LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT

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214-256 East Route 59
Nanuet, New York 10954

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EMG Project Number:
140403.19R000-001.075

Date of Report:
October 3, 2019

On Site Date:
September 19, 2019

Prepared for:

GEJ Nanuet LLC
c/o Shipman & Goodwin LLP
300 Atlantic Street, 3rd Floor
Stamford, Connecticut 06901
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1 Introduction

EMG completed a Limited Phase II Environmental Site Assessment (ESA) of 214-256 East Route 59 (the "Project"), located in Nanuet, New York 10954. This Limited Phase II ESA was completed in accordance with the scope of work prepared as part of EMG's Proposal (incorporated herein by reference), dated September 4, 2019, and agreed to and authorized by GEJ Nanuet LLC, c/o Shipman & Goodwin LLP (the "Client" and "User") on September 9, 2019. Additional Users, if any, in EMG's Proposal, dated September 4, 2019, and/or are listed on the cover page of this report.

EMG was contracted to perform the Limited Phase II ESA of the Project to determine if soil and/or soil gas beneath the Project building slab were impacted by a former onsite dry cleaner.

The Limited Phase II ESA included the collection of soil and soil gas samples, specifically to identify the possible presence of chlorinated volatile organic compounds (CVOCs) in one or both these environmental media beneath the Project building.

2 Recognized Environmental Condition

A dry cleaner was located at the Project from approximately 1985 to 2007. This facility was located at 228 East Route 59, in the current UPS Store tenant space, and was identified as Young's Gentle Touch Cleaner and Joon's Best Cleaners.

3 Work Performed and Rationale

Prior to execution of this Limited Phase II ESA, EMG submitted a proposal (incorporated herein by reference) to the Client, including a general scope of work. This scope of work was approved by the Client and EMG subsequently completed the same, unless specifically noted in Section 5.3, Scope Limitations and/or Qualifications of Assessment, of this report.

3.1 Overview of Recognized Environmental Condition

- Former onsite dry cleaner

3.2 Target Analytes

- Tetrachloroethene (PCE), Trichloroethene (TCE), cis-1,2-Dichloroethene (c-1,2-DCE), trans-1,2-Dichloroethene (t-1,2-DCE), 1,1-Dichloroethene (1,1-DCE), and Vinyl Chloride (VC)

3.3 Environmental Media of Concern

- Soil
  - Shallow (0-5 feet)
- Sub-Slab Soil Gas

3.4 Quality Assurance/Quality Control for Sampling and Chemical Testing

A quality assurance/quality control (QA/QC) plan was followed to provide assurance that the samples collected were representative of the environmental media and locations specified in the sampling plan, that sample integrity was not compromised with regard to target analyte presence and levels (as a result of the sampling and sample handling procedures), and that the chemical testing results were properly evaluated to ensure reliability. The Phase II Assessor incorporated provisions in the QA/QC plan to require appropriate sample handling prior to delivery to the laboratory, including ensuring that samples were properly preserved (e.g., refrigerated, or combined with appropriate preservative chemicals), that samples were available for chemical testing within required holding times, and that sample chain of custody was documented prior to being relinquished to the appropriately accredited laboratory. Deviations from the sampling plan, if any, were noted and justified or reconciled prior to completion of the investigation.

3.5 Exploration, Screening, and Sampling Methodologies and Procedures

3.5.1 Subsurface Exploration Methodologies and Field Screening Procedures

On September 19, 2019, soil borings were completed by Tri-State Drilling Technologies, Inc., with drilling at the Project completed using a manually-operated hand auger. EMG monitored the advancement of the soil borings to depths ranging from 3.5 feet to 5 feet below the interior concrete floor of the former dry cleaner space. Soil samples were obtained continuously at 1-foot intervals from each of the soil borings.

All tooling equipment and sampling equipment with potential contact with soil were decontaminated between locations using a solution of detergent and water and a distilled water rinse. Sampling personnel used fresh nitrile gloves in handling each sample and related equipment and bottleware. If submitted for laboratory analyses, samples were placed immediately into laboratory-supplied bottleware and stored in an ice-filled cooler.

All soils encountered were logged and screened with a calibrated PID (Mini RAE-2000) for evidence of volatile organic compounds (VOCs).

Sub-slab sampling ports were installed utilizing Cox-Colvin Vapor Pins®. Prior to sample collection, a probe leak detection test was conducted at each probe location per manufactures specifications. The specified leak detection test consists of a water dam placed around each sampling pin. The dam is filled with de-ionized water and a vacuum is applied to the Vapor Pin® using a hand-operated vacuum pump. A drop-in water level or the presence of water in the tubing indicates leakage. In the event of leakage, the Vapor Pin® is removed, reset with a new silicone rubber sleeve, and the leakage test conducted again. The water level and sample tubing were monitored during the actual sampling to determine if leakage had occurred.

The Vapor Pins® were connected with Teflon tubing to 1-liter Summa canisters to collect soil gas. All probes and tubing were purged before the collection of each soil gas sample.

3.5.2 Soil Sampling Procedures

On September 19, 2019, soil samples collected for VOC chemical testing were placed in pre-labeled, 40-milliliter VOA vials containing a methanol preservative. Approximately 10 grams of soil sample were added to each preserved vial.

Soil samples collected for other chemical testing along with moisture contents and total solids were placed in pre-labeled 4-ounce clear glass jars.

The soil sample containers were immediately placed in a cooler for preservation. The soil sample containers were then delivered to an accredited laboratory for chemical testing. The chemical testing of the soil samples was performed within the respective holding times. Chain-of-custody was maintained utilizing laboratory chain-of custody tracking forms.

3.5.3 Soil Gas Sampling Procedures

On September 19, 2019, one (1) soil gas sample was extracted from each Vapor Pin®. Each gas sample was collected over an approximate 5-minute duration using a laboratory supplied regulator and 1-liter, stainless steel Summa canister.

The soil gas sample containers were then delivered to an accredited laboratory for chemical testing. The chemical testing of the soil gas samples was performed within the respective holding times. Chain-of-custody was maintained utilizing laboratory chain-of custody tracking forms.

3.6 Chemical Testing Methods

All soil and soil gas samples were accompanied by a chain of custody form and were transported via courier to Pace Analytical of Mt. Juliet, Tennessee, a New York-accredited laboratory for applicable chemical testing.

3.6.1 Soil Sample Testing

Soil samples were tested for the following target analytes via the corresponding United States Environmental Protection Agency (USEPA) analytical methodology:

- PCE, TCE, c-1,2-DCE, t-1,2-DCE, 1,1-DCE, and VC: 5035/8260B

3.6.2 Soil Gas Sample Testing

Soil gas samples were tested for the following target analytes via the corresponding USEPA analytical methodology:

- PCE, TCE, c-1,2-DCE, t-1,2-DCE, 1,1-DCE, and VC: TO-15

4 Presentation and Evaluation of Results

4.1 Field Investigation

4.1.1 Soil Survey

EMG monitored the advancement of two (2), interior, soil borings in the northern portion (rear) of the UPS tenant space. The interior soil borings (SB-1 and SB-2) were advanced through the concrete floor slab in the likely vicinity of the former dry cleaning unit historically operated within the space. Soil boring locations are shown in Appendix A, Figure 2. Photographs of the soil boring operations are included in Appendix B.

The soils encountered in the interior soil borings were overlain by an approximate 4-inch thick concrete floor slab and a thin layer of crushed stone. Soils encountered in the soil borings consisted of brown and gray SILT (ML), and poorly graded SAND (SP). Equipment refusal was encountered at the location of soil boring SB-1 at depth of approximately 3.5 feet. Moisture contents of the soil samples at the time of the investigation were moderate to high. Shallow groundwater was not encountered in the soil borings. No unusual odors or stains were noted in any of the soil samples collected from the soil borings. The soil samples collected during the drilling operations were screened with a PID. No elevated PID readings were detected in any of the soil samples collected from the soil borings. Boring logs are included in Appendix C.

Upon completion, the boreholes were backfilled with excess soil cuttings and bentonite chips and patched with concrete.

4.1.2 Soil Gas Survey

Six (6) sub-slab soil gas samples were collected at the Project. Two (2), sub-slab soil gas samples (SS-1 and SS-2) were collected from the UPS tenant space; two (2), sub-slab soil gas samples (SS-3 and SS-4) were collected from the GameStop tenant space; and two (2), sub-slab soil gas samples (SS-5 and SS-6) were collected from the Avenue tenant space. Sub-slab soil gas samples were collected from the northern and southern portions (rear and front, respectively) of each of the three (3) tenant spaces investigated.

Vapor Pin® locations are shown in Appendix A, Figure 2. Photographs of the sub-slab soil gas sampling operations are included in Appendix B.

4.2 Chemical Testing Results

4.2.1 Soil Samples

The soil sample results are presented in Appendix D, Table 1 — Soil Sample Results. Copies of the laboratory analytical report and chain-of-custody are included in Appendix E.

As indicated in Table 1, target analytes were detected above their respective method detection limits in the following soil sample:

- Soil sample SB-1

Soil sample results were compared to New York State Department of Environmental Conservation (NYSDEC) Unrestricted Use Soil Cleanup Objectives and Restricted Use Soil Cleanup Objectives for Protection of Groundwater.

As indicated in Table 1, the following target analyte was detected above its respective NYSDEC Unrestricted Use Soil Cleanup Objective and Restricted Use Soil Cleanup Objective for Protection of Groundwater in soil sample SB-1:

- PCE

Based on these results, CVOCs in soil are considered a potential environmental concern with respect to this assessment; see Sections 5 and 6 for further discussion of this concern.

4.2.2 Soil Gas Samples

The soil gas sample results are presented in Appendix D, Table 2 — Soil Gas Sample Results. Copies of the laboratory analytical report and chain-of-custody are included in Appendix E.

As indicated in Table 2, target analytes were detected above their respective method detection limits in the following soil gas samples:

- Soil gas sample SS-1
- Soil gas sample SS-2
- Soil gas sample SS-3
- Soil gas sample SS-4
- Soil gas sample SS-5
- Soil gas sample SS-6

Soil gas sample results were compared to USEPA Commercial Vapor Intrusion Screening Levels (VISLs) (Target Risk $1x10^{-5}$ and Hazard Quotient of 1) and to New York State Department of Health (NYSDOH) Decision Matrix Action Levels.

As indicated in Table 2, no target analyte was detected above its respective USEPA VISL or NYSDOH Decision Matrix Action Level in any of the soil gas samples, with the exception of the following soil gas sample and respective target analyte:

- Soil gas sample SS-1: PCE, TCE, and c-1,2-DCE

Based on these results, CVOCs in soil gas are considered a potential environmental concern with respect to this assessment; see Sections 5 and 6 for further discussion of this concern.

5 Interpretations and Conclusion

EMG evaluated the Project through the completion of a Limited Phase II ESA. Presented below are EMG's interpretations and conclusions from the data gathered as part of this Limited Phase II ESA.

5.1 Recognized Environmental Condition

A dry cleaner was located at the Project from approximately 1985 to 2007. This facility was located at 228 East Route 59, in the current UPS Store tenant space, and was identified as Young's Gentle Touch Cleaner and Joon's Best Cleaners.

5.2 Conceptual Model Validation/Adequacy of Investigation

The scope of EMG's general evaluation of soil and sub-slab soil gas at the Project was appropriate to support an evaluation of the potential CVOC impacts to soil and/or soil gas beneath the Project building slab.

EMG's opinion is that the conceptual model developed for this assessment was validated and no additional data are required to support an opinion regarding environmental conditions at the Project.

5.3 Scope Limitations and/or Qualifications of Assessment

EMG encountered no limitations to the proposed scope of work and there are no qualifications to this report.

5.4 Objective Met

The User(s) of this Limited Phase II ESA report provided guidance as to the desired objective to be achieved from the Limited Phase II ESA process. With respect to the Project, the objective was to determine if soil and/or soil gas beneath the Project building slab were impacted by a former onsite dry cleaner.

EMG concludes that the objective was met through execution of this Limited Phase II ESA.

5.5 Conclusion

Chemical testing of soil and soil gas samples indicates that an apparently limited release from the former onsite dry cleaner impacted soil and soil gas at the Project.

6 Recommendations

Based on the results of this Limited Phase II ESA, no state or federal reporting requirements have been triggered and no further action is required pursuant to applicable regulatory requirements. Nonetheless, EMG recommends consideration of additional actions with respect to the former onsite dry cleaner, consistent with NYSDOH guidance.

Recommended additional actions for consideration include:

- Supplemental Phase II ESA to include three (3) exterior soil borings: two (2) to the rear of the former dry cleaner tenant space and one (1) in front of the former dry cleaner tenant space. EMG recommends that soil borings be advanced to at least 20 feet below ground surface or to first groundwater and soil and that groundwater samples be collected from each boring and analyzed for CVOCs.
- Installation of a sub-slab depressurization system (SSDS) within, at a minimum, the rear portion of the UPS tenant space.

Steps in the SSDS design and installation process would include:

- Diagnostic testing to determine actual vacuum conditions under the building slab;
- Inspection of the building to determine possible vacuum extraction locations, potential SSDS exhaust piping routes, and potential blower location(s);
- Engineering design of the SSDS based information collected through diagnostic testing and building inspection;
- Permitting, as required; and
- Installation of the SSDS.

7 Limitations and User Reliance and Terminology

7.1 Limitations and User Reliance

Unless otherwise provided for in EMG's Proposal (incorporated herein by reference), dated September 4, 2019, and agreed to and authorized by GEJ Nanuet LLC, c/o Shipman & Goodwin LLP:

EMG completed a Limited Phase II Environmental Site Assessment (ESA) of 214-256 East Route 59 (the "Project"), located in Nanuet, New York 10954. The assessment was performed at the Client's request using the methods and procedures consistent with good commercial and customary practice designed to conform with acceptable industry standards.

This report has been prepared for and is exclusively for the use and benefit of the Client identified on the cover page of this report. The purpose for which this report shall be used shall be limited to the use as stated in the contract between the client and EMG.

This report, or any of the information contained therein, is not for the use or benefit of, nor may it be relied upon by any other person or entity, for any purpose without the advance written consent of EMG. Any reuse or distribution without such consent shall be at the client's or recipient's sole risk, without liability to EMG.

In expressing the opinions stated in this report, EMG has exercised the degree of skill and care ordinarily exercised by a reasonable prudent environmental professional in the same community and in the same time frame given the same or similar facts and circumstances. Documentation and data provided by the Client, designated representatives of the Client or other interested third parties, or from the public domain, and referred to in the preparation of this assessment, have been used and referenced with the understanding that EMG assumes no responsibility or liability for their accuracy.

EMG's professional services have been performed, our findings obtained, and our recommendations prepared in accordance with customary principles and practices in the fields of environmental engineering and sciences. EMG is not responsible for the independent conclusions, opinions, or recommendations made by others based on the field exploration and laboratory test data presented in this report.

The investigation performed for this project is intended as a description of available information at the time of the investigation. This report does not warrant against future operations or conditions present of a type or at a location not investigated.

7.2 Terminology

Terminology as defined in *Section 3.1* of ASTM Practice E1903-11: *Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process* and/or *Section 3.2* of ASTM Practice E1527-13: *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*.

- **Background concentration** — The concentration of a *target analyte* in *groundwater*, surface water, air, soil gas, sediment, or soil at a reference location near an area under investigation, which is not attributable to the area under investigation. Background samples may contain the *target analyte*, due to either naturally occurring or man-made sources, but not due to the *release(s)* in question.
- **Business environmental risk** — A risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues investigated in accordance with these practices.
- **Chain of custody** — A written or printed form that documents information regarding sample possession, condition, and responsibility, including the time from sample container acquisition through transportation, sample collection, and *chemical testing*.
- **Chemical testing** — Measurement of the presence and concentration of *target analytes* by analytical chemistry methods in a laboratory; also, for purposes of this practice, measurement of certain *target analytes* by physical methods.
- **Controlled recognized environmental condition** — A *recognized environmental condition* resulting from a past *release* of *hazardous substances* or *petroleum products* that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with *hazardous substances* or *petroleum products* allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).
- **Data gap** — A lack of or inability to obtain information required by the United States Department of Environmental Protection (USEPA) All Appropriate Inquiries (AAI) Rule despite good faith efforts by the *Environmental Professional* to gather such information.
- **De minimis** — Conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.
- **Environmental media** — Soil, rock, *groundwater*, surface water, air, soil gas, and sediment.
- **Environmental Professional** — A person meeting the education, training, and experience requirements set forth in 40 CFR 312.10(b).

- **Field screening** — The measurement of physical properties or presence and approximate concentration of *target analytes* in *environmental media* by methods or techniques employed in the field during explorations and sampling. Measurements can be qualitative (positive/negative) or quantitative. Accuracy and precision of these methods generally are not equivalent to those achieved in a laboratory environment.
- **Groundwater** — Water below the land surface in a zone of saturation.
- **Groundwater flow** — The movement of water in the zone of saturation.
- **Groundwater flow direction** — The compass bearing of the horizontal component, and the vertical component, of water movement in the zone of saturation.
- **Hazardous substance** — A substance defined as a *hazardous substance* pursuant to Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) 42 U.S.C. §9601(14), as interpreted by USEPA regulations and the courts: "(A) any substance designated pursuant to section 1321(b)(2)(A) of Title 33, (B) any element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title, (C) any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Resource Conservation and Recovery Act of 1976 (RCRA), as amended, (42 U.S.C. §6921) (but not including any waste the regulation of which under RCRA (42 U.S.C. §6901 *et seq.*) has been suspended by Act of Congress), (D) any toxic pollutant listed under section 1317(a) of Title 33, (E) any hazardous air pollutant listed under section 112 of the Clean Air Act (42 U.S.C. §7412), and (F) any imminently hazardous chemical substance or mixture with respect to which the Administrator (of USEPA) has taken action pursuant to section 2606 of Title 15. The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a *hazardous substance* under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas)".
- **Historical recognized environmental condition** — A past *release* of any *hazardous substances* or *petroleum products* that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted residential use criteria established by a regulatory authority, without subjecting the property to any required controls (e.g., property use restriction, activity and use restrictions, institutional controls, or engineering controls).
- **Likely release area** — A place where a *Phase II Assessor* judges it likely that *target analytes* were first introduced into *environmental media* as a result of a *release* such that the *target analytes* may now be present in *environmental media* at the property.
- **Migration pathway** — A route through *environmental media* taken by a *target analyte*; the physical feature allowing movement of *target analytes*.
- **Petroleum products** — Those substances included within the meaning of the petroleum exclusion to CERCLA, 42 U.S.C. §9601(14), as interpreted by the courts and USEPA, that is: petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a *hazardous substance* under Subparagraphs (A) through (F) of 42 U.S.C. §9601(14), natural gas, natural gas liquids, liquefied natural gas, and synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).
- **Phase II Assessor** — A person meeting the definition of an *Environmental Professional* as provided in *Section 3.2.32* of ASTM Practice E1527-13, and possessing sufficient education, professional training, and relevant experience to conduct or be in responsible charge of environmental investigations and other activities in accordance with ASTM Practice E1903-11, and to interpret the resulting data to develop opinions and conclusions regarding the presence of *target analytes* in *environmental media* in connection with the property in question. Overall, a *Phase II Assessor* should understand and be experienced in pertinent aspects of the scientific method, hydrogeology, geochemistry, environmental investigation/exploration techniques, interpretation of *chemical testing* data, and commercial and industrial operations pertaining to the use and handling of site-specific *target analytes* and production and handling of associated wastes.
- **Quality assurance/quality control** — Quality control is the use of standards and procedures designed to promote and ensure the collection of samples and generation of analytical results that are of good and acceptable quality for the purposes intended; quality assurance is the use of standards and procedures to evaluate work products to determine if they achieved good and acceptable quality.
- **Receptor** — A living organism or habitat of a community of organisms; also, an inanimate feature that, if contacted by *target analytes*, would be a proximal means of exposing living organisms to the *target analytes*, e.g., a drinking water well that could convey *groundwater* containing *target analytes* to people.
- **Recognized environmental condition** — The presence or likely presence of any *hazardous substances* or *petroleum products* on property under conditions that indicate an existing *release*, a past *release*, or a material threat of a *release* of any *hazardous substances* or *petroleum products* into structures on the property or into the ground, *groundwater*, or surface water of the property. The term includes *hazardous substances* or *petroleum products* even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that do not present a material risk of harm to public health or the environment and that would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis* are not *recognized environmental conditions*.
- **Release** — A *release* of any *hazardous substance* or *petroleum product* shall have the same meaning as the definition of "release" in CERCLA 42 U.S.C. §9601(22).

- **Remediation/remedial action** — Activities conducted or measures taken to protect human health, safety and the environment. These include evaluating risk, monitoring quality of *environmental media* over time, imposing institutional controls, constructing engineering controls, removing *environmental media* containing *target analytes* from the environment, removing *target analytes* from *environmental media*, and generally designing and operating cleanup systems to isolate, remove, reduce, or destroy *target analytes*.
- **Site characterization** — Evaluation of the presence of *target analytes* in *environmental media* throughout a site impacted or potentially impacted by a *release* or *releases*. The evaluation typically includes the determination of geological, hydrogeological, hydrological, and engineered aspects of the site that influence the presence of *target analytes* (e.g., *migration pathways*, exposure points) and the existence of *receptors* and mechanisms of exposure.
- **Target analytes** — Substances 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 *field screening* or *chemical testing*.
- **Water table** — The surface of a *groundwater* body at which surface the water pressure equals atmospheric pressure. Earth material below the *water table* is saturated with water.

8 Certification

EMG certifies that EMG has no undisclosed interest in the Project, that EMG's relationship with the Client is at arms-length, and that EMG's employment and compensation are not contingent upon the findings or recommendations provided in the Report.

If you have any questions regarding this report, please contact Mark Fischer at (800) 733-0660 x2722 or mwfischer@emgcorp.com.

We have appreciated the opportunity to provide you with this service. If you have any questions regarding the Project, please feel free to call us at your convenience.

Field Oversight by: Joshua S. Randall, CHMM, Environmental Scientist

Written by: Joshua S. Randall, CHMM, Environmental Scientist

Reviewed by: Mark W. Fischer, C.P.G., Phase II Assessor

This report has been prepared under my direct supervision, and I believe the contents to be true and accurate.

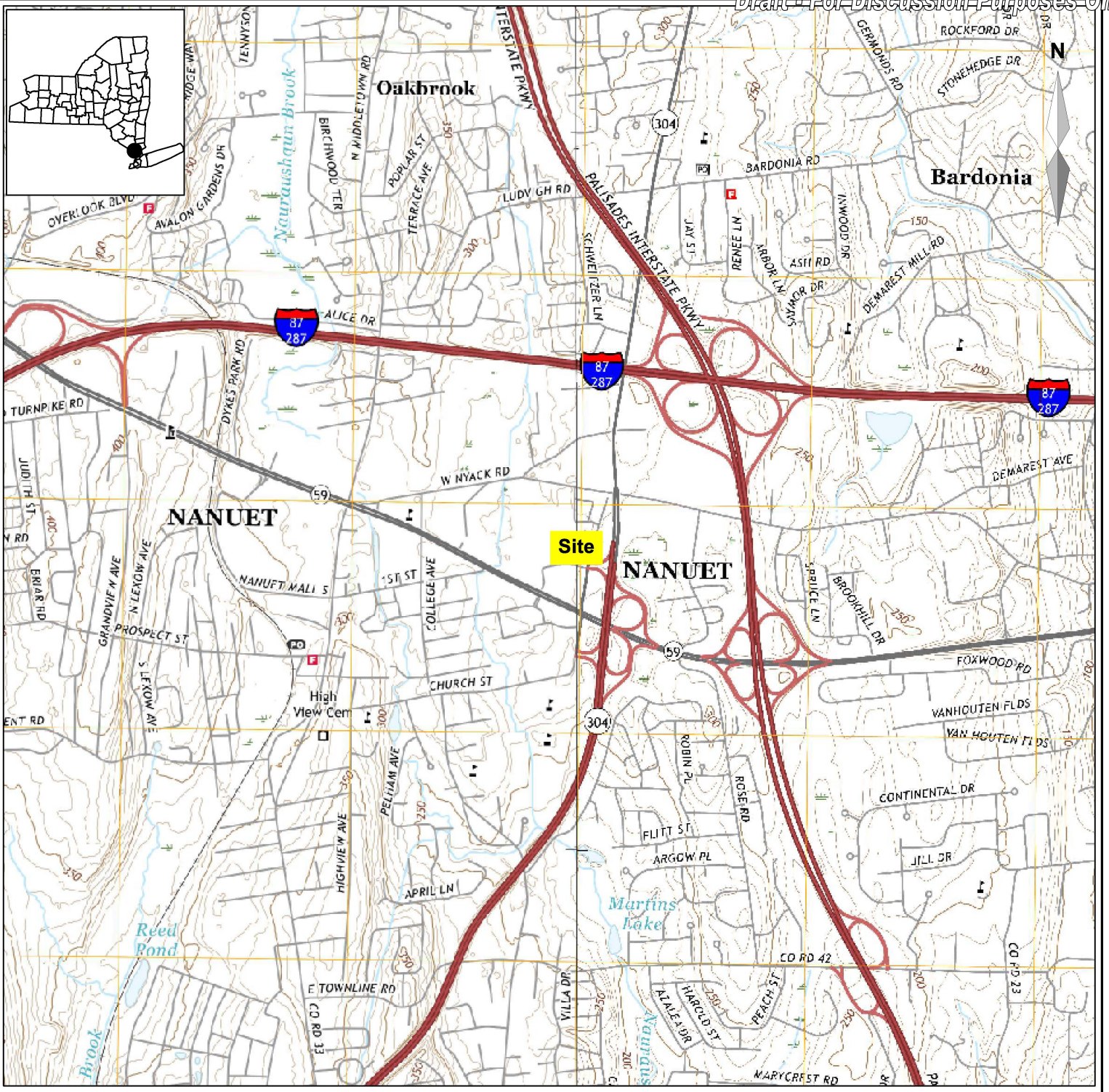
I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in *§ 312.10 of 40 CFR 312*.

Mark W. Fischer, C.P.G.
Phase II Assessor
Manager of Expanded Environmental Services

9 Appendices

Appendix A: Figures 1 and 2
Appendix B: Photographic Documentation
Appendix C: Boring Logs
Appendix D: Tables 1 and 2
Appendix E: Laboratory Results/Chain of Custody Forms

Appendix A:
Figures 1 and 2



Rockland County,Clarkstown town
Park Ridge Quadrangle

Basemap: U.S. Geological Survey US Topo 2016

emg	Figure 1 Site Location Map 214-220 East Route 59 Nanuet, New York 10954	Project Number: 140403.19R000-001.075 Date: 9/23/2019 Drawn by: JRB Scale: 1 in : 2000.00 ft

0 50 ft

Rockland County,Clarkstown town
Park Ridge Quadrangle

Basemap: NYS Digital Ortho-imagery Program (NYSDOP) 2016

emg	Figure 2 Soil Boring Location Map 214-220 East Route 59 Nanuet, New York 10954	Project Number: 140403.19R000-001.075 Date: 9/23/2019 Drawn by: JRB Scale: 1 in : 25.00 ft

Appendix B:
Photographic Documentation

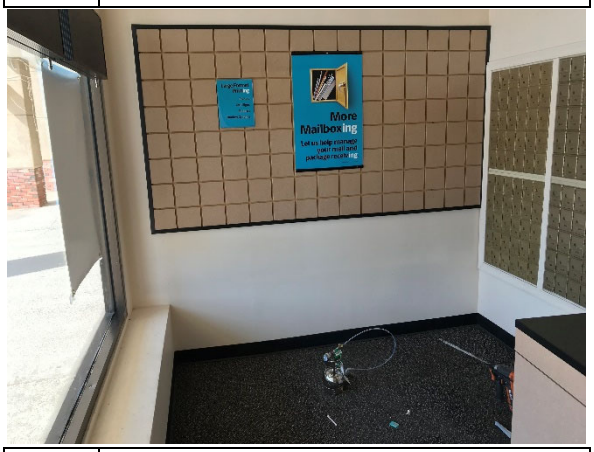
#1:	VIEW OF FRONT (SOUTH SIDE) OF PROJECT BUILDING

#2:	VIEW OF BACK (NORTH SIDE) OF PROJECT BUILDING

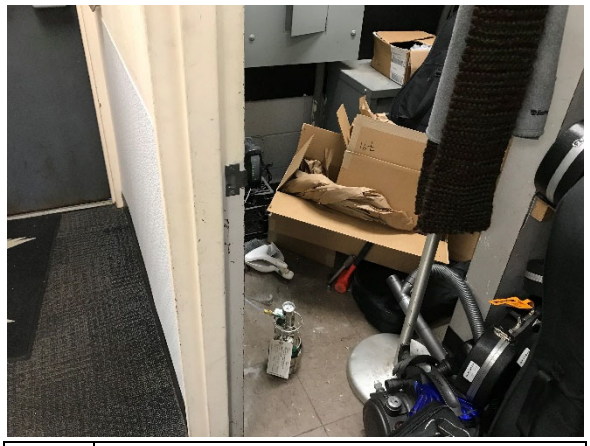
#3:	VIEW OF INTERIOR SOIL BORING SB-1 AND SOIL REMOVED FROM LOCATION

#4:	VIEW OF SOIL BORING SB-2

#5:	VIEW OF SUB-SLAB SOIL GAS SAMPLE SS-1

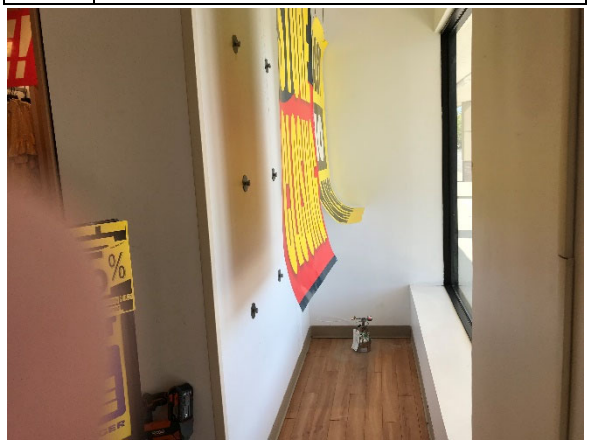


#6:	VIEW OF SUB-SLAB SOIL GAS SAMPLE SS-2



#7:	VIEW OF SUB-SLAB SOIL GAS SAMPLE SS-3

#8:	VIEW OF SUB-SLAB SOIL GAS SAMPLE SS-4



#9:	VIEW OF SUB-SLAB SOIL GAS SAMPLE SS-6

#10:	EXAMPLE VIEW OF FLOORING UPON COMPLETION OF SOIL BORINGS

Appendix C:
Boring Logs

Soil Boring Log - Field Readings EMG Project #140403.19R000-001.075 Project Name: 214-256 East Route 59 Boring Method: Hand Auger Date: September 19, 2019				
Sample #	Depth (Ft)	Moisture (H-M-L)	PID Reading	Soil Description
SB-1	0-0.5	M	0	Concrete floor slab and crushed stone
SB-1	0.5-3	M	0	10YR 4/3 Brown, SILT (ML) with poorly graded sand and trace cobbles; no odor
SB-1	3-3.5	M-H	0	10YR 6/1 Gray, SILT (ML) with large cobbles; no odor
Refusal; Bottom of Boring at 3.5'; No Groundwater Encountered				
SB-2	0-0.5	M	0	Concrete floor slab and crushed stone
SB-2	0.5-3	M	0	10YR 4/3 Brown, SILT (ML) with poorly graded sand and trace cobbles; no odor
SB-2	4-5	H	0	10YR 4/3 Brown, SILT (ML) with poorly graded sand and gravel; no odor
Bottom of Boring at 5'; No Groundwater Encountered				

Appendix D:
Tables 1 and 2

Table 1
Soil Sample Results
214-256 East Route 59
140403.19R000-001.075
(Reported in micrograms per kilogram [µg/kg])

Target Analytes	Sample ID#	Sample ID#	NYSDEC
	SB-1	SB-2	*Unrestricted Use Soil Cleanup Objectives and Restricted Use Soil Cleanup Objectives for Protection of Groundwater*
Chlorinated Volatile Organic Compounds (Method 8260)			
1,1-Dichloroethene	ND	ND	0.33
cis-1,2-Dichloroethene	0.213	ND	0.25
trans-1,2-Dichloroethene	ND	ND	0.19
Tetrachloroethene	**3.58**	ND	1.3
Trichloroethene	0.335	ND	0.47
Vinyl Chloride	ND	ND	0.02

Notes:

ND = Not Detected

NE = No Established Screening Level

Bolded = Exceeds Screening Level

Table 2
Soil Gas Sample Results
214-256 East Route 59
140403.19R000-001.075
(Reported in micrograms per cubic meter [µg/m^3])

Target Analytes	Sample ID#	Sample ID#	Sample ID#	Sample ID#	Sample ID#	Sample ID#	USEPA VISL
	SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	*Comm.*
Chlorinated Compounds (Method TO-15)							
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	29,200
cis-1,2-Dichloroethene	123	ND	ND	ND	ND	ND	NE
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	NE
Tetrachloroethene	4,590	68.1	55.6	4.02	47.2	36.5	5,840
Trichloroethene	**1,190**	2.86	1.23	1.09	4.20	29.1	292
Vinyl Chloride	ND	0.709	ND	ND	ND	12.2	929

Notes:

ND = Not Detected

NE = No Established Screening Level

Bolded = Exceeds VISL

Shaded = Exceeds NYSDOH Matrix A or Matrix B Mitigation Action Levels

Appendix E:
Laboratory Results/Chain of Custody Forms

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

September 23, 2019

EMG - Hunt Valley, MD

Sample Delivery Group:	L1141417
Samples Received:	09/20/2019
Project Number:	140403.19R000-001.07
Description:	Kohls Plaza 214-220 East Route 59

Report To:

Mr. Mark Fischer
10461 Mill Run Circle, Ste 1100
Owings Mills, MD 21117

Entire Report Reviewed By:

T. Alan Harvill
Project Manager

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SB-1 L1141417-01 Solid

Collected by: Josh R.
Collected date/time: 09/19/19 09:45
Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1349625	1	09/20/19 19:27	09/20/19 19:38	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1349721	1	09/19/19 09:45	09/20/19 22:01	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1350186	8	09/19/19 09:45	09/22/19 17:40	JAH	Mt. Juliet, TN

SB-2 L1141417-02 Solid

Collected by: Josh R.
Collected date/time: 09/19/19 10:45
Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1349625	1	09/20/19 19:27	09/20/19 19:38	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1349721	1	09/19/19 10:45	09/20/19 22:21	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1350186	1	09/19/19 10:45	09/22/19 17:20	JAH	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

T. Alan Harvill
Project Manager

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.4		1	09/20/2019 19:38	WG1349625

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
1,1-Dichloroethene	ND		0.00274	1	09/20/2019 22:01	WG1349721
cis-1,2-Dichloroethene	0.213		0.00274	1	09/20/2019 22:01	WG1349721
trans-1,2-Dichloroethene	ND		0.00547	1	09/20/2019 22:01	WG1349721
Tetrachloroethene	3.58		0.0219	8	09/22/2019 17:40	WG1350186
Trichloroethene	0.335		0.00109	1	09/20/2019 22:01	WG1349721
Vinyl chloride	ND		0.00274	1	09/20/2019 22:01	WG1349721
(S) Toluene-d8	*106*		*75.0-131*		*09/20/2019 22:01*	WG1349721
(S) Toluene-d8	*106*		*75.0-131*		*09/22/2019 17:40*	WG1350186
(S) 4-Bromofluorobenzene	*102*		*67.0-138*		*09/20/2019 22:01*	WG1349721
(S) 4-Bromofluorobenzene	*104*		*67.0-138*		*09/22/2019 17:40*	WG1350186
(S) 1,2-Dichloroethane-d4	*98.0*		*70.0-130*		*09/20/2019 22:01*	WG1349721
(S) 1,2-Dichloroethane-d4	*105*		*70.0-130*		*09/22/2019 17:40*	WG1350186

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.8		1	09/20/2019 19:38	WG1349625

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
1,1-Dichloroethene	ND		0.00281	1	09/20/2019 22:21	WG1349721
cis-1,2-Dichloroethene	ND		0.00281	1	09/20/2019 22:21	WG1349721
trans-1,2-Dichloroethene	ND		0.00563	1	09/20/2019 22:21	WG1349721
Tetrachloroethene	ND		0.00281	1	09/22/2019 17:20	WG1350186
Trichloroethene	ND		0.00113	1	09/20/2019 22:21	WG1349721
Vinyl chloride	ND		0.00281	1	09/20/2019 22:21	WG1349721
(S) Toluene-d8	*105*		*75.0-131*		*09/20/2019 22:21*	WG1349721
(S) Toluene-d8	*106*		*75.0-131*		*09/22/2019 17:20*	WG1350186
(S) 4-Bromofluorobenzene	*103*		*67.0-138*		*09/20/2019 22:21*	WG1349721
(S) 4-Bromofluorobenzene	*106*		*67.0-138*		*09/22/2019 17:20*	WG1350186
(S) 1,2-Dichloroethane-d4	*95.4*		*70.0-130*		*09/20/2019 22:21*	WG1349721
(S) 1,2-Dichloroethane-d4	*105*		*70.0-130*		*09/22/2019 17:20*	WG1350186

Method Blank (MB)

(MB) R3453426-1 09/20/19 19:38

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.000			

L1141051-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1141051-01 09/20/19 19:38 • (DUP) R3453426-3 09/20/19 19:38

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	79.0	79.7	1	0.948		10

Laboratory Control Sample (LCS)

(LCS) R3453426-2 09/20/19 19:38

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3453279-2 09/20/19 20:57

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
1,1-Dichloroethene	U		0.000500	0.00250
cis-1,2-Dichloroethene	U		0.000690	0.00250
trans-1,2-Dichloroethene	U		0.00143	0.00500
Trichloroethene	U		0.000400	0.00100
Vinyl chloride	U		0.000683	0.00250
(S) Toluene-d8	*104*			*75.0-131*
(S) 4-Bromofluorobenzene	*101*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*92.5*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3453279-1 09/20/19 19:55

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
1,1-Dichloroethene	0.125	0.139	111	65.0-131	
cis-1,2-Dichloroethene	0.125	0.121	96.8	73.0-125	
trans-1,2-Dichloroethene	0.125	0.133	106	71.0-125	
Trichloroethene	0.125	0.131	105	76.0-126	
Vinyl chloride	0.125	0.160	128	63.0-134	
(S) Toluene-d8			*102*	*75.0-131*	
(S) 4-Bromofluorobenzene			*104*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*103*	*70.0-130*	

Method Blank (MB)

(MB) R3453504-2 09/22/19 11:23

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Tetrachloroethene	U		0.000700	0.00250
(S) Toluene-d8	*104*			*75.0-131*
(S) 4-Bromofluorobenzene	*104*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3453504-1 09/22/19 10:22

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Tetrachloroethene	0.125	0.145	116	70.0-136	
(S) Toluene-d8			*104*	*75.0-131*	
(S) 4-Bromofluorobenzene			*106*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*105*	*70.0-130*	

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

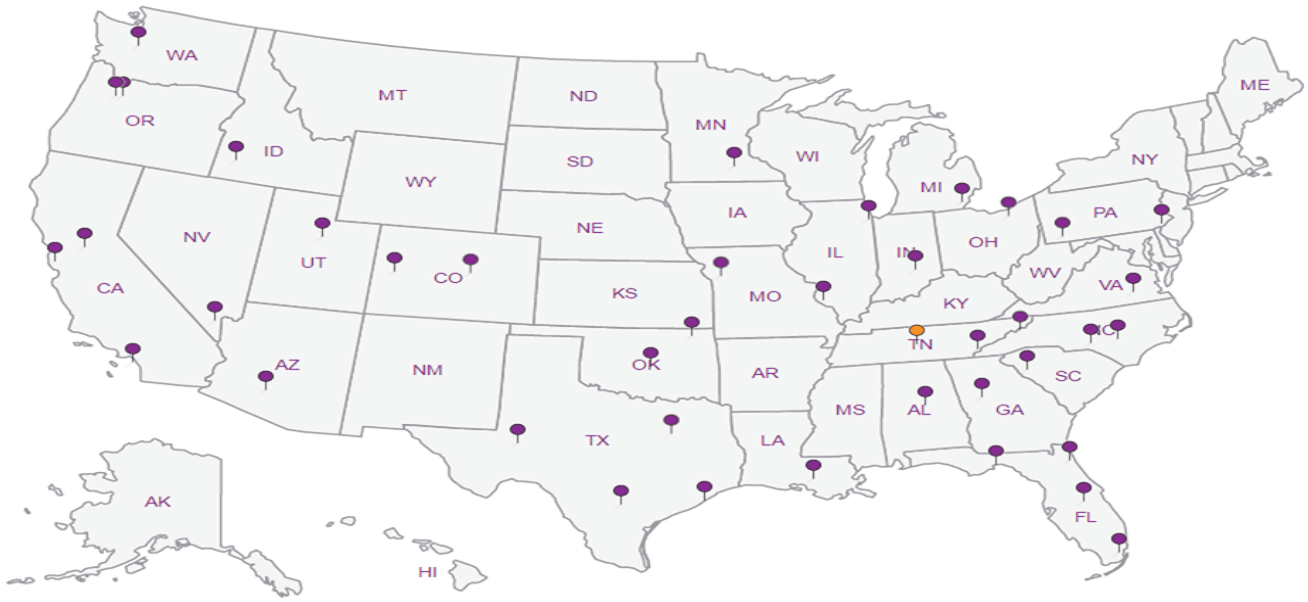
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



EMG - Hunt Valley, MD

10461 Mill Run Circle, Ste 1100
Owings Mills, MD 21117

Billing Information:
Accounts Payable
10461 Mills Run Circle, Ste 1100
Owings Mills, MD 18519

Report to: Mark Fischer

Email To: mfischer@heartlandenv.com

Project Description: Kohls Plaza 214-220 East Route

City/State Collected: Nanuet NY

Please Circle: PT MT CT ET

Phone: 410-785-6200
Fax:

Client Project # 140403.19R000-001.075

Lab Project # EMGHVMD-2217

Collected by (print): Josh R. [illegible]

Site/Facility ID #

P.O. # 2217

Collected by (signature): [signature]

Immediately Packed on Ice N ___ Y ✓

Rush? (Lab MUST be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed: 24-Hour TAT

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TS 4oz Clr-NoPres	V8260C 40ml Amb/MeOH 5ml/Syr	Remarks	Sample # (lab only)
SB-1	Grab	SS	3.5'	9/19/19	9:45	2	X	X		.01
SB-2	Grab	SS	5'	9/19/19	10:45	2	X	X		.02
		SS				2	X	X		
		SS				2	X	X		
		SS				2	X	X		

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: 24-Hour TAT

pH _____ Temp _____

Flow _____ Other _____

Samples returned via: __ UPS ✓ FedEx __ Courier _____

Tracking # 4794 8841 6546

Relinquished by : (Signature) [signature] Date: 9/19/19 Time: 14:00 Received by: (Signature)

Relinquished by : (Signature) Date: Time: Received by: (Signature)

Relinquished by : (Signature) Date: Time: Received for lab by: (Signature) [signature]

Trip Blank Received: Yes / (No) HCL / MeoH TBR

Temp: 0.7+0.8 °C Bottles Received: 4

Date: 9-20 Time: 8:45

If preservation required by Login: Date/Time

Hold:

Condition: NCF / (OK)

Chain of Custody Page 1 of 1

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # L1141417

A037

Account: [illegible]

Template: T156005

Prelogin: P730543

PM: 364 - T. Alan Harvill

PB:

Shipped Via: FedEX Ground

Sample Receipt Checklist

COC Seal Present/Intact:	NP	✓Y __N
COC Signed/Accurate:		✓Y __N
Bottles arrive intact:		✓Y __N
Correct bottles used:		✓Y __N
Sufficient volume sent:		✓Y __N
If Applicable		
VOA Zero Headspace:		__Y __N
Preservation Correct/Checked:		__Y __N
RAD Screen <0.5 mR/hr:		✓Y __N

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

September 23, 2019

EMG - Hunt Valley, MD

Sample Delivery Group:	L1141361
Samples Received:	09/20/2019
Project Number:	140403.19R000-001.07
Description:	Kohls Plaza 214-220 East Route 59

Report To:

Mr. Mark Fischer
10461 Mill Run Circle, Ste 1100
Owings Mills, MD 21117

Entire Report Reviewed By:

T. Alan Harvill
Project Manager

TABLE OF CONTENTS

SS-1 L1141361-01 Air

Collected by: Josh R. | Collected date/time: 09/19/19 09:30 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1349484	1	09/20/19 20:50	09/20/19 20:50	MBF	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1349840	20	09/21/19 12:01	09/21/19 12:01	MBF	Mt. Juliet, TN

SS-2 L1141361-02 Air

Collected by: Josh R. | Collected date/time: 09/19/19 11:16 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1349484	1	09/20/19 21:35	09/20/19 21:35	MBF	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1349840	20	09/21/19 12:51	09/21/19 12:51	MBF	Mt. Juliet, TN

SS-3 L1141361-03 Air

Collected by: Josh R. | Collected date/time: 09/19/19 11:48 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1349484	1	09/20/19 22:19	09/20/19 22:19	MBF	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1349840	10	09/21/19 13:42	09/21/19 13:42	MBF	Mt. Juliet, TN

SS-4 L1141361-04 Air

Collected by: Josh R. | Collected date/time: 09/19/19 12:17 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1349484	1	09/20/19 23:04	09/20/19 23:04	MBF	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1349840	50	09/21/19 14:30	09/21/19 14:30	MBF	Mt. Juliet, TN

SS-5 L1141361-05 Air

Collected by: Josh R. | Collected date/time: 09/19/19 12:31 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1349484	1	09/20/19 23:49	09/20/19 23:49	MBF	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1349840	10	09/21/19 15:21	09/21/19 15:21	MBF	Mt. Juliet, TN

SS-6 L1141361-06 Air

Collected by: Josh R. | Collected date/time: 09/19/19 12:50 | Received date/time: 09/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1349484	1	09/21/19 00:35	09/21/19 00:35	MBF	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1349840	10	09/21/19 16:13	09/21/19 16:13	MBF	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

T. Alan Harvill
Project Manager

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1349484
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	31.1	123		1	WG1349484
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1349484
Tetrachloroethylene	127-18-4	166	4.00	27.2	676	4590		20	WG1349840
Trichloroethylene	79-01-6	131	4.00	21.4	222	1190		20	WG1349840
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1349484
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*99.9*				WG1349484
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*94.2*				WG1349840

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1349484
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1349484
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1349484
Tetrachloroethylene	127-18-4	166	0.200	1.36	10.0	68.1		1	WG1349484
Trichloroethylene	79-01-6	131	0.200	1.07	0.535	2.86		1	WG1349484
Vinyl chloride	75-01-4	62.50	0.200	0.511	0.278	0.709		1	WG1349484
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*108*				WG1349484
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*94.8*				WG1349840

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1349484
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1349484
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1349484
Tetrachloroethylene	127-18-4	166	0.200	1.36	8.18	55.6		1	WG1349484
Trichloroethylene	79-01-6	131	0.200	1.07	0.229	1.23		1	WG1349484
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1349484
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*98.3*				WG1349484
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*94.7*				WG1349840

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1349484
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1349484
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1349484
Tetrachloroethylene	127-18-4	166	0.200	1.36	0.592	4.02		1	WG1349484
Trichloroethylene	79-01-6	131	0.200	1.07	0.203	1.09		1	WG1349484
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1349484
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*101*				WG1349484
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*99.1*				WG1349840

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1349484
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1349484
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1349484
Tetrachloroethylene	127-18-4	166	0.200	1.36	6.95	47.2		1	WG1349484
Trichloroethylene	79-01-6	131	0.200	1.07	0.784	4.20		1	WG1349484
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG1349484
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*99.4*				WG1349484
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*96.3*				WG1349840

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG1349484
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG1349484
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG1349484
Tetrachloroethylene	127-18-4	166	0.200	1.36	5.38	36.5		1	WG1349484
Trichloroethylene	79-01-6	131	0.200	1.07	5.42	29.1		1	WG1349484
Vinyl chloride	75-01-4	62.50	0.200	0.511	4.76	12.2		1	WG1349484
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*99.2*				WG1349484
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*97.8*				WG1349840

Method Blank (MB)

(MB) R3453103-3 09/20/19 09:04

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
1,1-Dichloroethene	U		0.0490	0.200
cis-1,2-Dichloroethene	U		0.0389	0.200
trans-1,2-Dichloroethene	U		0.0464	0.200
Tetrachloroethylene	U		0.0497	0.200
Trichloroethylene	U		0.0545	0.200
Vinyl chloride	U		0.0457	0.200
(S) 1,4-Bromofluorobenzene	*94.1*			*60.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3453103-1 09/20/19 07:35 • (LCSD) R3453103-2 09/20/19 08:20

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Vinyl chloride	3.75	3.84	3.80	102	101	70.0-130			0.862	25
1,1-Dichloroethene	3.75	3.73	3.66	99.6	97.6	70.0-130			2.01	25
trans-1,2-Dichloroethene	3.75	3.80	3.72	101	99.1	70.0-130			2.18	25
cis-1,2-Dichloroethene	3.75	3.86	3.77	103	101	70.0-130			2.26	25
Trichloroethylene	3.75	3.86	3.81	103	102	70.0-130			1.23	25
Tetrachloroethylene	3.75	4.08	4.01	109	107	70.0-130			1.79	25
(S) 1,4-Bromofluorobenzene				*97.4*	*98.7*	*60.0-140*				

Method Blank (MB)

(MB) R3453212-3 09/21/19 09:14

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Tetrachloroethylene	U		0.0497	0.200
Trichloroethylene	U		0.0545	0.200
(S) 1,4-Bromofluorobenzene	*95.7*			*60.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3453212-1 09/21/19 07:28 • (LCSD) R3453212-2 09/21/19 08:22

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Trichloroethylene	3.75	4.60	4.75	123	127	70.0-130			3.14	25
Tetrachloroethylene	3.75	4.65	4.67	124	124	70.0-130			0.450	25
(S) 1,4-Bromofluorobenzene				*98.3*	*100*	*60.0-140*				

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

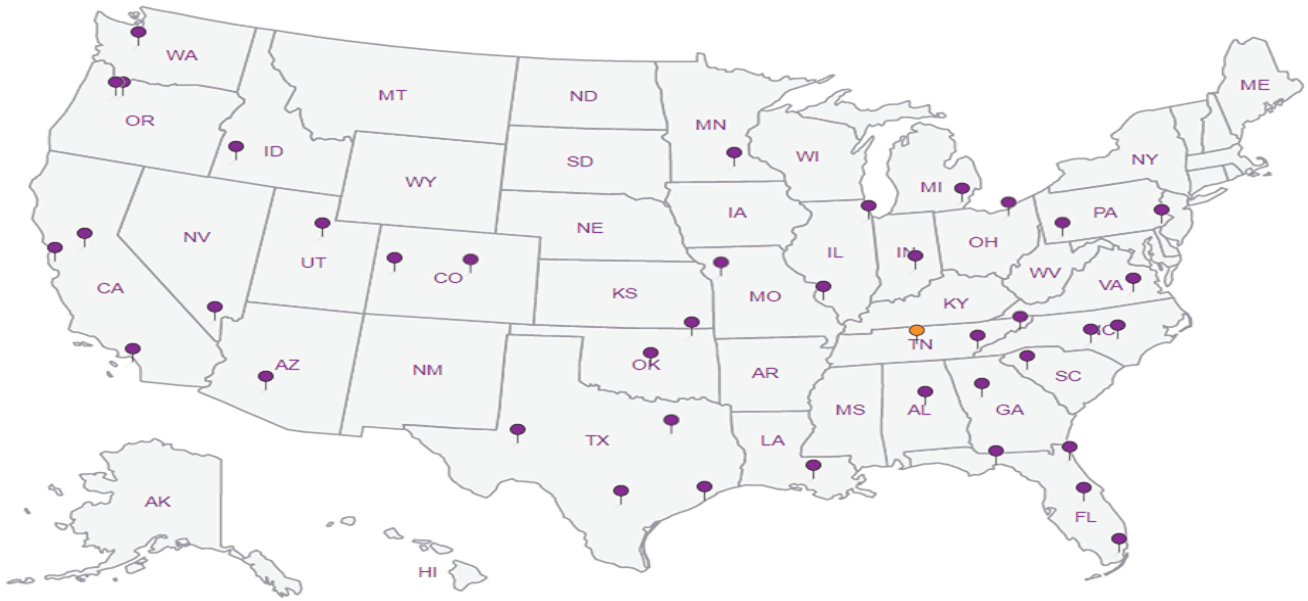
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



Chain of Custody

Page 1 of 1

EMG - Hunt Valley, MD
10461 Mill Run Circle, Ste 1100
Owings Mills, MD 21117

Billing Information:
Accounts Payable
10461 Mills Run Circle, Ste 1100
Owings Mills, MD 18519

Report to: Mark Fischer
Email To: mfischer@heartlandenv.com

Project Description: Kohls Plaza 214-220 East Route
City/State Collected: Nanuet NY
Please Circle: PT MT CT ET

Phone: 410-785-6200
Fax:
Client Project #: 140403.19R000-001.05
Lab Project #: EMGHVMD-2217
Collected by (print): Josh Rudd
Site/Facility ID #:
P.O. #: 2217
Collected by (signature):
Immediately Packed on Ice N ___ Y ✓
Quote #:

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day
Date Results Needed: 24 Hour TAT

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Fax: 615-758-5859

SDG # L1141361
B163

Acctnum: EMGHVMD
Template: T156003
Prelogin: P730394
PM: 364 - T. Alan Harvill
PB: BL 9/17/19
Shipped Via: FedEX Ground

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TO-15 Summa	Initial Pressure	Sample Start Time	Final Pressure	Sample End Time	# Summa	Remarks	Sample # (lab only)
SS-1	Grab	Air		9/19/19		1	X	30	9:26	5	9:30		7350	-01
SS-2	Grab	Air		9/19/19		1	X	29	11:11	3	11:16		5371	-02
SS-3	Grab	Air		9/19/19		1	X	30	11:44	5	11:48		7906	-03
SS-4	Grab	Air		9/19/19		1	X	30	12:12	5	12:17		8027	-04
SS-5	Grab	Air		9/19/19		1	X	25	12:27	5	12:31		9037	-05
SS-6	Grab	Air		9/19/19		1	X	30	12:48	5	12:53		10589	-06
		Air				1	X							

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks: 24 Hour TAT RAD SCREEN: <0.5 mR/hr pH _____ Temp _____ Flow _____ Other _____

Samples returned via: __ UPS ✓ FedEx __ Courier _____
Tracking # 1145 2234 9875

Sample Receipt Checklist
COC Seal Present/Intact: ✓NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: ✓Y __N
Correct bottles used: ✓Y __N
Sufficient volume sent: ✓Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y ✓N
RAD Screen <0.5 mR/hr: ✓Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / (No) HCL / MeoH TBR	If preservation required by Login: Date/Time
Josh Rudd	9/19/19	14:00		Ø	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: Amb °C Bottles Received: 6	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Tenyka Sinclair	Date: 9/20/19 Time: 8:45	Hold: Condition: NCF / (OK)