ARM Group Inc.
Engineers and Scientists

October 18, 2019

Ms. Barbara Brown
Project Coordinator
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, MD 21230

Re: Building Occupancy Assessment
Area A: Sub-Parcel A11-1
Tradepoint Atlantic
Sparrows Point, MD 21219

Dear Ms. Brown:

On October 11, 2019, ARM Group Inc. (ARM), on behalf of EnviroAnalytics Group (EAG), completed a Building Occupancy Assessment (BOA) through the collection of sub-slab soil gas samples to evaluate conditions below the floor of the newly constructed warehouse facility on Sub-Parcel A11-1 (the Site) of the Tradepoint Atlantic property located on Sparrows Point, Maryland. The BOA was conducted in accordance with the Sub-Slab Soil Gas & Indoor Air Monitoring Plan dated September 13, 2019. Indoor air samples were not specified to be collected during this first round of monitoring.

Prior to ARM mobilizing to the Site, a Tradepoint Atlantic contractor created 6-inch diameter pilot-holes through the concrete floor at the four locations provided on **Figure 1** to facilitate the installation of permanent sub-slab soil gas monitoring probes. On October 8, 2019, ARM personnel mobilized to complete the installations. The Stego® Wrap vapor barrier (below the concrete slab) was carefully cut and peeled back to gain access to the subsurface. A hammer drill was used to create a shallow borehole that extended below the floor slab through the subgrade to a depth of at least 8 inches below the bottom of the floor slab. A 6-inch soil gas implant, constructed of double woven stainless-steel wire screen, was then attached to an appropriate length of polyethylene tubing and lowered to the bottom of the borehole.

Once the implant and tubing were installed, the tubing was capped with a three-way valve, and clean sand was added around the implant to create a permeable layer that extended at least 2 inches above the implant. Bentonite was then added and hydrated to create a seal above the sand pack that extended to the vapor barrier, which was then put back in place prior to adding additional hydrated bentonite. Additional bentonite was added until it was within the pilot-hole and approximately 6 inches from the surface. Concrete was then used to seal the hole to the surface and secure the surface completion.

On October 9, 2019, 24 hours after the installation of the monitoring probes, leak tests were performed to ensure that valid soil gas samples would be collected, and to provide quantitative proof of the integrity of the surface seal. The testing involved the introduction of a gaseous tracer compound (helium) into shroud which covered the sampling point, and then monitoring with a hand-held meter for the presence of helium in the air withdrawn from the subsurface. While the shroud was inflated, air was purged from the monitoring point using a three-way valve and a syringe. Using the same three-way valve and syringe, a Tedlar bag was then filled with at least 500 mL of air that was withdrawn from the monitoring point. The air inside of the Tedlar bag was then screened in the field with the meter.

As stated in Field Standard Operating Procedure (SOP) Number 002, if less than 10% of the starting concentration of the tracer gas within the shroud was observed in the Tedlar bag sample, the seal could be considered competent and sampling would continue. During fieldwork, the concentration of helium measured in the Tedlar bag was always significantly less than 10%, and each seal was deemed adequate to proceed.

Sampling of the monitoring points commenced on October 11, 2019. Prior to sampling, a syringe was attached to the three-way valve and three purge volumes of air were removed. After the probe had been purged of any ambient air, an evacuated stainless-steel Summa canister with a flow restrictor set for an 8-hour intake time was attached to the tubing. The soil gas sample was then collected over a period of 8 hours. At the completion of the sampling period, the valve of the Summa canister was closed, and an identification tag was attached to the canister.

Quality assurance and quality control (QA/QC) samples were collected during field studies to evaluate field/laboratory variability. As specified in the Sub-Slab Soil Gas & Indoor Air Monitoring Plan, a blind field duplicate and an equipment blank consisting of "clean" air provided by the laboratory were collected in the field and submitted for analysis.

ARM submitted the four sub-slab soil gas samples and QA/QC samples to Pace Analytical Services, Inc. (PACE), via courier and under a completed Chain of Custody, to be analyzed for Volatile Organic Compounds (VOCs) via United States Environmental Protection Agency (USEPA) Method TO-15. The final results were received from PACE on October 18, 2019. The laboratory's Certificate of Analysis is included as **Attachment 1**. Results were compared against the soil gas Project Action Limit (PALs) established in the property-wide Quality Assurance Project Plan (QAPP) dated April 5, 2016 that was developed to govern the environmental investigation work performed across the Tradepoint Atlantic property. The PALs are generally based on the Maryland Department of the Environment (MDE) Commercial Tier 1 Target Soil Gas screening levels.

The detected VOC parameters within the sub-slab soil gas samples are summarized and compared to the PALs in **Table 1**. The summary table includes all parameters with at least one detection in any sub-slab soil gas sample, and the complete analytical results can be viewed in the provided

laboratory report (**Attachment 1**). While there were several VOCs detected at low concentrations in the samples, none of the detected concentrations exceeded the applicable PALs in any of the samples submitted for analysis. There is no significant risk to commercial workers via the vapor intrusion to indoor air risk pathway, and the structure appears to be suitable for occupancy.

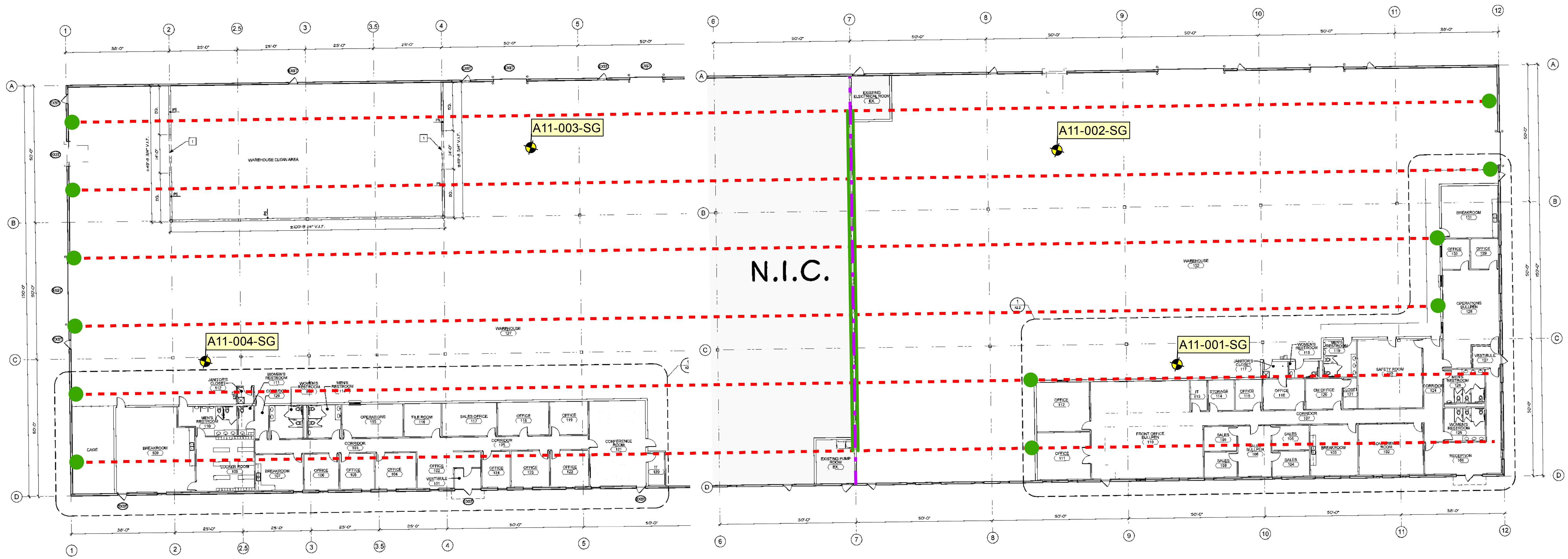
If you have questions regarding any information covered in this document, please feel free to contact ARM Group Inc. at (410) 290-7775.

Respectfully submitted,
ARM Group Inc.

Taylor R. Smith, P.E.
Project Engineer

Eric S. Magdar, P.G.
Vice President

FIGURES



Sub-Slab Vapor Sampling Point

Venting Pipe Monitoring Point (Potential Future Sampling Point)

Solid Pipe Header and Riser

Vapor Collection Boundary

Perforated/Screened Venting Pipe

Sub-Parcel A11-1 - Building Layout
Sub-Slab Soil Gas Sample Points

October 17, 2019

Figure 1

ARM Group Inc.
Engineers and Scientists

0 20 40 80 Feet

Tradepoint Atlantic

Baltimore County, MD

EnviroAnalytics Group

ARM Project 160443M-20

TABLES

Table 1 - Sub-Parcel A11-1
Summary of VOCs Detected in Sub-Slab Soil Gas

Parameter	Units	PAL	A11-001-SG	A11-002-SG	A11-003-SG	A11-004-SG
1,1,1-Trichloroethane	ug/m^3	2,200,000	**14.4**	**2.5**	**5.2**	**1.7**
1,1-Dichloroethane	ug/m^3	7,700	**1.7**	**0.50 J**	1.1 U	1.1 U
1,2,4-Trimethylbenzene	ug/m^3	3,100	**1.7**	**1.1 J**	**0.73 J**	1.4 U
2-Butanone (MEK)	ug/m^3	2,200,000	**16.1**	**13.2**	**12.3**	**10.3**
2-Hexanone	ug/m^3	14,000	5.8 U	**2.0 J**	5.8 U	5.8 U
4-Methyl-2-pentanone (MIBK)	ug/m^3	1,400,000	**2.3 J**	5.8 U	5.8 U	**0.87 J**
Acetone	ug/m^3	14,000,000	**231**	**298**	**98.5**	**358**
Benzene	ug/m^3	1,600	**17.8**	**35.4**	**22.4**	**19.2**
Bromodichloromethane	ug/m^3	340	**3.2**	**6.8**	**1.3 J**	1.9 U
Carbon disulfide	ug/m^3	310,000	**428**	**1,030**	**215**	**447**
Chloroform	ug/m^3	540	**64.8**	**113**	**13.8**	**8.1**
Chloromethane	ug/m^3	40,000	**2.4**	**3.5**	**1.7**	**1.3**
Cyclohexane	ug/m^3	2,700,000	**81.2**	**4,410**	**96.8**	2.4 U
Dichlorodifluoromethane	ug/m^3	44,000	**2.0**	**2.2**	**2.2**	**3.4**
Ethylbenzene	ug/m^3	5,000	**9.7**	**7.0**	**2.8**	**1.8**
Methylene Chloride	ug/m^3	270,000	**3.1 J**	**2.5 J**	**1.7 J**	**1.8 J**
Naphthalene	ug/m^3	370	**2.8 J**	**2.6 J**	3.7 U	**2.4 J**
Styrene	ug/m^3	440,000	**0.52 J**	1.2 U	1.2 U	1.2 U
Tetrachloroethene	ug/m^3	18,000	**42.1**	**97.1**	**1.5**	**3.8**
Toluene	ug/m^3	2,200,000	**11.1**	**9.7**	**8.8**	**6.3**
Trichloroethene	ug/m^3	880	**2.7**	**4.7**	**3.3**	**0.47 J**
Trichlorofluoromethane	ug/m^3	310,000	**16.8**	**4.7**	**7.4**	**2.8**
m&p-Xylene	ug/m^3	44,000	**40.0**	**29.0**	**11.9**	**7.8**
o-Xylene	ug/m^3	44,000	**8.3**	**6.0**	**3.0**	**2.0**

Detections in bold

Values in red indicate an exceedance of the Project Action Limit (PAL)

U: This analyte was not detected in the sample. The numeric value represents the sample quantitation/detection limit.

J: The positive result reported for this analyte is a quantitative estimate.

Attachment 1

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

October 18, 2019

Mr. James Calenda
EnviroAnalytics Group, LLC
1600 Sparrows Point Blvd
Suite B2
Sparrows Point, MD 21219

RE: Project: A11 Soil Gas-Revised Report
Pace Project No.: 30329522

Dear Mr. Calenda:
Enclosed are the analytical results for sample(s) received by the laboratory on October 12, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

This project follows the April 5, 2016 revision 3 Quality Assurance Project Plan for Sparrows Point Terminal Site, Sparrows Point, MD prepared for EnviroAnalytics Group and is not for PA DEP compliance reporting.

Trip blank was not listed on COC, but received with samples. As per client do not analyze trip blank.

Revision 1 - This report replaces the October 16, 2019 report. This project was revised on October 17, 2019 to revise the analyte list as per client request. (Greensburg, PA)

Revision 2 - This report replaces the October 17, 2019 report. This project was revised on October 18, 2019 to revise the analyte list as per client request. (Greensburg, PA)

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

Samantha Bayura
samantha.bayura@pacelabs.com
(724)850-5622
Project Manager

Enclosures

cc: Ms. Penny Gardner, Environmental Data Quality, Inc.
Ms. Shawne M. Rodgers, Environmental Data Quality, Inc.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: A11 Soil Gas-Revised Report
Pace Project No.: 30329522

Minnesota Certification IDs

1700 Elm Street SE, Minneapolis, MN 55414-2485
A2LA Certification #: 2926.01
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
CNMI Saipan Certification #: MP0003
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605
Georgia Certification #: 959
Guam EPA Certification #: MN00064
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: 03086
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064
Maryland Certification #: 322
Massachusetts Certification #: M-MN064
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137
Minnesota Dept of Ag Certifcation #: via MN 027-053-137
Minnesota Petrofund Certification #: 1240
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081
New Jersey Certification #: MN002
New York Certification #: 11647
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192
Utah Certification #: MN00064
Vermont Certification #: VT-027053137
Virginia Certification #: 460163
Washington Certification #: C486
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C
Wisconsin Certification #: 999407970
Wyoming UST Certification #: via A2LA 2926.01

Pace Analytical Services, LLC
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SAMPLE SUMMARY

Project: A11 Soil Gas-Revised Report
Pace Project No.: 30329522

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30329522001	**Duplicate**	Air	10/11/19 00:01	10/12/19 09:00
30329522002	**Equip Blank**	Air	10/11/19 16:00	10/12/19 09:00
30329522003	**A11-001-SG**	Air	10/11/19 15:47	10/12/19 09:00
30329522004	**A11-002-SG**	Air	10/11/19 15:41	10/12/19 09:00
30329522005	**A11-003-SG**	Air	10/11/19 15:05	10/12/19 09:00
30329522006	**A11-004-SG**	Air	10/11/19 15:14	10/12/19 09:00

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SAMPLE ANALYTE COUNT

Project: A11 Soil Gas-Revised Report
Pace Project No.: 30329522

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30329522001	**Duplicate**	TO-15	AFV	54	PASI-M
30329522002	**Equip Blank**	TO-15	AFV	54	PASI-M
30329522003	**A11-001-SG**	TO-15	AFV	54	PASI-M
30329522004	**A11-002-SG**	TO-15	AFV	54	PASI-M
30329522005	**A11-003-SG**	TO-15	AFV	54	PASI-M
30329522006	**A11-004-SG**	TO-15	AFV	54	PASI-M

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: A11 Soil Gas-Revised Report
Pace Project No.: 30329522

Date: October 18, 2019

Duplicate (Lab ID: 30329522001)

- 1,2,3-trichlorobenzene (CAS #87-61-3) was not detected in this mass spectral analysis.
- 1,2-dibromo-3-chloropropane (CAS #96-12-8) was not detected in this mass spectral analysis.

Equip Blank (Lab ID: 30329522002)

- 1,2,3-trichlorobenzene (CAS #87-61-3) was not detected in this mass spectral analysis.
- 1,2-dibromo-3-chloropropane (CAS #96-12-8) was not detected in this mass spectral analysis.

A11-001-SG (Lab ID: 30329522003)

- 1,2,3-trichlorobenzene (CAS #87-61-3) was not detected in this mass spectral analysis.
- 1,2-dibromo-3-chloropropane (CAS #96-12-8) was not detected in this mass spectral analysis.

A11-002-SG (Lab ID: 30329522004)

- 1,2,3-trichlorobenzene (CAS #87-61-3) was not detected in this mass spectral analysis.
- 1,2-dibromo-3-chloropropane (CAS #96-12-8) was not detected in this mass spectral analysis.

A11-003-SG (Lab ID: 30329522005)

- 1,2,3-trichlorobenzene (CAS #87-61-3) was not detected in this mass spectral analysis.
- 1,2-dibromo-3-chloropropane (CAS #96-12-8) was not detected in this mass spectral analysis.

A11-004-SG (Lab ID: 30329522006)

- 1,2,3-trichlorobenzene (CAS #87-61-3) was not detected in this mass spectral analysis.
- 1,2-dibromo-3-chloropropane (CAS #96-12-8) was not detected in this mass spectral analysis.

Pace Analytical Services, LLC
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PROJECT NARRATIVE

Project: A11 Soil Gas-Revised Report
Pace Project No.: 30329522

Method: **TO-15**
Description: TO15 MSV AIR
Client: EnviroAnalytics Group, LLC
Date: October 18, 2019

General Information:
6 samples were analyzed for TO-15. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 638003

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- A11-001-SG (Lab ID: 30329522003)
  - 1,2-Dichloroethene (Total)
- A11-002-SG (Lab ID: 30329522004)
  - 1,2-Dichloroethene (Total)
- A11-003-SG (Lab ID: 30329522005)
  - 1,2-Dichloroethene (Total)
- A11-004-SG (Lab ID: 30329522006)
  - 1,2-Dichloroethene (Total)
- BLANK (Lab ID: 3439470)
  - 1,2-Dichloroethene (Total)
- DUP (Lab ID: 3439717)
  - 1,2-Dichloroethene (Total)

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

PROJECT NARRATIVE

Project: A11 Soil Gas-Revised Report
Pace Project No.: 30329522

Method: **TO-15**
Description: TO15 MSV AIR
Client: EnviroAnalytics Group, LLC
Date: October 18, 2019

Analyte Comments:

QC Batch: 638003

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- DUP (Lab ID: 3439718)
  - 1,2-Dichloroethene (Total)
- Duplicate (Lab ID: 30329522001)
  - 1,2-Dichloroethene (Total)
- Equip Blank (Lab ID: 30329522002)
  - 1,2-Dichloroethene (Total)
- LCS (Lab ID: 3439471)
  - 1,2-Dichloroethene (Total)

This data package has been reviewed for quality and completeness and is approved for release.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: A11 Soil Gas-Revised Report
Pace Project No.: 30329522

Sample: Duplicate **Lab ID: 30329522001** Collected: 10/11/19 00:01 Received: 10/12/19 09:00 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15								
Acetone	**334**	ug/m3	3.3	1.7	1.39		10/13/19 21:30	67-64-1	
Benzene	**17.9**	ug/m3	0.45	0.21	1.39		10/13/19 21:30	71-43-2	
Bromodichloromethane	**1.9 U**	ug/m3	1.9	0.51	1.39		10/13/19 21:30	75-27-4	
Bromoform	**7.3 U**	ug/m3	7.3	2.0	1.39		10/13/19 21:30	75-25-2	
Bromomethane	**1.1 U**	ug/m3	1.1	0.32	1.39		10/13/19 21:30	74-83-9	
2-Butanone (MEK)	**10.7**	ug/m3	4.2	0.51	1.39		10/13/19 21:30	78-93-3	
Carbon disulfide	**500**	ug/m3	26.4	9.1	41.7		10/14/19 19:23	75-15-0	
Carbon tetrachloride	**1.8 U**	ug/m3	1.8	0.60	1.39		10/13/19 21:30	56-23-5	
Chlorobenzene	**1.3 U**	ug/m3	1.3	0.38	1.39		10/13/19 21:30	108-90-7	
Chloroethane	**0.75 U**	ug/m3	0.75	0.36	1.39		10/13/19 21:30	75-00-3	
Chloroform	**7.9**	ug/m3	0.69	0.27	1.39		10/13/19 21:30	67-66-3	
Chloromethane	**0.91**	ug/m3	0.58	0.22	1.39		10/13/19 21:30	74-87-3	
Cyclohexane	**2.4 U**	ug/m3	2.4	0.49	1.39		10/13/19 21:30	110-82-7	
Dibromochloromethane	**2.4 U**	ug/m3	2.4	1.0	1.39		10/13/19 21:30	124-48-1	
1,2-Dibromoethane (EDB)	**1.1 U**	ug/m3	1.1	0.51	1.39		10/13/19 21:30	106-93-4	
1,2-Dichlorobenzene	**1.7 U**	ug/m3	1.7	0.69	1.39		10/13/19 21:30	95-50-1	
1,3-Dichlorobenzene	**1.7 U**	ug/m3	1.7	0.81	1.39		10/13/19 21:30	541-73-1	
1,4-Dichlorobenzene	**4.3 U**	ug/m3	4.3	1.4	1.39		10/13/19 21:30	106-46-7	
Dichlorodifluoromethane	**3.2**	ug/m3	1.4	0.41	1.39		10/13/19 21:30	75-71-8	
1,1-Dichloroethane	**1.1 U**	ug/m3	1.1	0.31	1.39		10/13/19 21:30	75-34-3	
1,2-Dichloroethane	**0.57 U**	ug/m3	0.57	0.21	1.39		10/13/19 21:30	107-06-2	
1,2-Dichloroethene (Total)	**2.2 U**	ug/m3	2.2	0.40	1.39		10/13/19 21:30	540-59-0	N2
1,1-Dichloroethene	**1.1 U**	ug/m3	1.1	0.38	1.39		10/13/19 21:30	75-35-4	
cis-1,2-Dichloroethene	**1.1 U**	ug/m3	1.1	0.30	1.39		10/13/19 21:30	156-59-2	
trans-1,2-Dichloroethene	**1.1 U**	ug/m3	1.1	0.40	1.39		10/13/19 21:30	156-60-5	
1,2-Dichloropropane	**1.3 U**	ug/m3	1.3	0.32	1.39		10/13/19 21:30	78-87-5	
cis-1,3-Dichloropropene	**1.3 U**	ug/m3	1.3	0.42	1.39		10/13/19 21:30	10061-01-5	
trans-1,3-Dichloropropene	**1.3 U**	ug/m3	1.3	0.61	1.39		10/13/19 21:30	10061-02-6	
1,4-Dioxane (p-Dioxane)	**5.1 U**	ug/m3	5.1	1.0	1.39		10/13/19 21:30	123-91-1	
Ethylbenzene	**1.6**	ug/m3	1.2	0.42	1.39		10/13/19 21:30	100-41-4	
Hexachloro-1,3-butadiene	**7.5 U**	ug/m3	7.5	2.7	1.39		10/13/19 21:30	87-68-3	
2-Hexanone	**5.8 U**	ug/m3	5.8	1.0	1.39		10/13/19 21:30	591-78-6	
Isopropylbenzene (Cumene)	**3.5 U**	ug/m3	3.5	0.53	1.39		10/13/19 21:30	98-82-8	
Methylene Chloride	**1.9J**	ug/m3	4.9	1.7	1.39		10/13/19 21:30	75-09-2	
4-Methyl-2-pentanone (MIBK)	**5.8 U**	ug/m3	5.8	0.72	1.39		10/13/19 21:30	108-10-1	
Methyl-tert-butyl ether	**5.1 U**	ug/m3	5.1	0.92	1.39		10/13/19 21:30	1634-04-4	
Naphthalene	**2.4J**	ug/m3	3.7	1.8	1.39		10/13/19 21:30	91-20-3	
Styrene	**1.2 U**	ug/m3	1.2	0.48	1.39		10/13/19 21:30	100-42-5	
1,1,2,2-Tetrachloroethane	**0.97 U**	ug/m3	0.97	0.43	1.39		10/13/19 21:30	79-34-5	
Tetrachloroethene	**2.0**	ug/m3	0.96	0.44	1.39		10/13/19 21:30	127-18-4	
Toluene	**6.1**	ug/m3	1.1	0.49	1.39		10/13/19 21:30	108-88-3	
1,2,4-Trichlorobenzene	**10.5 U**	ug/m3	10.5	5.2	1.39		10/13/19 21:30	120-82-1	
1,1,1-Trichloroethane	**1.7**	ug/m3	1.5	0.43	1.39		10/13/19 21:30	71-55-6	
1,1,2-Trichloroethane	**0.77 U**	ug/m3	0.77	0.34	1.39		10/13/19 21:30	79-00-5	
Trichloroethene	**0.76 U**	ug/m3	0.76	0.35	1.39		10/13/19 21:30	79-01-6	
Trichlorofluoromethane	**2.5**	ug/m3	1.6	0.51	1.39		10/13/19 21:30	75-69-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: A11 Soil Gas-Revised Report
Pace Project No.: 30329522

Sample: Duplicate **Lab ID: 30329522001** Collected: 10/11/19 00:01 Received: 10/12/19 09:00 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15								
1,1,2-Trichlorotrifluoroethane	**2.2 U**	ug/m3	2.2	0.78	1.39		10/13/19 21:30	76-13-1	
1,2,3-Trimethylbenzene	**1.4 U**	ug/m3	1.4	0.56	1.39		10/13/19 21:30	526-73-8	
1,2,4-Trimethylbenzene	**1.4 U**	ug/m3	1.4	0.63	1.39		10/13/19 21:30	95-63-6	
1,3,5-Trimethylbenzene	**1.4 U**	ug/m3	1.4	0.55	1.39		10/13/19 21:30	108-67-8	
Vinyl chloride	**0.36 U**	ug/m3	0.36	0.18	1.39		10/13/19 21:30	75-01-4	
Xylene (Total)	**8.9**	ug/m3	3.7	0.97	1.39		10/13/19 21:30	1330-20-7	
m&p-Xylene	**7.0**	ug/m3	2.5	0.97	1.39		10/13/19 21:30	179601-23-1	
o-Xylene	**1.9**	ug/m3	1.2	0.48	1.39		10/13/19 21:30	95-47-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: A11 Soil Gas-Revised Report
Pace Project No.: 30329522

Sample: Equip Blank **Lab ID: 30329522002** Collected: 10/11/19 16:00 Received: 10/12/19 09:00 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15								
Acetone	**10**	ug/m3	3.9	1.9	1.61		10/13/19 20:37	67-64-1	
Benzene	**0.52 U**	ug/m3	0.52	0.25	1.61		10/13/19 20:37	71-43-2	
Bromodichloromethane	**2.2 U**	ug/m3	2.2	0.59	1.61		10/13/19 20:37	75-27-4	
Bromoform	**8.5 U**	ug/m3	8.5	2.3	1.61		10/13/19 20:37	75-25-2	
Bromomethane	**1.3 U**	ug/m3	1.3	0.37	1.61		10/13/19 20:37	74-83-9	
2-Butanone (MEK)	**0.62J**	ug/m3	4.8	0.59	1.61		10/13/19 20:37	78-93-3	
Carbon disulfide	**1.0 U**	ug/m3	1.0	0.35	1.61		10/13/19 20:37	75-15-0	
Carbon tetrachloride	**2.1 U**	ug/m3	2.1	0.69	1.61		10/13/19 20:37	56-23-5	
Chlorobenzene	**1.5 U**	ug/m3	1.5	0.44	1.61		10/13/19 20:37	108-90-7	
Chloroethane	**0.86 U**	ug/m3	0.86	0.42	1.61		10/13/19 20:37	75-00-3	
Chloroform	**0.80 U**	ug/m3	0.80	0.32	1.61		10/13/19 20:37	67-66-3	
Chloromethane	**0.68 U**	ug/m3	0.68	0.25	1.61		10/13/19 20:37	74-87-3	
Cyclohexane	**2.8 U**	ug/m3	2.8	0.57	1.61		10/13/19 20:37	110-82-7	
Dibromochloromethane	**2.8 U**	ug/m3	2.8	1.2	1.61		10/13/19 20:37	124-48-1	
1,2-Dibromoethane (EDB)	**1.3 U**	ug/m3	1.3	0.59	1.61		10/13/19 20:37	106-93-4	
1,2-Dichlorobenzene	**2.0 U**	ug/m3	2.0	0.80	1.61		10/13/19 20:37	95-50-1	
1,3-Dichlorobenzene	**2.0 U**	ug/m3	2.0	0.94	1.61		10/13/19 20:37	541-73-1	
1,4-Dichlorobenzene	**4.9 U**	ug/m3	4.9	1.6	1.61		10/13/19 20:37	106-46-7	
Dichlorodifluoromethane	**1.6 U**	ug/m3	1.6	0.47	1.61		10/13/19 20:37	75-71-8	
1,1-Dichloroethane	**1.3 U**	ug/m3	1.3	0.36	1.61		10/13/19 20:37	75-34-3	
1,2-Dichloroethane	**0.66 U**	ug/m3	0.66	0.24	1.61		10/13/19 20:37	107-06-2	
1,2-Dichloroethene (Total)	**2.6 U**	ug/m3	2.6	0.46	1.61		10/13/19 20:37	540-59-0	N2
1,1-Dichloroethene	**1.3 U**	ug/m3	1.3	0.44	1.61		10/13/19 20:37	75-35-4	
cis-1,2-Dichloroethene	**1.3 U**	ug/m3	1.3	0.35	1.61		10/13/19 20:37	156-59-2	
trans-1,2-Dichloroethene	**1.3 U**	ug/m3	1.3	0.46	1.61		10/13/19 20:37	156-60-5	
1,2-Dichloropropane	**1.5 U**	ug/m3	1.5	0.37	1.61		10/13/19 20:37	78-87-5	
cis-1,3-Dichloropropene	**1.5 U**	ug/m3	1.5	0.49	1.61		10/13/19 20:37	10061-01-5	
trans-1,3-Dichloropropene	**1.5 U**	ug/m3	1.5	0.71	1.61		10/13/19 20:37	10061-02-6	
1,4-Dioxane (p-Dioxane)	**5.9 U**	ug/m3	5.9	1.2	1.61		10/13/19 20:37	123-91-1	
Ethylbenzene	**1.4 U**	ug/m3	1.4	0.49	1.61		10/13/19 20:37	100-41-4	
Hexachloro-1,3-butadiene	**8.7 U**	ug/m3	8.7	3.2	1.61		10/13/19 20:37	87-68-3	
2-Hexanone	**6.7 U**	ug/m3	6.7	1.2	1.61		10/13/19 20:37	591-78-6	
Isopropylbenzene (Cumene)	**4.0 U**	ug/m3	4.0	0.61	1.61		10/13/19 20:37	98-82-8	
Methylene Chloride	**2.5J**	ug/m3	5.7	1.9	1.61		10/13/19 20:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	**6.7 U**	ug/m3	6.7	0.83	1.61		10/13/19 20:37	108-10-1	
Methyl-tert-butyl ether	**5.9 U**	ug/m3	5.9	1.1	1.61		10/13/19 20:37	1634-04-4	
Naphthalene	**4.3 U**	ug/m3	4.3	2.1	1.61		10/13/19 20:37	91-20-3	
Styrene	**1.4 U**	ug/m3	1.4	0.55	1.61		10/13/19 20:37	100-42-5	
1,1,2,2-Tetrachloroethane	**1.1 U**	ug/m3	1.1	0.50	1.61		10/13/19 20:37	79-34-5	
Tetrachloroethene	**1.1 U**	ug/m3	1.1	0.51	1.61		10/13/19 20:37	127-18-4	
Toluene	**0.62J**	ug/m3	1.2	0.57	1.61		10/13/19 20:37	108-88-3	
1,2,4-Trichlorobenzene	**12.1 U**	ug/m3	12.1	6.0	1.61		10/13/19 20:37	120-82-1	
1,1,1-Trichloroethane	**1.8 U**	ug/m3	1.8	0.50	1.61		10/13/19 20:37	71-55-6	
1,1,2-Trichloroethane	**0.89 U**	ug/m3	0.89	0.39	1.61		10/13/19 20:37	79-00-5	
Trichloroethene	**0.88 U**	ug/m3	0.88	0.41	1.61		10/13/19 20:37	79-01-6	
Trichlorofluoromethane	**1.8 U**	ug/m3	1.8	0.59	1.61		10/13/19 20:37	75-69-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: A11 Soil Gas-Revised Report
Pace Project No.: 30329522

Sample: Equip Blank **Lab ID: 30329522002** Collected: 10/11/19 16:00 Received: 10/12/19 09:00 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15								
1,1,2-Trichlorotrifluoroethane	**2.5 U**	ug/m3	2.5	0.91	1.61		10/13/19 20:37	76-13-1	
1,2,3-Trimethylbenzene	**1.6 U**	ug/m3	1.6	0.65	1.61		10/13/19 20:37	526-73-8	
1,2,4-Trimethylbenzene	**1.6 U**	ug/m3	1.6	0.73	1.61		10/13/19 20:37	95-63-6	
1,3,5-Trimethylbenzene	**1.6 U**	ug/m3	1.6	0.64	1.61		10/13/19 20:37	108-67-8	
Vinyl chloride	**0.42 U**	ug/m3	0.42	0.20	1.61		10/13/19 20:37	75-01-4	
Xylene (Total)	**4.3 U**	ug/m3	4.3	1.1	1.61		10/13/19 20:37	1330-20-7	
m&p-Xylene	**2.8 U**	ug/m3	2.8	1.1	1.61		10/13/19 20:37	179601-23-1	
o-Xylene	**1.4 U**	ug/m3	1.4	0.55	1.61		10/13/19 20:37	95-47-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
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ANALYTICAL RESULTS

Project: A11 Soil Gas-Revised Report
Pace Project No.: 30329522

Sample: A11-001-SG **Lab ID: 30329522003** Collected: 10/11/19 15:47 Received: 10/12/19 09:00 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15								
Acetone	**231**	ug/m3	3.3	1.7	1.39		10/13/19 22:50	67-64-1	
Benzene	**17.8**	ug/m3	0.45	0.21	1.39		10/13/19 22:50	71-43-2	
Bromodichloromethane	**3.2**	ug/m3	1.9	0.51	1.39		10/13/19 22:50	75-27-4	
Bromoform	**7.3 U**	ug/m3	7.3	2.0	1.39		10/13/19 22:50	75-25-2	
Bromomethane	**1.1 U**	ug/m3	1.1	0.32	1.39		10/13/19 22:50	74-83-9	
2-Butanone (MEK)	**16.1**	ug/m3	4.2	0.51	1.39		10/13/19 22:50	78-93-3	
Carbon disulfide	**428**	ug/m3	106	36.5	166.8		10/14/19 20:37	75-15-0	
Carbon tetrachloride	**1.8 U**	ug/m3	1.8	0.60	1.39		10/13/19 22:50	56-23-5	
Chlorobenzene	**1.3 U**	ug/m3	1.3	0.38	1.39		10/13/19 22:50	108-90-7	
Chloroethane	**0.75 U**	ug/m3	0.75	0.36	1.39		10/13/19 22:50	75-00-3	
Chloroform	**64.8**	ug/m3	0.69	0.27	1.39		10/13/19 22:50	67-66-3	
Chloromethane	**2.4**	ug/m3	0.58	0.22	1.39		10/13/19 22:50	74-87-3	
Cyclohexane	**81.2**	ug/m3	2.4	0.49	1.39		10/13/19 22:50	110-82-7	
Dibromochloromethane	**2.4 U**	ug/m3	2.4	1.0	1.39		10/13/19 22:50	124-48-1	
1,2-Dibromoethane (EDB)	**1.1 U**	ug/m3	1.1	0.51	1.39		10/13/19 22:50	106-93-4	
1,2-Dichlorobenzene	**1.7 U**	ug/m3	1.7	0.69	1.39		10/13/19 22:50	95-50-1	
1,3-Dichlorobenzene	**1.7 U**	ug/m3	1.7	0.81	1.39		10/13/19 22:50	541-73-1	
1,4-Dichlorobenzene	**4.3 U**	ug/m3	4.3	1.4	1.39		10/13/19 22:50	106-46-7	
Dichlorodifluoromethane	**2.0**	ug/m3	1.4	0.41	1.39		10/13/19 22:50	75-71-8	
1,1-Dichloroethane	**1.7**	ug/m3	1.1	0.31	1.39		10/13/19 22:50	75-34-3	
1,2-Dichloroethane	**0.57 U**	ug/m3	0.57	0.21	1.39		10/13/19 22:50	107-06-2	
1,2-Dichloroethene (Total)	**2.2 U**	ug/m3	2.2	0.40	1.39		10/13/19 22:50	540-59-0	N2
1,1-Dichloroethene	**1.1 U**	ug/m3	1.1	0.38	1.39		10/13/19 22:50	75-35-4	
cis-1,2-Dichloroethene	**1.1 U**	ug/m3	1.1	0.30	1.39		10/13/19 22:50	156-59-2	
trans-1,2-Dichloroethene	**1.1 U**	ug/m3	1.1	0.40	1.39		10/13/19 22:50	156-60-5	
1,2-Dichloropropane	**1.3 U**	ug/m3	1.3	0.32	1.39		10/13/19 22:50	78-87-5	
cis-1,3-Dichloropropene	**1.3 U**	ug/m3	1.3	0.42	1.39		10/13/19 22:50	10061-01-5	
trans-1,3-Dichloropropene	**1.3 U**	ug/m3	1.3	0.61	1.39		10/13/19 22:50	10061-02-6	
1,4-Dioxane (p-Dioxane)	**5.1 U**	ug/m3	5.1	1.0	1.39		10/13/19 22:50	123-91-1	
Ethylbenzene	**9.7**	ug/m3	1.2	0.42	1.39		10/13/19 22:50	100-41-4	
Hexachloro-1,3-butadiene	**7.5 U**	ug/m3	7.5	2.7	1.39		10/13/19 22:50	87-68-3	
2-Hexanone	**5.8 U**	ug/m3	5.8	1.0	1.39		10/13/19 22:50	591-78-6	
Isopropylbenzene (Cumene)	**3.5 U**	ug/m3	3.5	0.53	1.39		10/13/19 22:50	98-82-8	
Methylene Chloride	**3.1J**	ug/m3	4.9	1.7	1.39		10/13/19 22:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	**2.3J**	ug/m3	5.8	0.72	1.39		10/13/19 22:50	108-10-1	
Methyl-tert-butyl ether	**5.1 U**	ug/m3	5.1	0.92	1.39		10/13/19 22:50	1634-04-4	
Naphthalene	**2.8J**	ug/m3	3.7	1.8	1.39		10/13/19 22:50	91-20-3	
Styrene	**0.52J**	ug/m3	1.2	0.48	1.39		10/13/19 22:50	100-42-5	
1,1,2,2-Tetrachloroethane	**0.97 U**	ug/m3	0.97	0.43	1.39		10/13/19 22:50	79-34-5	
Tetrachloroethene	**42.1**	ug/m3	0.96	0.44	1.39		10/13/19 22:50	127-18-4	
Toluene	**11.1**	ug/m3	1.1	0.49	1.39		10/13/19 22:50	108-88-3	
1,2,4-Trichlorobenzene	**10.5 U**	ug/m3	10.5	5.2	1.39		10/13/19 22:50	120-82-1	
1,1,1-Trichloroethane	**14.4**	ug/m3	1.5	0.43	1.39		10/13/19 22:50	71-55-6	
1,1,2-Trichloroethane	**0.77 U**	ug/m3	0.77	0.34	1.39		10/13/19 22:50	79-00-5	
Trichloroethene	**2.7**	ug/m3	0.76	0.35	1.39		10/13/19 22:50	79-01-6	
Trichlorofluoromethane	**16.8**	ug/m3	1.6	0.51	1.39		10/13/19 22:50	75-69-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: A11 Soil Gas-Revised Report
Pace Project No.: 30329522

Sample: A11-001-SG **Lab ID: 30329522003** Collected: 10/11/19 15:47 Received: 10/12/19 09:00 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15								
1,1,2-Trichlorotrifluoroethane	**2.2 U**	ug/m3	2.2	0.78	1.39		10/13/19 22:50	76-13-1	
1,2,3-Trimethylbenzene	**1.4 U**	ug/m3	1.4	0.56	1.39		10/13/19 22:50	526-73-8	
1,2,4-Trimethylbenzene	**1.7**	ug/m3	1.4	0.63	1.39		10/13/19 22:50	95-63-6	
1,3,5-Trimethylbenzene	**1.4 U**	ug/m3	1.4	0.55	1.39		10/13/19 22:50	108-67-8	
Vinyl chloride	**0.36 U**	ug/m3	0.36	0.18	1.39		10/13/19 22:50	75-01-4	
Xylene (Total)	**48.2**	ug/m3	3.7	0.97	1.39		10/13/19 22:50	1330-20-7	
m&p-Xylene	**40.0**	ug/m3	2.5	0.97	1.39		10/13/19 22:50	179601-23-1	
o-Xylene	**8.3**	ug/m3	1.2	0.48	1.39		10/13/19 22:50	95-47-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
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ANALYTICAL RESULTS

Project: A11 Soil Gas-Revised Report
Pace Project No.: 30329522

Sample: A11-002-SG **Lab ID: 30329522004** Collected: 10/11/19 15:41 Received: 10/12/19 09:00 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15								
Acetone	**298**	ug/m3	3.3	1.7	1.39		10/13/19 21:57	67-64-1	
Benzene	**35.4**	ug/m3	0.45	0.21	1.39		10/13/19 21:57	71-43-2	
Bromodichloromethane	**6.8**	ug/m3	1.9	0.51	1.39		10/13/19 21:57	75-27-4	
Bromoform	**7.3 U**	ug/m3	7.3	2.0	1.39		10/13/19 21:57	75-25-2	
Bromomethane	**1.1 U**	ug/m3	1.1	0.32	1.39		10/13/19 21:57	74-83-9	
2-Butanone (MEK)	**13.2**	ug/m3	4.2	0.51	1.39		10/13/19 21:57	78-93-3	
Carbon disulfide	**1030**	ug/m3	106	36.5	166.8		10/14/19 19:47	75-15-0	
Carbon tetrachloride	**1.8 U**	ug/m3	1.8	0.60	1.39		10/13/19 21:57	56-23-5	
Chlorobenzene	**1.3 U**	ug/m3	1.3	0.38	1.39		10/13/19 21:57	108-90-7	
Chloroethane	**0.75 U**	ug/m3	0.75	0.36	1.39		10/13/19 21:57	75-00-3	
Chloroform	**113**	ug/m3	0.69	0.27	1.39		10/13/19 21:57	67-66-3	
Chloromethane	**3.5**	ug/m3	0.58	0.22	1.39		10/13/19 21:57	74-87-3	
Cyclohexane	**4410**	ug/m3	292	58.9	166.8		10/14/19 19:47	110-82-7	
Dibromochloromethane	**2.4 U**	ug/m3	2.4	1.0	1.39		10/13/19 21:57	124-48-1	
1,2-Dibromoethane (EDB)	**1.1 U**	ug/m3	1.1	0.51	1.39		10/13/19 21:57	106-93-4	
1,2-Dichlorobenzene	**1.7 U**	ug/m3	1.7	0.69	1.39		10/13/19 21:57	95-50-1	
1,3-Dichlorobenzene	**1.7 U**	ug/m3	1.7	0.81	1.39		10/13/19 21:57	541-73-1	
1,4-Dichlorobenzene	**4.3 U**	ug/m3	4.3	1.4	1.39		10/13/19 21:57	106-46-7	
Dichlorodifluoromethane	**2.2**	ug/m3	1.4	0.41	1.39		10/13/19 21:57	75-71-8	
1,1-Dichloroethane	**0.50J**	ug/m3	1.1	0.31	1.39		10/13/19 21:57	75-34-3	
1,2-Dichloroethane	**0.57 U**	ug/m3	0.57	0.21	1.39		10/13/19 21:57	107-06-2	
1,2-Dichloroethene (Total)	**2.2 U**	ug/m3	2.2	0.40	1.39		10/13/19 21:57	540-59-0	N2
1,1-Dichloroethene	**1.1 U**	ug/m3	1.1	0.38	1.39		10/13/19 21:57	75-35-4	
cis-1,2-Dichloroethene	**1.1 U**	ug/m3	1.1	0.30	1.39		10/13/19 21:57	156-59-2	
trans-1,2-Dichloroethene	**1.1 U**	ug/m3	1.1	0.40	1.39		10/13/19 21:57	156-60-5	
1,2-Dichloropropane	**1.3 U**	ug/m3	1.3	0.32	1.39		10/13/19 21:57	78-87-5	
cis-1,3-Dichloropropene	**1.3 U**	ug/m3	1.3	0.42	1.39		10/13/19 21:57	10061-01-5	
trans-1,3-Dichloropropene	**1.3 U**	ug/m3	1.3	0.61	1.39		10/13/19 21:57	10061-02-6	
1,4-Dioxane (p-Dioxane)	**5.1 U**	ug/m3	5.1	1.0	1.39		10/13/19 21:57	123-91-1	
Ethylbenzene	**7.0**	ug/m3	1.2	0.42	1.39		10/13/19 21:57	100-41-4	
Hexachloro-1,3-butadiene	**7.5 U**	ug/m3	7.5	2.7	1.39		10/13/19 21:57	87-68-3	
2-Hexanone	**2.0J**	ug/m3	5.8	1.0	1.39		10/13/19 21:57	591-78-6	
Isopropylbenzene (Cumene)	**3.5 U**	ug/m3	3.5	0.53	1.39		10/13/19 21:57	98-82-8	
Methylene Chloride	**2.5J**	ug/m3	4.9	1.7	1.39		10/13/19 21:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	**5.8 U**	ug/m3	5.8	0.72	1.39		10/13/19 21:57	108-10-1	
Methyl-tert-butyl ether	**5.1 U**	ug/m3	5.1	0.92	1.39		10/13/19 21:57	1634-04-4	
Naphthalene	**2.6J**	ug/m3	3.7	1.8	1.39		10/13/19 21:57	91-20-3	
Styrene	**1.2 U**	ug/m3	1.2	0.48	1.39		10/13/19 21:57	100-42-5	
1,1,2,2-Tetrachloroethane	**0.97 U**	ug/m3	0.97	0.43	1.39		10/13/19 21:57	79-34-5	
Tetrachloroethene	**97.1**	ug/m3	0.96	0.44	1.39		10/13/19 21:57	127-18-4	
Toluene	**9.7**	ug/m3	1.1	0.49	1.39		10/13/19 21:57	108-88-3	
1,2,4-Trichlorobenzene	**10.5 U**	ug/m3	10.5	5.2	1.39		10/13/19 21:57	120-82-1	
1,1,1-Trichloroethane	**2.5**	ug/m3	1.5	0.43	1.39		10/13/19 21:57	71-55-6	
1,1,2-Trichloroethane	**0.77 U**	ug/m3	0.77	0.34	1.39		10/13/19 21:57	79-00-5	
Trichloroethene	**4.7**	ug/m3	0.76	0.35	1.39		10/13/19 21:57	79-01-6	
Trichlorofluoromethane	**4.7**	ug/m3	1.6	0.51	1.39		10/13/19 21:57	75-69-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: A11 Soil Gas-Revised Report
Pace Project No.: 30329522

Sample: A11-002-SG **Lab ID: 30329522004** Collected: 10/11/19 15:41 Received: 10/12/19 09:00 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15								
1,1,2-Trichlorotrifluoroethane	**2.2 U**	ug/m3	2.2	0.78	1.39		10/13/19 21:57	76-13-1	
1,2,3-Trimethylbenzene	**1.4 U**	ug/m3	1.4	0.56	1.39		10/13/19 21:57	526-73-8	
1,2,4-Trimethylbenzene	**1.1J**	ug/m3	1.4	0.63	1.39		10/13/19 21:57	95-63-6	
1,3,5-Trimethylbenzene	**1.4 U**	ug/m3	1.4	0.55	1.39		10/13/19 21:57	108-67-8	
Vinyl chloride	**0.36 U**	ug/m3	0.36	0.18	1.39		10/13/19 21:57	75-01-4	
Xylene (Total)	**35.1**	ug/m3	3.7	0.97	1.39		10/13/19 21:57	1330-20-7	
m&p-Xylene	**29.0**	ug/m3	2.5	0.97	1.39		10/13/19 21:57	179601-23-1	
o-Xylene	**6.0**	ug/m3	1.2	0.48	1.39		10/13/19 21:57	95-47-6	

Pace Analytical Services, LLC
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Greensburg, PA 15601
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ANALYTICAL RESULTS

Project: A11 Soil Gas-Revised Report
Pace Project No.: 30329522

Sample: A11-003-SG **Lab ID: 30329522005** Collected: 10/11/19 15:05 Received: 10/12/19 09:00 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15								
Acetone	**98.5**	ug/m3	3.3	1.7	1.39		10/13/19 22:24	67-64-1	
Benzene	**22.4**	ug/m3	0.45	0.21	1.39		10/13/19 22:24	71-43-2	
Bromodichloromethane	**1.3J**	ug/m3	1.9	0.51	1.39		10/13/19 22:24	75-27-4	
Bromoform	**7.3 U**	ug/m3	7.3	2.0	1.39		10/13/19 22:24	75-25-2	
Bromomethane	**1.1 U**	ug/m3	1.1	0.32	1.39		10/13/19 22:24	74-83-9	
2-Butanone (MEK)	**12.3**	ug/m3	4.2	0.51	1.39		10/13/19 22:24	78-93-3	
Carbon disulfide	**215**	ug/m3	26.4	9.1	41.7		10/14/19 20:12	75-15-0	
Carbon tetrachloride	**1.8 U**	ug/m3	1.8	0.60	1.39		10/13/19 22:24	56-23-5	
Chlorobenzene	**1.3 U**	ug/m3	1.3	0.38	1.39		10/13/19 22:24	108-90-7	
Chloroethane	**0.75 U**	ug/m3	0.75	0.36	1.39		10/13/19 22:24	75-00-3	
Chloroform	**13.8**	ug/m3	0.69	0.27	1.39		10/13/19 22:24	67-66-3	
Chloromethane	**1.7**	ug/m3	0.58	0.22	1.39		10/13/19 22:24	74-87-3	
Cyclohexane	**96.8**	ug/m3	73.0	14.7	41.7		10/14/19 20:12	110-82-7	
Dibromochloromethane	**2.4 U**	ug/m3	2.4	1.0	1.39		10/13/19 22:24	124-48-1	
1,2-Dibromoethane (EDB)	**1.1 U**	ug/m3	1.1	0.51	1.39		10/13/19 22:24	106-93-4	
1,2-Dichlorobenzene	**1.7 U**	ug/m3	1.7	0.69	1.39		10/13/19 22:24	95-50-1	
1,3-Dichlorobenzene	**1.7 U**	ug/m3	1.7	0.81	1.39		10/13/19 22:24	541-73-1	
1,4-Dichlorobenzene	**4.3 U**	ug/m3	4.3	1.4	1.39		10/13/19 22:24	106-46-7	
Dichlorodifluoromethane	**2.2**	ug/m3	1.4	0.41	1.39		10/13/19 22:24	75-71-8	
1,1-Dichloroethane	**1.1 U**	ug/m3	1.1	0.31	1.39		10/13/19 22:24	75-34-3	
1,2-Dichloroethane	**0.57 U**	ug/m3	0.57	0.21	1.39		10/13/19 22:24	107-06-2	
1,2-Dichloroethene (Total)	**2.2 U**	ug/m3	2.2	0.40	1.39		10/13/19 22:24	540-59-0	N2
1,1-Dichloroethene	**1.1 U**	ug/m3	1.1	0.38	1.39		10/13/19 22:24	75-35-4	
cis-1,2-Dichloroethene	**1.1 U**	ug/m3	1.1	0.30	1.39		10/13/19 22:24	156-59-2	
trans-1,2-Dichloroethene	**1.1 U**	ug/m3	1.1	0.40	1.39		10/13/19 22:24	156-60-5	
1,2-Dichloropropane	**1.3 U**	ug/m3	1.3	0.32	1.39		10/13/19 22:24	78-87-5	
cis-1,3-Dichloropropene	**1.3 U**	ug/m3	1.3	0.42	1.39		10/13/19 22:24	10061-01-5	
trans-1,3-Dichloropropene	**1.3 U**	ug/m3	1.3	0.61	1.39		10/13/19 22:24	10061-02-6	
1,4-Dioxane (p-Dioxane)	**5.1 U**	ug/m3	5.1	1.0	1.39		10/13/19 22:24	123-91-1	
Ethylbenzene	**2.8**	ug/m3	1.2	0.42	1.39		10/13/19 22:24	100-41-4	
Hexachloro-1,3-butadiene	**7.5 U**	ug/m3	7.5	2.7	1.39		10/13/19 22:24	87-68-3	
2-Hexanone	**5.8 U**	ug/m3	5.8	1.0	1.39		10/13/19 22:24	591-78-6	
Isopropylbenzene (Cumene)	**3.5 U**	ug/m3	3.5	0.53	1.39		10/13/19 22:24	98-82-8	
Methylene Chloride	**1.7J**	ug/m3	4.9	1.7	1.39		10/13/19 22:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	**5.8 U**	ug/m3	5.8	0.72	1.39		10/13/19 22:24	108-10-1	
Methyl-tert-butyl ether	**5.1 U**	ug/m3	5.1	0.92	1.39		10/13/19 22:24	1634-04-4	
Naphthalene	**3.7 U**	ug/m3	3.7	1.8	1.39		10/13/19 22:24	91-20-3	
Styrene	**1.2 U**	ug/m3	1.2	0.48	1.39		10/13/19 22:24	100-42-5	
1,1,2,2-Tetrachloroethane	**0.97 U**	ug/m3	0.97	0.43	1.39		10/13/19 22:24	79-34-5	
Tetrachloroethene	**1.5**	ug/m3	0.96	0.44	1.39		10/13/19 22:24	127-18-4	
Toluene	**8.8**	ug/m3	1.1	0.49	1.39		10/13/19 22:24	108-88-3	
1,2,4-Trichlorobenzene	**10.5 U**	ug/m3	10.5	5.2	1.39		10/13/19 22:24	120-82-1	
1,1,1-Trichloroethane	**5.2**	ug/m3	1.5	0.43	1.39		10/13/19 22:24	71-55-6	
1,1,2-Trichloroethane	**0.77 U**	ug/m3	0.77	0.34	1.39		10/13/19 22:24	79-00-5	
Trichloroethene	**3.3**	ug/m3	0.76	0.35	1.39		10/13/19 22:24	79-01-6	
Trichlorofluoromethane	**7.4**	ug/m3	1.6	0.51	1.39		10/13/19 22:24	75-69-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: A11 Soil Gas-Revised Report
Pace Project No.: 30329522

Sample: A11-003-SG **Lab ID: 30329522005** Collected: 10/11/19 15:05 Received: 10/12/19 09:00 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15								
1,1,2-Trichlorotrifluoroethane	**2.2 U**	ug/m3	2.2	0.78	1.39		10/13/19 22:24	76-13-1	
1,2,3-Trimethylbenzene	**1.4 U**	ug/m3	1.4	0.56	1.39		10/13/19 22:24	526-73-8	
1,2,4-Trimethylbenzene	**0.73J**	ug/m3	1.4	0.63	1.39		10/13/19 22:24	95-63-6	
1,3,5-Trimethylbenzene	**1.4 U**	ug/m3	1.4	0.55	1.39		10/13/19 22:24	108-67-8	
Vinyl chloride	**0.36 U**	ug/m3	0.36	0.18	1.39		10/13/19 22:24	75-01-4	
Xylene (Total)	**14.8**	ug/m3	3.7	0.97	1.39		10/13/19 22:24	1330-20-7	
m&p-Xylene	**11.9**	ug/m3	2.5	0.97	1.39		10/13/19 22:24	179601-23-1	
o-Xylene	**3.0**	ug/m3	1.2	0.48	1.39		10/13/19 22:24	95-47-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: A11 Soil Gas-Revised Report
Pace Project No.: 30329522

Sample: A11-004-SG **Lab ID: 30329522006** Collected: 10/11/19 15:14 Received: 10/12/19 09:00 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15								
Acetone	**358**	ug/m3	3.3	1.7	1.39		10/13/19 21:04	67-64-1	
Benzene	**19.2**	ug/m3	0.45	0.21	1.39		10/13/19 21:04	71-43-2	
Bromodichloromethane	**1.9 U**	ug/m3	1.9	0.51	1.39		10/13/19 21:04	75-27-4	
Bromoform	**7.3 U**	ug/m3	7.3	2.0	1.39		10/13/19 21:04	75-25-2	
Bromomethane	**1.1 U**	ug/m3	1.1	0.32	1.39		10/13/19 21:04	74-83-9	
2-Butanone (MEK)	**10.3**	ug/m3	4.2	0.51	1.39		10/13/19 21:04	78-93-3	
Carbon disulfide	**447**	ug/m3	26.4	9.1	41.7		10/14/19 18:58	75-15-0	
Carbon tetrachloride	**1.8 U**	ug/m3	1.8	0.60	1.39		10/13/19 21:04	56-23-5	
Chlorobenzene	**1.3 U**	ug/m3	1.3	0.38	1.39		10/13/19 21:04	108-90-7	
Chloroethane	**0.75 U**	ug/m3	0.75	0.36	1.39		10/13/19 21:04	75-00-3	
Chloroform	**8.1**	ug/m3	0.69	0.27	1.39		10/13/19 21:04	67-66-3	
Chloromethane	**1.3**	ug/m3	0.58	0.22	1.39		10/13/19 21:04	74-87-3	
Cyclohexane	**2.4 U**	ug/m3	2.4	0.49	1.39		10/13/19 21:04	110-82-7	
Dibromochloromethane	**2.4 U**	ug/m3	2.4	1.0	1.39		10/13/19 21:04	124-48-1	
1,2-Dibromoethane (EDB)	**1.1 U**	ug/m3	1.1	0.51	1.39		10/13/19 21:04	106-93-4	
1,2-Dichlorobenzene	**1.7 U**	ug/m3	1.7	0.69	1.39		10/13/19 21:04	95-50-1	
1,3-Dichlorobenzene	**1.7 U**	ug/m3	1.7	0.81	1.39		10/13/19 21:04	541-73-1	
1,4-Dichlorobenzene	**4.3 U**	ug/m3	4.3	1.4	1.39		10/13/19 21:04	106-46-7	
Dichlorodifluoromethane	**3.4**	ug/m3	1.4	0.41	1.39		10/13/19 21:04	75-71-8	
1,1-Dichloroethane	**1.1 U**	ug/m3	1.1	0.31	1.39		10/13/19 21:04	75-34-3	
1,2-Dichloroethane	**0.57 U**	ug/m3	0.57	0.21	1.39		10/13/19 21:04	107-06-2	
1,2-Dichloroethene (Total)	**2.2 U**	ug/m3	2.2	0.40	1.39		10/13/19 21:04	540-59-0	N2
1,1-Dichloroethene	**1.1 U**	ug/m3	1.1	0.38	1.39		10/13/19 21:04	75-35-4	
cis-1,2-Dichloroethene	**1.1 U**	ug/m3	1.1	0.30	1.39		10/13/19 21:04	156-59-2	
trans-1,2-Dichloroethene	**1.1 U**	ug/m3	1.1	0.40	1.39		10/13/19 21:04	156-60-5	
1,2-Dichloropropane	**1.3 U**	ug/m3	1.3	0.32	1.39		10/13/19 21:04	78-87-5	
cis-1,3-Dichloropropene	**1.3 U**	ug/m3	1.3	0.42	1.39		10/13/19 21:04	10061-01-5	
trans-1,3-Dichloropropene	**1.3 U**	ug/m3	1.3	0.61	1.39		10/13/19 21:04	10061-02-6	
1,4-Dioxane (p-Dioxane)	**5.1 U**	ug/m3	5.1	1.0	1.39		10/13/19 21:04	123-91-1	
Ethylbenzene	**1.8**	ug/m3	1.2	0.42	1.39		10/13/19 21:04	100-41-4	
Hexachloro-1,3-butadiene	**7.5 U**	ug/m3	7.5	2.7	1.39		10/13/19 21:04	87-68-3	
2-Hexanone	**5.8 U**	ug/m3	5.8	1.0	1.39		10/13/19 21:04	591-78-6	
Isopropylbenzene (Cumene)	**3.5 U**	ug/m3	3.5	0.53	1.39		10/13/19 21:04	98-82-8	
Methylene Chloride	**1.8J**	ug/m3	4.9	1.7	1.39		10/13/19 21:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	**0.87J**	ug/m3	5.8	0.72	1.39		10/13/19 21:04	108-10-1	
Methyl-tert-butyl ether	**5.1 U**	ug/m3	5.1	0.92	1.39		10/13/19 21:04	1634-04-4	
Naphthalene	**2.4J**	ug/m3	3.7	1.8	1.39		10/13/19 21:04	91-20-3	
Styrene	**1.2 U**	ug/m3	1.2	0.48	1.39		10/13/19 21:04	100-42-5	
1,1,2,2-Tetrachloroethane	**0.97 U**	ug/m3	0.97	0.43	1.39		10/13/19 21:04	79-34-5	
Tetrachloroethene	**3.8**	ug/m3	0.96	0.44	1.39		10/13/19 21:04	127-18-4	
Toluene	**6.3**	ug/m3	1.1	0.49	1.39		10/13/19 21:04	108-88-3	
1,2,4-Trichlorobenzene	**10.5 U**	ug/m3	10.5	5.2	1.39		10/13/19 21:04	120-82-1	
1,1,1-Trichloroethane	**1.7**	ug/m3	1.5	0.43	1.39		10/13/19 21:04	71-55-6	
1,1,2-Trichloroethane	**0.77 U**	ug/m3	0.77	0.34	1.39		10/13/19 21:04	79-00-5	
Trichloroethene	**0.47J**	ug/m3	0.76	0.35	1.39		10/13/19 21:04	79-01-6	
Trichlorofluoromethane	**2.8**	ug/m3	1.6	0.51	1.39		10/13/19 21:04	75-69-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: A11 Soil Gas-Revised Report
Pace Project No.: 30329522

Sample: A11-004-SG **Lab ID: 30329522006** Collected: 10/11/19 15:14 Received: 10/12/19 09:00 Matrix: Air

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15								
1,1,2-Trichlorotrifluoroethane	**2.2 U**	ug/m3	2.2	0.78	1.39		10/13/19 21:04	76-13-1	
1,2,3-Trimethylbenzene	**1.4 U**	ug/m3	1.4	0.56	1.39		10/13/19 21:04	526-73-8	
1,2,4-Trimethylbenzene	**1.4 U**	ug/m3	1.4	0.63	1.39		10/13/19 21:04	95-63-6	
1,3,5-Trimethylbenzene	**1.4 U**	ug/m3	1.4	0.55	1.39		10/13/19 21:04	108-67-8	
Vinyl chloride	**0.36 U**	ug/m3	0.36	0.18	1.39		10/13/19 21:04	75-01-4	
Xylene (Total)	**9.8**	ug/m3	3.7	0.97	1.39		10/13/19 21:04	1330-20-7	
m&p-Xylene	**7.8**	ug/m3	2.5	0.97	1.39		10/13/19 21:04	179601-23-1	
o-Xylene	**2.0**	ug/m3	1.2	0.48	1.39		10/13/19 21:04	95-47-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: A11 Soil Gas-Revised Report
Pace Project No.: 30329522

QC Batch: 638003 Analysis Method: TO-15
QC Batch Method: TO-15 Analysis Description: TO15 MSV AIR Low Level
Associated Lab Samples: 30329522001, 30329522002, 30329522003, 30329522004, 30329522005, 30329522006

METHOD BLANK: 3439470 Matrix: Air
Associated Lab Samples: 30329522001, 30329522002, 30329522003, 30329522004, 30329522005, 30329522006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/m3	0.56 U	0.56	0.15	10/13/19 09:27	
1,1,2,2-Tetrachloroethane	ug/m3	0.35 U	0.35	0.15	10/13/19 09:27	
1,1,2-Trichloroethane	ug/m3	0.28 U	0.28	0.12	10/13/19 09:27	
1,1,2-Trichlorotrifluoroethane	ug/m3	0.78 U	0.78	0.28	10/13/19 09:27	
1,1-Dichloroethane	ug/m3	0.41 U	0.41	0.11	10/13/19 09:27	
1,1-Dichloroethene	ug/m3	0.40 U	0.40	0.14	10/13/19 09:27	
1,2,3-Trimethylbenzene	ug/m3	0.50 U	0.50	0.20	10/13/19 09:27	
1,2,4-Trichlorobenzene	ug/m3	3.8 U	3.8	1.9	10/13/19 09:27	
1,2,4-Trimethylbenzene	ug/m3	0.50 U	0.50	0.23	10/13/19 09:27	
1,2-Dibromoethane (EDB)	ug/m3	0.39 U	0.39	0.18	10/13/19 09:27	
1,2-Dichlorobenzene	ug/m3	0.61 U	0.61	0.25	10/13/19 09:27	
1,2-Dichloroethane	ug/m3	0.21 U	0.21	0.075	10/13/19 09:27	
1,2-Dichloroethene (Total)	ug/m3	0.80 U	0.80	0.14	10/13/19 09:27	N2
1,2-Dichloropropane	ug/m3	0.47 U	0.47	0.12	10/13/19 09:27	
1,3,5-Trimethylbenzene	ug/m3	0.50 U	0.50	0.20	10/13/19 09:27	
1,3-Dichlorobenzene	ug/m3	0.61 U	0.61	0.29	10/13/19 09:27	
1,4-Dichlorobenzene	ug/m3	1.5 U	1.5	0.50	10/13/19 09:27	
1,4-Dioxane (p-Dioxane)	ug/m3	1.8 U	1.8	0.38	10/13/19 09:27	
2-Butanone (MEK)	ug/m3	1.5 U	1.5	0.18	10/13/19 09:27	
2-Hexanone	ug/m3	2.1 U	2.1	0.37	10/13/19 09:27	
4-Methyl-2-pentanone (MIBK)	ug/m3	2.1 U	2.1	0.26	10/13/19 09:27	
Acetone	ug/m3	1.2 U	1.2	0.60	10/13/19 09:27	
Benzene	ug/m3	0.16 U	0.16	0.076	10/13/19 09:27	
Bromodichloromethane	ug/m3	0.68 U	0.68	0.18	10/13/19 09:27	
Bromoform	ug/m3	2.6 U	2.6	0.71	10/13/19 09:27	
Bromomethane	ug/m3	0.39 U	0.39	0.11	10/13/19 09:27	
Carbon disulfide	ug/m3	0.32 U	0.32	0.11	10/13/19 09:27	
Carbon tetrachloride	ug/m3	0.64 U	0.64	0.21	10/13/19 09:27	
Chlorobenzene	ug/m3	0.47 U	0.47	0.14	10/13/19 09:27	
Chloroethane	ug/m3	0.27 U	0.27	0.13	10/13/19 09:27	
Chloroform	ug/m3	0.25 U	0.25	0.098	10/13/19 09:27	
Chloromethane	ug/m3	0.21 U	0.21	0.078	10/13/19 09:27	
cis-1,2-Dichloroethene	ug/m3	0.40 U	0.40	0.11	10/13/19 09:27	
cis-1,3-Dichloropropene	ug/m3	0.46 U	0.46	0.15	10/13/19 09:27	
Cyclohexane	ug/m3	0.88 U	0.88	0.18	10/13/19 09:27	
Dibromochloromethane	ug/m3	0.86 U	0.86	0.36	10/13/19 09:27	
Dichlorodifluoromethane	ug/m3	0.50 U	0.50	0.15	10/13/19 09:27	
Ethylbenzene	ug/m3	0.44 U	0.44	0.15	10/13/19 09:27	
Hexachloro-1,3-butadiene	ug/m3	2.7 U	2.7	0.98	10/13/19 09:27	
Isopropylbenzene (Cumene)	ug/m3	1.2 U	1.2	0.19	10/13/19 09:27	
m&p-Xylene	ug/m3	0.88 U	0.88	0.35	10/13/19 09:27	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: A11 Soil Gas-Revised Report
Pace Project No.: 30329522

METHOD BLANK: 3439470 Matrix: Air
Associated Lab Samples: 30329522001, 30329522002, 30329522003, 30329522004, 30329522005, 30329522006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Methyl-tert-butyl ether	ug/m3	1.8 U	1.8	0.33	10/13/19 09:27	
Methylene Chloride	ug/m3	1.8 U	1.8	0.60	10/13/19 09:27	
Naphthalene	ug/m3	1.3 U	1.3	0.66	10/13/19 09:27	
o-Xylene	ug/m3	0.44 U	0.44	0.17	10/13/19 09:27	
Styrene	ug/m3	0.43 U	0.43	0.17	10/13/19 09:27	
Tetrachloroethene	ug/m3	0.34 U	0.34	0.16	10/13/19 09:27	
Toluene	ug/m3	0.38 U	0.38	0.18	10/13/19 09:27	
trans-1,2-Dichloroethene	ug/m3	0.40 U	0.40	0.14	10/13/19 09:27	
trans-1,3-Dichloropropene	ug/m3	0.46 U	0.46	0.22	10/13/19 09:27	
Trichloroethene	ug/m3	0.27 U	0.27	0.13	10/13/19 09:27	
Trichlorofluoromethane	ug/m3	0.57 U	0.57	0.18	10/13/19 09:27	
Vinyl chloride	ug/m3	0.13 U	0.13	0.063	10/13/19 09:27	
Xylene (Total)	ug/m3	1.3 U	1.3	0.35	10/13/19 09:27	

LABORATORY CONTROL SAMPLE: 3439471

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/m3	55.5	61.2	110	70-130	
1,1,2,2-Tetrachloroethane	ug/m3	69.8	80.5	115	70-132	
1,1,2-Trichloroethane	ug/m3	55.5	62.9	113	70-130	
1,1,2-Trichlorotrifluoroethane	ug/m3	77.9	82.0	105	70-130	
1,1-Dichloroethane	ug/m3	41.1	43.6	106	70-130	
1,1-Dichloroethene	ug/m3	40.3	42.7	106	70-130	
1,2,3-Trimethylbenzene	ug/m3	50	60.7	122	65-147	
1,2,4-Trichlorobenzene	ug/m3	75.4	81.3	108	56-130	
1,2,4-Trimethylbenzene	ug/m3	50	61.7	123	70-134	
1,2-Dibromoethane (EDB)	ug/m3	78.1	88.5	113	70-130	
1,2-Dichlorobenzene	ug/m3	61.1	75.2	123	70-132	
1,2-Dichloroethane	ug/m3	41.1	45.1	110	70-130	
1,2-Dichloroethene (Total)	ug/m3	80.6	89.1	111	70-130	N2
1,2-Dichloropropane	ug/m3	47	50.8	108	70-130	
1,3,5-Trimethylbenzene	ug/m3	50	61.1	122	70-132	
1,3-Dichlorobenzene	ug/m3	61.1	75.5	124	70-137	
1,4-Dichlorobenzene	ug/m3	61.1	79.2	130	70-134	
1,4-Dioxane (p-Dioxane)	ug/m3	91.6	107	117	70-138	
2-Butanone (MEK)	ug/m3	30	31.0	103	70-130	
2-Hexanone	ug/m3	41.6	49.2	118	70-135	
4-Methyl-2-pentanone (MIBK)	ug/m3	41.6	47.7	115	70-131	
Acetone	ug/m3	121	114	95	67-130	
Benzene	ug/m3	32.5	33.8	104	70-130	
Bromodichloromethane	ug/m3	68.1	74.7	110	70-130	
Bromoform	ug/m3	105	111	106	70-132	
Bromomethane	ug/m3	39.5	43.4	110	69-130	
Carbon disulfide	ug/m3	31.6	33.2	105	56-137	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: A11 Soil Gas-Revised Report
Pace Project No.: 30329522

LABORATORY CONTROL SAMPLE: 3439471

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/m3	64	77.5	121	66-131	
Chlorobenzene	ug/m3	46.8	51.3	110	70-130	
Chloroethane	ug/m3	26.8	30.0	112	70-130	
Chloroform	ug/m3	49.6	52.5	106	70-130	
Chloromethane	ug/m3	21	22.6	108	66-130	
cis-1,2-Dichloroethene	ug/m3	40.3	44.7	111	70-130	
cis-1,3-Dichloropropene	ug/m3	46.1	53.0	115	70-133	
Cyclohexane	ug/m3	35	41.5	119	68-132	
Dibromochloromethane	ug/m3	86.6	102	118	70-130	
Dichlorodifluoromethane	ug/m3	50.3	56.5	112	70-130	
Ethylbenzene	ug/m3	44.1	52.3	118	67-131	
Hexachloro-1,3-butadiene	ug/m3	108	122	113	66-137	
Isopropylbenzene (Cumene)	ug/m3	50	62.6	125	70-133	
m&p-Xylene	ug/m3	88.3	107	121	70-132	
Methyl-tert-butyl ether	ug/m3	36.6	40.6	111	70-130	
Methylene Chloride	ug/m3	177	174	99	65-130	
Naphthalene	ug/m3	53.3	57.4	108	56-130	
o-Xylene	ug/m3	44.1	51.5	117	70-130	
Styrene	ug/m3	43.3	54.2	125	69-136	
Tetrachloroethene	ug/m3	68.9	75.5	110	70-130	
Toluene	ug/m3	38.3	43.5	114	70-130	
trans-1,2-Dichloroethene	ug/m3	40.3	44.4	110	70-130	
trans-1,3-Dichloropropene	ug/m3	46.1	56.2	122	70-134	
Trichloroethene	ug/m3	54.6	59.3	109	70-130	
Trichlorofluoromethane	ug/m3	57.1	62.3	109	65-130	
Vinyl chloride	ug/m3	26	28.8	111	70-130	
Xylene (Total)	ug/m3	132	158	119	70-136	

SAMPLE DUPLICATE: 3439717

Parameter	Units	10494463001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	1.6 U		25	
1,1,2,2-Tetrachloroethane	ug/m3	ND	1.0 U		25	
1,1,2-Trichloroethane	ug/m3	ND	0.80 U		25	
1,1,2-Trichlorotrifluoroethane	ug/m3	ND	2.2 U		25	
1,1-Dichloroethane	ug/m3	ND	1.2 U		25	
1,1-Dichloroethene	ug/m3	ND	1.2 U		25	
1,2,3-Trimethylbenzene	ug/m3	ND	1.4 U		25	
1,2,4-Trichlorobenzene	ug/m3	ND	10.9 U		25	
1,2,4-Trimethylbenzene	ug/m3	2.0	2.0	2	25	
1,2-Dibromoethane (EDB)	ug/m3	ND	1.1 U		25	
1,2-Dichlorobenzene	ug/m3	ND	1.8 U		25	
1,2-Dichloroethane	ug/m3	ND	0.59 U		25	
1,2-Dichloroethene (Total)	ug/m3	ND	2.3 U		25	N2
1,2-Dichloropropane	ug/m3	ND	1.4 U		25	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: A11 Soil Gas-Revised Report
Pace Project No.: 30329522

SAMPLE DUPLICATE: 3439717

Parameter	Units	10494463001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,3,5-Trimethylbenzene	ug/m3	ND	1.4 U		25	
1,3-Dichlorobenzene	ug/m3	ND	1.8 U		25	
1,4-Dichlorobenzene	ug/m3	ND	4.4 U		25	
1,4-Dioxane (p-Dioxane)	ug/m3	ND	5.3 U		25	
2-Butanone (MEK)	ug/m3	ND	1.3J		25	
2-Hexanone	ug/m3	ND	6.0 U		25	
4-Methyl-2-pentanone (MIBK)	ug/m3	10.3	10.2	2	25	
Acetone	ug/m3	61.2	63.8	4	25	
Benzene	ug/m3	ND	0.47 U		25	
Bromodichloromethane	ug/m3	ND	2.0 U		25	
Bromoform	ug/m3	ND	7.6 U		25	
Bromomethane	ug/m3	ND	1.1 U		25	
Carbon disulfide	ug/m3	ND	0.91 U		25	
Carbon tetrachloride	ug/m3	ND	1.8 U		25	
Chlorobenzene	ug/m3	ND	1.3 U		25	
Chloroethane	ug/m3	ND	0.77 U		25	
Chloroform	ug/m3	2.0	2.0	0	25	
Chloromethane	ug/m3	ND	0.60 U		25	
cis-1,2-Dichloroethene	ug/m3	ND	1.2 U		25	
cis-1,3-Dichloropropene	ug/m3	ND	1.3 U		25	
Cyclohexane	ug/m3	ND	2.5 U		25	
Dibromochloromethane	ug/m3	ND	2.5 U		25	
Dichlorodifluoromethane	ug/m3	7430	7240	3	25	
Ethylbenzene	ug/m3	2.1	2.0	3	25	
Hexachloro-1,3-butadiene	ug/m3	ND	7.8 U		25	
Isopropylbenzene (Cumene)	ug/m3	ND	3.6 U		25	
m&p-Xylene	ug/m3	9.7	9.6	0	25	
Methyl-tert-butyl ether	ug/m3	ND	5.3 U		25	
Methylene Chloride	ug/m3	5.5	5.5	0	25	
Naphthalene	ug/m3	ND	1.9J		25	
o-Xylene	ug/m3	3.3	3.3	0	25	
Styrene	ug/m3	ND	1.2 U		25	
Tetrachloroethene	ug/m3	4.1	4.1	1	25	
Toluene	ug/m3	2.8	2.7	1	25	
trans-1,2-Dichloroethene	ug/m3	ND	1.2 U		25	
trans-1,3-Dichloropropene	ug/m3	ND	1.3 U		25	
Trichloroethene	ug/m3	ND	0.79 U		25	
Trichlorofluoromethane	ug/m3	32.8	35.4	8	25	
Vinyl chloride	ug/m3	ND	0.37 U		25	
Xylene (Total)	ug/m3	12.9	12.9	0	25	

SAMPLE DUPLICATE: 3439718

Parameter	Units	10494463002 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	1.6 U		25	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: A11 Soil Gas-Revised Report
Pace Project No.: 30329522

SAMPLE DUPLICATE: 3439718

Parameter	Units	10494463002 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,2,2-Tetrachloroethane	ug/m3	ND	1.0 U		25	
1,1,2-Trichloroethane	ug/m3	ND	0.80 U		25	
1,1,2-Trichlorotrifluoroethane	ug/m3	ND	2.2 U		25	
1,1-Dichloroethane	ug/m3	ND	1.2 U		25	
1,1-Dichloroethene	ug/m3	ND	1.2 U		25	
1,2,3-Trimethylbenzene	ug/m3	ND	0.59J		25	
1,2,4-Trichlorobenzene	ug/m3	ND	10.9 U		25	
1,2,4-Trimethylbenzene	ug/m3	2.5	2.4	4	25	
1,2-Dibromoethane (EDB)	ug/m3	ND	1.1 U		25	
1,2-Dichlorobenzene	ug/m3	ND	1.8 U		25	
1,2-Dichloroethane	ug/m3	ND	0.59 U		25	
1,2-Dichloroethene (Total)	ug/m3	ND	2.3 U		25	N2
1,2-Dichloropropane	ug/m3	ND	1.4 U		25	
1,3,5-Trimethylbenzene	ug/m3	ND	0.73J		25	
1,3-Dichlorobenzene	ug/m3	ND	1.8 U		25	
1,4-Dichlorobenzene	ug/m3	ND	4.4 U		25	
1,4-Dioxane (p-Dioxane)	ug/m3	ND	5.3 U		25	
2-Butanone (MEK)	ug/m3	ND	1.5J		25	
2-Hexanone	ug/m3	ND	6.0 U		25	
4-Methyl-2-pentanone (MIBK)	ug/m3	ND	3.7J		25	
Acetone	ug/m3	23.4	22.8	3	25	
Benzene	ug/m3	ND	0.39J		25	
Bromodichloromethane	ug/m3	ND	2.0 U		25	
Bromoform	ug/m3	ND	7.6 U		25	
Bromomethane	ug/m3	ND	1.1 U		25	
Carbon disulfide	ug/m3	ND	0.91 U		25	
Carbon tetrachloride	ug/m3	ND	1.8 U		25	
Chlorobenzene	ug/m3	ND	1.3 U		25	
Chloroethane	ug/m3	ND	0.77 U		25	
Chloroform	ug/m3	ND	0.71 U		25	
Chloromethane	ug/m3	ND	0.60 U		25	
cis-1,2-Dichloroethene	ug/m3	ND	1.2 U		25	
cis-1,3-Dichloropropene	ug/m3	ND	1.3 U		25	
Cyclohexane	ug/m3	ND	2.5 U		25	
Dibromochloromethane	ug/m3	ND	2.5 U		25	
Dichlorodifluoromethane	ug/m3	10300	10200	1	25	
Ethylbenzene	ug/m3	2.1	2.1	4	25	
Hexachloro-1,3-butadiene	ug/m3	ND	7.8 U		25	
Isopropylbenzene (Cumene)	ug/m3	ND	3.6 U		25	
m&p-Xylene	ug/m3	10.5	10.2	3	25	
Methyl-tert-butyl ether	ug/m3	ND	5.3 U		25	
Methylene Chloride	ug/m3	6.0	5.8	4	25	
Naphthalene	ug/m3	ND	3.8 U		25	
o-Xylene	ug/m3	3.4	3.2	5	25	
Styrene	ug/m3	ND	1.2 U		25	
Tetrachloroethene	ug/m3	3.4	3.2	6	25	
Toluene	ug/m3	3.7	3.6	2	25	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA

Project: A11 Soil Gas-Revised Report
Pace Project No.: 30329522

SAMPLE DUPLICATE: 3439718

Parameter	Units	10494463002 Result	Dup Result	RPD	Max RPD	Qualifiers
trans-1,2-Dichloroethene	ug/m3	ND	1.2 U		25	
trans-1,3-Dichloropropene	ug/m3	ND	1.3 U		25	
Trichloroethene	ug/m3	ND	0.41J		25	
Trichlorofluoromethane	ug/m3	22.1	21.6	2	25	
Vinyl chloride	ug/m3	ND	0.37 U		25	
Xylene (Total)	ug/m3	13.9	13.5	3	25	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: A11 Soil Gas-Revised Report
Pace Project No.: 30329522

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

SAMPLE QUALIFIERS

Sample: 30329522001
[1] 1,2,3-trichlorobenzene (CAS #87-61-3) was not detected in this mass spectral analysis.
[2] 1,2-dibromo-3-chloropropane (CAS #96-12-8) was not detected in this mass spectral analysis.

Sample: 30329522002
[1] 1,2,3-trichlorobenzene (CAS #87-61-3) was not detected in this mass spectral analysis.
[2] 1,2-dibromo-3-chloropropane (CAS #96-12-8) was not detected in this mass spectral analysis.

Sample: 30329522003
[1] 1,2,3-trichlorobenzene (CAS #87-61-3) was not detected in this mass spectral analysis.
[2] 1,2-dibromo-3-chloropropane (CAS #96-12-8) was not detected in this mass spectral analysis.

Sample: 30329522004
[1] 1,2,3-trichlorobenzene (CAS #87-61-3) was not detected in this mass spectral analysis.
[2] 1,2-dibromo-3-chloropropane (CAS #96-12-8) was not detected in this mass spectral analysis.

Sample: 30329522005
[1] 1,2,3-trichlorobenzene (CAS #87-61-3) was not detected in this mass spectral analysis.
[2] 1,2-dibromo-3-chloropropane (CAS #96-12-8) was not detected in this mass spectral analysis.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: A11 Soil Gas-Revised Report
Pace Project No.: 30329522

SAMPLE QUALIFIERS

Sample: 30329522006

[1] 1,2,3-trichlorobenzene (CAS #87-61-3) was not detected in this mass spectral analysis.

[2] 1,2-dibromo-3-chloropropane (CAS #96-12-8) was not detected in this mass spectral analysis.

ANALYTE QUALIFIERS

N2 The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: A11 Soil Gas-Revised Report
Pace Project No.: 30329522

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30329522001	**Duplicate**	TO-15	638003		
30329522002	**Equip Blank**	TO-15	638003		
30329522003	**A11-001-SG**	TO-15	638003		
30329522004	**A11-002-SG**	TO-15	638003		
30329522005	**A11-003-SG**	TO-15	638003		
30329522006	**A11-004-SG**	TO-15	638003		

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AIR: CHAIN-OF-CUSTOD

The Chain-of-Custody is a LEGAL DOCUMENT. All r

WO# : 10495326

10495326

45662

Page: 1 of 1

Section A
Required Client Information:

Company:	ARM Group
Address:	9175 Guilford Rd
Email To:	jcalenda@enviroanalyticsgroup.com
Phone:	Fax:
Requested Due Date/TAT:	2 day

Section B
Required Project Information:

Report To:	James Calenda
Copy To:	
Purchase Order No.:	EAG-SPT-7719
Project Name:	All Soil gas
Project Number:	180556M

Section C
Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager/Sales Rep.	
Pace Profile #:	13565

Program: UST / Superfund / Emissions / Clean Air Act / Voluntary Clean Up / Dry Clean / RCRA / Other ___

Location of Sampling by State ___

Reporting Units: ug/m³ ___ mg/m³ ___ PPBV ___ PPMV ___ Other ___

Report Level II.___ III.___ IV.___ Other___

Section D Required Client Information
AIR SAMPLE ID
Sample IDs MUST BE UNIQUE

Valid Media Codes

MEDIA	CODE
Tedlar Bag	TB
1 Liter Summa Can	1LC
6 Liter Summa Can	6LC
Low Volume Puff	LVP
High Volume Puff	HVP
Other	PM10

ITEM #	AIR SAMPLE ID	MEDIA CODE	PID Reading (Client only)	COLLECTED Composite Start DATE	Composite Start TIME	Composite - End/Grab DATE	Composite - End/Grab TIME	Canister Pressure (Initial Field - in Hg)	Canister Pressure (Final Field - in Hg)	Summa Can Number	Flow Control Number	PM10	3C - Fixed Gas (%)	TO-3 BTEX	TO-3M (Methane)	TO-14	TO-15 Full List VOCs	TO-15 Short List BTEX	TO-15 Short List Chlorinated	TO-15 Short List (other)	Pace Lab ID
1	Duplicate	6LC		10-11-19		10-11-19	–	-27	-2	2057	2020						X				001
2	Equip. Blank	|		|	1441	|	1600	–	–	3340							X				002
3	All-001-SG	|		|	0747	|	1547	-30	-3	1293	0099						X				003
4	All-002-SG	|		|	0741	|	1541	-30	0	2132	1097						X				004
5	All-003-SG	|		|	0725	|	1525	-25	-1	1528	1990						X				005
6	All-004-SG	|		|	0714	|	1514	-30	-3	0792	1378						X				006
7	TRIP BLANK 10/12/19 CMY									0335	0291										007
8																					
9																					
10																					
11																					
12																					

Comments :
2 day TAT for:
All-001-SG
All-002-SG
All-003-SG
All-004-SG
5 day TAT:
Duplicate
Equip. Blank

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
[signature] ARM	10-11-19	1605	[signature] PACE	10/11/19	1605
[signature] PACE	10/11/19	17:15	[signature] PACE	10/12/19	900

SAMPLE CONDITIONS			
Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact
	Y/N	Y/N	Y/N
–	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Tyler Van Ness
SIGNATURE of SAMPLER: [signature]
DATE Signed (MM / DD / YY) 10/11/19

1 EQUIP 1 NOT USED 1 BLANK

ORIGINAL

1700 Elm Street SE, Suite 200, Minneapolis, MN 55414 Air Technical Phone: 612.607.6386

FC046Rev.01, 03Feb2010

Pace Analytical	Document Name: Air Sample Condition Upon Receipt	Document Revised: 31Jan2019 Page 1 of 1
	Document No.: F-MN-A-106-rev.18	Issuing Authority: Pace Minnesota Quality Office

Air Sample Condition Upon Receipt **Client Name:** ARM GROUP **Project #:** WO#: 10495326

Courier: ☒Fed Ex ☐UPS ☐USPS ☐Client ☐Pace ☐SpeeDee ☐Commercial **See Exception** ☒

PM: JDD **Due Date:** 10/22/19

CLIENT: PASI-PITT

Tracking Number: _____

Custody Seal on Cooler/Box Present? ☐Yes ☒No **Seals Intact?** ☐Yes ☒No

Packing Material: ☒Bubble Wrap ☐Bubble Bags ☒Foam ☐None ☐Tin Can ☐Other:_____ **Temp Blank rec:** ☐Yes ☒No

Temp. (TO17 and TO13 samples only) (°C): X **Corrected Temp (°C):** X **Thermometer Used:** ☐G87A9170600254 ☐G87A9155100842

Temp should be above freezing to 6°C **Correction Factor:** X **Date & Initials of Person Examining Contents:** 10/12/19 CMY

Type of ice Received ☐Blue ☐Wet ☒None

		Comments:
Chain of Custody Present?	☒Yes ☐No	1.
Chain of Custody Filled Out?	☒Yes ☐No	2.
Chain of Custody Relinquished?	☒Yes ☐No	3.
Sampler Name and/or Signature on COC?	☒Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time?	☒Yes ☐No	5.
Short Hold Time Analysis (<72 hr)?	☐Yes ☒No	6.
Rush Turn Around Time Requested?	☒Yes ☐No	7.
Sufficient Volume?	☒Yes ☐No	8.
Correct Containers Used?	☒Yes ☐No	9.
-Pace Containers Used?	☒Yes ☐No	
Containers Intact?	☒Yes ☐No	10.
Media: (Air Can) Airbag Filter TDT Passive		11. Individually Certified Cans Y (N) (list which samples)
Is sufficient information available to reconcile samples to the COC?	☒Yes ☐No	ONLY TRIP BLANK CAN IS CERT. 12.
Do cans need to be pressurized (3C and ASTM 1946 DO NOT PRESSURIZE)?	☒Yes ☐No	13. 10/12/19 CMY

Samples Received: Pressure Gauge # ☐10AIR34 ☒~~10AIR35~~ 10AIR26

Canisters					Canisters				
Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure	Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure
DUPLICATE	2057	2020	-1	-5	UNUSED	3443	1876	-22	—
EQUIP BLANK	3340	—	-5	-5					
ALL-001-SG	1293	0099	-1	-5					
ALL-002-SG	2132	1097	-1	-5					
ALL-003-SG	1528	1990	-1	-5					
ALL-004-SG	0792	1376	-1	-5					
TRIP BLANK	0335	0291	-5	—					
UNUSED	3460	1874	-28	—					

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐Yes ☐No

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

Project Manager Review: _____ **Date:** _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

During sample triage, this form is to be placed in each cooler that arrives above 6.0 degrees Celsius

SCUR Exceptions: **Workorder #:**

Out of Temp Sample IDs	Container Type	# of Containers

PM Notified? ☐Yes ☐No

If yes, indicate who was contacted/date/time.
If no, indicate reason why.

Multiple Cooler Project? ☐Yes ☐No
If you answered yes, fill out information to the left.

No Temp Blank

Read Temp	Corrected Temp	Average Temp

Tracking Number/Temperature	
7802 0552 2860	
7802 0552 2870	
7802 0552 2881	

Other Issues

Issue Type: Sample ID	Container Type	# of Containers

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preserv.	pH Upon Receipt	Date Adjusted	Time Adjusted	Amount Added (mL)	Lot # Added	pH After	In Compliance after addition?	Initials
								☐Yes ☐No	
								☐Yes ☐No	
								☐Yes ☐No	
								☐Yes ☐No	

Pace Analytical™

Media Order # 1038391

Sent to Can Room 09/27/19 11:51 AM KM
Report Printed 9/27/2019 12:58 PM

Ordered By:	Ship To:	Return To:
Contact: Samantha Bayura	**Contact:** Eric Magdar	**Contact:** Sample Receiving
Company: PACE - PIT	**Company:** ARM Group	**Lab Name:** PACE - MN
Address: 1638 Roseytown Road Suites 2,3 & 4	**Address:** 9175 Guilford Rd. Suite 310	**Address:** 1700 Elm Street Ste 200
City, St, ZIP: Greensburg, PA, 15601	**City, St, ZIP:** Columbia, MD, 21046	**City, St, ZIP:** Minneapolis, MN, 55414
Phone:	**Phone:** (410) 290-7775 x2004	**Phone:** 612-607-1700

Initiator: Carly MacDonald **PM:** Jared Dickinson **Profile Number:** 13565
Proj. Description: ARM Group **Quote Number:** **Shipping Method:** FedEx
Required By: 9/30/2019 PM **Expected Return Date:** 10/14/2019 **Tracking #:**

Return Shipping Labels	***CoC's***	***Bottle Labels***	***Bottles***
☐ No Shipper Number	☒ Blank # 1	☐ Blank	☐ Boxed Cases
☒ With Shipper Number	☐ Preprinted	☐ Pre-Printed - With Sample IDs	☐ Individually Wrapped
		☐ Pre-Printed - No Sample IDs	☐ Grouped By Sample ID/Matrix

Miscellaneous

☒ Sampling Instructions	☐ Coolers	☐ Short Hold/Rush Stickers	☐ Trip Blank
☒ Custody Seal	☐ Extra Bubble Wrap	☐ DI Water	
☐ Temperature Blanks	☐ 10 mL Cut-Off Syringes		

Notes: Air lab okay

Qty	Method	Media Specification	Certification Level	Notes
6	TO-15	6 L Canister	Low Level (0.1 - 0.2 ppbv)	Batch cert
6	Canister Attachments	Flow Controller with Gauge (specify setting)		8 hour
6	Other Misc.	Fitting/Ferrule/Tubing/Filter		

Hazard Shipping Placard In Place:

*Sample receiving hours are Monday through Friday 8:00 am to 6:00 pm and Saturday from 9:00 am to 12:00 pm unless special arrangements are made with you project manager.
*Pace Analytical reserves the right to return hazardous, toxic, or radioactive samples to you.
*Pace Analytical reserves the right to charge for unused bottles, as well as cost associated with sample storage and disposal.
*Payment term are net 30 days.
*Please include the proposal number on the chain of custody to insure proper billing

9/27/19

Pace Analytical™

Media Order # 1038547

Sent to Can Room 10/09/19 03:08 PM CT
Report Printed 10/9/2019 03:10 PM

Ordered By:	Ship To:	Return To:
Contact: Samantha Bayura	**Contact:** Stewart Kabis	**Contact:** Sample Receiving
Company: PACE - PIT	**Company:** ARM Group	**Lab Name:** PACE - MN
Address: 1638 Roseytown Road Suites 2,3 & 4	**Address:** 1600 Sparrows Point Rd	**Address:** 1700 Elm Street Ste 200
City, St, ZIP: Greensburg, PA, 15601	**City, St, ZIP:** Sparrows Point, MD, 21219	**City, St, ZIP:** Minneapolis, MN, 55414
Phone:	**Phone:**	**Phone:** 612-607-1700

Initiator: Carolynne Trout **PM:** Jared Dickinson **Profile Number:** 13565
Proj. Description: ARM Grp. 180556 **Quote Number:** **Shipping Method:** FedEx
Required By: 10/11/2019 PM **Expected Return Date:** 10/16/2019 **Tracking #:**

Return Shipping Labels	***CoC's***	***Bottle Labels***	***Bottles***
☐ No Shipper Number	☐ Blank #	☐ Blank	☐ Boxed Cases
☒ With Shipper Number	☐ Preprinted	☐ Pre-Printed - With Sample IDs	☐ Individually Wrapped
		☐ Pre-Printed - No Sample IDs	☐ Grouped By Sample ID/Matrix

Miscellaneous

☒ Sampling Instructions	☐ Coolers	☐ Short Hold/Rush Stickers	☐ Trip Blank
☒ Custody Seal	☐ Extra Bubble Wrap	☐ DI Water	
☐ Temperature Blanks	☐ 10 mL Cut-Off Syringes		

Notes: client has extra can to transfer into

Qty	Method	Media Specification	Certification Level	Notes
1	TO-15	6 L Canister	Individual Cert	Nitrogen filled Field blank (transfer) can
1	Other Misc.	Additional Tubing (specify # of feet)		1- 2 foot section of tubing
2	Other Misc.	Fitting/Ferrule/Tubing/Filter		2 Swagelok sets

Hazard Shipping Placard In Place:

10/10/19 RV

*Sample receiving hours are Monday through Friday 8:00 am to 6:00 pm and Saturday from 9:00 am to 12:00 pm unless special arrangements are made with you project manager.
*Pace Analytical reserves the right to return hazardous, toxic, or radioactive samples to you.
*Pace Analytical reserves the right to charge for unused bottles, as well as cost associated with sample storage and disposal.
*Payment term are net 30 days.
*Please include the proposal number on the chain of custody to insure proper billing

Pace Analytical™ Media Order # 1038437

Sent to Can Room 10/01/19 12:19 PM AS
Report Printed 10/1/2019 12:32 PM

Ordered By:	Ship To:	Return To:
Contact: Samantha Bayura	**Contact:** Eric Magdar	**Contact:** Sample Receiving
Company: PACE - PIT	**Company:** ARM Group	**Lab Name:** PACE - MN
Address: 1638 Roseytown Road Suites 2,3 & 4	**Address:** 9175 Guilford Rd. Suite 310	**Address:** 1700 Elm Street Ste 200
City, St, ZIP: Greensburg, PA, 15601	**City, St, ZIP:** Columbia, MD, 21046	**City, St, ZIP:** Minneapolis, MN, 55414
Phone:	**Phone:** (410) 290-7775 x2004	**Phone:** 612-607-1700

Initiator: Andrew Strom **PM:** Jared Dickinson **Profile Number:** 13565
Proj. Description: ARM Group **Quote Number:** **Shipping Method:** FedEx
Required By: 10/2/2019 PM **Expected Return Date:** 10/16/2019 **Tracking #:**

Return Shipping Labels	***CoC's***	***Bottle Labels***	***Bottles***
☐ No Shipper Number	☒ Blank # 1	☐ Blank	☐ Boxed Cases
☒ With Shipper Number	☐ Preprinted	☐ Pre-Printed - With Sample IDs	☐ Individually Wrapped
		☐ Pre-Printed - No Sample IDs	☐ Grouped By Sample ID/Matrix

Miscellaneous

☒ Sampling Instructions	☐ Coolers	☐ Short Hold/Rush Stickers	☐ Trip Blank
☒ Custody Seal	☐ Extra Bubble Wrap	☐ DI Water	
☐ Temperature Blanks	☐ 10 mL Cut-Off Syringes		

Notes: Air lab okay

Qty	Method	Media Specification	Certification Level	Notes
2	TO-15	6 L Canister	Low Level (0.1 - 0.2 ppbv)	Batch cert
2	Canister Attachments	Flow Controller with Gauge (specify setting)		8 hour
2	Other Misc.	Fitting/Ferrule/Tubing/Filter		

Hazard Shipping Placard In Place:

*Sample receiving hours are Monday through Friday 8:00 am to 6:00 pm and Saturday from 9:00 am to 12:00 pm unless special arrangements are made with you project manager.
*Pace Analytical reserves the right to return hazardous, toxic, or radioactive samples to you.
*Pace Analytical reserves the right to charge for unused bottles, as well as cost associated with sample storage and disposal.
*Payment term are net 30 days.
*Please include the proposal number on the chain of custody to insure proper billing

10/1/19