APPENDIX C1

B – EFI Global, Inc. Phase II Limited Subsurface Investigation Report

11 Commerce Way, Suite A
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DRAFT

PHASE II LIMITED SUBSURFACE INVESTIGATION REPORT

EFI Global Project No.: 011-00191
March 25, 2019

94-17 63rd Drive
Rego Park, New York 11374

Prepared For:

Arbern Queens Commercial Properties LLC
c/o Jonas Equities, Inc.
725 Church Avenue
Brooklyn, NY 11218

TOTOWA, NEW JERSEY

Project No. 011.00191
March 25, 2019

Larry Bernstein
Arbern Queens Commercial Properties LLC
c/o Jonas Equities, Inc.
725 Church Avenue
Brooklyn, NY 11218

Re: Phase II Limited Subsurface Investigation Report
Retail Building
94-17 63rd Drive
Rego Park, New York 11374

Dear Mr. Bernstein:

EFI Global, Inc. (EFI) is presenting the results from a Phase II Limited Subsurface Investigation (Phase II) performed at the retail building located at 94-17 63rd Drive, Rego Park, New York (Property). EFI recently complete a Phase I Environmental Site Assessment (ESA) at the Property. The Property consists of a retail building that was formerly a dry cleaning facility. EFI determined that the former use of the Property as a dry-cleaning facility was a Recognized Environmental Condition (REC). Additionally, a common dry-cleaning solvent was recently detected in soil-gas samples and indoor-air samples that were collected at an adjacent site to the southeast. Therefore, based on the historical use of the Property and because dry-cleaning solvent was detected in adjacent soil gas and indoor-air samples, EFI recommended a Phase II investigation to determine if the subsurface of the Property is impacted by a release from the former dry-cleaning operation.

This Phase II was performed in accordance with EFI's proposal dated March 24, 2019. This report is intended for the sole use and benefit of Arbern Queens Commercial Properties LLC c/o Jonas Equities, Inc. and may not be relied upon by any other party without the permission of EFI Global, Inc.

PURPOSE

The purpose of this investigation was to assess the current environmental status of the REC identified in a Phase I Environmental ESA that was recently completed at the Property. The information provided in this Phase II report describes the scope of work performed during the investigation and provides documentation of the factual findings of the investigation.

BACKGROUND INFORMATION

The Property is approximately 0.057 acre and improved with a one-story building with basement and a small rear courtyard. The building is subdivided into two tenant spaces. The Property, and the entire basement, was occupied by a dry cleaning facility since at least 1979. The dry cleaning facility recently vacated the building. Figure 1 is a Topographic Map of the Property and surrounding area.

In August 2018, a Soil Vapor Survey was conducted at the adjoining property to the south, known as 94-13 and 94-14 63rd Drive, as part of a real estate transaction on behalf of a potential purchaser. Tetrachloroethene (also known as perc and PCE), a dry-cleaning solvent, was detected at 33,000 micrograms per cubic meter (ug/m3) in a soil-gas sample. Additionally, PCE was detected in an indoor air sample at 12.2 ug/m3, which exceeds the New York State Department of Health (NYSDOH) mitigation level of 10.0 ug/m3. Soil samples were collected at this site to determine if the contamination was from an on-site or off-site source. No contaminants were detected in the soil samples at concentrations exceeding the New York State Department of Environmental Conservation (NYSDEC) standards. The consultants for the adjacent property concluded that the source of the PCE identified in the soil gas was emanating from the Property located 94-17 63rd Drive due to the long history of being occupied by a dry-cleaning establishment.

HEALTH AND SAFETY PLAN

EFI developed a Health and Safety Plan that was specific to the Property. The development of this plan is required by the Occupational Safety and Health Administration (OSHA) under Hazardous Waste Operations & Emergency Response 29 CFR 1910.120. The Health and Safety Plan was designed to reduce the risk of physical or chemical exposures that may affect on-site workers in the proposed work area. The Health and Safety Plan includes information about chemicals expected on the Property, health and safety procedures, and emergency response procedures. The Health and Safety Plan is on file at EFI's office.

UTILITY LOCATING

Prior to drilling or digging, a utility inspection was performed at the Property prior to the initiation of the subsurface investigation, as required by New York law. This utility clearance request consisted of notifying utility members to mark their underground utility locations. The ticket number was 190581299.

SUBSURFACE INVESTIGATION

Field Activities

The Phase II Limited Subsurface Investigation was conducted on March 12, 2019. During the investigation, four soil borings (SB-1, SB-2, SB-3, and SB-4) were advanced at the Property by Eastern Environmental Solutions, with a 420M Geoprobe portable drilling rig. Boring SB-1 was completed to 23 feet below grade level (BGL) and located in the courtyard at the rear of the Property building. Borings SB-2, SB-3 and SB-4 were completed to six feet BGL from below the basement slab. Two sub-slab soil-gas samples from beneath the basement concrete slab and one ambient air sample from the basement level were collected using one-liter summa canisters equipped with one-hour controllers. The sampling locations are illustrated on Figure 2.

Soil Sampling

Soil samples were continuously collected from the borings with a three-foot long stainless-steel macro core and disposable PVC sleeves to the terminal depth of 23 feet BGL in boring SB-1 and 6 feet BGL in borings SB-2, SB-3 and SB-4. The soil cores collected from each boring were field screened with a photo-ionization detector (PID) to determine if volatile organic vapors were present. There were no field screening readings, olfactory or visual indications of contamination detected in any of the soil samples. Based upon field observations, soil samples were collected for chemical analysis from borings SB-1 at approximately 1.0 to 3.0 feet BGL and 16.0 to 18.0 feet BGL, and from SB-2, SB-3 and SB-4 at approximately 5.0 to 6.0 feet BGL.

Soil encountered at the Property consisted mainly of light brown to medium brown silty sand from to 18 feet BGL, light brown silty clay from 18 to 21 feet BGL, and light reddish brown silty sand from 21 to 23 feet BGL. The soil boring logs are presented in Appendix I.

Ground Water Sampling

Ground water was encountered in boring SB-1 at approximately 21 feet BGL. Ground water was not encountered in borings SB-2. SB-3 or SB-4. One temporary ground water monitoring well (GW-1) was installed in boring SB-1 in order to a collect ground water sample for chemical analysis. The temporary well was constructed of one-inch diameter schedule 40 PVC well screen and riser pipe. Dedicated disposable tubing outfitted with a chock valve was utilized to remove the ground water sample. The boring was abandoned in accordance with NYSDEC Well Closure protocols and regulations following the collection of the soil and ground water samples.

Air Sampling

To evaluate the potential for a soil vapor intrusion condition at the Property, EFI conducted sub slab soil-gas and indoor-air sampling activities. Two temporary sub slab soil-gas points were installed, in accordance with the NYSDOH "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" dated October 2006 and revised May 2017. The installation was conducted using a hammer drill to create ½- inch diameter holes through the building's basement concrete slab. The sub slab soil-gas points were constructed of ¼-inch HDP tubing. After the soil-gas points and the tubing were set, a shroud was constructed over the points and sealed with bentonite. A helium check was performed on the soil-gas points to confirm the integrity of the bentonite seal. The helium check determined that less than 1% helium was detected from the soil vapor point, an acceptable level set by the NYSDOH. The samples were collected using one-liter summa canisters equipped with regulators set to fill over a one-hour period and not to exceed 0.2 liters per minute.

The indoor-air sample was collected in close proximity to the soil-gas samples. The indoor-air sample was collected using a one-liter summa canister equipped with a regulator set to fill over a one-hour period and not to exceed 0.2 liters per minute.

Laboratory Analytical Results

The soil, ground water, soil-gas and indoor-air samples were transported under chain of custody to Pace Analytical Services of Mount Juliet, Tennessee, a NYSDEC certified laboratory. Five soil samples, two from SB-1, and one each from SB-2, SB-3 and SB-4, and ground water sample GW-1, were analyzed for volatile organic compounds (VOCs) by EPA Method 8260. Additionally, the two soil-gas samples and the indoor-air sample analyzed for VOCs using USEPA Method TO-15.

According to the laboratory analytical report, PCE, trichloroethene (TCE), cis-1,2-dichloroethene (DCE), benzene, and toluene were detected in the soil samples, however the concentrations were less than the NYSDEC 6 NYCRR Part 375 Environmental Remediation Program (Part 375) Recommended Soil Objections (SCOs) Unrestricted Residential (UR) levels.

Tetrachloroethene was detected in the ground water sample GW-1 at 23.2 micrograms per liter (ug/l), which exceeds the New York State Ambient Water Standard of 5 ug/l. No other contaminants were detected at concentrations exceeding the water quality standards.

The NYSDOH Decision Matrix Tables A, B, and C were utilized to evaluate the air sample results. The "decision matrices" have guideline levels for eight contaminants and use the soil-

gas and indoor-air concentrations for comparison to determine the quality of the air and the appropriate action to take when elevated concentrations are encountered. Tetrachloroethene, TCE, and cis-1,2-DCE were identified in the soil-gas samples at concentrations that exceed the mitigation levels of the Decision Matrix set forth by NYSDOH. Additionally, vinyl chloride was detected at a concentration requiring monitoring.

The soil analytical results are summarized in Table 1, the ground water analytical results are summarized in Table 2, and the air analytical results are summarized in Table 3. The laboratory analytical reports are included as Appendix II.

RELIANCE

The use of and reliance on this report are strictly limited. This report is the intellectual property of EFI, protected by copyright law and other laws, and has been prepared solely for the use and benefit of Arbern Queens Commercial Properties LLC c/o Jonas Equities, Inc. Unless authorized in writing by EFI, reliance on or use (collectively, "Use") of this report by additional parties is strictly prohibited and shall be at the sole risk of the user, without rights of recourse or recovery from or against EFI. Any such unauthorized user shall be responsible to protect, indemnify and hold EFI, Arbern Queens Commercial Properties LLC c/o Jonas Equities, Inc. and their respective officers, employees, vendors, successors and assigns harmless from any and all claims, damages, losses, liabilities, expenses (including reasonable attorneys' fees) and costs attributable to such use. The unauthorized use of this report shall constitute acceptance of and commitment to these responsibilities, which shall be irrevocable and shall apply regardless of the cause of action or legal theory pled or asserted. Additional legal penalties may apply.

FINDINGS AND CONCLUSIONS

The following conclusions are based on the results of a Phase II limited subsurface investigation performed at 94-17 63rd Road, Rego Park. This investigation was intended to assess a REC identified in the Phase I ESA in general conformance with ASTM standards. It was not intended to satisfy the level of inquiry that may be necessary to support remedial solutions or determine migration pathways related to a release from the REC.

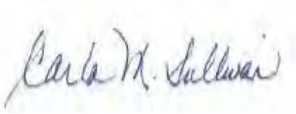
The sampling conducted during this investigation indicates that a release of dry-cleaning solvent from the former dry-cleaning operation has impacted ground water at the Property at a concentration that exceeds the NYSDEC Ambient Water Quality Standard. Additionally, according to the DOH Decision Matrix Tables, mitigation is required due to the presence of PCE, TCE, and cis-1,2-DCE in soil-gas samples, and monitoring is required due to the presence

of vinyl chloride in soil-gas samples. Chlorinated solvents are also present in soil beneath the building, however no contaminants were detected at concentrations exceeding state standards.

EFI recommends the installation of a sub-slab depressurization system to mitigate the potential of soil-gas intrusion into the building. Additionally, the presence of PCE in ground water at a concentration exceeding the water quality standard should be reported to the NYSDEC. If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

EFI GLOBAL, INC.



Carla Sullivan
Field Professional

Dale Lanier
Client Manager

TABLES

Table 1
Soil Analytical Results
Retail Building
94-17 63rd Drive
Rego Park, New York
Project # 011.00191

Sample ID	SB-1	SB-1	SB-2	SB-3	SB-4	NYSDEC Part 375
Sample Depth	1-3'	16-18'	3-6'	3-6'	3-6'	Unrestricted
Sample Date	3/12/2019	3/12/2019	3/12/2019	3/12/2019	3/12/2019	Residential
Tetrachlorethene	103	173	55.2	63.6	47.5	1300
Trichloroethene	ND	ND	19.6	1.9	ND	470
Benzene	ND	ND	4.72	ND	ND	60
cis-1,2-Dichlorethene	ND	ND	3.41	1.65	ND	250
Toluene	3.15	ND	ND	3.18	1.9	700

Concentrations reported in micrograms per kilogram (ug/kg)
ND - Not Detected
SCO - Soil Cleanup Objectives

Table 2
Ground Water Analytical Results
Retail Building
94-17 63rd Drive
Rego Park, New York
Project # 011.00191

Sample ID	GW-1	NYSDEC GW Action
Sample Date	3/12/2019	Levels
Chloroform	2.18	7
Tetrachlorothene	**23.2**	5
Toluene	0.972	5

Concentrations reported in micrograms per kilogram (ug/l)

ND - Not Detected

Bold/shaded concentrations exceed the action levels

Table 3
Sub-Slab Soil Gas and Indoor-Air Results
Retail Building
94-17 63rd Drive
Rego Park, New York
Project # 011.00191

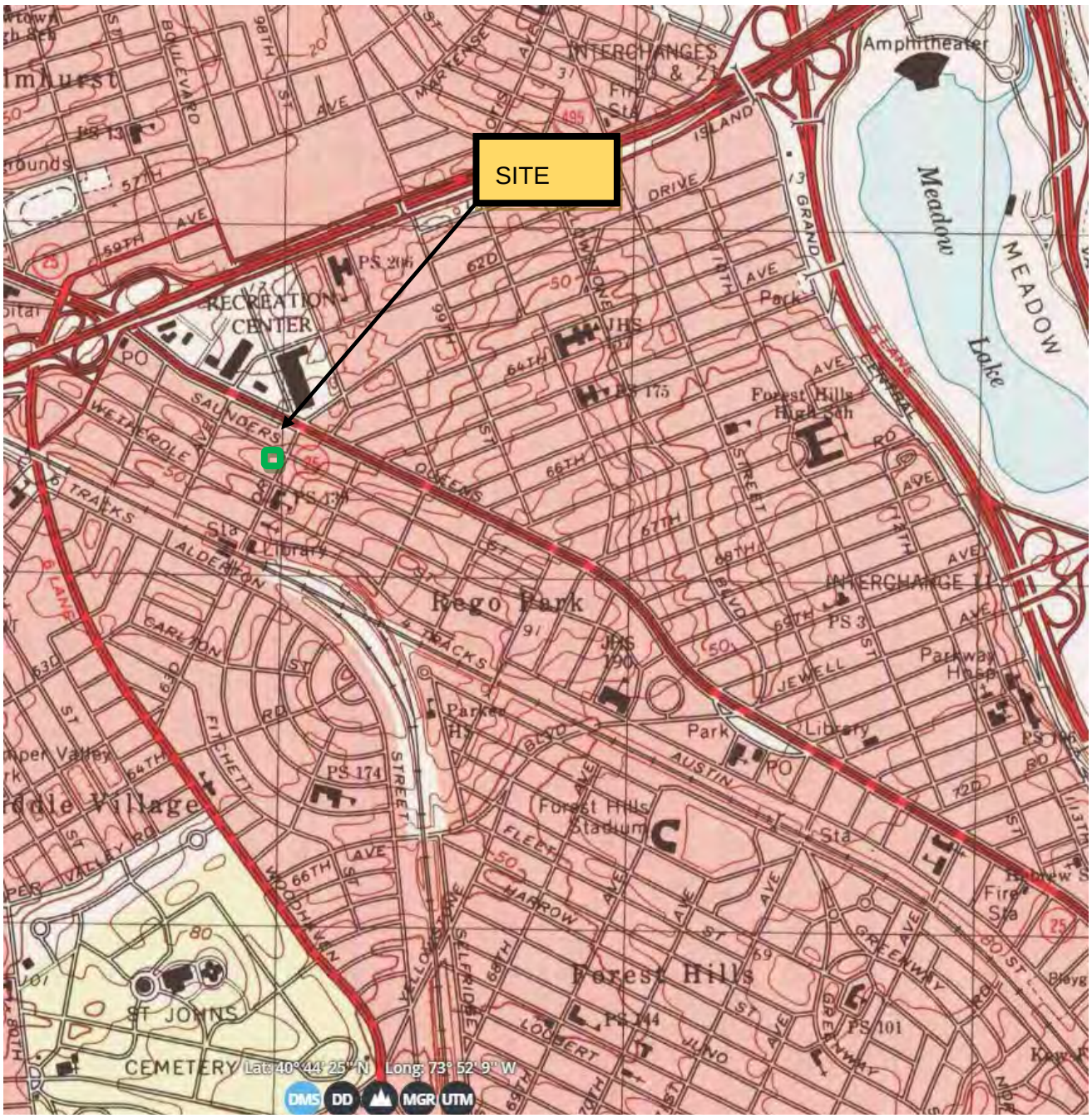
	SS-1	SS-2	Basement	DOH
Sample Depth	6"	6"	N/A	Soil Vapor / Indoor Air
Sample Date	3/12/2019	3/12/2019	3/12/2019	Matrix A
Trichloroethene	**791**	25.9	4.19	Mitigate
Cis-1,2 Dichloroethene	**423**	2.79	ND	Mitigate
1,1-Dichloroethene	3.11	ND	ND	No further Action

Sample ID	SS-1	SS-2	Basement	DOH
Sample Depth	6"	6"	N/A	Soil Vapor / Indoor Air
Sample Date	3/12/2019	3/12/2019	3/12/2019	Matrix B
Tetrachloroethene	**3,240**	**4,030**	19.9	Mitigate
Methylene Chloride	1.77	1.79	ND	No Further Action
1,1,1-Trichloroethane	ND	ND	ND	No Further Action

Sample ID	SS-1	SS-2	Basement	DOH
Sample Depth	6"	6"	N/A	Soil Vapor / Indoor Air
Sample Date	3/12/2019	3/12/2019	3/12/2019	Matrix C
Vinyl Chloride	**49**	ND	ND	Monitor

Concentrations reported in micrograms per kilogram (ug/m3)
DOH - Department of Health
ND - Not Detected
Bold/shaded concentrations exceed the action levels

FIGURES



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Site Topographic Map

Commercial Property

94-17 63rd Drive

Rego Park, New York 11374

Project # 011-00191

Figure 2 **Sample Location Map**	**Not to Scale**	**N**
efi global	**94-17 63rd Drive** **Rego Park, New York** **011-00191**	

APPENDICES

APPENDIX I

SOIL BORING LOGS

BORING SB-1

Project No. 011.00191	**Sample Date:** March 12, 2019
Project Name: Rego Park, New York	**Field Professional:** Carla Sullivan
Site Location: 94-17 63rd Drive, Rego Park, New York	**Drilled By:** Eastern Environmental

Total Depth: 23 feet

Observed Depth to GW: 21 feet

Depth of Refusal: N/A

Sample Interval	Core Rec.	Soil Description	Sample Depth	PID (ppm)	Sample ID
0-3’	2’	Organic, dark brown sandy, dry	4-5’	0.0	SB-1 1-3’
3-6’	2.5’	Gravelly, medium brownish-grey sand	9-10’	0.0	
6-9’	2.5’	Light brown sand, some fines	14-15’	0.0	
9-12’	3’	Light brown sand, some fines	19-20’	0.0	
12-15’	3’	Reddish light brown sand	24-25’	0.0	
15-18’	3’	Reddish light brown silty sand, some fines, clayey at 18’	NS	0.0	SB-1 16-18’
18-21’	3’	Same as above, wet at 21’		0.0	
21-23’	3’	Same as above, saturated		0.0	GW-1

NOTES:

Temporary well installed at 23 feet BGL with one-inch diameter PVC

Groundwater sample GW-1 collected for chemical analysis

BORING SB-2

Project No. 011.00191	**Sample Date:** March 12, 2019
Project Name: Rego Park, New York	**Field Professional:** Carla Sullivan
Site Location: 94-17 63rd Drive, Rego Park, New York	**Drilled By:** Eastern Environmental

Total Depth: 6 feet

Observed Depth to GW: N/A

Depth of Refusal: N/A

Sample Interval	Core Rec.	Soil Description	Sample Depth	PID (ppm)	Sample ID
0-3’	2.5’	Light brown sand, some fines, dry	2-3’	0.0	N/A
3-6’’	3’	Reddish light brown sand, dry	5-6’	0.0	SB-2

BORING SB-3

Project No. 011.00191	**Sample Date:** March 12, 2019
Project Name: Rego Park, New York	**Field Professional:** Carla Sullivan
Site Location: 94-17 63rd Drive, Rego Park, New York	**Drilled By:** Eastern Environmental

Total Depth: 6 feet

Observed Depth to GW: N/A

Depth of Refusal: N/A

Sample Interval	Core Rec.	Soil Description	Sample Depth	PID (ppm)	Sample ID
0-3’	2.5’	Light brown sand, some fines, dry	2-3’	0.0	N/A
3-6’’	3’	Reddish light brown sand, dry	5-6’	0.0	SB-3

BORING SB-4

Project No. 011.00191	**Sample Date:** March 12, 2019
Project Name: Rego Park, New York	**Field Professional:** Carla Sullivan
Site Location: 94-17 63rd Drive, Rego Park, New York	**Drilled By:** Eastern Environmental

Total Depth: 6 feet

Observed Depth to GW: N/A

Depth of Refusal: N/A

Sample Interval	Core Rec.	Soil Description	Sample Depth	PID (ppm)	Sample ID
0-3’	2.5’	Light brown sand, some fines, dry	2-3’	0.0	N/A
3-6’’	3’	Reddish light brown sand, dry	5-6’	0.0	SB-4

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APPENDIX II

LABORATORY ANALYTICAL REPORTS

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

March 19, 2019

EFI Global

Sample Delivery Group:	L1078252
Samples Received:	03/13/2019
Project Number:	94-17 63RD
Description:	Rego Park, NY

Report To: Dale Lanier
242 Old New Brunswick Road
Suite 414
Piscataway, NJ 08854

Entire Report Reviewed By:

Heather J Wagner
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

TABLE OF CONTENTS

SB-1 16'-18' L1078252-01 Solid

Collected by: Carla Sullivan | Collected date/time: 03/12/19 10:50 | Received date/time: 03/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1250007	1	03/14/19 15:16	03/14/19 15:27	JD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1249893	1	03/12/19 10:50	03/14/19 15:59	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1250711	1	03/12/19 10:50	03/15/19 22:06	JAH	Mt. Juliet, TN

GW-1 23' L1078252-02 GW

Collected by: Carla Sullivan | Collected date/time: 03/12/19 11:30 | Received date/time: 03/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1250591	1	03/15/19 22:49	03/15/19 22:49	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1250962	1	03/16/19 19:14	03/16/19 19:14	BMB	Mt. Juliet, TN

SB-2 3-6' L1078252-03 Solid

Collected by: Carla Sullivan | Collected date/time: 03/12/19 12:10 | Received date/time: 03/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1250007	1	03/14/19 15:16	03/14/19 15:27	JD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1249893	1	03/12/19 12:10	03/14/19 16:18	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1250711	1	03/12/19 12:10	03/15/19 22:25	JAH	Mt. Juliet, TN

SB-3 3-6' L1078252-04 Solid

Collected by: Carla Sullivan | Collected date/time: 03/12/19 12:45 | Received date/time: 03/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1250007	1	03/14/19 15:16	03/14/19 15:27	JD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1249893	1.06	03/12/19 12:45	03/14/19 16:37	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1250711	1.06	03/12/19 12:45	03/15/19 22:45	JAH	Mt. Juliet, TN

SB-4 3'-6' L1078252-05 Solid

Collected by: Carla Sullivan | Collected date/time: 03/12/19 13:15 | Received date/time: 03/13/19 08:45

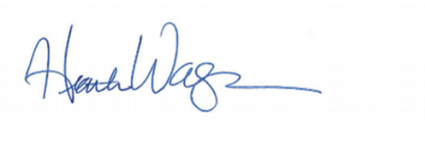
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1250007	1	03/14/19 15:16	03/14/19 15:27	JD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1249893	1	03/12/19 13:15	03/14/19 16:56	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1250711	1	03/12/19 13:15	03/15/19 23:05	JAH	Mt. Juliet, TN

SB-1 1'-3' L1078252-06 Solid

Collected by: Carla Sullivan | Collected date/time: 03/12/19 11:15 | Received date/time: 03/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1250007	1	03/14/19 15:16	03/14/19 15:27	JD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1249893	1.04	03/12/19 11:15	03/14/19 17:15	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1250711	1.04	03/12/19 11:15	03/15/19 23:25	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.



Heather J Wagner
Project Manager

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.1		1	03/14/2019 15:27	WG1250007

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0150	0.0275	1	03/15/2019 22:06	WG1250711
Acrylonitrile	U		0.00209	0.0137	1	03/14/2019 15:59	WG1249893
Benzene	U		0.000439	0.00110	1	03/14/2019 15:59	WG1249893
Bromobenzene	U		0.00115	0.0137	1	03/14/2019 15:59	WG1249893
Bromodichloromethane	U		0.000865	0.00275	1	03/14/2019 15:59	WG1249893
Bromoform	U	J4	0.00657	0.0275	1	03/14/2019 15:59	WG1249893
Bromomethane	U	J0	0.00406	0.0137	1	03/14/2019 15:59	WG1249893
n-Butylbenzene	U		0.00422	0.0137	1	03/14/2019 15:59	WG1249893
sec-Butylbenzene	U	J0	0.00278	0.0137	1	03/14/2019 15:59	WG1249893
tert-Butylbenzene	U		0.00170	0.00549	1	03/14/2019 15:59	WG1249893
Carbon tetrachloride	U		0.00119	0.00549	1	03/14/2019 15:59	WG1249893
Chlorobenzene	U		0.000629	0.00275	1	03/14/2019 15:59	WG1249893
Chlorodibromomethane	U		0.000494	0.00275	1	03/14/2019 15:59	WG1249893
Chloroethane	U	J0	0.00119	0.00549	1	03/14/2019 15:59	WG1249893
Chloroform	U		0.000456	0.00275	1	03/14/2019 15:59	WG1249893
Chloromethane	U		0.00153	0.0137	1	03/14/2019 15:59	WG1249893
2-Chlorotoluene	U		0.00101	0.00275	1	03/14/2019 15:59	WG1249893
4-Chlorotoluene	U	J0	0.00124	0.00549	1	03/14/2019 15:59	WG1249893
1,2-Dibromo-3-Chloropropane	U		0.00560	0.0275	1	03/14/2019 15:59	WG1249893
1,2-Dibromoethane	U		0.000577	0.00275	1	03/14/2019 15:59	WG1249893
Dibromomethane	U	J4	0.00110	0.00549	1	03/14/2019 15:59	WG1249893
1,2-Dichlorobenzene	U		0.00159	0.00549	1	03/14/2019 15:59	WG1249893
1,3-Dichlorobenzene	U		0.00187	0.00549	1	03/14/2019 15:59	WG1249893
1,4-Dichlorobenzene	U		0.00216	0.00549	1	03/14/2019 15:59	WG1249893
Dichlorodifluoromethane	U		0.000898	0.00275	1	03/14/2019 15:59	WG1249893
1,1-Dichloroethane	U		0.000631	0.00275	1	03/14/2019 15:59	WG1249893
1,2-Dichloroethane	U		0.000522	0.00275	1	03/14/2019 15:59	WG1249893
1,1-Dichloroethene	U		0.000549	0.00275	1	03/14/2019 15:59	WG1249893
cis-1,2-Dichloroethene	U	J4	0.000758	0.00275	1	03/14/2019 15:59	WG1249893
trans-1,2-Dichloroethene	U		0.00157	0.00549	1	03/14/2019 15:59	WG1249893
1,2-Dichloropropane	U		0.00139	0.00549	1	03/14/2019 15:59	WG1249893
1,1-Dichloropropene	U		0.000769	0.00275	1	03/14/2019 15:59	WG1249893
1,3-Dichloropropane	U		0.00192	0.00549	1	03/14/2019 15:59	WG1249893
cis-1,3-Dichloropropene	U		0.000745	0.00275	1	03/14/2019 15:59	WG1249893
trans-1,3-Dichloropropene	U		0.00168	0.00549	1	03/14/2019 15:59	WG1249893
2,2-Dichloropropane	U		0.000871	0.00275	1	03/14/2019 15:59	WG1249893
Di-isopropyl ether	U		0.000384	0.00110	1	03/14/2019 15:59	WG1249893
Ethylbenzene	U		0.000582	0.00275	1	03/14/2019 15:59	WG1249893
Hexachloro-1,3-butadiene	U		0.0139	0.0275	1	03/14/2019 15:59	WG1249893
Isopropylbenzene	U		0.000948	0.00275	1	03/14/2019 15:59	WG1249893
p-Isopropyltoluene	U		0.00256	0.00549	1	03/14/2019 15:59	WG1249893
2-Butanone (MEK)	U		0.0137	0.0275	1	03/14/2019 15:59	WG1249893
Methylene Chloride	U		0.00729	0.0275	1	03/14/2019 15:59	WG1249893
4-Methyl-2-pentanone (MIBK)	U		0.0110	0.0275	1	03/14/2019 15:59	WG1249893
Methyl tert-butyl ether	U		0.000324	0.00110	1	03/14/2019 15:59	WG1249893
Naphthalene	U		0.00343	0.0137	1	03/14/2019 15:59	WG1249893
n-Propylbenzene	U		0.00130	0.00549	1	03/14/2019 15:59	WG1249893
Styrene	U		0.00300	0.0137	1	03/14/2019 15:59	WG1249893
1,1,1,2-Tetrachloroethane	U		0.000549	0.00275	1	03/14/2019 15:59	WG1249893
1,1,2,2-Tetrachloroethane	U		0.000428	0.00275	1	03/14/2019 15:59	WG1249893

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.000741	0.00275	1	03/14/2019 15:59	WG1249893
Tetrachloroethene	0.173		0.000769	0.00275	1	03/14/2019 15:59	WG1249893
Toluene	U		0.00137	0.00549	1	03/14/2019 15:59	WG1249893
1,2,3-Trichlorobenzene	U		0.000686	0.00275	1	03/14/2019 15:59	WG1249893
1,2,4-Trichlorobenzene	U		0.00529	0.0137	1	03/14/2019 15:59	WG1249893
1,1,1-Trichloroethane	U		0.000302	0.00275	1	03/14/2019 15:59	WG1249893
1,1,2-Trichloroethane	U		0.000970	0.00275	1	03/14/2019 15:59	WG1249893
Trichloroethene	U		0.000439	0.00110	1	03/14/2019 15:59	WG1249893
Trichlorofluoromethane	U		0.000549	0.00275	1	03/14/2019 15:59	WG1249893
1,2,3-Trichloropropane	U		0.00560	0.0137	1	03/14/2019 15:59	WG1249893
1,2,4-Trimethylbenzene	U		0.00127	0.00549	1	03/14/2019 15:59	WG1249893
1,2,3-Trimethylbenzene	U		0.00126	0.00549	1	03/14/2019 15:59	WG1249893
Vinyl chloride	U		0.000750	0.00275	1	03/14/2019 15:59	WG1249893
1,3,5-Trimethylbenzene	U		0.00119	0.00549	1	03/14/2019 15:59	WG1249893
Xylenes, Total	U		0.00525	0.00714	1	03/14/2019 15:59	WG1249893
(S) Toluene-d8	*110*			*75.0-131*		*03/14/2019 15:59*	WG1249893
(S) Toluene-d8	*94.6*			*75.0-131*		*03/15/2019 22:06*	WG1250711
(S) 4-Bromofluorobenzene	*99.3*			*67.0-138*		*03/14/2019 15:59*	WG1249893
(S) 4-Bromofluorobenzene	*87.5*			*67.0-138*		*03/15/2019 22:06*	WG1250711
(S) 1,2-Dichloroethane-d4	*82.7*			*70.0-130*		*03/14/2019 15:59*	WG1249893
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*03/15/2019 22:06*	WG1250711

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	J4	10.0	50.0	1	03/16/2019 19:14	WG1250962
Acrolein	U		8.87	50.0	1	03/15/2019 22:49	WG1250591
Acrylonitrile	U		1.87	10.0	1	03/15/2019 22:49	WG1250591
Benzene	U		0.331	1.00	1	03/15/2019 22:49	WG1250591
Bromobenzene	U		0.352	1.00	1	03/15/2019 22:49	WG1250591
Bromodichloromethane	U		0.380	1.00	1	03/15/2019 22:49	WG1250591
Bromoform	U		0.469	1.00	1	03/15/2019 22:49	WG1250591
Bromomethane	U		0.866	5.00	1	03/15/2019 22:49	WG1250591
n-Butylbenzene	U		0.361	1.00	1	03/15/2019 22:49	WG1250591
sec-Butylbenzene	U		0.365	1.00	1	03/15/2019 22:49	WG1250591
tert-Butylbenzene	U		0.399	1.00	1	03/15/2019 22:49	WG1250591
Carbon tetrachloride	U		0.379	1.00	1	03/15/2019 22:49	WG1250591
Chlorobenzene	U		0.348	1.00	1	03/15/2019 22:49	WG1250591
Chlorodibromomethane	U		0.327	1.00	1	03/15/2019 22:49	WG1250591
Chloroethane	U		0.453	5.00	1	03/15/2019 22:49	WG1250591
Chloroform	2.18	J	0.324	5.00	1	03/15/2019 22:49	WG1250591
Chloromethane	U		0.276	2.50	1	03/15/2019 22:49	WG1250591
2-Chlorotoluene	U		0.375	1.00	1	03/15/2019 22:49	WG1250591
4-Chlorotoluene	U		0.351	1.00	1	03/15/2019 22:49	WG1250591
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	03/15/2019 22:49	WG1250591
1,2-Dibromoethane	U		0.381	1.00	1	03/15/2019 22:49	WG1250591
Dibromomethane	U		0.346	1.00	1	03/15/2019 22:49	WG1250591
1,2-Dichlorobenzene	U		0.349	1.00	1	03/15/2019 22:49	WG1250591
1,3-Dichlorobenzene	U		0.220	1.00	1	03/15/2019 22:49	WG1250591
1,4-Dichlorobenzene	U		0.274	1.00	1	03/15/2019 22:49	WG1250591
Dichlorodifluoromethane	U		0.551	5.00	1	03/15/2019 22:49	WG1250591
1,1-Dichloroethane	U		0.259	1.00	1	03/15/2019 22:49	WG1250591
1,2-Dichloroethane	U		0.361	1.00	1	03/15/2019 22:49	WG1250591
1,1-Dichloroethene	U		0.398	1.00	1	03/15/2019 22:49	WG1250591
cis-1,2-Dichloroethene	U		0.260	1.00	1	03/15/2019 22:49	WG1250591
trans-1,2-Dichloroethene	U		0.396	1.00	1	03/15/2019 22:49	WG1250591
1,2-Dichloropropane	U		0.306	1.00	1	03/15/2019 22:49	WG1250591
1,1-Dichloropropene	U		0.352	1.00	1	03/15/2019 22:49	WG1250591
1,3-Dichloropropane	U		0.366	1.00	1	03/15/2019 22:49	WG1250591
cis-1,3-Dichloropropene	U		0.418	1.00	1	03/15/2019 22:49	WG1250591
trans-1,3-Dichloropropene	U		0.419	1.00	1	03/15/2019 22:49	WG1250591
2,2-Dichloropropane	U		0.321	1.00	1	03/15/2019 22:49	WG1250591
Di-isopropyl ether	U		0.320	1.00	1	03/15/2019 22:49	WG1250591
Ethylbenzene	U		0.384	1.00	1	03/15/2019 22:49	WG1250591
Hexachloro-1,3-butadiene	U		0.256	1.00	1	03/15/2019 22:49	WG1250591
Isopropylbenzene	U		0.326	1.00	1	03/15/2019 22:49	WG1250591
p-Isopropyltoluene	U		0.350	1.00	1	03/15/2019 22:49	WG1250591
2-Butanone (MEK)	U		3.93	10.0	1	03/15/2019 22:49	WG1250591
Methylene Chloride	U		1.00	5.00	1	03/15/2019 22:49	WG1250591
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	03/15/2019 22:49	WG1250591
Methyl tert-butyl ether	U		0.367	1.00	1	03/15/2019 22:49	WG1250591
Naphthalene	U		1.00	5.00	1	03/15/2019 22:49	WG1250591
n-Propylbenzene	U		0.349	1.00	1	03/15/2019 22:49	WG1250591
Styrene	U		0.307	1.00	1	03/15/2019 22:49	WG1250591
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	03/15/2019 22:49	WG1250591
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	03/15/2019 22:49	WG1250591
1,1,2-Trichlorotrifluoroethane	U		0.303	1.00	1	03/15/2019 22:49	WG1250591
Tetrachloroethene	23.2		0.372	1.00	1	03/15/2019 22:49	WG1250591
Toluene	0.972	J	0.412	1.00	1	03/15/2019 22:49	WG1250591
1,2,3-Trichlorobenzene	U		0.230	1.00	1	03/15/2019 22:49	WG1250591
1,2,4-Trichlorobenzene	U		0.355	1.00	1	03/15/2019 22:49	WG1250591

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,1-Trichloroethane	U		0.319	1.00	1	03/15/2019 22:49	WG1250591
1,1,2-Trichloroethane	U		0.383	1.00	1	03/15/2019 22:49	WG1250591
Trichloroethene	U		0.398	1.00	1	03/15/2019 22:49	WG1250591
Trichlorofluoromethane	U		1.20	5.00	1	03/15/2019 22:49	WG1250591
1,2,3-Trichloropropane	U		0.807	2.50	1	03/15/2019 22:49	WG1250591
1,2,4-Trimethylbenzene	U		0.373	1.00	1	03/15/2019 22:49	WG1250591
1,2,3-Trimethylbenzene	U		0.321	1.00	1	03/15/2019 22:49	WG1250591
1,3,5-Trimethylbenzene	U		0.387	1.00	1	03/15/2019 22:49	WG1250591
Vinyl chloride	U		0.259	1.00	1	03/15/2019 22:49	WG1250591
Xylenes, Total	U		1.06	3.00	1	03/15/2019 22:49	WG1250591
(S) Toluene-d8	*98.4*			*80.0-120*		*03/15/2019 22:49*	WG1250591
(S) Toluene-d8	*101*			*80.0-120*		*03/16/2019 19:14*	WG1250962
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*03/15/2019 22:49*	WG1250591
(S) 4-Bromofluorobenzene	*94.1*			*77.0-126*		*03/16/2019 19:14*	WG1250962
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*03/15/2019 22:49*	WG1250591
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*03/16/2019 19:14*	WG1250962

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.5		1	03/14/2019 15:27	WG1250007

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0145	0.0265	1	03/15/2019 22:25	WG1250711
Acrylonitrile	U		0.00201	0.0132	1	03/14/2019 16:18	WG1249893
Benzene	0.000472	J	0.000423	0.00106	1	03/14/2019 16:18	WG1249893
Bromobenzene	U		0.00111	0.0132	1	03/14/2019 16:18	WG1249893
Bromodichloromethane	U		0.000834	0.00265	1	03/14/2019 16:18	WG1249893
Bromoform	U	J4	0.00633	0.0265	1	03/14/2019 16:18	WG1249893
Bromomethane	U	J0	0.00392	0.0132	1	03/14/2019 16:18	WG1249893
n-Butylbenzene	U		0.00406	0.0132	1	03/14/2019 16:18	WG1249893
sec-Butylbenzene	U	J0	0.00268	0.0132	1	03/14/2019 16:18	WG1249893
tert-Butylbenzene	U		0.00164	0.00529	1	03/14/2019 16:18	WG1249893
Carbon tetrachloride	U		0.00114	0.00529	1	03/14/2019 16:18	WG1249893
Chlorobenzene	U		0.000606	0.00265	1	03/14/2019 16:18	WG1249893
Chlorodibromomethane	U		0.000476	0.00265	1	03/14/2019 16:18	WG1249893
Chloroethane	U	J0	0.00114	0.00529	1	03/14/2019 16:18	WG1249893
Chloroform	U		0.000439	0.00265	1	03/14/2019 16:18	WG1249893
Chloromethane	U		0.00147	0.0132	1	03/14/2019 16:18	WG1249893
2-Chlorotoluene	U		0.000974	0.00265	1	03/14/2019 16:18	WG1249893
4-Chlorotoluene	U	J0	0.00120	0.00529	1	03/14/2019 16:18	WG1249893
1,2-Dibromo-3-Chloropropane	U		0.00540	0.0265	1	03/14/2019 16:18	WG1249893
1,2-Dibromoethane	U		0.000556	0.00265	1	03/14/2019 16:18	WG1249893
Dibromomethane	U	J4	0.00106	0.00529	1	03/14/2019 16:18	WG1249893
1,2-Dichlorobenzene	U		0.00153	0.00529	1	03/14/2019 16:18	WG1249893
1,3-Dichlorobenzene	U		0.00180	0.00529	1	03/14/2019 16:18	WG1249893
1,4-Dichlorobenzene	U		0.00208	0.00529	1	03/14/2019 16:18	WG1249893
Dichlorodifluoromethane	U		0.000866	0.00265	1	03/14/2019 16:18	WG1249893
1,1-Dichloroethane	U		0.000608	0.00265	1	03/14/2019 16:18	WG1249893
1,2-Dichloroethane	U		0.000503	0.00265	1	03/14/2019 16:18	WG1249893
1,1-Dichloroethene	U		0.000529	0.00265	1	03/14/2019 16:18	WG1249893
cis-1,2-Dichloroethene	0.00341		0.000730	0.00265	1	03/15/2019 22:25	WG1250711
trans-1,2-Dichloroethene	U		0.00151	0.00529	1	03/14/2019 16:18	WG1249893
1,2-Dichloropropane	U		0.00134	0.00529	1	03/14/2019 16:18	WG1249893
1,1-Dichloropropene	U		0.000741	0.00265	1	03/14/2019 16:18	WG1249893
1,3-Dichloropropane	U		0.00185	0.00529	1	03/14/2019 16:18	WG1249893
cis-1,3-Dichloropropene	U		0.000717	0.00265	1	03/14/2019 16:18	WG1249893
trans-1,3-Dichloropropene	U		0.00162	0.00529	1	03/14/2019 16:18	WG1249893
2,2-Dichloropropane	U		0.000839	0.00265	1	03/14/2019 16:18	WG1249893
Di-isopropyl ether	U		0.000370	0.00106	1	03/14/2019 16:18	WG1249893
Ethylbenzene	U		0.000561	0.00265	1	03/14/2019 16:18	WG1249893
Hexachloro-1,3-butadiene	U		0.0134	0.0265	1	03/14/2019 16:18	WG1249893
Isopropylbenzene	U		0.000913	0.00265	1	03/14/2019 16:18	WG1249893
p-Isopropyltoluene	U		0.00247	0.00529	1	03/14/2019 16:18	WG1249893
2-Butanone (MEK)	U		0.0132	0.0265	1	03/14/2019 16:18	WG1249893
Methylene Chloride	U		0.00703	0.0265	1	03/14/2019 16:18	WG1249893
4-Methyl-2-pentanone (MIBK)	U		0.0106	0.0265	1	03/14/2019 16:18	WG1249893
Methyl tert-butyl ether	U		0.000312	0.00106	1	03/14/2019 16:18	WG1249893
Naphthalene	U		0.00330	0.0132	1	03/14/2019 16:18	WG1249893
n-Propylbenzene	U		0.00125	0.00529	1	03/14/2019 16:18	WG1249893
Styrene	U		0.00289	0.0132	1	03/14/2019 16:18	WG1249893
1,1,1,2-Tetrachloroethane	U		0.000529	0.00265	1	03/14/2019 16:18	WG1249893
1,1,2,2-Tetrachloroethane	U		0.000413	0.00265	1	03/14/2019 16:18	WG1249893

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.000714	0.00265	1	03/14/2019 16:18	WG1249893
Tetrachloroethene	0.0552		0.000741	0.00265	1	03/14/2019 16:18	WG1249893
Toluene	U		0.00132	0.00529	1	03/14/2019 16:18	WG1249893
1,2,3-Trichlorobenzene	U		0.000661	0.00265	1	03/14/2019 16:18	WG1249893
1,2,4-Trichlorobenzene	U		0.00510	0.0132	1	03/14/2019 16:18	WG1249893
1,1,1-Trichloroethane	U		0.000291	0.00265	1	03/14/2019 16:18	WG1249893
1,1,2-Trichloroethane	U		0.000934	0.00265	1	03/14/2019 16:18	WG1249893
Trichloroethene	0.0196		0.000423	0.00106	1	03/14/2019 16:18	WG1249893
Trichlorofluoromethane	U		0.000529	0.00265	1	03/14/2019 16:18	WG1249893
1,2,3-Trichloropropane	U		0.00540	0.0132	1	03/14/2019 16:18	WG1249893
1,2,4-Trimethylbenzene	U		0.00123	0.00529	1	03/14/2019 16:18	WG1249893
1,2,3-Trimethylbenzene	U		0.00122	0.00529	1	03/14/2019 16:18	WG1249893
Vinyl chloride	U		0.000723	0.00265	1	03/14/2019 16:18	WG1249893
1,3,5-Trimethylbenzene	U		0.00114	0.00529	1	03/14/2019 16:18	WG1249893
Xylenes, Total	U		0.00506	0.00688	1	03/14/2019 16:18	WG1249893
(S) Toluene-d8	*111*			*75.0-131*		*03/14/2019 16:18*	WG1249893
(S) Toluene-d8	*94.5*			*75.0-131*		*03/15/2019 22:25*	WG1250711
(S) 4-Bromofluorobenzene	*98.8*			*67.0-138*		*03/14/2019 16:18*	WG1249893
(S) 4-Bromofluorobenzene	*82.9*			*67.0-138*		*03/15/2019 22:25*	WG1250711
(S) 1,2-Dichloroethane-d4	*82.9*			*70.0-130*		*03/14/2019 16:18*	WG1249893
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*03/15/2019 22:25*	WG1250711

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.6		1	03/14/2019 15:27	WG1250007

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0153	0.0280	1.06	03/15/2019 22:45	WG1250711
Acrylonitrile	U		0.00201	0.0132	1.06	03/14/2019 16:37	WG1249893
Benzene	U		0.000423	0.00106	1.06	03/14/2019 16:37	WG1249893
Bromobenzene	U		0.00111	0.0132	1.06	03/14/2019 16:37	WG1249893
Bromodichloromethane	U		0.000833	0.00264	1.06	03/14/2019 16:37	WG1249893
Bromoform	U	J4	0.00632	0.0264	1.06	03/14/2019 16:37	WG1249893
Bromomethane	U		0.00391	0.0132	1.06	03/14/2019 16:37	WG1249893
n-Butylbenzene	U		0.00406	0.0132	1.06	03/14/2019 16:37	WG1249893
sec-Butylbenzene	U		0.00268	0.0132	1.06	03/14/2019 16:37	WG1249893
tert-Butylbenzene	U		0.00164	0.00529	1.06	03/14/2019 16:37	WG1249893
Carbon tetrachloride	U		0.00114	0.00529	1.06	03/14/2019 16:37	WG1249893
Chlorobenzene	U		0.000606	0.00264	1.06	03/14/2019 16:37	WG1249893
Chlorodibromomethane	U		0.000476	0.00264	1.06	03/14/2019 16:37	WG1249893
Chloroethane	U		0.00114	0.00529	1.06	03/14/2019 16:37	WG1249893
Chloroform	U		0.000439	0.00264	1.06	03/14/2019 16:37	WG1249893
Chloromethane	U		0.00147	0.0132	1.06	03/14/2019 16:37	WG1249893
2-Chlorotoluene	U		0.000973	0.00264	1.06	03/14/2019 16:37	WG1249893
4-Chlorotoluene	U		0.00119	0.00529	1.06	03/14/2019 16:37	WG1249893
1,2-Dibromo-3-Chloropropane	U		0.00539	0.0264	1.06	03/14/2019 16:37	WG1249893
1,2-Dibromoethane	U		0.000555	0.00264	1.06	03/14/2019 16:37	WG1249893
Dibromomethane	U	J4	0.00106	0.00529	1.06	03/14/2019 16:37	WG1249893
1,2-Dichlorobenzene	U		0.00153	0.00529	1.06	03/14/2019 16:37	WG1249893
1,3-Dichlorobenzene	U		0.00180	0.00529	1.06	03/14/2019 16:37	WG1249893
1,4-Dichlorobenzene	U		0.00208	0.00529	1.06	03/14/2019 16:37	WG1249893
Dichlorodifluoromethane	U		0.000865	0.00264	1.06	03/14/2019 16:37	WG1249893
1,1-Dichloroethane	U		0.000608	0.00264	1.06	03/14/2019 16:37	WG1249893
1,2-Dichloroethane	U		0.000502	0.00264	1.06	03/14/2019 16:37	WG1249893
1,1-Dichloroethene	U		0.000529	0.00264	1.06	03/14/2019 16:37	WG1249893
cis-1,2-Dichloroethene	0.00165	J	0.000773	0.00280	1.06	03/15/2019 22:45	WG1250711
trans-1,2-Dichloroethene	U		0.00151	0.00529	1.06	03/14/2019 16:37	WG1249893
1,2-Dichloropropane	U		0.00134	0.00529	1.06	03/14/2019 16:37	WG1249893
1,1-Dichloropropene	U		0.000740	0.00264	1.06	03/14/2019 16:37	WG1249893
1,3-Dichloropropane	U		0.00185	0.00529	1.06	03/14/2019 16:37	WG1249893
cis-1,3-Dichloropropene	U		0.000717	0.00264	1.06	03/14/2019 16:37	WG1249893
trans-1,3-Dichloropropene	U		0.00162	0.00529	1.06	03/14/2019 16:37	WG1249893
2,2-Dichloropropane	U		0.000839	0.00264	1.06	03/14/2019 16:37	WG1249893
Di-isopropyl ether	U		0.000370	0.00106	1.06	03/14/2019 16:37	WG1249893
Ethylbenzene	U		0.000560	0.00264	1.06	03/14/2019 16:37	WG1249893
Hexachloro-1,3-butadiene	U		0.0134	0.0264	1.06	03/14/2019 16:37	WG1249893
Isopropylbenzene	U		0.000913	0.00264	1.06	03/14/2019 16:37	WG1249893
p-Isopropyltoluene	U		0.00246	0.00529	1.06	03/14/2019 16:37	WG1249893
2-Butanone (MEK)	U		0.0132	0.0264	1.06	03/14/2019 16:37	WG1249893
Methylene Chloride	U		0.00702	0.0264	1.06	03/14/2019 16:37	WG1249893
4-Methyl-2-pentanone (MIBK)	U		0.0106	0.0264	1.06	03/14/2019 16:37	WG1249893
Methyl tert-butyl ether	U		0.000312	0.00106	1.06	03/14/2019 16:37	WG1249893
Naphthalene	U		0.00330	0.0132	1.06	03/14/2019 16:37	WG1249893
n-Propylbenzene	U		0.00125	0.00529	1.06	03/14/2019 16:37	WG1249893
Styrene	U		0.00289	0.0132	1.06	03/14/2019 16:37	WG1249893
1,1,1,2-Tetrachloroethane	U		0.000529	0.00264	1.06	03/14/2019 16:37	WG1249893
1,1,2,2-Tetrachloroethane	U		0.000412	0.00264	1.06	03/14/2019 16:37	WG1249893

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.000714	0.00264	1.06	03/14/2019 16:37	WG1249893
Tetrachloroethene	0.0636		0.000740	0.00264	1.06	03/14/2019 16:37	WG1249893
Toluene	0.00318	J	0.00132	0.00529	1.06	03/14/2019 16:37	WG1249893
1,2,3-Trichlorobenzene	U		0.000661	0.00264	1.06	03/14/2019 16:37	WG1249893
1,2,4-Trichlorobenzene	U		0.00510	0.0132	1.06	03/14/2019 16:37	WG1249893
1,1,1-Trichloroethane	U		0.000291	0.00264	1.06	03/14/2019 16:37	WG1249893
1,1,2-Trichloroethane	U		0.000934	0.00264	1.06	03/14/2019 16:37	WG1249893
Trichloroethene	0.00190		0.000423	0.00106	1.06	03/14/2019 16:37	WG1249893
Trichlorofluoromethane	U		0.000529	0.00264	1.06	03/14/2019 16:37	WG1249893
1,2,3-Trichloropropane	U		0.00539	0.0132	1.06	03/14/2019 16:37	WG1249893
1,2,4-Trimethylbenzene	U		0.00123	0.00529	1.06	03/14/2019 16:37	WG1249893
1,2,3-Trimethylbenzene	U		0.00122	0.00529	1.06	03/14/2019 16:37	WG1249893
Vinyl chloride	U		0.000722	0.00264	1.06	03/14/2019 16:37	WG1249893
1,3,5-Trimethylbenzene	U		0.00114	0.00529	1.06	03/14/2019 16:37	WG1249893
Xylenes, Total	U		0.00505	0.00687	1.06	03/14/2019 16:37	WG1249893
(S) Toluene-d8	*112*			*75.0-131*		*03/14/2019 16:37*	WG1249893
(S) Toluene-d8	*94.0*			*75.0-131*		*03/15/2019 22:45*	WG1250711
(S) 4-Bromofluorobenzene	*99.7*			*67.0-138*		*03/14/2019 16:37*	WG1249893
(S) 4-Bromofluorobenzene	*85.2*			*67.0-138*		*03/15/2019 22:45*	WG1250711
(S) 1,2-Dichloroethane-d4	*83.6*			*70.0-130*		*03/14/2019 16:37*	WG1249893
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*03/15/2019 22:45*	WG1250711

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	95.6		1	03/14/2019 15:27	WG1250007

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0143	0.0262	1	03/15/2019 23:05	WG1250711
Acrylonitrile	U		0.00199	0.0131	1	03/14/2019 16:56	WG1249893
Benzene	U		0.000418	0.00105	1	03/14/2019 16:56	WG1249893
Bromobenzene	U		0.00110	0.0131	1	03/14/2019 16:56	WG1249893
Bromodichloromethane	U		0.000824	0.00262	1	03/14/2019 16:56	WG1249893
Bromoform	U	J4	0.00626	0.0262	1	03/14/2019 16:56	WG1249893
Bromomethane	U	J0	0.00387	0.0131	1	03/14/2019 16:56	WG1249893
n-Butylbenzene	U		0.00402	0.0131	1	03/14/2019 16:56	WG1249893
sec-Butylbenzene	U	J0	0.00265	0.0131	1	03/14/2019 16:56	WG1249893
tert-Butylbenzene	U		0.00162	0.00523	1	03/14/2019 16:56	WG1249893
Carbon tetrachloride	U		0.00113	0.00523	1	03/14/2019 16:56	WG1249893
Chlorobenzene	U		0.000599	0.00262	1	03/14/2019 16:56	WG1249893
Chlorodibromomethane	U		0.000471	0.00262	1	03/14/2019 16:56	WG1249893
Chloroethane	U	J0	0.00113	0.00523	1	03/14/2019 16:56	WG1249893
Chloroform	U		0.000434	0.00262	1	03/14/2019 16:56	WG1249893
Chloromethane	U		0.00145	0.0131	1	03/14/2019 16:56	WG1249893
2-Chlorotoluene	U		0.000962	0.00262	1	03/14/2019 16:56	WG1249893
4-Chlorotoluene	U	J0	0.00118	0.00523	1	03/14/2019 16:56	WG1249893
1,2-Dibromo-3-Chloropropane	U		0.00534	0.0262	1	03/14/2019 16:56	WG1249893
1,2-Dibromoethane	U		0.000549	0.00262	1	03/14/2019 16:56	WG1249893
Dibromomethane	U	J4	0.00105	0.00523	1	03/14/2019 16:56	WG1249893
1,2-Dichlorobenzene	U		0.00152	0.00523	1	03/14/2019 16:56	WG1249893
1,3-Dichlorobenzene	U		0.00178	0.00523	1	03/14/2019 16:56	WG1249893
1,4-Dichlorobenzene	U		0.00206	0.00523	1	03/14/2019 16:56	WG1249893
Dichlorodifluoromethane	U		0.000856	0.00262	1	03/14/2019 16:56	WG1249893
1,1-Dichloroethane	U		0.000602	0.00262	1	03/14/2019 16:56	WG1249893
1,2-Dichloroethane	U		0.000497	0.00262	1	03/14/2019 16:56	WG1249893
1,1-Dichloroethene	U		0.000523	0.00262	1	03/14/2019 16:56	WG1249893
cis-1,2-Dichloroethene	U	J4	0.000722	0.00262	1	03/14/2019 16:56	WG1249893
trans-1,2-Dichloroethene	U		0.00150	0.00523	1	03/14/2019 16:56	WG1249893
1,2-Dichloropropane	U		0.00133	0.00523	1	03/14/2019 16:56	WG1249893
1,1-Dichloropropene	U		0.000732	0.00262	1	03/14/2019 16:56	WG1249893
1,3-Dichloropropane	U		0.00183	0.00523	1	03/14/2019 16:56	WG1249893
cis-1,3-Dichloropropene	U		0.000709	0.00262	1	03/14/2019 16:56	WG1249893
trans-1,3-Dichloropropene	U		0.00160	0.00523	1	03/14/2019 16:56	WG1249893
2,2-Dichloropropane	U		0.000830	0.00262	1	03/14/2019 16:56	WG1249893
Di-isopropyl ether	U		0.000366	0.00105	1	03/14/2019 16:56	WG1249893
Ethylbenzene	U		0.000554	0.00262	1	03/14/2019 16:56	WG1249893
Hexachloro-1,3-butadiene	U		0.0133	0.0262	1	03/14/2019 16:56	WG1249893
Isopropylbenzene	U		0.000903	0.00262	1	03/14/2019 16:56	WG1249893
p-Isopropyltoluene	U		0.00244	0.00523	1	03/14/2019 16:56	WG1249893
2-Butanone (MEK)	U		0.0131	0.0262	1	03/14/2019 16:56	WG1249893
Methylene Chloride	U		0.00695	0.0262	1	03/14/2019 16:56	WG1249893
4-Methyl-2-pentanone (MIBK)	U		0.0105	0.0262	1	03/14/2019 16:56	WG1249893
Methyl tert-butyl ether	U		0.000309	0.00105	1	03/14/2019 16:56	WG1249893
Naphthalene	U		0.00326	0.0131	1	03/14/2019 16:56	WG1249893
n-Propylbenzene	U		0.00123	0.00523	1	03/14/2019 16:56	WG1249893
Styrene	U		0.00286	0.0131	1	03/14/2019 16:56	WG1249893
1,1,1,2-Tetrachloroethane	U		0.000523	0.00262	1	03/14/2019 16:56	WG1249893
1,1,2,2-Tetrachloroethane	U		0.000408	0.00262	1	03/14/2019 16:56	WG1249893

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.000706	0.00262	1	03/14/2019 16:56	WG1249893
Tetrachloroethene	0.0475		0.000732	0.00262	1	03/14/2019 16:56	WG1249893
Toluene	0.00190	J	0.00131	0.00523	1	03/14/2019 16:56	WG1249893
1,2,3-Trichlorobenzene	U		0.000654	0.00262	1	03/14/2019 16:56	WG1249893
1,2,4-Trichlorobenzene	U		0.00504	0.0131	1	03/14/2019 16:56	WG1249893
1,1,1-Trichloroethane	U		0.000288	0.00262	1	03/14/2019 16:56	WG1249893
1,1,2-Trichloroethane	U		0.000924	0.00262	1	03/14/2019 16:56	WG1249893
Trichloroethene	U		0.000418	0.00105	1	03/14/2019 16:56	WG1249893
Trichlorofluoromethane	U		0.000523	0.00262	1	03/14/2019 16:56	WG1249893
1,2,3-Trichloropropane	U		0.00534	0.0131	1	03/14/2019 16:56	WG1249893
1,2,4-Trimethylbenzene	U		0.00121	0.00523	1	03/14/2019 16:56	WG1249893
1,2,3-Trimethylbenzene	U		0.00120	0.00523	1	03/14/2019 16:56	WG1249893
Vinyl chloride	U		0.000715	0.00262	1	03/14/2019 16:56	WG1249893
1,3,5-Trimethylbenzene	U		0.00113	0.00523	1	03/14/2019 16:56	WG1249893
Xylenes, Total	U		0.00500	0.00680	1	03/14/2019 16:56	WG1249893
(S) Toluene-d8	*110*			*75.0-131*		*03/14/2019 16:56*	WG1249893
(S) Toluene-d8	*93.6*			*75.0-131*		*03/15/2019 23:05*	WG1250711
(S) 4-Bromofluorobenzene	*98.9*			*67.0-138*		*03/14/2019 16:56*	WG1249893
(S) 4-Bromofluorobenzene	*83.3*			*67.0-138*		*03/15/2019 23:05*	WG1250711
(S) 1,2-Dichloroethane-d4	*76.0*			*70.0-130*		*03/14/2019 16:56*	WG1249893
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*03/15/2019 23:05*	WG1250711

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.1		1	03/14/2019 15:27	WG1250007

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

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0154	0.0282	1.04	03/15/2019 23:25	WG1250711
Acrylonitrile	U		0.00215	0.0141	1.04	03/14/2019 17:15	WG1249893
Benzene	U		0.000452	0.00113	1.04	03/14/2019 17:15	WG1249893
Bromobenzene	U		0.00118	0.0141	1.04	03/14/2019 17:15	WG1249893
Bromodichloromethane	U		0.000890	0.00282	1.04	03/14/2019 17:15	WG1249893
Bromoform	U	J4	0.00675	0.0282	1.04	03/14/2019 17:15	WG1249893
Bromomethane	U	J0	0.00418	0.0141	1.04	03/14/2019 17:15	WG1249893
n-Butylbenzene	U		0.00433	0.0141	1.04	03/14/2019 17:15	WG1249893
sec-Butylbenzene	U	J0	0.00285	0.0141	1.04	03/14/2019 17:15	WG1249893
tert-Butylbenzene	U		0.00175	0.00564	1.04	03/14/2019 17:15	WG1249893
Carbon tetrachloride	U		0.00122	0.00564	1.04	03/14/2019 17:15	WG1249893
Chlorobenzene	U		0.000647	0.00282	1.04	03/14/2019 17:15	WG1249893
Chlorodibromomethane	U		0.000508	0.00282	1.04	03/14/2019 17:15	WG1249893
Chloroethane	U	J0	0.00122	0.00564	1.04	03/14/2019 17:15	WG1249893
Chloroform	U		0.000469	0.00282	1.04	03/14/2019 17:15	WG1249893
Chloromethane	U		0.00156	0.0141	1.04	03/14/2019 17:15	WG1249893
2-Chlorotoluene	U		0.00104	0.00282	1.04	03/14/2019 17:15	WG1249893
4-Chlorotoluene	U	J0	0.00128	0.00564	1.04	03/14/2019 17:15	WG1249893
1,2-Dibromo-3-Chloropropane	U		0.00575	0.0282	1.04	03/14/2019 17:15	WG1249893
1,2-Dibromoethane	U		0.000593	0.00282	1.04	03/14/2019 17:15	WG1249893
Dibromomethane	U	J4	0.00113	0.00564	1.04	03/14/2019 17:15	WG1249893
1,2-Dichlorobenzene	U		0.00164	0.00564	1.04	03/14/2019 17:15	WG1249893
1,3-Dichlorobenzene	U		0.00192	0.00564	1.04	03/14/2019 17:15	WG1249893
1,4-Dichlorobenzene	U		0.00223	0.00564	1.04	03/14/2019 17:15	WG1249893
Dichlorodifluoromethane	U		0.000924	0.00282	1.04	03/14/2019 17:15	WG1249893
1,1-Dichloroethane	U		0.000649	0.00282	1.04	03/14/2019 17:15	WG1249893
1,2-Dichloroethane	U		0.000536	0.00282	1.04	03/14/2019 17:15	WG1249893
1,1-Dichloroethene	U		0.000564	0.00282	1.04	03/14/2019 17:15	WG1249893
cis-1,2-Dichloroethene	U	J4	0.000779	0.00282	1.04	03/14/2019 17:15	WG1249893
trans-1,2-Dichloroethene	U		0.00162	0.00564	1.04	03/14/2019 17:15	WG1249893
1,2-Dichloropropane	U		0.00143	0.00564	1.04	03/14/2019 17:15	WG1249893
1,1-Dichloropropene	U		0.000790	0.00282	1.04	03/14/2019 17:15	WG1249893
1,3-Dichloropropane	U		0.00198	0.00564	1.04	03/14/2019 17:15	WG1249893
cis-1,3-Dichloropropene	U		0.000765	0.00282	1.04	03/14/2019 17:15	WG1249893
trans-1,3-Dichloropropene	U		0.00173	0.00564	1.04	03/14/2019 17:15	WG1249893
2,2-Dichloropropane	U		0.000895	0.00282	1.04	03/14/2019 17:15	WG1249893
Di-isopropyl ether	U		0.000395	0.00113	1.04	03/14/2019 17:15	WG1249893
Ethylbenzene	U		0.000598	0.00282	1.04	03/14/2019 17:15	WG1249893
Hexachloro-1,3-butadiene	U		0.0143	0.0282	1.04	03/14/2019 17:15	WG1249893
Isopropylbenzene	U		0.000975	0.00282	1.04	03/14/2019 17:15	WG1249893
p-Isopropyltoluene	U		0.00263	0.00564	1.04	03/14/2019 17:15	WG1249893
2-Butanone (MEK)	U		0.0141	0.0282	1.04	03/14/2019 17:15	WG1249893
Methylene Chloride	U		0.00749	0.0282	1.04	03/14/2019 17:15	WG1249893
4-Methyl-2-pentanone (MIBK)	U		0.0113	0.0282	1.04	03/14/2019 17:15	WG1249893
Methyl tert-butyl ether	U		0.000333	0.00113	1.04	03/14/2019 17:15	WG1249893
Naphthalene	U		0.00352	0.0141	1.04	03/14/2019 17:15	WG1249893
n-Propylbenzene	U		0.00134	0.00564	1.04	03/14/2019 17:15	WG1249893
Styrene	U		0.00308	0.0141	1.04	03/14/2019 17:15	WG1249893
1,1,1,2-Tetrachloroethane	U		0.000564	0.00282	1.04	03/14/2019 17:15	WG1249893
1,1,2,2-Tetrachloroethane	U		0.000441	0.00282	1.04	03/14/2019 17:15	WG1249893

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

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.000762	0.00282	1.04	03/14/2019 17:15	WG1249893
Tetrachloroethene	0.103		0.000790	0.00282	1.04	03/14/2019 17:15	WG1249893
Toluene	0.00315	J	0.00141	0.00564	1.04	03/14/2019 17:15	WG1249893
1,2,3-Trichlorobenzene	U		0.000706	0.00282	1.04	03/14/2019 17:15	WG1249893
1,2,4-Trichlorobenzene	U		0.00544	0.0141	1.04	03/14/2019 17:15	WG1249893
1,1,1-Trichloroethane	U		0.000310	0.00282	1.04	03/14/2019 17:15	WG1249893
1,1,2-Trichloroethane	U		0.000996	0.00282	1.04	03/14/2019 17:15	WG1249893
Trichloroethene	U		0.000452	0.00113	1.04	03/14/2019 17:15	WG1249893
Trichlorofluoromethane	U		0.000564	0.00282	1.04	03/14/2019 17:15	WG1249893
1,2,3-Trichloropropane	U		0.00575	0.0141	1.04	03/14/2019 17:15	WG1249893
1,2,4-Trimethylbenzene	U		0.00131	0.00564	1.04	03/14/2019 17:15	WG1249893
1,2,3-Trimethylbenzene	U		0.00130	0.00564	1.04	03/14/2019 17:15	WG1249893
Vinyl chloride	U		0.000771	0.00282	1.04	03/14/2019 17:15	WG1249893
1,3,5-Trimethylbenzene	U		0.00122	0.00564	1.04	03/14/2019 17:15	WG1249893
Xylenes, Total	U		0.00539	0.00734	1.04	03/14/2019 17:15	WG1249893
(S) Toluene-d8	*110*			*75.0-131*		*03/14/2019 17:15*	WG1249893
(S) Toluene-d8	*94.1*			*75.0-131*		*03/15/2019 23:25*	WG1250711
(S) 4-Bromofluorobenzene	*98.0*			*67.0-138*		*03/14/2019 17:15*	WG1249893
(S) 4-Bromofluorobenzene	*83.3*			*67.0-138*		*03/15/2019 23:25*	WG1250711
(S) 1,2-Dichloroethane-d4	*79.9*			*70.0-130*		*03/14/2019 17:15*	WG1249893
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*03/15/2019 23:25*	WG1250711

Method Blank (MB)

(MB) R3391872-1 03/14/19 15:27

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1078252-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1078252-03 03/14/19 15:27 • (DUP) R3391872-3 03/14/19 15:27

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	94.5	93.4	1	1.19		10

Laboratory Control Sample (LCS)

(LCS) R3391872-2 03/14/19 15:27

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) R3392135-2 03/14/19 10:54

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acrylonitrile	U		0.00190	0.0125
Benzene	U		0.000400	0.00100
Bromobenzene	U		0.00105	0.0125
Bromodichloromethane	U		0.000788	0.00250
Bromoform	U		0.00598	0.0250
Bromomethane	U		0.00370	0.0125
n-Butylbenzene	U		0.00384	0.0125
sec-Butylbenzene	U		0.00253	0.0125
tert-Butylbenzene	U		0.00155	0.00500
Carbon tetrachloride	U		0.00108	0.00500
Chlorobenzene	U		0.000573	0.00250
Chlorodibromomethane	U		0.000450	0.00250
Chloroethane	U		0.00108	0.00500
Chloroform	U		0.000415	0.00250
Chloromethane	U		0.00139	0.0125
2-Chlorotoluene	U		0.000920	0.00250
4-Chlorotoluene	U		0.00113	0.00500
1,2-Dibromo-3-Chloropropane	U		0.00510	0.0250
1,2-Dibromoethane	U		0.000525	0.00250
Dibromomethane	U		0.00100	0.00500
1,2-Dichlorobenzene	U		0.00145	0.00500
1,3-Dichlorobenzene	U		0.00170	0.00500
1,4-Dichlorobenzene	U		0.00197	0.00500
Dichlorodifluoromethane	U		0.000818	0.00250
1,1-Dichloroethane	U		0.000575	0.00250
1,2-Dichloroethane	U		0.000475	0.00250
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
1,2-Dichloropropane	U		0.00127	0.00500
1,1-Dichloropropene	U		0.000700	0.00250
1,3-Dichloropropane	U		0.00175	0.00500
cis-1,3-Dichloropropene	U		0.000678	0.00250
trans-1,3-Dichloropropene	U		0.00153	0.00500
2,2-Dichloropropane	U		0.000793	0.00250
Di-isopropyl ether	U		0.000350	0.00100
Ethylbenzene	U		0.000530	0.00250
Hexachloro-1,3-butadiene	U		0.0127	0.0250
Isopropylbenzene	U		0.000863	0.00250
p-Isopropyltoluene	U		0.00233	0.00500

Method Blank (MB)

(MB) R3392135-2 03/14/19 10:54

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
2-Butanone (MEK)	U		0.0125	0.0250
Methylene Chloride	U		0.00664	0.0250
4-Methyl-2-pentanone (MIBK)	U		0.0100	0.0250
Methyl tert-butyl ether	U		0.000295	0.00100
Naphthalene	U		0.00312	0.0125
n-Propylbenzene	U		0.00118	0.00500
Styrene	U		0.00273	0.0125
1,1,1,2-Tetrachloroethane	U		0.000500	0.00250
1,1,2,2-Tetrachloroethane	U		0.000390	0.00250
Tetrachloroethene	U		0.000700	0.00250
Toluene	U		0.00125	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000675	0.00250
1,2,3-Trichlorobenzene	U		0.000625	0.00250
1,2,4-Trichlorobenzene	U		0.00482	0.0125
1,1,1-Trichloroethane	U		0.000275	0.00250
1,1,2-Trichloroethane	U		0.000883	0.00250
Trichloroethene	U		0.000400	0.00100
Trichlorofluoromethane	U		0.000500	0.00250
1,2,3-Trichloropropane	U		0.00510	0.0125
1,2,3-Trimethylbenzene	U		0.00115	0.00500
1,2,4-Trimethylbenzene	U		0.00116	0.00500
1,3,5-Trimethylbenzene	U		0.00108	0.00500
Vinyl chloride	U		0.000683	0.00250
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*107*			*75.0-131*
(S) 4-Bromofluorobenzene	*99.4*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*84.3*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3392135-1 03/14/19 09:18

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acrylonitrile	0.625	0.833	133	45.0-153	
Benzene	0.125	0.123	98.6	70.0-123	
Bromobenzene	0.125	0.107	85.8	73.0-121	
Bromodichloromethane	0.125	0.106	85.0	73.0-121	
Bromoform	0.125	0.188	150	64.0-132	J4
Bromomethane	0.125	0.0873	69.8	56.0-147	

Laboratory Control Sample (LCS)

(LCS) R3392135-1 03/14/19 09:18

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
n-Butylbenzene	0.125	0.103	82.4	68.0-135	
sec-Butylbenzene	0.125	0.101	80.8	74.0-130	
tert-Butylbenzene	0.125	0.103	82.4	75.0-127	
Carbon tetrachloride	0.125	0.136	109	66.0-128	
Chlorobenzene	0.125	0.123	98.3	76.0-128	
Chlorodibromomethane	0.125	0.146	117	74.0-127	
Chloroethane	0.125	0.0947	75.8	61.0-134	
Chloroform	0.125	0.124	99.1	72.0-123	
Chloromethane	0.125	0.107	85.4	51.0-138	
2-Chlorotoluene	0.125	0.131	105	75.0-124	
4-Chlorotoluene	0.125	0.0970	77.6	75.0-124	
1,2-Dibromo-3-Chloropropane	0.125	0.133	106	59.0-130	
1,2-Dibromoethane	0.125	0.125	100	74.0-128	
Dibromomethane	0.125	0.163	131	75.0-122	J4
1,2-Dichlorobenzene	0.125	0.108	86.6	76.0-124	
1,3-Dichlorobenzene	0.125	0.106	84.5	76.0-125	
1,4-Dichlorobenzene	0.125	0.103	82.7	77.0-121	
Dichlorodifluoromethane	0.125	0.170	136	43.0-156	
1,1-Dichloroethane	0.125	0.133	107	70.0-127	
1,2-Dichloroethane	0.125	0.130	104	65.0-131	
1,1-Dichloroethene	0.125	0.0962	77.0	65.0-131	
cis-1,2-Dichloroethene	0.125	0.168	135	73.0-125	J4
trans-1,2-Dichloroethene	0.125	0.128	102	71.0-125	
1,2-Dichloropropane	0.125	0.124	98.9	74.0-125	
1,1-Dichloropropene	0.125	0.114	91.2	73.0-125	
1,3-Dichloropropane	0.125	0.132	106	80.0-125	
cis-1,3-Dichloropropene	0.125	0.117	93.2	76.0-127	
trans-1,3-Dichloropropene	0.125	0.147	118	73.0-127	
2,2-Dichloropropane	0.125	0.132	106	59.0-135	
Di-isopropyl ether	0.125	0.122	97.4	60.0-136	
Ethylbenzene	0.125	0.129	103	74.0-126	
Hexachloro-1,3-butadiene	0.125	0.119	95.3	57.0-150	
Isopropylbenzene	0.125	0.125	99.8	72.0-127	
p-Isopropyltoluene	0.125	0.116	92.9	72.0-133	
2-Butanone (MEK)	0.625	0.886	142	30.0-160	
Methylene Chloride	0.125	0.114	91.3	68.0-123	
4-Methyl-2-pentanone (MIBK)	0.625	0.797	128	56.0-143	
Methyl tert-butyl ether	0.125	0.127	102	66.0-132	
Naphthalene	0.125	0.110	88.1	59.0-130	
n-Propylbenzene	0.125	0.101	80.9	74.0-126	

Laboratory Control Sample (LCS)

(LCS) R3392135-1 03/14/19 09:18

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Styrene	0.125	0.128	103	72.0-127	
1,1,1,2-Tetrachloroethane	0.125	0.151	121	74.0-129	
1,1,2,2-Tetrachloroethane	0.125	0.154	123	68.0-128	
Tetrachloroethene	0.125	0.119	95.4	70.0-136	
Toluene	0.125	0.109	87.0	75.0-121	
1,1,2-Trichlorotrifluoroethane	0.125	0.105	83.6	61.0-139	
1,2,3-Trichlorobenzene	0.125	0.155	124	59.0-139	
1,2,4-Trichlorobenzene	0.125	0.120	96.0	62.0-137	
1,1,1-Trichloroethane	0.125	0.102	81.7	69.0-126	
1,1,2-Trichloroethane	0.125	0.127	101	78.0-123	
Trichloroethene	0.125	0.105	84.2	76.0-126	
Trichlorofluoromethane	0.125	0.123	98.7	61.0-142	
1,2,3-Trichloropropane	0.125	0.127	101	67.0-129	
1,2,3-Trimethylbenzene	0.125	0.0963	77.0	74.0-124	
1,2,4-Trimethylbenzene	0.125	0.0981	78.5	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.0938	75.1	73.0-127	
Vinyl chloride	0.125	0.114	91.1	63.0-134	
Xylenes, Total	0.375	0.339	90.4	72.0-127	
(S) Toluene-d8			*107*	*75.0-131*	
(S) 4-Bromofluorobenzene			*103*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*96.1*	*70.0-130*	

L1078257-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1078257-01 03/14/19 18:32 • (MS) R3392135-3 03/14/19 19:10 • (MSD) R3392135-4 03/14/19 19:29

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.142	U	0.0443	0.0785	31.2	55.2	1	10.0-149		J3	55.7	37
Acrylonitrile	0.711	U	0.503	0.699	70.8	98.3	1	10.0-160			32.6	40
Bromodichloromethane	0.142	U	0.0599	0.0843	42.2	59.3	1	10.0-143			33.9	37
Bromobenzene	0.142	U	0.0683	0.0979	48.1	68.9	1	10.0-156			35.6	38
Bromoform	0.142	U	0.136	0.167	96.0	117	1	10.0-146			19.9	36
Bromomethane	0.142	U	0.0179	0.0388	12.6	27.3	1	10.0-149		J3	73.8	38
n-Butylbenzene	0.142	U	0.0414	0.0814	29.1	57.3	1	10.0-160		J3	65.1	40
sec-Butylbenzene	0.142	U	0.0406	0.0834	28.6	58.7	1	10.0-159		J3	69.1	39
Carbon tetrachloride	0.142	U	0.0392	0.0850	27.6	59.8	1	10.0-145		J3	73.7	37
tert-Butylbenzene	0.142	U	0.0478	0.0996	33.6	70.1	1	10.0-156		J3	70.2	39
Chlorobenzene	0.142	U	0.0627	0.0961	44.1	67.6	1	10.0-152		J3	42.0	39
Chlorodibromomethane	0.142	U	0.102	0.131	72.0	92.4	1	10.0-146			24.7	37

L1078257-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1078257-01 03/14/19 18:32 • (MS) R3392135-3 03/14/19 19:10 • (MSD) R3392135-4 03/14/19 19:29

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloroethane	0.142	U	0.0170	0.0368	12.0	25.9	1	10.0-146		J3	73.4	40
Chloroform	0.142	U	0.0539	0.0858	37.9	60.4	1	10.0-146		J3	45.7	37
Chloromethane	0.142	U	0.0194	0.0412	13.6	29.0	1	10.0-159		J3	71.9	37
2-Chlorotoluene	0.142	U	0.0603	0.107	42.5	75.3	1	10.0-159		J3	55.8	38
1,2-Dibromoethane	0.142	U	0.0924	0.110	65.0	77.4	1	10.0-148			17.4	34
4-Chlorotoluene	0.142	U	0.0567	0.0824	39.9	58.0	1	10.0-155			37.1	39
1,2-Dibromo-3-Chloropropane	0.142	U	0.0976	0.117	68.7	82.4	1	10.0-151			18.1	39
1,2-Dichlorobenzene	0.142	U	0.0668	0.0933	47.0	65.6	1	10.0-155			33.2	37
1,3-Dichlorobenzene	0.142	U	0.0577	0.0886	40.6	62.3	1	10.0-153		J3	42.2	38
Dibromomethane	0.142	U	0.0987	0.120	69.4	84.5	1	10.0-147			19.6	35
1,4-Dichlorobenzene	0.142	U	0.0606	0.0874	42.6	61.5	1	10.0-151			36.3	38
Dichlorodifluoromethane	0.142	U	0.0379	0.0932	26.6	65.6	1	10.0-160		J3	84.5	35
1,1-Dichloroethane	0.142	U	0.0466	0.0794	32.8	55.9	1	10.0-147		J3	52.1	37
1,2-Dichloroethane	0.142	U	0.0687	0.0853	48.3	60.0	1	10.0-148			21.6	35
1,1-Dichloroethene	0.142	U	0.0165	0.0327	11.6	23.0	1	10.0-155		J3	65.5	37
cis-1,2-Dichloroethene	0.142	U	0.0665	0.104	46.8	72.9	1	10.0-149		J3	43.6	37
trans-1,2-Dichloroethene	0.142	U	0.0302	0.0555	21.2	39.1	1	10.0-150		J3	59.1	37
1,2-Dichloropropane	0.142	U	0.0637	0.0930	44.8	65.5	1	10.0-148		J3	37.5	37
1,1-Dichloropropene	0.142	U	0.0270	0.0631	19.0	44.4	1	10.0-153		J3	80.3	35
cis-1,3-Dichloropropene	0.142	U	0.0682	0.0988	48.0	69.6	1	10.0-151			36.7	37
1,3-Dichloropropane	0.142	U	0.0991	0.123	69.8	86.7	1	10.0-154			21.6	35
trans-1,3-Dichloropropene	0.142	U	0.100	0.131	70.5	92.4	1	10.0-148			26.9	37
2,2-Dichloropropane	0.142	U	0.0348	0.0635	24.5	44.7	1	10.0-138		J3	58.5	36
Di-isopropyl ether	0.142	U	0.0642	0.0900	45.2	63.3	1	10.0-147			33.4	36
Ethylbenzene	0.142	U	0.0537	0.0936	37.8	65.9	1	10.0-160		J3	54.3	38
Hexachloro-1,3-butadiene	0.142	U	0.0493	0.105	34.7	73.9	1	10.0-160		J3	72.2	40
2-Butanone (MEK)	0.711	U	0.665	0.542	93.6	76.2	1	10.0-160			20.4	40
Isopropylbenzene	0.142	U	0.0476	0.0912	33.5	64.2	1	10.0-155		J3	62.9	38
Methylene Chloride	0.142	U	0.0491	0.0725	34.6	51.0	1	10.0-141		J3	38.3	37
p-Isopropyltoluene	0.142	U	0.0488	0.0935	34.4	65.8	1	10.0-160		J3	62.8	40
4-Methyl-2-pentanone (MIBK)	0.711	U	0.595	0.717	83.7	101	1	10.0-160			18.6	35
Methyl tert-butyl ether	0.142	U	0.0722	0.0913	50.8	64.2	1	11.0-147			23.3	35
Naphthalene	0.142	U	0.0775	0.103	54.5	72.7	1	10.0-160			28.6	36
n-Propylbenzene	0.142	U	0.0411	0.0821	28.9	57.8	1	10.0-158		J3	66.5	38
1,1,2,2-Tetrachloroethane	0.142	U	0.121	0.150	85.0	105	1	10.0-160			21.3	35
Styrene	0.142	U	0.0676	0.102	47.6	71.5	1	10.0-160		J3	40.1	40
1,1,1,2-Tetrachloroethane	0.142	U	0.0851	0.120	59.9	84.6	1	10.0-149			34.2	39
Tetrachloroethene	0.142	U	0.0392	0.0753	27.6	53.0	1	10.0-156		J3	63.2	39
Toluene	0.142	U	0.0452	0.0782	31.8	55.0	1	10.0-156		J3	53.6	38

L1078257-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1078257-01 03/14/19 18:32 • (MS) R3392135-3 03/14/19 19:10 • (MSD) R3392135-4 03/14/19 19:29

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,1,2-Trichlorotrifluoroethane	0.142	U	0.0176	0.0461	12.4	32.4	1	10.0-160		J3	89.7	36
1,1,1-Trichloroethane	0.142	U	0.0321	0.0640	22.6	45.0	1	10.0-144		J3	66.4	35
1,2,3-Trichlorobenzene	0.142	U	0.0996	0.143	70.1	100	1	10.0-160			35.4	40
1,1,2-Trichloroethane	0.142	U	0.0964	0.120	67.8	84.8	1	10.0-160			22.2	35
1,2,4-Trichlorobenzene	0.142	U	0.0700	0.105	49.3	74.1	1	10.0-160		J3	40.2	40
Trichloroethene	0.142	U	0.0373	0.0720	26.3	50.7	1	10.0-156		J3	63.5	38
Trichlorofluoromethane	0.142	U	0.0245	0.0511	17.2	35.9	1	10.0-160		J3	70.4	40
1,2,3-Trichloropropane	0.142	U	0.105	0.127	73.7	89.0	1	10.0-156			18.9	35
1,2,3-Trimethylbenzene	0.142	U	0.0553	0.0821	38.9	57.8	1	10.0-160		J3	39.0	36
1,2,4-Trimethylbenzene	0.142	0.00167	0.0494	0.0796	33.6	54.8	1	10.0-160		J3	46.8	36
1,3,5-Trimethylbenzene	0.142	U	0.0430	0.0738	30.2	51.9	1	10.0-160		J3	52.8	38
Vinyl chloride	0.142	U	0.0250	0.0598	17.6	42.1	1	10.0-160		J3	82.0	37
Xylenes, Total	0.426	U	0.146	0.246	34.1	57.7	1	10.0-160		J3	51.3	38
(S) Toluene-d8					*112*	*111*		*75.0-131*				
(S) 4-Bromofluorobenzene					*101*	*99.4*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*87.5*	*82.4*		*70.0-130*				

Method Blank (MB)

(MB) R3392490-2 03/15/19 19:09

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0137	0.0250
cis-1,2-Dichloroethene	U		0.000690	0.00250
(S) Toluene-d8	*97.2*			*75.0-131*
(S) 4-Bromofluorobenzene	*79.5*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3392490-1 03/15/19 18:00

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.625	0.896	143	10.0-160	
cis-1,2-Dichloroethene	0.125	0.107	85.2	73.0-125	
(S) Toluene-d8			*96.5*	*75.0-131*	
(S) 4-Bromofluorobenzene			*95.2*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*109*	*70.0-130*	

Method Blank (MB)

(MB) R3392170-3 03/15/19 13:51

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acrolein	U		8.87	50.0
Acrylonitrile	U		1.87	10.0
Benzene	U		0.331	1.00
Bromobenzene	U		0.352	1.00
Bromodichloromethane	U		0.380	1.00
Bromoform	U		0.469	1.00
Bromomethane	U		0.866	5.00
n-Butylbenzene	U		0.361	1.00
sec-Butylbenzene	U		0.365	1.00
tert-Butylbenzene	U		0.399	1.00
Carbon tetrachloride	U		0.379	1.00
Chlorobenzene	U		0.348	1.00
Chlorodibromomethane	U		0.327	1.00
Chloroethane	U		0.453	5.00
Chloroform	U		0.324	5.00
Chloromethane	U		0.276	2.50
2-Chlorotoluene	U		0.375	1.00
4-Chlorotoluene	U		0.351	1.00
1,2-Dibromo-3-Chloropropane	U		1.33	5.00
1,2-Dibromoethane	U		0.381	1.00
Dibromomethane	U		0.346	1.00
1,2-Dichlorobenzene	U		0.349	1.00
1,3-Dichlorobenzene	U		0.220	1.00
1,4-Dichlorobenzene	U		0.274	1.00
Dichlorodifluoromethane	U		0.551	5.00
1,1-Dichloroethane	U		0.259	1.00
1,2-Dichloroethane	U		0.361	1.00
1,1-Dichloroethene	U		0.398	1.00
cis-1,2-Dichloroethene	U		0.260	1.00
trans-1,2-Dichloroethene	U		0.396	1.00
1,2-Dichloropropane	U		0.306	1.00
1,1-Dichloropropene	U		0.352	1.00
1,3-Dichloropropane	U		0.366	1.00
cis-1,3-Dichloropropene	U		0.418	1.00
trans-1,3-Dichloropropene	U		0.419	1.00
2,2-Dichloropropane	U		0.321	1.00
Di-isopropyl ether	U		0.320	1.00
Ethylbenzene	U		0.384	1.00
Hexachloro-1,3-butadiene	U		0.256	1.00
Isopropylbenzene	U		0.326	1.00

Method Blank (MB)

(MB) R3392170-3 03/15/19 13:51

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
p-Isopropyltoluene	U		0.350	1.00
2-Butanone (MEK)	U		3.93	10.0
Methylene Chloride	U		1.00	5.00
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0
Methyl tert-butyl ether	U		0.367	1.00
Naphthalene	U		1.00	5.00
n-Propylbenzene	U		0.349	1.00
1,1,2-Trichlorotrifluoroethane	U		0.303	1.00
Styrene	U		0.307	1.00
1,1,1,2-Tetrachloroethane	U		0.385	1.00
1,1,2,2-Tetrachloroethane	U		0.130	1.00
Tetrachloroethene	U		0.372	1.00
Toluene	U		0.412	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,3-Trimethylbenzene	U		0.321	1.00
1,2,4-Trichlorobenzene	U		0.355	1.00
1,1,1-Trichloroethane	U		0.319	1.00
1,1,2-Trichloroethane	U		0.383	1.00
Trichloroethene	U		0.398	1.00
Trichlorofluoromethane	U		1.20	5.00
1,2,3-Trichloropropane	U		0.807	2.50
1,2,4-Trimethylbenzene	U		0.373	1.00
1,3,5-Trimethylbenzene	U		0.387	1.00
Vinyl chloride	U		0.259	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*101*			*80.0-120*
(S) 4-Bromofluorobenzene	*102*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*

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

(LCS) R3392170-1 03/15/19 12:32 • (LCSD) R3392170-2 03/15/19 12:52

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acrolein	125	139	139	111	111	10.0-160			0.280	26
Acrylonitrile	125	131	131	105	105	55.0-149			0.132	20
Benzene	25.0	23.0	22.1	91.9	88.3	70.0-123			4.04	20
Bromobenzene	25.0	21.9	22.5	87.7	90.2	73.0-121			2.82	20
Bromodichloromethane	25.0	23.0	22.5	92.1	90.1	75.0-120			2.22	20

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

(LCS) R3392170-1 03/15/19 12:32 • (LCSD) R3392170-2 03/15/19 12:52

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromoform	25.0	25.5	25.0	102	100	68.0-132			1.73	20
Bromomethane	25.0	23.0	22.3	92.0	89.3	10.0-160			2.97	25
n-Butylbenzene	25.0	22.8	23.5	91.1	94.1	73.0-125			3.28	20
sec-Butylbenzene	25.0	21.5	22.1	85.8	88.5	75.0-125			3.07	20
tert-Butylbenzene	25.0	22.7	23.3	90.7	93.2	76.0-124			2.71	20
Carbon tetrachloride	25.0	22.9	22.2	91.7	88.8	68.0-126			3.24	20
Chlorobenzene	25.0	24.6	23.8	98.5	95.4	80.0-121			3.21	20
Chlorodibromomethane	25.0	25.1	24.5	100	97.9	77.0-125			2.43	20
Chloroethane	25.0	22.9	21.2	91.4	84.7	47.0-150			7.64	20
Chloroform	25.0	23.1	22.1	92.3	88.6	73.0-120			4.12	20
Chloromethane	25.0	23.4	22.1	93.6	88.2	41.0-142			5.99	20
2-Chlorotoluene	25.0	23.0	23.7	91.8	94.8	76.0-123			3.22	20
4-Chlorotoluene	25.0	23.4	23.6	93.7	94.4	75.0-122			0.779	20
1,2-Dibromo-3-Chloropropane	25.0	25.6	27.5	102	110	58.0-134			7.38	20
1,2-Dibromoethane	25.0	24.9	24.7	99.8	98.7	80.0-122			1.11	20
Dibromomethane	25.0	24.5	24.3	98.0	97.3	80.0-120			0.688	20
1,2-Dichlorobenzene	25.0	23.8	24.6	95.3	98.5	79.0-121			3.40	20
1,3-Dichlorobenzene	25.0	23.0	23.3	91.8	93.4	79.0-120			1.69	20
1,4-Dichlorobenzene	25.0	22.9	23.8	91.6	95.1	79.0-120			3.70	20
Dichlorodifluoromethane	25.0	23.8	21.8	95.4	87.3	51.0-149			8.81	20
1,1-Dichloroethane	25.0	24.1	23.2	96.4	92.9	70.0-126			3.76	20
1,2-Dichloroethane	25.0	23.7	23.2	94.9	92.8	70.0-128			2.21	20
1,1-Dichloroethene	25.0	21.8	21.0	87.4	83.9	71.0-124			4.10	20
cis-1,2-Dichloroethene	25.0	23.4	22.8	93.6	91.3	73.0-120			2.46	20
trans-1,2-Dichloroethene	25.0	24.1	22.7	96.3	90.9	73.0-120			5.75	20
1,2-Dichloropropane	25.0	24.4	24.2	97.5	96.6	77.0-125			0.847	20
1,1-Dichloropropene	25.0	23.2	22.1	92.8	88.3	74.0-126			4.99	20
1,3-Dichloropropane	25.0	25.5	24.9	102	99.5	80.0-120			2.51	20
cis-1,3-Dichloropropene	25.0	24.5	24.4	98.0	97.5	80.0-123			0.600	20
trans-1,3-Dichloropropene	25.0	25.0	25.2	100	101	78.0-124			0.455	20
2,2-Dichloropropane	25.0	23.6	22.7	94.3	90.9	58.0-130			3.67	20
Di-isopropyl ether	25.0	23.1	22.5	92.5	90.2	58.0-138			2.48	20
Ethylbenzene	25.0	24.2	23.4	96.9	93.6	79.0-123			3.50	20
Hexachloro-1,3-butadiene	25.0	22.5	23.6	90.2	94.3	54.0-138			4.51	20
1,1,2-Trichlorotrifluoroethane	25.0	20.4	19.2	81.7	77.0	69.0-132			5.93	20
Isopropylbenzene	25.0	23.5	22.8	94.1	91.3	76.0-127			2.99	20
p-Isopropyltoluene	25.0	22.8	23.5	91.0	94.0	76.0-125			3.25	20
2-Butanone (MEK)	125	147	146	118	117	44.0-160			0.513	20
Methylene Chloride	25.0	23.5	22.9	94.2	91.8	67.0-120			2.56	20
4-Methyl-2-pentanone (MIBK)	125	133	133	106	106	68.0-142			0.195	20

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

(LCS) R3392170-1 03/15/19 12:32 • (LCSD) R3392170-2 03/15/19 12:52

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methyl tert-butyl ether	25.0	24.3	24.2	97.4	96.7	68.0-125			0.724	20
1,2,3-Trimethylbenzene	25.0	22.4	23.2	89.8	92.9	77.0-120			3.44	20
Naphthalene	25.0	24.1	26.0	96.4	104	54.0-135			7.53	20
n-Propylbenzene	25.0	22.4	22.7	89.4	91.0	77.0-124			1.73	20
Styrene	25.0	24.8	24.1	99.3	96.4	73.0-130			2.93	20
1,1,1,2-Tetrachloroethane	25.0	24.6	23.9	98.5	95.5	75.0-125			3.14	20
1,1,2,2-Tetrachloroethane	25.0	23.0	24.4	92.1	97.4	65.0-130			5.63	20
Tetrachloroethene	25.0	23.6	22.6	94.3	90.5	72.0-132			4.10	20
Toluene	25.0	22.5	21.7	89.9	86.7	79.0-120			3.66	20
1,2,3-Trichlorobenzene	25.0	23.7	25.2	94.8	101	50.0-138			6.04	20
1,2,4-Trichlorobenzene	25.0	23.8	25.6	95.0	103	57.0-137			7.57	20
1,1,1-Trichloroethane	25.0	22.3	21.5	89.2	86.1	73.0-124			3.45	20
1,1,2-Trichloroethane	25.0	24.0	23.3	96.1	93.2	80.0-120			3.04	20
Trichloroethene	25.0	22.7	22.0	90.8	88.1	78.0-124			2.99	20
Trichlorofluoromethane	25.0	21.9	20.8	87.7	83.2	59.0-147			5.21	20
1,2,3-Trichloropropane	25.0	24.7	25.8	98.6	103	73.0-130			4.59	20
1,2,4-Trimethylbenzene	25.0	22.8	23.5	91.2	94.0	76.0-121			3.03	20
1,3,5-Trimethylbenzene	25.0	22.5	23.0	89.9	91.9	76.0-122			2.26	20
Vinyl chloride	25.0	23.1	22.1	92.3	88.4	67.0-131			4.32	20
Xylenes, Total	75.0	71.4	69.0	95.2	92.0	79.0-123			3.42	20
(S) Toluene-d8				*100*	*98.2*	*80.0-120*				
(S) 4-Bromofluorobenzene				*98.8*	*99.3*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*101*	*101*	*70.0-130*				

Method Blank (MB)

(MB) R3392358-3 03/16/19 10:36

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		10.0	50.0
(S) Toluene-d8	*101*			*80.0-120*
(S) 4-Bromofluorobenzene	*99.2*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*

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

(LCS) R3392358-1 03/16/19 09:37 • (LCSD) R3392358-2 03/16/19 09:57

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Acetone	125	206	194	165	155	19.0-160	J4		6.03	27
(S) Toluene-d8				*98.0*	*99.9*	*80.0-120*				
(S) 4-Bromofluorobenzene				*98.0*	*97.9*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*108*	*115*	*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.

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.
MDL (dry)	Method Detection Limit.
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
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration met method criteria.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.

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

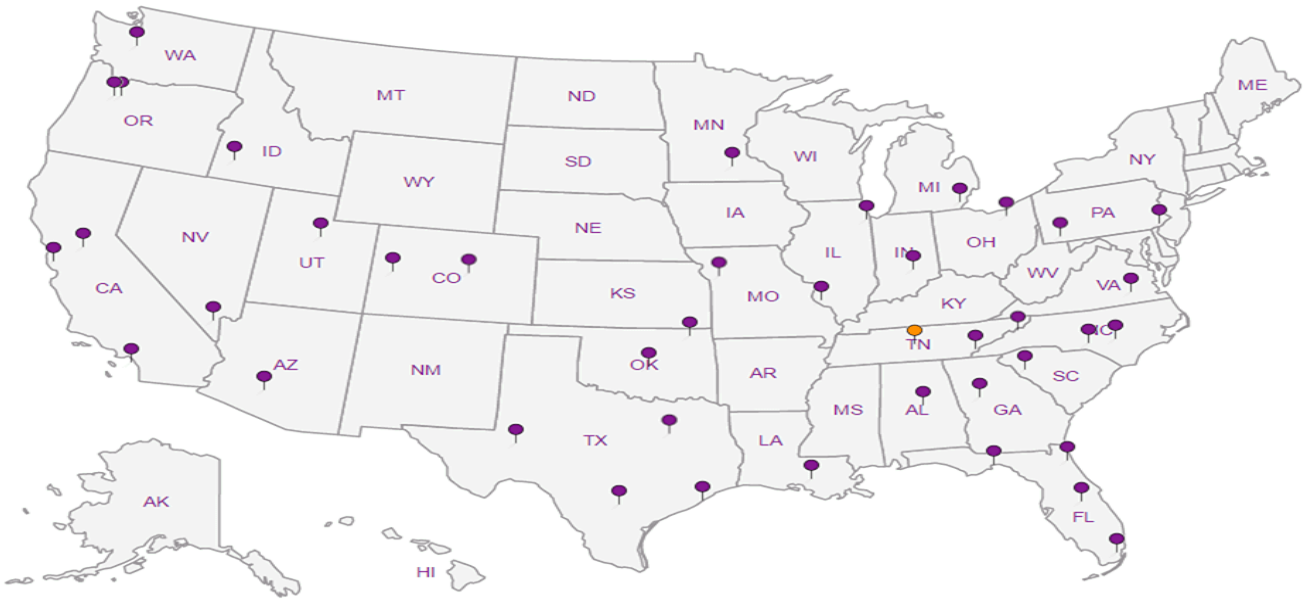
Third Party Federal Accreditations

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.



EFI Global

242 Old New Brunswick Road
Suite 414
Piscataway, NJ 08854

Billing Information:
Dale Lanier
242 Old New Brunswick Rd.,Ste. 414
Piscataway, NJ 08854

Pres Chk

Report to: Dale Lanier

Email To: jeffrey_diamond@efiglobal.com,dale_lanier@efigl

Project Description: Rego Park, NY

City/State Collected:

Phone:
Fax:

Client Project # 94-17 ~~Rego~~ 63rd Dr

Lab Project # EFIPNJ-REGO

Collected by (print): CARLA SULLIVAN

Site/Facility ID #

P.O. #

Collected by (signature):

Quote #

Immediately Packed on Ice N ___ Y X

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

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TS 4ozClr-NoPres	V8260C 40mlAmb-HCl	V8260C 40mlAmb/MeOH5ml/Syr	Remarks	Sample # (lab only)
SB-1 16'-18'	G	SS	16-18'	3-12-19	1050	2	X		X		-01
GW-1 23'	G	~~SS~~ GW	23	11	1130	3		X			-02
SB-2 3-6	G	SS	3'-6'		1210	2	X		X		-03
SB-3 3-6	G	SS	3'-6'		1245	2	X		X		-04
SB-4 3'-6'	G	SS	3'-6'		115	2	X		X		-05
~~SB-1 2'-3'~~	~~G~~	~~SS~~	~~2'-3'~~	~~3-12-19~~	~~1115 AM~~						
~~1-3'~~		~~GW~~									
		GW									
SB-1	G	SS	1'-3'		1115 AM	2	X		X		-06

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

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

L # L1078252

1006

Acctnum: EFIPNJ
Template: T146829
Prelogin: P696175
TSR: 873 - Heather J Wagner
PB: 2/27/19 mc
Shipped Via: FedEX Ground

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

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via: (UPS) __ FedEx __ Courier __ _____

Tracking #

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Carla Sullivan	3-12-19	4pm	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
			Malak T.

Trip Blank Received: (Yes) / No
HCl / MeOH
TBR
1

Temp: 4.1+.1=4.2 °C AM AS Bottles Received: 13+TB

Date: 3/13 Time: 8:45

If preservation required by Login: Date/Time

Hold:

Condition: NCF / (OK)

Pace Analytical®
National Center for Testing & Innovation

ANALYTICAL REPORT

March 19, 2019

EFI Global

Sample Delivery Group:	L1078202
Samples Received:	03/13/2019
Project Number:	94-17 63RD DR REGO P
Description:	Rego Park, NY

Report To: Dale Lanier
242 Old New Brunswick Road
Suite 414
Piscataway, NJ 08854

Entire Report Reviewed By:

Heather J Wagner
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

TABLE OF CONTENTS

BASEMENT SS-1 8544&5956 L1078202-01 Air

Collected by: Carla S
Collected date/time: 03/12/19 10:00
Received date/time: 03/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1250459	2	03/15/19 11:51	03/15/19 11:51	AMC	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1250905	80	03/17/19 02:00	03/17/19 02:00	AMC	Mt. Juliet, TN

BASEMENT SS-2 6294&6650 L1078202-02 Air

Collected by: Carla S
Collected date/time: 03/12/19 09:44
Received date/time: 03/13/19 08:45

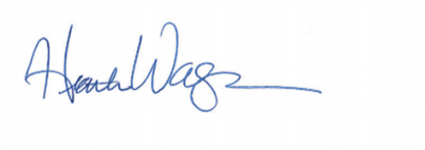
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1250459	2	03/15/19 12:40	03/15/19 12:40	AMC	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1250905	80	03/17/19 02:47	03/17/19 02:47	AMC	Mt. Juliet, TN

BASE AI 5286&5698 L1078202-03 Air

Collected by: Carla S
Collected date/time: 03/12/19 10:07
Received date/time: 03/13/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1250459	2	03/15/19 13:29	03/15/19 13:29	AMC	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.



Heather J Wagner
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
Acetone	67-64-1	58.10	2.50	5.94	15.4	36.5		2	WG1250459
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1250459
Benzene	71-43-2	78.10	0.400	1.28	21.1	67.5		2	WG1250459
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1250459
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1250459
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1250459
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1250459
1,3-Butadiene	106-99-0	54.10	4.00	8.85	27.1	59.9		2	WG1250459
Carbon disulfide	75-15-0	76.10	0.400	1.24	2.15	6.70		2	WG1250459
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1250459
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG1250459
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG1250459
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG1250459
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG1250459
2-Chlorotoluene	95-49-8	126	0.400	2.06	0.402	2.07		2	WG1250459
Cyclohexane	110-82-7	84.20	0.400	1.38	5.66	19.5		2	WG1250459
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1250459
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1250459
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1250459
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1250459
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1250459
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1250459
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1250459
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	0.785	3.11		2	WG1250459
cis-1,2-Dichloroethene	156-59-2	96.90	16.0	63.4	107	423		80	WG1250905
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	0.947	3.75		2	WG1250459
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1250459
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1250459
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1250459
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG1250459
Ethanol	64-17-5	46.10	50.4	95.0	210	396		80	WG1250905
Ethylbenzene	100-41-4	106	0.400	1.73	15.9	69.0		2	WG1250459
4-Ethyltoluene	622-96-8	120	0.400	1.96	4.49	22.0		2	WG1250459
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG1250459
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	ND	ND		2	WG1250459
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1250459
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1250459
Heptane	142-82-5	100	0.400	1.64	20.8	85.0		2	WG1250459
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1250459
n-Hexane	110-54-3	86.20	0.400	1.41	32.8	116		2	WG1250459
Isopropylbenzene	98-82-8	120.20	0.400	1.97	1.09	5.37		2	WG1250459
Methylene Chloride	75-09-2	84.90	0.400	1.39	0.509	1.77		2	WG1250459
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1250459
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	17.8	52.3		2	WG1250459
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1250459
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG1250459
MTBE	1634-04-4	88.10	0.400	1.44	5.35	19.3		2	WG1250459
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1250459
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG1250459
Propene	115-07-1	42.10	32.0	55.1	244	419		80	WG1250905
Styrene	100-42-5	104	0.400	1.70	ND	ND		2	WG1250459
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1250459
Tetrachloroethylene	127-18-4	166	16.0	109	477	3240		80	WG1250905
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG1250459
Toluene	108-88-3	92.10	16.0	60.3	70.8	267		80	WG1250905
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1250459

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
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	ND	ND		2	WG1250459
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1250459
Trichloroethylene	79-01-6	131	16.0	85.7	148	791		80	WG1250905
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	10.3	50.6		2	WG1250459
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	3.36	16.5		2	WG1250459
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	5.26	24.6		2	WG1250459
Vinyl chloride	75-01-4	62.50	0.400	1.02	19.2	49.0		2	WG1250459
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1250459
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1250459
m&p-Xylene	1330-20-7	106	0.800	3.47	60.1	261		2	WG1250459
o-Xylene	95-47-6	106	0.400	1.73	17.8	77.2		2	WG1250459
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*98.4*				WG1250459
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*89.9*				WG1250905

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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
Acetone	67-64-1	58.10	2.50	5.94	7.10	16.9		2	WG1250459
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1250459
Benzene	71-43-2	78.10	0.400	1.28	24.3	77.5		2	WG1250459
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1250459
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1250459
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1250459
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1250459
1,3-Butadiene	106-99-0	54.10	4.00	8.85	21.0	46.4		2	WG1250459
Carbon disulfide	75-15-0	76.10	0.400	1.24	1.69	5.25		2	WG1250459
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1250459
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG1250459
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG1250459
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG1250459
Chloromethane	74-87-3	50.50	0.400	0.826	ND	ND		2	WG1250459
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1250459
Cyclohexane	110-82-7	84.20	0.400	1.38	12.2	41.9		2	WG1250459
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1250459
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1250459
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1250459
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1250459
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1250459
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1250459
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1250459
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1250459
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	0.703	2.79		2	WG1250459
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1250459
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1250459
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1250459
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1250459
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG1250459
Ethanol	64-17-5	46.10	1.26	2.38	27.2	51.2		2	WG1250459
Ethylbenzene	100-41-4	106	0.400	1.73	15.1	65.3		2	WG1250459
4-Ethyltoluene	622-96-8	120	0.400	1.96	4.16	20.4		2	WG1250459
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG1250459
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	ND	ND		2	WG1250459
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1250459
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1250459
Heptane	142-82-5	100	0.400	1.64	28.6	117		2	WG1250459
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1250459
n-Hexane	110-54-3	86.20	0.400	1.41	62.1	219		2	WG1250459
Isopropylbenzene	98-82-8	120.20	0.400	1.97	0.977	4.80		2	WG1250459
Methylene Chloride	75-09-2	84.90	0.400	1.39	0.515	1.79		2	WG1250459
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1250459
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	5.19	15.3		2	WG1250459
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1250459
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG1250459
MTBE	1634-04-4	88.10	0.400	1.44	5.86	21.1		2	WG1250459
Naphthalene	91-20-3	128	1.26	6.60	ND	ND		2	WG1250459
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG1250459
Propene	115-07-1	42.10	32.0	55.1	182	313		80	WG1250905
Styrene	100-42-5	104	0.400	1.70	ND	ND		2	WG1250459
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1250459
Tetrachloroethylene	127-18-4	166	16.0	109	594	4030		80	WG1250905
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG1250459
Toluene	108-88-3	92.10	16.0	60.3	95.7	361		80	WG1250905
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1250459

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
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	ND	ND		2	WG1250459
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1250459
Trichloroethylene	79-01-6	131	0.400	2.14	4.84	25.9		2	WG1250459
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	9.97	48.9		2	WG1250459
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	3.24	15.9		2	WG1250459
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	17.1	79.9		2	WG1250459
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1250459
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1250459
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1250459
m&p-Xylene	1330-20-7	106	0.800	3.47	55.9	242		2	WG1250459
o-Xylene	95-47-6	106	0.400	1.73	16.7	72.4		2	WG1250459
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*94.9*				WG1250459
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*91.4*				WG1250905

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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
Acetone	67-64-1	58.10	2.50	5.94	8.61	20.5		2	WG1250459
Allyl chloride	107-05-1	76.53	0.400	1.25	ND	ND		2	WG1250459
Benzene	71-43-2	78.10	0.400	1.28	0.477	1.52		2	WG1250459
Benzyl Chloride	100-44-7	127	0.400	2.08	ND	ND		2	WG1250459
Bromodichloromethane	75-27-4	164	0.400	2.68	ND	ND		2	WG1250459
Bromoform	75-25-2	253	1.20	12.4	ND	ND		2	WG1250459
Bromomethane	74-83-9	94.90	0.400	1.55	ND	ND		2	WG1250459
1,3-Butadiene	106-99-0	54.10	4.00	8.85	ND	ND		2	WG1250459
Carbon disulfide	75-15-0	76.10	0.400	1.24	ND	ND		2	WG1250459
Carbon tetrachloride	56-23-5	154	0.400	2.52	ND	ND		2	WG1250459
Chlorobenzene	108-90-7	113	0.400	1.85	ND	ND		2	WG1250459
Chloroethane	75-00-3	64.50	0.400	1.06	ND	ND		2	WG1250459
Chloroform	67-66-3	119	0.400	1.95	ND	ND		2	WG1250459
Chloromethane	74-87-3	50.50	0.400	0.826	0.450	0.929		2	WG1250459
2-Chlorotoluene	95-49-8	126	0.400	2.06	ND	ND		2	WG1250459
Cyclohexane	110-82-7	84.20	0.400	1.38	ND	ND		2	WG1250459
Dibromochloromethane	124-48-1	208	0.400	3.40	ND	ND		2	WG1250459
1,2-Dibromoethane	106-93-4	188	0.400	3.08	ND	ND		2	WG1250459
1,2-Dichlorobenzene	95-50-1	147	0.400	2.40	ND	ND		2	WG1250459
1,3-Dichlorobenzene	541-73-1	147	0.400	2.40	ND	ND		2	WG1250459
1,4-Dichlorobenzene	106-46-7	147	0.400	2.40	ND	ND		2	WG1250459
1,2-Dichloroethane	107-06-2	99	0.400	1.62	ND	ND		2	WG1250459
1,1-Dichloroethane	75-34-3	98	0.400	1.60	ND	ND		2	WG1250459
1,1-Dichloroethene	75-35-4	96.90	0.400	1.59	ND	ND		2	WG1250459
cis-1,2-Dichloroethene	156-59-2	96.90	0.400	1.59	ND	ND		2	WG1250459
trans-1,2-Dichloroethene	156-60-5	96.90	0.400	1.59	ND	ND		2	WG1250459
1,2-Dichloropropane	78-87-5	113	0.400	1.85	ND	ND		2	WG1250459
cis-1,3-Dichloropropene	10061-01-5	111	0.400	1.82	ND	ND		2	WG1250459
trans-1,3-Dichloropropene	10061-02-6	111	0.400	1.82	ND	ND		2	WG1250459
1,4-Dioxane	123-91-1	88.10	0.400	1.44	ND	ND		2	WG1250459
Ethanol	64-17-5	46.10	1.26	2.38	10.1	19.0		2	WG1250459
Ethylbenzene	100-41-4	106	0.400	1.73	ND	ND		2	WG1250459
4-Ethyltoluene	622-96-8	120	0.400	1.96	ND	ND		2	WG1250459
Trichlorofluoromethane	75-69-4	137.40	0.400	2.25	ND	ND		2	WG1250459
Dichlorodifluoromethane	75-71-8	120.92	0.400	1.98	ND	ND		2	WG1250459
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.400	3.07	ND	ND		2	WG1250459
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.400	2.80	ND	ND		2	WG1250459
Heptane	142-82-5	100	0.400	1.64	ND	ND		2	WG1250459
Hexachloro-1,3-butadiene	87-68-3	261	1.26	13.5	ND	ND		2	WG1250459
n-Hexane	110-54-3	86.20	0.400	1.41	0.660	2.33		2	WG1250459
Isopropylbenzene	98-82-8	120.20	0.400	1.97	ND	ND		2	WG1250459
Methylene Chloride	75-09-2	84.90	0.400	1.39	ND	ND		2	WG1250459
Methyl Butyl Ketone	591-78-6	100	2.50	10.2	ND	ND		2	WG1250459
2-Butanone (MEK)	78-93-3	72.10	2.50	7.37	ND	ND		2	WG1250459
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	2.50	10.2	ND	ND		2	WG1250459
Methyl methacrylate	80-62-6	100.12	0.400	1.64	ND	ND		2	WG1250459
MTBE	1634-04-4	88.10	0.400	1.44	0.417	1.50		2	WG1250459
Naphthalene	91-20-3	128	1.26	6.60	1.46	7.63		2	WG1250459
2-Propanol	67-63-0	60.10	2.50	6.15	ND	ND		2	WG1250459
Propene	115-07-1	42.10	0.800	1.38	1.07	1.85		2	WG1250459
Styrene	100-42-5	104	0.400	1.70	ND	ND		2	WG1250459
1,1,2,2-Tetrachloroethane	79-34-5	168	0.400	2.75	ND	ND		2	WG1250459
Tetrachloroethylene	127-18-4	166	0.400	2.72	2.93	19.9		2	WG1250459
Tetrahydrofuran	109-99-9	72.10	0.400	1.18	ND	ND		2	WG1250459
Toluene	108-88-3	92.10	0.400	1.51	4.18	15.7		2	WG1250459
1,2,4-Trichlorobenzene	120-82-1	181	1.26	9.33	ND	ND		2	WG1250459

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
1,1,1-Trichloroethane	71-55-6	133	0.400	2.18	ND	ND		2	WG1250459
1,1,2-Trichloroethane	79-00-5	133	0.400	2.18	ND	ND		2	WG1250459
Trichloroethylene	79-01-6	131	0.400	2.14	ND	ND		2	WG1250459
1,2,4-Trimethylbenzene	95-63-6	120	0.400	1.96	1.97	9.65		2	WG1250459
1,3,5-Trimethylbenzene	108-67-8	120	0.400	1.96	0.411	2.02		2	WG1250459
2,2,4-Trimethylpentane	540-84-1	114.22	0.400	1.87	ND	ND		2	WG1250459
Vinyl chloride	75-01-4	62.50	0.400	1.02	ND	ND		2	WG1250459
Vinyl Bromide	593-60-2	106.95	0.400	1.75	ND	ND		2	WG1250459
Vinyl acetate	108-05-4	86.10	0.400	1.41	ND	ND		2	WG1250459
m&p-Xylene	1330-20-7	106	0.800	3.47	2.10	9.11		2	WG1250459
o-Xylene	95-47-6	106	0.400	1.73	1.11	4.82		2	WG1250459
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*88.4*				WG1250459

Method Blank (MB)

(MB) R3392232-3 03/15/19 11:03

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.0569	1.25
Allyl Chloride	U		0.0546	0.200
Benzene	U		0.0460	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0436	0.200
Bromoform	U		0.0786	0.600
Bromomethane	U		0.0609	0.200
1,3-Butadiene	U		0.0563	2.00
Carbon disulfide	U		0.0544	0.200
Carbon tetrachloride	U		0.0585	0.200
Chlorobenzene	U		0.0601	0.200
Chloroethane	U		0.0489	0.200
Chloroform	U		0.0574	0.200
Chloromethane	U		0.0544	0.200
2-Chlorotoluene	U		0.0605	0.200
Cyclohexane	U		0.0534	0.200
Dibromochloromethane	U		0.0494	0.200
1,2-Dibromoethane	U		0.0185	0.200
1,2-Dichlorobenzene	U		0.0603	0.200
1,3-Dichlorobenzene	U		0.0597	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0616	0.200
1,1-Dichloroethane	U		0.0514	0.200
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
1,2-Dichloropropane	U		0.0599	0.200
cis-1,3-Dichloropropene	U		0.0588	0.200
trans-1,3-Dichloropropene	U		0.0435	0.200
1,4-Dioxane	U		0.0554	0.200
Ethylbenzene	U		0.0506	0.200
4-Ethyltoluene	U		0.0666	0.200
Trichlorofluoromethane	U		0.0673	0.200
Dichlorodifluoromethane	U		0.0601	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0687	0.200
1,2-Dichlorotetrafluoroethane	U		0.0458	0.200
Heptane	U		0.0626	0.200
Hexachloro-1,3-butadiene	U		0.0656	0.630
n-Hexane	U		0.0457	0.200
Isopropylbenzene	U		0.0563	0.200

Method Blank (MB)

(MB) R3392232-3 03/15/19 11:03

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Methylene Chloride	U		0.0465	0.200
Methyl Butyl Ketone	U		0.0682	1.25
2-Butanone (MEK)	U		0.0493	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0650	1.25
Methyl Methacrylate	U		0.0773	0.200
MTBE	U		0.0505	0.200
Naphthalene	U		0.154	0.630
2-Propanol	U		0.0882	1.25
Propene	U		0.0932	0.400
Styrene	U		0.0465	0.200
1,1,2,2-Tetrachloroethane	U		0.0576	0.200
Tetrachloroethylene	U		0.0497	0.200
Tetrahydrofuran	U		0.0508	0.200
Toluene	U		0.0499	0.200
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0665	0.200
1,1,2-Trichloroethane	U		0.0287	0.200
Trichloroethylene	U		0.0545	0.200
1,2,4-Trimethylbenzene	U		0.0483	0.200
1,3,5-Trimethylbenzene	U		0.0631	0.200
2,2,4-Trimethylpentane	U		0.0456	0.200
Vinyl chloride	U		0.0457	0.200
Vinyl Bromide	U		0.0727	0.200
Vinyl acetate	U		0.0639	0.200
m&p-Xylene	U		0.0946	0.400
o-Xylene	U		0.0633	0.200
Ethanol	U		0.0832	0.630
(S) 1,4-Bromofluorobenzene	*77.8*			*60.0-140*

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

(LCS) R3392232-1 03/15/19 09:23 • (LCSD) R3392232-2 03/15/19 10:12

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethanol	3.75	2.87	3.08	76.4	82.1	55.0-148			7.09	25
Propene	3.75	3.09	3.15	82.4	84.0	64.0-144			1.91	25
Dichlorodifluoromethane	3.75	3.34	3.37	89.0	89.9	64.0-139			1.04	25
1,2-Dichlorotetrafluoroethane	3.75	3.71	3.79	98.9	101	70.0-130			2.15	25
Chloromethane	3.75	3.03	3.41	80.7	90.8	70.0-130			11.8	25

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

(LCS) R3392232-1 03/15/19 09:23 • (LCSD) R3392232-2 03/15/19 10:12

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	3.28	3.55	87.5	94.8	70.0-130			8.00	25
1,3-Butadiene	3.75	3.13	3.74	83.5	99.7	70.0-130			17.7	25
Bromomethane	3.75	3.84	3.84	102	102	70.0-130			0.0685	25
Chloroethane	3.75	3.13	3.08	83.5	82.2	70.0-130			1.48	25
Trichlorofluoromethane	3.75	3.73	3.78	99.4	101	70.0-130			1.49	25
1,1,2-Trichlorotrifluoroethane	3.75	3.70	3.75	98.7	100	70.0-130			1.23	25
1,1-Dichloroethene	3.75	3.15	3.23	84.1	86.1	70.0-130			2.35	25
1,1-Dichloroethane	3.75	3.17	3.24	84.6	86.4	70.0-130			2.03	25
Acetone	3.75	3.14	3.10	83.7	82.6	70.0-130			1.39	25
2-Propanol	3.75	3.04	3.07	81.1	81.8	70.0-139			0.868	25
Carbon disulfide	3.75	3.16	3.25	84.2	86.6	70.0-130			2.75	25
Methylene Chloride	3.75	2.78	2.89	74.2	77.0	70.0-130			3.70	25
MTBE	3.75	3.23	3.31	86.1	88.4	70.0-130			2.60	25
trans-1,2-Dichloroethene	3.75	3.06	3.11	81.6	83.1	70.0-130			1.76	25
n-Hexane	3.75	3.03	3.12	80.7	83.2	70.0-130			3.08	25
Vinyl acetate	3.75	3.14	3.21	83.8	85.6	70.0-130			2.15	25
Methyl Ethyl Ketone	3.75	3.14	3.17	83.9	84.4	70.0-130			0.677	25
cis-1,2-Dichloroethene	3.75	3.15	3.17	84.0	84.5	70.0-130			0.702	25
Chloroform	3.75	3.39	3.46	90.5	92.4	70.0-130			2.05	25
Cyclohexane	3.75	3.40	3.45	90.7	92.0	70.0-130			1.36	25
1,1,1-Trichloroethane	3.75	3.52	3.62	93.8	96.6	70.0-130			2.89	25
Carbon tetrachloride	3.75	3.83	3.85	102	103	70.0-130			0.458	25
Benzene	3.75	3.45	3.43	91.9	91.5	70.0-130			0.505	25
1,2-Dichloroethane	3.75	3.59	3.50	95.6	93.3	70.0-130			2.49	25
Heptane	3.75	3.23	3.25	86.0	86.7	70.0-130			0.709	25
Trichloroethylene	3.75	3.63	3.70	96.9	98.6	70.0-130			1.72	25
1,2-Dichloropropane	3.75	3.24	3.24	86.5	86.4	70.0-130			0.139	25
1,4-Dioxane	3.75	3.53	3.54	94.2	94.4	70.0-140			0.281	25
Bromodichloromethane	3.75	3.63	3.64	96.8	97.1	70.0-130			0.298	25
cis-1,3-Dichloropropene	3.75	3.64	3.62	97.0	96.6	70.0-130			0.409	25
4-Methyl-2-pentanone (MIBK)	3.75	3.39	3.38	90.3	90.0	70.0-139			0.333	25
Toluene	3.75	3.97	3.94	106	105	70.0-130			0.812	25
trans-1,3-Dichloropropene	3.75	3.69	3.74	98.5	99.8	70.0-130			1.37	25
1,1,2-Trichloroethane	3.75	4.16	4.05	111	108	70.0-130			2.57	25
Tetrachloroethylene	3.75	4.67	4.58	125	122	70.0-130			1.97	25
Methyl Butyl Ketone	3.75	3.52	3.52	93.8	93.7	70.0-149			0.0862	25
Dibromochloromethane	3.75	4.39	4.32	117	115	70.0-130			1.44	25
1,2-Dibromoethane	3.75	4.31	4.25	115	113	70.0-130			1.38	25
Chlorobenzene	3.75	4.43	4.37	118	117	70.0-130			1.31	25
Ethylbenzene	3.75	3.82	3.80	102	101	70.0-130			0.637	25

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

(LCS) R3392232-1 03/15/19 09:23 • (LCSD) R3392232-2 03/15/19 10:12

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
m&p-Xylene	7.50	7.61	7.61	102	101	70.0-130			0.0440	25
o-Xylene	3.75	3.83	3.83	102	102	70.0-130			0.195	25
Styrene	3.75	4.06	4.01	108	107	70.0-130			1.09	25
Bromoform	3.75	4.49	4.47	120	119	70.0-130			0.515	25
1,1,2,2-Tetrachloroethane	3.75	3.64	3.60	97.2	95.9	70.0-130			1.34	25
4-Ethyltoluene	3.75	3.97	3.97	106	106	70.0-130			0.000907	25
1,3,5-Trimethylbenzene	3.75	3.77	3.79	100	101	70.0-130			0.599	25
1,2,4-Trimethylbenzene	3.75	3.85	3.82	103	102	70.0-130			0.698	25
1,3-Dichlorobenzene	3.75	4.29	4.36	114	116	70.0-130			1.47	25
1,4-Dichlorobenzene	3.75	4.17	4.21	111	112	70.0-130			1.04	25
Benzyl Chloride	3.75	3.77	3.81	101	102	70.0-152			1.04	25
1,2-Dichlorobenzene	3.75	4.24	4.33	113	115	70.0-130			1.92	25
1,2,4-Trichlorobenzene	3.75	4.33	4.45	116	119	70.0-160			2.69	25
Hexachloro-1,3-butadiene	3.75	4.31	4.35	115	116	70.0-151			0.905	25
Naphthalene	3.75	4.20	4.28	112	114	70.0-159			1.87	25
Allyl Chloride	3.75	3.20	3.19	85.3	85.1	70.0-130			0.240	25
2-Chlorotoluene	3.75	3.63	3.64	96.9	97.1	70.0-130			0.254	25
Methyl Methacrylate	3.75	3.30	3.33	87.9	88.9	70.0-130			1.08	25
Tetrahydrofuran	3.75	2.88	2.94	76.8	78.5	70.0-137			2.20	25
2,2,4-Trimethylpentane	3.75	3.15	3.21	83.9	85.6	70.0-130			1.91	25
Vinyl Bromide	3.75	3.98	3.96	106	106	70.0-130			0.597	25
Isopropylbenzene	3.75	3.93	3.89	105	104	70.0-130			1.09	25
(S) 1,4-Bromofluorobenzene				*89.5*	*90.9*	*60.0-140*				

Method Blank (MB)

(MB) R3392375-3 03/16/19 22:53

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
cis-1,2-Dichloroethene	U		0.0389	0.200
Propene	U		0.0932	0.400
Tetrachloroethylene	U		0.0497	0.200
Toluene	U		0.0499	0.200
Trichloroethylene	U		0.0545	0.200
Ethanol	U		0.0832	0.630
(S) 1,4-Bromofluorobenzene	*83.8*			*60.0-140*

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

(LCS) R3392375-1 03/16/19 21:13 • (LCSD) R3392375-2 03/16/19 22:02

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethanol	3.75	3.82	3.95	102	105	55.0-148			3.34	25
Propene	3.75	3.82	3.83	102	102	64.0-144			0.157	25
cis-1,2-Dichloroethene	3.75	3.75	3.90	99.9	104	70.0-130			4.01	25
Trichloroethylene	3.75	3.69	3.72	98.4	99.1	70.0-130			0.674	25
Toluene	3.75	3.96	3.97	106	106	70.0-130			0.292	25
Tetrachloroethylene	3.75	3.74	3.75	99.7	99.9	70.0-130			0.167	25
(S) 1,4-Bromofluorobenzene				*101*	*101*	*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.

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

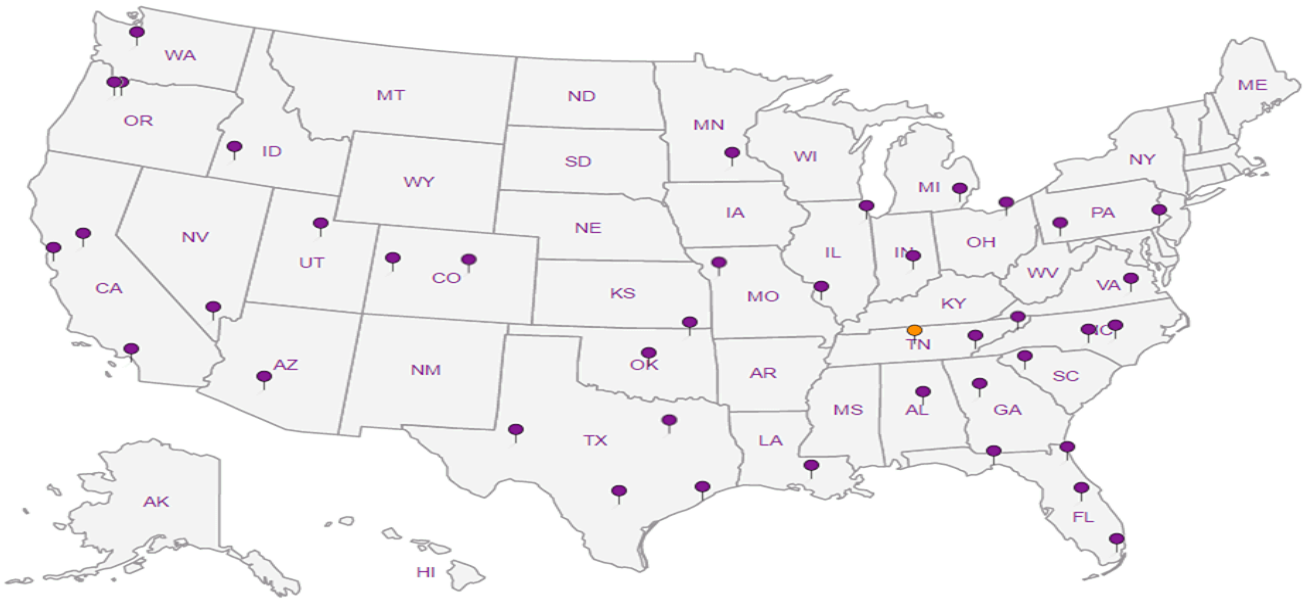
Third Party Federal Accreditations

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.



EFI Global

242 Old New Brunswick Road
Suite 414
Piscataway, NJ 08854

Billing Information:
Dale Lanier
242 Old New Brunswick Rd.,Ste. 414
Piscataway, NJ 08854

Report to: Dale Lanier

Email To: jeffrey_diamond@efiglobal.com,dale_lanier@efigl

Project Description: Rego Park, NY

City/State Collected: Rego Park NY

Phone:
Fax:

Client Project # 94-17 63rd Dr Rego Park

Lab Project # EFIPNJ-REGO

Collected by (print): Carla Sullivan

Site/Facility ID #

P.O. #

Collected by (signature): Carla Sullivan

Immediately Packed on Ice N X 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

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Pres Chk	Analysis / Container / Preservative: TO-15 Summa	Remarks	Sample # (lab only)
Basement SS-1 8544 + 5956	G	Air	3ft bg	3-12-19	10am	1		✓		-01
		Air								
		Air								
Bsmt SS-2 6294 + 5540	G	Air	3ft bg		944a	1		✓		02
Base Air 5286) 5698	G	AIR			1007	1		✓		03
~~Base Air 5945~~										
~~First Air~~	G	AIR								

Chain of Custody Page ___ of ___

Pace Analytical® National Center for Testing & Innovation

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Mount Juliet, TN 37122
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Fax: 615-758-5859

L# 1078202

Ta M169

Acctnum: EFIPNJ
Template: T146830
Prelogin: P696176
TSR: 873 - Heather J Wagner
PB: BF 2/27/19
Shipped Via: FedEX Ground

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

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 479 4 4832 3014

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	
Carla Sullivan	3/12/19	4pm			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:	If preservation required by Login: Date/Time
				Amb 3	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:	Hold: Conditions NCF / OK
				3/13/19 0845	