

**ATTACHMENT 2
SAMPLING RESULTS
(JULY 24-HOUR SAMPLE)**

July 20, 2022

David Cochran
City of Bristol VA
2655 Valley Dr
Bristol, VA 24201

RE: Project: CITY OF BRISTOL VA
Pace Project No.: 92615681

Dear David Cochran:

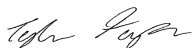
Enclosed are the analytical results for sample(s) received by the laboratory on July 09, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace National - Mt. Juliet

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

Sincerely,



Tyler Forney
tyler.forney@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Logan Howard, SCS Engineers
Mike Martin, City of Bristol VA
Ms. Jennifer Robb, SCS Engineers



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

CERTIFICATIONS

Project: CITY OF BRISTOL VA

Pace Project No.: 92615681

Pace Analytical Services National

12065 Lebanon Road, Mt. Juliet, TN 37122

Alabama Certification #: 40660

Alaska Certification #: 17-026

Arizona Certification #: AZ0612

Arkansas Certification #: 88-0469

California Certification #: 2932

Canada Certification #: 1461.01

Colorado Certification #: TN00003

Connecticut Certification #: PH-0197

DOD Certification #: #1461.01

EPA# TN00003

Florida Certification #: E87487

Georgia DW Certification #: 923

Georgia Certification: NELAP

Idaho Certification #: TN00003

Illinois Certification #: 200008

Indiana Certification #: C-TN-01

Iowa Certification #: 364

Kansas Certification #: E-10277

Kentucky UST Certification #: 16

Kentucky Certification #: 90010

Louisiana Certification #: AI30792

Louisiana DW Certification #: LA180010

Maine Certification #: TN0002

Maryland Certification #: 324

Massachusetts Certification #: M-TN003

Michigan Certification #: 9958

Minnesota Certification #: 047-999-395

Mississippi Certification #: TN00003

Missouri Certification #: 340

Montana Certification #: CERT0086

Nebraska Certification #: NE-OS-15-05

Nevada Certification #: TN-03-2002-34

New Hampshire Certification #: 2975

New Jersey Certification #: TN002

New Mexico DW Certification

New York Certification #: 11742

North Carolina Aquatic Toxicity Certification #: 41

North Carolina Drinking Water Certification #: 21704

North Carolina Environmental Certificate #: 375

North Dakota Certification #: R-140

Ohio VAP Certification #: CL0069

Oklahoma Certification #: 9915

Oregon Certification #: TN200002

Pennsylvania Certification #: 68-02979

Rhode Island Certification #: LAO00356

South Carolina Certification #: 84004

South Dakota Certification

Tennessee DW/Chem/Micro Certification #: 2006

Texas Certification #: T 104704245-17-14

Texas Mold Certification #: LAB0152

USDA Soil Permit #: P330-15-00234

Utah Certification #: TN00003

Virginia Certification #: VT2006

Vermont Dept. of Health: ID# VT-2006

Virginia Certification #: 460132

Washington Certification #: C847

West Virginia Certification #: 233

Wisconsin Certification #: 998093910

Wyoming UST Certification #: via A2LA 2926.01

A2LA-ISO 17025 Certification #: 1461.01

A2LA-ISO 17025 Certification #: 1461.02

AIHA-LAP/LLC EMLAP Certification #:100789

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE SUMMARY

Project: CITY OF BRISTOL VA

Pace Project No.: 92615681

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92615681001	24HR SAMPLE	Air	07/07/22 10:38	07/09/22 09:00

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE ANALYTE COUNT

Project: CITY OF BRISTOL VA

Pace Project No.: 92615681

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92615681001	24HR SAMPLE	TO-15	DAH	68	PAN

PAN = Pace National - Mt. Juliet

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SUMMARY OF DETECTION

Project: CITY OF BRISTOL VA

Pace Project No.: 92615681

Lab Sample ID	Client Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92615681001	24HR SAMPLE					
TO-15	Acetone	10.4	ug/m3	2.97	07/14/22 19:16	
TO-15	Benzene	2.08	ug/m3	0.639	07/14/22 19:16	
TO-15	Chloromethane	2.13	ug/m3	0.413	07/14/22 19:16	
TO-15	Ethanol	7.75	ug/m3	2.36	07/14/22 19:16	
TO-15	Trichlorofluoromethane	1.25	ug/m3	1.12	07/14/22 19:16	
TO-15	Dichlorodifluoromethane	2.47	ug/m3	0.989	07/14/22 19:16	
TO-15	Methylene Chloride	0.823	ug/m3	0.694	07/14/22 19:16	B
TO-15	Tetrachloroethene	2.04	ug/m3	1.36	07/14/22 19:16	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

PROJECT NARRATIVE

Project: CITY OF BRISTOL VA

Pace Project No.: 92615681

Method: TO-15

Description: VOA (MS) TO-15

Client: City of Bristol VA

Date: July 20, 2022

General Information:

1 sample was analyzed for TO-15 by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

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

Initial Calibrations (including MS Tune as applicable):

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

Continuing Calibration:

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

Internal Standards:

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

Method Blank:

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

QC Batch: 1895074

B: Analyte was detected in the associated method blank.

- R3814853-3 (Lab ID: R3814853-3)
- Methylene Chloride

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Additional Comments:

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: CITY OF BRISTOL VA

Pace Project No.: 92615681

Sample: 24HR SAMPLE		Lab ID: 92615681001		Collected: 07/07/22 10:38		Received: 07/09/22 09:00		Matrix: Air	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (MS) TO-15		Analytical Method: TO-15 Preparation Method: TO-15 Pace National - Mt. Juliet							
Acetone	10.4	ug/m3	2.97	0.5840	1	07/14/22 19:16	07/14/22 19:16	67-64-1	
Allyl chloride	ND	ug/m3	0.626	0.1140	1	07/14/22 19:16	07/14/22 19:16	107-05-1	
Benzene	2.08	ug/m3	0.639	0.0715	1	07/14/22 19:16	07/14/22 19:16	71-43-2	
Benzyl chloride	ND	ug/m3	1.04	0.0598	1	07/14/22 19:16	07/14/22 19:16	100-44-7	
Bromodichloromethane	ND	ug/m3	1.34	0.0702	1	07/14/22 19:16	07/14/22 19:16	75-27-4	
Bromoform	ND	ug/m3	6.21	0.0732	1	07/14/22 19:16	07/14/22 19:16	75-25-2	
Bromomethane	ND	ug/m3	0.776	0.0982	1	07/14/22 19:16	07/14/22 19:16	74-83-9	
1,3-Butadiene	ND	ug/m3	4.43	0.1040	1	07/14/22 19:16	07/14/22 19:16	106-99-0	
Carbon disulfide	ND	ug/m3	0.622	0.1020	1	07/14/22 19:16	07/14/22 19:16	75-15-0	
Carbon tetrachloride	ND	ug/m3	1.26	0.0732	1	07/14/22 19:16	07/14/22 19:16	56-23-5	
Chlorobenzene	ND	ug/m3	0.924	0.0832	1	07/14/22 19:16	07/14/22 19:16	108-90-7	
Chloroethane	ND	ug/m3	0.528	0.0996	1	07/14/22 19:16	07/14/22 19:16	75-00-3	
Chloroform	ND	ug/m3	0.973	0.0717	1	07/14/22 19:16	07/14/22 19:16	67-66-3	
Chloromethane	2.13	ug/m3	0.413	0.1030	1	07/14/22 19:16	07/14/22 19:16	74-87-3	
2-Chlorotoluene	ND	ug/m3	1.03	0.0828	1	07/14/22 19:16	07/14/22 19:16	95-49-8	
Cyclohexane	ND	ug/m3	0.689	0.0753	1	07/14/22 19:16	07/14/22 19:16	110-82-7	
Dibromochloromethane	ND	ug/m3	1.70	0.0727	1	07/14/22 19:16	07/14/22 19:16	124-48-1	
1,2-Dibromoethane (EDB)	ND	ug/m3	1.54	0.0721	1	07/14/22 19:16	07/14/22 19:16	106-93-4	
1,2-Dichlorobenzene	ND	ug/m3	1.20	0.1280	1	07/14/22 19:16	07/14/22 19:16	95-50-1	
1,3-Dichlorobenzene	ND	ug/m3	1.20	0.1820	1	07/14/22 19:16	07/14/22 19:16	541-73-1	
1,4-Dichlorobenzene	ND	ug/m3	1.20	0.0557	1	07/14/22 19:16	07/14/22 19:16	106-46-7	
1,2-Dichloroethane	ND	ug/m3	0.810	0.07	1	07/14/22 19:16	07/14/22 19:16	107-06-2	
1,1-Dichloroethane	ND	ug/m3	0.802	0.0723	1	07/14/22 19:16	07/14/22 19:16	75-34-3	
1,1-Dichloroethene	ND	ug/m3	0.793	0.0762	1	07/14/22 19:16	07/14/22 19:16	75-35-4	
cis-1,2-Dichloroethene	ND	ug/m3	0.793	0.0784	1	07/14/22 19:16	07/14/22 19:16	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	0.793	0.0673	1	07/14/22 19:16	07/14/22 19:16	156-60-5	
1,2-Dichloropropane	ND	ug/m3	0.924	0.0760	1	07/14/22 19:16	07/14/22 19:16	78-87-5	
cis-1,3-Dichloropropene	ND	ug/m3	0.908	0.0689	1	07/14/22 19:16	07/14/22 19:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/m3	0.908	0.0728	1	07/14/22 19:16	07/14/22 19:16	10061-02-6	
1,4-Dioxane (p-Dioxane)	ND	ug/m3	0.721	0.0833	1	07/14/22 19:16	07/14/22 19:16	123-91-1	
Ethanol	7.75	ug/m3	2.36	0.2650	1	07/14/22 19:16	07/14/22 19:16	64-17-5	
Ethylbenzene	ND	ug/m3	0.867	0.0835	1	07/14/22 19:16	07/14/22 19:16	100-41-4	
4-Ethyltoluene	ND	ug/m3	0.982	0.0783	1	07/14/22 19:16	07/14/22 19:16	622-96-8	
Trichlorofluoromethane	1.25	ug/m3	1.12	0.0819	1	07/14/22 19:16	07/14/22 19:16	75-69-4	
Dichlorodifluoromethane	2.47	ug/m3	0.989	0.1370	1	07/14/22 19:16	07/14/22 19:16	75-71-8	
1,1,2-Trichlorotrifluoroethane	ND	ug/m3	1.53	0.0793	1	07/14/22 19:16	07/14/22 19:16	76-13-1	
Dichlorotetrafluoroethane	ND	ug/m3	1.40	0.0890	1	07/14/22 19:16	07/14/22 19:16	76-14-2	
n-Heptane	ND	ug/m3	0.818	0.1040	1	07/14/22 19:16	07/14/22 19:16	142-82-5	
Hexachloro-1,3-butadiene	ND	ug/m3	6.73	0.1050	1	07/14/22 19:16	07/14/22 19:16	87-68-3	
n-Hexane	ND	ug/m3	2.22	0.2060	1	07/14/22 19:16	07/14/22 19:16	110-54-3	
Isopropylbenzene (Cumene)	ND	ug/m3	0.983	0.0777	1	07/14/22 19:16	07/14/22 19:16	98-82-8	
Methylene Chloride	0.823	ug/m3	0.694	0.0979	1	07/14/22 19:16	07/14/22 19:16	75-09-2	B
2-Hexanone	ND	ug/m3	5.11	0.1330	1	07/14/22 19:16	07/14/22 19:16	591-78-6	
2-Butanone (MEK)	ND	ug/m3	3.69	0.0814	1	07/14/22 19:16	07/14/22 19:16	78-93-3	
4-Methyl-2-pentanone (MIBK)	ND	ug/m3	5.12	0.0765	1	07/14/22 19:16	07/14/22 19:16	108-10-1	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

ANALYTICAL RESULTS

Project: CITY OF BRISTOL VA

Pace Project No.: 92615681

Sample: 24HR SAMPLE		Lab ID: 92615681001		Collected: 07/07/22 10:38		Received: 07/09/22 09:00		Matrix: Air	
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
VOA (MS) TO-15		Analytical Method: TO-15 Preparation Method: TO-15 Pace National - Mt. Juliet							
Methyl methacrylate	ND	ug/m3	0.819	0.0876	1	07/14/22 19:16	07/14/22 19:16	80-62-6	
Methyl-tert-butyl ether	ND	ug/m3	0.721	0.0647	1	07/14/22 19:16	07/14/22 19:16	1634-04-4	
Naphthalene	ND	ug/m3	3.30	0.35	1	07/14/22 19:16	07/14/22 19:16	91-20-3	
2-Propanol	ND	ug/m3	3.07	0.2640	1	07/14/22 19:16	07/14/22 19:16	67-63-0	
Propylene	ND	ug/m3	2.15	0.0932	1	07/14/22 19:16	07/14/22 19:16	115-07-1	
Styrene	ND	ug/m3	0.851	0.0788	1	07/14/22 19:16	07/14/22 19:16	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/m3	1.37	0.0743	1	07/14/22 19:16	07/14/22 19:16	79-34-5	
Tetrachloroethene	2.04	ug/m3	1.36	0.0814	1	07/14/22 19:16	07/14/22 19:16	127-18-4	
Tetrahydrofuran	ND	ug/m3	0.590	0.0734	1	07/14/22 19:16	07/14/22 19:16	109-99-9	
Toluene	ND	ug/m3	1.88	0.0870	1	07/14/22 19:16	07/14/22 19:16	108-88-3	
1,2,4-Trichlorobenzene	ND	ug/m3	4.66	0.1480	1	07/14/22 19:16	07/14/22 19:16	120-82-1	
1,1,1-Trichloroethane	ND	ug/m3	1.09	0.0736	1	07/14/22 19:16	07/14/22 19:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/m3	1.09	0.0775	1	07/14/22 19:16	07/14/22 19:16	79-00-5	
Trichloroethene	ND	ug/m3	1.07	0.0680	1	07/14/22 19:16	07/14/22 19:16	79-01-6	
1,2,4-Trimethylbenzene	ND	ug/m3	0.982	0.0764	1	07/14/22 19:16	07/14/22 19:16	95-63-6	
1,3,5-Trimethylbenzene	ND	ug/m3	0.982	0.0779	1	07/14/22 19:16	07/14/22 19:16	108-67-8	
2,2,4-Trimethylpentane	ND	ug/m3	0.934	0.1330	1	07/14/22 19:16	07/14/22 19:16	540-84-1	
Vinyl chloride	ND	ug/m3	0.511	0.0949	1	07/14/22 19:16	07/14/22 19:16	75-01-4	
Vinyl bromide	ND	ug/m3	0.875	0.0852	1	07/14/22 19:16	07/14/22 19:16	593-60-2	
Vinyl acetate	ND	ug/m3	0.704	0.1160	1	07/14/22 19:16	07/14/22 19:16	108-05-4	
m&p-Xylene	ND	ug/m3	1.73	0.1350	1	07/14/22 19:16	07/14/22 19:16	179601-23-1	
o-Xylene	ND	ug/m3	0.867	0.0828	1	07/14/22 19:16	07/14/22 19:16	95-47-6	
Surrogates									
1,4-Dichlorobenzene-d4 (IS)	96.7	%	60.0-140		1	07/14/22 19:16	07/14/22 19:16	3855-82-1	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: CITY OF BRISTOL VA
Pace Project No.: 92615681

QC Batch:	1895074	Analysis Method:	TO-15
QC Batch Method:	TO-15	Analysis Description:	VOA (MS) TO-15
		Laboratory:	Pace National - Mt. Juliet

Associated Lab Samples: 92615681001

METHOD BLANK: R3814853-3 Matrix: Air
Associated Lab Samples: 92615681001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acetone	ppbv	ND	1.25	0.584	07/14/22 09:21	
Allyl chloride	ppbv	ND	0.200	0.114	07/14/22 09:21	
Benzene	ppbv	ND	0.200	0.0715	07/14/22 09:21	
Benzyl chloride	ppbv	ND	0.200	0.0598	07/14/22 09:21	
Bromodichloromethane	ppbv	ND	0.200	0.0702	07/14/22 09:21	
Bromoform	ppbv	ND	0.600	0.0732	07/14/22 09:21	
Bromomethane	ppbv	ND	0.200	0.0982	07/14/22 09:21	
1,3-Butadiene	ppbv	ND	2.00	0.104	07/14/22 09:21	
Carbon disulfide	ppbv	ND	0.200	0.102	07/14/22 09:21	
Carbon tetrachloride	ppbv	ND	0.200	0.0732	07/14/22 09:21	
Chlorobenzene	ppbv	ND	0.200	0.0832	07/14/22 09:21	
Chloroethane	ppbv	ND	0.200	0.0996	07/14/22 09:21	
Chloroform	ppbv	ND	0.200	0.0717	07/14/22 09:21	
Chloromethane	ppbv	ND	0.200	0.103	07/14/22 09:21	
2-Chlorotoluene	ppbv	ND	0.200	0.0828	07/14/22 09:21	
Cyclohexane	ppbv	ND	0.200	0.0753	07/14/22 09:21	
Dibromochloromethane	ppbv	ND	0.200	0.0727	07/14/22 09:21	
1,2-Dibromoethane (EDB)	ppbv	ND	0.200	0.0721	07/14/22 09:21	
1,2-Dichlorobenzene	ppbv	ND	0.200	0.128	07/14/22 09:21	
1,3-Dichlorobenzene	ppbv	ND	0.200	0.182	07/14/22 09:21	
1,4-Dichlorobenzene	ppbv	ND	0.200	0.0557	07/14/22 09:21	
1,2-Dichloroethane	ppbv	ND	0.200	0.0700	07/14/22 09:21	
1,1-Dichloroethane	ppbv	ND	0.200	0.0723	07/14/22 09:21	
1,1-Dichloroethene	ppbv	ND	0.200	0.0762	07/14/22 09:21	
cis-1,2-Dichloroethene	ppbv	ND	0.200	0.0784	07/14/22 09:21	
trans-1,2-Dichloroethene	ppbv	ND	0.200	0.0673	07/14/22 09:21	
1,2-Dichloropropane	ppbv	ND	0.200	0.0760	07/14/22 09:21	
cis-1,3-Dichloropropene	ppbv	ND	0.200	0.0689	07/14/22 09:21	
trans-1,3-Dichloropropene	ppbv	ND	0.200	0.0728	07/14/22 09:21	
1,4-Dioxane (p-Dioxane)	ppbv	ND	0.200	0.0833	07/14/22 09:21	
Ethanol	ppbv	ND	1.25	0.265	07/14/22 09:21	
Ethylbenzene	ppbv	ND	0.200	0.0835	07/14/22 09:21	
4-Ethyltoluene	ppbv	ND	0.200	0.0783	07/14/22 09:21	
Trichlorofluoromethane	ppbv	ND	0.200	0.0819	07/14/22 09:21	
Dichlorodifluoromethane	ppbv	ND	0.200	0.137	07/14/22 09:21	
1,1,2-Trichlorotrifluoroethane	ppbv	ND	0.200	0.0793	07/14/22 09:21	
Dichlorotetrafluoroethane	ppbv	ND	0.200	0.0890	07/14/22 09:21	
n-Heptane	ppbv	ND	0.200	0.104	07/14/22 09:21	
Hexachloro-1,3-butadiene	ppbv	ND	0.630	0.105	07/14/22 09:21	
n-Hexane	ppbv	ND	0.630	0.206	07/14/22 09:21	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: CITY OF BRISTOL VA
Pace Project No.: 92615681

METHOD BLANK: R3814853-3

Matrix: Air

Associated Lab Samples: 92615681001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Isopropylbenzene (Cumene)	ppbv	ND	0.200	0.0777	07/14/22 09:21	
Methylene Chloride	ppbv	0.153J	0.200	0.0979	07/14/22 09:21	J
2-Hexanone	ppbv	ND	1.25	0.133	07/14/22 09:21	
2-Butanone (MEK)	ppbv	ND	1.25	0.0814	07/14/22 09:21	
4-Methyl-2-pentanone (MIBK)	ppbv	ND	1.25	0.0765	07/14/22 09:21	
Methyl methacrylate	ppbv	ND	0.200	0.0876	07/14/22 09:21	
Methyl-tert-butyl ether	ppbv	ND	0.200	0.0647	07/14/22 09:21	
Naphthalene	ppbv	ND	0.630	0.350	07/14/22 09:21	
2-Propanol	ppbv	ND	1.25	0.264	07/14/22 09:21	
Propylene	ppbv	0.125J	1.25	0.0932	07/14/22 09:21	J
Styrene	ppbv	ND	0.200	0.0788	07/14/22 09:21	
1,1,2,2-Tetrachloroethane	ppbv	ND	0.200	0.0743	07/14/22 09:21	
Tetrachloroethene	ppbv	ND	0.200	0.0814	07/14/22 09:21	
Tetrahydrofuran	ppbv	ND	0.200	0.0734	07/14/22 09:21	
Toluene	ppbv	ND	0.500	0.0870	07/14/22 09:21	
1,2,4-Trichlorobenzene	ppbv	ND	0.630	0.148	07/14/22 09:21	
1,1,1-Trichloroethane	ppbv	ND	0.200	0.0736	07/14/22 09:21	
1,1,2-Trichloroethane	ppbv	ND	0.200	0.0775	07/14/22 09:21	
Trichloroethene	ppbv	ND	0.200	0.0680	07/14/22 09:21	
1,2,4-Trimethylbenzene	ppbv	ND	0.200	0.0764	07/14/22 09:21	
1,3,5-Trimethylbenzene	ppbv	ND	0.200	0.0779	07/14/22 09:21	
2,2,4-Trimethylpentane	ppbv	ND	0.200	0.133	07/14/22 09:21	
Vinyl chloride	ppbv	ND	0.200	0.0949	07/14/22 09:21	
Vinyl bromide	ppbv	ND	0.200	0.0852	07/14/22 09:21	
Vinyl acetate	ppbv	ND	0.200	0.116	07/14/22 09:21	
m&p-Xylene	ppbv	ND	0.400	0.135	07/14/22 09:21	
o-Xylene	ppbv	ND	0.200	0.0828	07/14/22 09:21	
1,4-Dichlorobenzene-d4 (IS)	%	93.9	60.0-140		07/14/22 09:21	

LABORATORY CONTROL SAMPLE & LCSD: R3814853-1

R3814853-2

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Acetone	ppbv	3.75	4.39	4.51	117	120	70.0-130	2.70	25	
Allyl chloride	ppbv	3.75	3.82	4.00	102	107	70.0-130	4.60	25	
Benzene	ppbv	3.75	3.87	4.00	103	107	70.0-130	3.30	25	
Benzyl chloride	ppbv	3.75	4.60	4.64	123	124	70.0-152	0.866	25	
Bromodichloromethane	ppbv	3.75	3.98	4.00	106	107	70.0-130	0.501	25	
Bromoform	ppbv	3.75	4.05	4.09	108	109	70.0-130	0.983	25	
Bromomethane	ppbv	3.75	3.78	3.87	101	103	70.0-130	2.35	25	
1,3-Butadiene	ppbv	3.75	3.30	3.34	88.0	89.1	70.0-130	1.20	25	
Carbon disulfide	ppbv	3.75	3.90	4.08	104	109	70.0-130	4.51	25	
Carbon tetrachloride	ppbv	3.75	3.96	4.05	106	108	70.0-130	2.25	25	
Chlorobenzene	ppbv	3.75	3.86	3.96	103	106	70.0-130	2.56	25	
Chloroethane	ppbv	3.75	3.92	4.14	105	110	70.0-130	5.46	25	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: CITY OF BRISTOL VA
Pace Project No.: 92615681

LABORATORY CONTROL SAMPLE & LCSD: R3814853-1			R3814853-2							
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Chloroform	ppbv	3.75	3.91	4.11	104	110	70.0-130	4.99	25	
Chloromethane	ppbv	3.75	3.96	4.00	106	107	70.0-130	1.01	25	
2-Chlorotoluene	ppbv	3.75	4.02	4.03	107	107	70.0-130	0.248	25	
Cyclohexane	ppbv	3.75	3.72	3.88	99.2	103	70.0-130	4.21	25	
Dibromochloromethane	ppbv	3.75	4.04	4.06	108	108	70.0-130	0.494	25	
1,2-Dibromoethane (EDB)	ppbv	3.75	4.01	4.07	107	109	70.0-130	1.49	25	
1,2-Dichlorobenzene	ppbv	3.75	4.23	4.23	113	113	70.0-130	0.00	25	
1,3-Dichlorobenzene	ppbv	3.75	4.17	4.30	111	115	70.0-130	3.07	25	
1,4-Dichlorobenzene	ppbv	3.75	4.26	4.27	114	114	70.0-130	0.234	25	
1,2-Dichloroethane	ppbv	3.75	4.06	4.15	108	111	70.0-130	2.19	25	
1,1-Dichloroethane	ppbv	3.75	3.97	4.12	106	110	70.0-130	3.71	25	
1,1-Dichloroethene	ppbv	3.75	4.01	4.14	107	110	70.0-130	3.19	25	
cis-1,2-Dichloroethene	ppbv	3.75	3.82	4.00	102	107	70.0-130	4.60	25	
trans-1,2-Dichloroethene	ppbv	3.75	3.92	4.06	105	108	70.0-130	3.51	25	
1,2-Dichloropropane	ppbv	3.75	3.94	3.92	105	105	70.0-130	0.509	25	
cis-1,3-Dichloropropene	ppbv	3.75	3.93	3.88	105	103	70.0-130	1.28	25	
trans-1,3-Dichloropropene	ppbv	3.75	3.84	3.89	102	104	70.0-130	1.29	25	
1,4-Dioxane (p-Dioxane)	ppbv	3.75	3.85	3.93	103	105	70.0-140	2.06	25	
Ethanol	ppbv	3.75	3.68	3.85	98.1	103	55.0-148	4.52	25	
Ethylbenzene	ppbv	3.75	3.92	3.98	105	106	70.0-130	1.52	25	
4-Ethyltoluene	ppbv	3.75	4.28	4.30	114	115	70.0-130	0.466	25	
Trichlorofluoromethane	ppbv	3.75	3.99	4.15	106	111	70.0-130	3.93	25	
Dichlorodifluoromethane	ppbv	3.75	4.04	4.11	108	110	64.0-139	1.72	25	
1,1,2-Trichlorotrifluoroethane	ppbv	3.75	3.99	4.10	106	109	70.0-130	2.72	25	
Dichlorotetrafluoroethane	ppbv	3.75	3.96	4.10	106	109	70.0-130	3.47	25	
n-Heptane	ppbv	3.75	4.08	4.15	109	111	70.0-130	1.70	25	
Hexachloro-1,3-butadiene	ppbv	3.75	4.13	4.09	110	109	70.0-151	0.973	25	
n-Hexane	ppbv	3.75	3.89	4.01	104	107	70.0-130	3.04	25	
Isopropylbenzene (Cumene)	ppbv	3.75	4.06	4.08	108	109	70.0-130	0.491	25	
Methylene Chloride	ppbv	3.75	3.47	3.61	92.5	96.3	70.0-130	3.95	25	
2-Hexanone	ppbv	3.75	3.87	3.90	103	104	70.0-149	0.772	25	
2-Butanone (MEK)	ppbv	3.75	3.79	3.81	101	102	70.0-130	0.526	25	
4-Methyl-2-pentanone (MIBK)	ppbv	3.75	4.09	4.13	109	110	70.0-139	0.973	25	
Methyl methacrylate	ppbv	3.75	3.84	3.99	102	106	70.0-130	3.83	25	
Methyl-tert-butyl ether	ppbv	3.75	3.74	3.85	99.7	103	70.0-130	2.90	25	
Naphthalene	ppbv	3.75	3.85	3.88	103	103	70.0-159	0.776	25	
2-Propanol	ppbv	3.75	3.71	3.89	98.9	104	70.0-139	4.74	25	
Propylene	ppbv	3.75	3.65	3.76	97.3	100	64.0-144	2.97	25	
Styrene	ppbv	3.75	4.00	4.16	107	111	70.0-130	3.92	25	
1,1,2,2-Tetrachloroethane	ppbv	3.75	4.22	4.19	113	112	70.0-130	0.713	25	
Tetrachloroethene	ppbv	3.75	3.94	4.15	105	111	70.0-130	5.19	25	
Tetrahydrofuran	ppbv	3.75	3.75	4.03	100	107	70.0-137	7.20	25	
Toluene	ppbv	3.75	3.84	3.97	102	106	70.0-130	3.33	25	
1,2,4-Trichlorobenzene	ppbv	3.75	3.91	3.95	104	105	70.0-160	1.02	25	
1,1,1-Trichloroethane	ppbv	3.75	3.95	4.05	105	108	70.0-130	2.50	25	
1,1,2-Trichloroethane	ppbv	3.75	3.95	4.08	105	109	70.0-130	3.24	25	
Trichloroethene	ppbv	3.75	3.93	4.05	105	108	70.0-130	3.01	25	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA

Project: CITY OF BRISTOL VA

Pace Project No.: 92615681

LABORATORY CONTROL SAMPLE & LCSD: R3814853-1			R3814853-2								
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers	
1,2,4-Trimethylbenzene	ppbv	3.75	4.34	4.34	116	116	70.0-130	0.00	25		
1,3,5-Trimethylbenzene	ppbv	3.75	4.24	4.24	113	113	70.0-130	0.00	25		
2,2,4-Trimethylpentane	ppbv	3.75	3.94	4.05	105	108	70.0-130	2.75	25		
Vinyl chloride	ppbv	3.75	3.92	4.07	105	109	70.0-130	3.75	25		
Vinyl bromide	ppbv	3.75	3.89	4.05	104	108	70.0-130	4.03	25		
Vinyl acetate	ppbv	3.75	3.74	3.90	99.7	104	70.0-130	4.19	25		
m&p-Xylene	ppbv	7.50	8.38	8.50	112	113	70.0-130	1.42	25		
o-Xylene	ppbv	3.75	4.28	4.25	114	113	70.0-130	0.703	25		
1,4-Dichlorobenzene-d4 (IS)	%				101	101	60.0-140				

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALIFIERS

Project: CITY OF BRISTOL VA

Pace Project No.: 92615681

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

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

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

J Analyte detected below the reporting limit, therefore result is an estimate. This qualifier is also used for all TICs.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: CITY OF BRISTOL VA

Pace Project No.: 92615681

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92615681001	24HR SAMPLE	TO-15	1895074	TO-15	1895074

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

Page 15 of 15

55

Form #BX-00000000	Sample # Lab only
-------------------	-------------------