

**ATTACHMENT 3  
SAMPLING RESULTS  
MAY 2024 (24-HOUR SAMPLE)**





May 14, 2024

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

RE: Project: Bristol-Monthly Air  
Pace Project No.: 92730032

Dear David Cochran:

Enclosed are the analytical results for sample(s) received by the laboratory on May 09, 2024. 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,

Eben Buchanan  
eben.buchanan@pacelabs.com  
(770)734-4200  
Project Manager

Enclosures

cc: Karen Culbertson, City of Bristol VA  
Jonathan Hayes  
Logan Howard, City of Bristol VA  
Jennifer Robb, City of Bristol VA



## REPORT OF LABORATORY ANALYSIS

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



## CERTIFICATIONS

Project: Bristol-Monthly Air  
Pace Project No.: 92730032

---

### 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: Bristol-Monthly Air

Pace Project No.: 92730032

| Lab ID      | Sample ID       | Matrix | Date Collected | Date Received  |
|-------------|-----------------|--------|----------------|----------------|
| 92730032001 | May 24hr Sample | Air    | 05/07/24 12:04 | 05/09/24 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: Bristol-Monthly Air

Pace Project No.: 92730032

| Lab ID      | Sample ID       | Method | Analysts | Analytes Reported | Laboratory |
|-------------|-----------------|--------|----------|-------------------|------------|
| 92730032001 | May 24hr Sample | TO-15  | DAH      | 72                | 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: Bristol-Monthly Air

Pace Project No.: 92730032

| Lab Sample ID      | Client Sample ID        |        |       |              |                |            |
|--------------------|-------------------------|--------|-------|--------------|----------------|------------|
| Method             | Parameters              | Result | Units | Report Limit | Analyzed       | Qualifiers |
| <b>92730032001</b> | <b>May 24hr Sample</b>  |        |       |              |                |            |
| TO-15              | Gasoline                | 260J   | ug/m3 | 1030         | 05/11/24 01:42 | J          |
| TO-15              | Acetone                 | 29.7   | ug/m3 | 2.97         | 05/11/24 01:42 |            |
| TO-15              | Acetonitrile            | 0.781J | ug/m3 | 8.39         | 05/11/24 01:42 | J          |
| TO-15              | Benzene                 | 0.319J | ug/m3 | 0.639        | 05/11/24 01:42 | J          |
| TO-15              | Chloromethane           | 1.28   | ug/m3 | 0.413        | 05/11/24 01:42 |            |
| TO-15              | Ethanol                 | 20.2   | ug/m3 | 4.71         | 05/11/24 01:42 |            |
| TO-15              | Ethyl acetate           | 0.929J | ug/m3 | 2.27         | 05/11/24 01:42 | J          |
| TO-15              | Trichlorofluoromethane  | 1.27   | ug/m3 | 1.12         | 05/11/24 01:42 |            |
| TO-15              | Dichlorodifluoromethane | 2.47   | ug/m3 | 0.989        | 05/11/24 01:42 |            |
| TO-15              | Methylene Chloride      | 0.701  | ug/m3 | 0.694        | 05/11/24 01:42 |            |
| TO-15              | 2-Butanone (MEK)        | 0.982J | ug/m3 | 3.69         | 05/11/24 01:42 | J          |
| TO-15              | 2-Propanol              | 4.69   | ug/m3 | 3.07         | 05/11/24 01:42 |            |
| TO-15              | Styrene                 | 0.838J | ug/m3 | 0.851        | 05/11/24 01:42 | J          |

## 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: Bristol-Monthly Air  
Pace Project No.: 92730032

---

**Method:** TO-15  
**Description:** VOA (MS) TO-15  
**Client:** City of Bristol VA  
**Date:** May 14, 2024

### 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.

### Laboratory Control Spike:

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

### Duplicate Sample:

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

QC Batch: 2284048

D8: The sample and duplicate results for this parameter are less than 5 times the reporting limit, the RPD may not be statistically valid.

- DUP (Lab ID: R4068293-4)
  - 1,3-Dichlorobenzene

### Additional Comments:

Analyte Comments:

QC Batch: 2284048

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- DUP (Lab ID: R4068293-4)
  - n-Hexane
- DUP (Lab ID: R4068293-5)
  - Ethanol

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: Bristol-Monthly Air  
Pace Project No.: 92730032

| Sample: May 24hr Sample Lab ID: 92730032001 Collected: 05/07/24 12:04 Received: 05/09/24 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<br>Pace National - Mt. Juliet            |         |       |              |       |    |                |                |            |      |
| Gasoline                                                                                                   | 260J    | ug/m3 | 1030         | 164   | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 8006-61-9  | J    |
| Acetone                                                                                                    | 29.7    | ug/m3 | 2.97         | 1.39  | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 67-64-1    |      |
| Acetonitrile                                                                                               | 0.781J  | ug/m3 | 8.39         | 0.395 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 75-05-8    | J    |
| Allyl chloride                                                                                             | ND      | ug/m3 | 0.626        | 0.357 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 107-05-1   |      |
| Benzene                                                                                                    | 0.319J  | ug/m3 | 0.639        | 0.228 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 71-43-2    | J    |
| Benzyl chloride                                                                                            | ND      | ug/m3 | 1.04         | 0.311 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 100-44-7   |      |
| Bromodichloromethane                                                                                       | ND      | ug/m3 | 1.34         | 0.471 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 75-27-4    |      |
| Bromoform                                                                                                  | ND      | ug/m3 | 6.21         | 0.757 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 75-25-2    |      |
| Bromomethane                                                                                               | ND      | ug/m3 | 0.776        | 0.381 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 74-83-9    |      |
| 1,3-Butadiene                                                                                              | ND      | ug/m3 | 4.43         | 0.230 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 106-99-0   |      |
| Carbon disulfide                                                                                           | ND      | ug/m3 | 0.622        | 0.317 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 75-15-0    |      |
| Carbon tetrachloride                                                                                       | ND      | ug/m3 | 1.26         | 0.461 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 56-23-5    |      |
| Chlorobenzene                                                                                              | ND      | ug/m3 | 0.924        | 0.385 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 108-90-7   |      |
| Chloroethane                                                                                               | ND      | ug/m3 | 0.528        | 0.263 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 75-00-3    |      |
| Chloroform                                                                                                 | ND      | ug/m3 | 0.973        | 0.349 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 67-66-3    |      |
| Chloromethane                                                                                              | 1.28    | ug/m3 | 0.413        | 0.213 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 74-87-3    |      |
| 2-Chlorotoluene                                                                                            | ND      | ug/m3 | 1.03         | 0.427 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 95-49-8    |      |
| Cyclohexane                                                                                                | ND      | ug/m3 | 0.689        | 0.259 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 110-82-7   |      |
| Dibromochloromethane                                                                                       | ND      | ug/m3 | 1.70         | 0.618 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 124-48-1   |      |
| 1,2-Dibromoethane (EDB)                                                                                    | ND      | ug/m3 | 1.54         | 0.554 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 106-93-4   |      |
| 1,2-Dichlorobenzene                                                                                        | ND      | ug/m3 | 1.20         | 0.770 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 95-50-1    |      |
| 1,3-Dichlorobenzene                                                                                        | ND      | ug/m3 | 1.20         | 1.09  | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 541-73-1   |      |
| 1,4-Dichlorobenzene                                                                                        | ND      | ug/m3 | 1.20         | 0.335 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 106-46-7   |      |
| 1,2-Dichloroethane                                                                                         | ND      | ug/m3 | 0.810        | 0.283 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 107-06-2   |      |
| 1,1-Dichloroethane                                                                                         | ND      | ug/m3 | 0.802        | 0.290 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 75-34-3    |      |
| 1,1-Dichloroethene                                                                                         | ND      | ug/m3 | 0.793        | 0.302 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 75-35-4    |      |
| cis-1,2-Dichloroethene                                                                                     | ND      | ug/m3 | 0.793        | 0.311 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 156-59-2   |      |
| trans-1,2-Dichloroethene                                                                                   | ND      | ug/m3 | 0.793        | 0.267 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 156-60-5   |      |
| 1,2-Dichloropropane                                                                                        | ND      | ug/m3 | 0.924        | 0.351 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 78-87-5    |      |
| cis-1,3-Dichloropropene                                                                                    | ND      | ug/m3 | 0.908        | 0.313 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 10061-01-5 |      |
| trans-1,3-Dichloropropene                                                                                  | ND      | ug/m3 | 0.908        | 0.331 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 10061-02-6 |      |
| 1,4-Dioxane (p-Dioxane)                                                                                    | ND      | ug/m3 | 2.27         | 0.300 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 123-91-1   |      |
| Ethanol                                                                                                    | 20.2    | ug/m3 | 4.71         | 0.500 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 64-17-5    |      |
| Ethylbenzene                                                                                               | ND      | ug/m3 | 0.867        | 0.362 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 100-41-4   |      |
| Ethyl acetate                                                                                              | 0.929J  | ug/m3 | 2.27         | 0.360 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 141-78-6   | J    |
| 4-Ethyltoluene                                                                                             | ND      | ug/m3 | 0.982        | 0.384 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 622-96-8   |      |
| Trichlorofluoromethane                                                                                     | 1.27    | ug/m3 | 1.12         | 0.460 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 75-69-4    |      |
| Dichlorodifluoromethane                                                                                    | 2.47    | ug/m3 | 0.989        | 0.678 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 75-71-8    |      |
| 1,1,2-Trichlorotrifluoroethane                                                                             | ND      | ug/m3 | 1.53         | 0.608 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 76-13-1    |      |
| Dichlorotetrafluoroethane                                                                                  | ND      | ug/m3 | 1.40         | 0.622 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 76-14-2    |      |
| n-Heptane                                                                                                  | ND      | ug/m3 | 0.818        | 0.425 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 142-82-5   |      |
| Hexachloro-1,3-butadiene                                                                                   | ND      | ug/m3 | 6.73         | 1.12  | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 87-68-3    |      |
| n-Hexane                                                                                                   | ND      | ug/m3 | 2.22         | 0.726 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 110-54-3   |      |
| Isopropylbenzene (Cumene)                                                                                  | ND      | ug/m3 | 0.983        | 0.382 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 98-82-8    |      |
| Methylene Chloride                                                                                         | 0.701   | ug/m3 | 0.694        | 0.340 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 75-09-2    |      |

## 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: Bristol-Monthly Air  
Pace Project No.: 92730032

| Sample: May 24hr Sample      Lab ID: 92730032001      Collected: 05/07/24 12:04      Received: 05/09/24 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<br>Pace National - Mt. Juliet                      |         |       |              |       |    |                |                |             |      |
| 2-Hexanone                                                                                                                     | ND      | ug/m3 | 5.11         | 0.544 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 591-78-6    |      |
| 2-Butanone (MEK)                                                                                                               | 0.982J  | ug/m3 | 3.69         | 0.240 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 78-93-3     | J    |
| 4-Methyl-2-pentanone (MIBK)                                                                                                    | ND      | ug/m3 | 5.12         | 0.313 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 108-10-1    |      |
| Methyl methacrylate                                                                                                            | ND      | ug/m3 | 0.819        | 0.359 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 80-62-6     |      |
| Methyl-tert-butyl ether                                                                                                        | ND      | ug/m3 | 0.721        | 0.233 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 1634-04-4   |      |
| Naphthalene                                                                                                                    | ND      | ug/m3 | 3.30         | 1.83  | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 91-20-3     |      |
| 2-Propanol                                                                                                                     | 4.69    | ug/m3 | 3.07         | 0.649 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 67-63-0     |      |
| Propylene                                                                                                                      | ND      | ug/m3 | 2.15         | 0.160 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 115-07-1    |      |
| Styrene                                                                                                                        | 0.838J  | ug/m3 | 0.851        | 0.335 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 100-42-5    | J    |
| 1,1,2,2-Tetrachloroethane                                                                                                      | ND      | ug/m3 | 1.37         | 0.511 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 79-34-5     |      |
| Tetrachloroethene                                                                                                              | ND      | ug/m3 | 1.36         | 0.553 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 127-18-4    |      |
| Tetrahydrofuran                                                                                                                | ND      | ug/m3 | 0.590        | 0.216 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 109-99-9    |      |
| Toluene                                                                                                                        | ND      | ug/m3 | 1.88         | 0.328 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 108-88-3    |      |
| 1,2,4-Trichlorobenzene                                                                                                         | ND      | ug/m3 | 4.66         | 1.10  | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 120-82-1    |      |
| 1,1,1-Trichloroethane                                                                                                          | ND      | ug/m3 | 1.09         | 0.400 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 71-55-6     |      |
| 1,1,2-Trichloroethane                                                                                                          | ND      | ug/m3 | 1.09         | 0.422 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 79-00-5     |      |
| Trichloroethene                                                                                                                | ND      | ug/m3 | 1.07         | 0.364 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 79-01-6     |      |
| 1,2,4-Trimethylbenzene                                                                                                         | ND      | ug/m3 | 0.982        | 0.375 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 95-63-6     |      |
| 1,3,5-Trimethylbenzene                                                                                                         | ND      | ug/m3 | 0.982        | 0.382 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 108-67-8    |      |
| 2,2,4-Trimethylpentane                                                                                                         | ND      | ug/m3 | 0.934        | 0.621 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 540-84-1    |      |
| Vinyl chloride                                                                                                                 | ND      | ug/m3 | 0.511        | 0.243 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 75-01-4     |      |
| Vinyl bromide                                                                                                                  | ND      | ug/m3 | 0.875        | 0.373 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 593-60-2    |      |
| Vinyl acetate                                                                                                                  | ND      | ug/m3 | 2.22         | 0.408 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 108-05-4    |      |
| m&p-Xylene                                                                                                                     | ND      | ug/m3 | 1.73         | 0.585 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 179601-23-1 |      |
| o-Xylene                                                                                                                       | ND      | ug/m3 | 0.867        | 0.359 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 95-47-6     |      |
| Xylene (Total)                                                                                                                 | ND      | ug/m3 | 2.61         | 0.586 | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 1330-20-7   |      |
| Surrogates                                                                                                                     |         |       |              |       |    |                |                |             |      |
| 4-Bromofluorobenzene (S)                                                                                                       | 99.6    | %     | 60.0-140     |       | 1  | 05/11/24 01:42 | 05/11/24 01:42 | 460-00-4    |      |

## 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: Bristol-Monthly Air  
Pace Project No.: 92730032

QC Batch: 2284048 Analysis Method: TO-15  
QC Batch Method: TO-15 Analysis Description: VOA (MS) TO-15  
Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 92730032001

METHOD BLANK: R4068293-3 Matrix: Air  
Associated Lab Samples: 92730032001

| Parameter                      | Units | Blank Result | Reporting Limit | MDL   | Analyzed       | Qualifiers |
|--------------------------------|-------|--------------|-----------------|-------|----------------|------------|
| Gasoline                       | ug/m3 | ND           | 1030            | 164   | 05/10/24 10:09 |            |
| Acetone                        | ug/m3 | ND           | 2.97            | 1.39  | 05/10/24 10:09 |            |
| Acetonitrile                   | ug/m3 | ND           | 8.39            | 0.395 | 05/10/24 10:09 |            |
| Allyl chloride                 | ug/m3 | ND           | 0.626           | 0.357 | 05/10/24 10:09 |            |
| Benzene                        | ug/m3 | ND           | 0.639           | 0.228 | 05/10/24 10:09 |            |
| Benzyl chloride                | ug/m3 | ND           | 1.04            | 0.311 | 05/10/24 10:09 |            |
| Bromodichloromethane           | ug/m3 | ND           | 1.34            | 0.471 | 05/10/24 10:09 |            |
| Bromoform                      | ug/m3 | ND           | 6.21            | 0.757 | 05/10/24 10:09 |            |
| Bromomethane                   | ug/m3 | ND           | 0.776           | 0.381 | 05/10/24 10:09 |            |
| 1,3-Butadiene                  | ug/m3 | ND           | 4.43            | 0.230 | 05/10/24 10:09 |            |
| Carbon disulfide               | ug/m3 | ND           | 0.622           | 0.317 | 05/10/24 10:09 |            |
| Carbon tetrachloride           | ug/m3 | ND           | 1.26            | 0.461 | 05/10/24 10:09 |            |
| Chlorobenzene                  | ug/m3 | ND           | 0.924           | 0.385 | 05/10/24 10:09 |            |
| Chloroethane                   | ug/m3 | ND           | 0.528           | 0.263 | 05/10/24 10:09 |            |
| Chloroform                     | ug/m3 | ND           | 0.973           | 0.349 | 05/10/24 10:09 |            |
| Chloromethane                  | ug/m3 | ND           | 0.413           | 0.213 | 05/10/24 10:09 |            |
| 2-Chlorotoluene                | ug/m3 | ND           | 1.03            | 0.427 | 05/10/24 10:09 |            |
| Cyclohexane                    | ug/m3 | ND           | 0.689           | 0.259 | 05/10/24 10:09 |            |
| Dibromochloromethane           | ug/m3 | ND           | 1.70            | 0.618 | 05/10/24 10:09 |            |
| 1,2-Dibromoethane (EDB)        | ug/m3 | ND           | 1.54            | 0.554 | 05/10/24 10:09 |            |
| 1,2-Dichlorobenzene            | ug/m3 | ND           | 1.20            | 0.770 | 05/10/24 10:09 |            |
| 1,3-Dichlorobenzene            | ug/m3 | ND           | 1.20            | 1.09  | 05/10/24 10:09 |            |
| 1,4-Dichlorobenzene            | ug/m3 | ND           | 1.20            | 0.335 | 05/10/24 10:09 |            |
| 1,2-Dichloroethane             | ug/m3 | ND           | 0.810           | 0.283 | 05/10/24 10:09 |            |
| 1,1-Dichloroethane             | ug/m3 | ND           | 0.802           | 0.290 | 05/10/24 10:09 |            |
| 1,1-Dichloroethene             | ug/m3 | ND           | 0.793           | 0.302 | 05/10/24 10:09 |            |
| cis-1,2-Dichloroethene         | ug/m3 | ND           | 0.793           | 0.311 | 05/10/24 10:09 |            |
| trans-1,2-Dichloroethene       | ug/m3 | ND           | 0.793           | 0.267 | 05/10/24 10:09 |            |
| 1,2-Dichloropropane            | ug/m3 | ND           | 0.924           | 0.351 | 05/10/24 10:09 |            |
| cis-1,3-Dichloropropene        | ug/m3 | ND           | 0.908           | 0.313 | 05/10/24 10:09 |            |
| trans-1,3-Dichloropropene      | ug/m3 | ND           | 0.908           | 0.331 | 05/10/24 10:09 |            |
| 1,4-Dioxane (p-Dioxane)        | ug/m3 | ND           | 2.27            | 0.300 | 05/10/24 10:09 |            |
| Ethanol                        | ug/m3 | ND           | 4.71            | 0.500 | 05/10/24 10:09 |            |
| Ethylbenzene                   | ug/m3 | ND           | 0.867           | 0.362 | 05/10/24 10:09 |            |
| Ethyl acetate                  | ug/m3 | ND           | 2.27            | 0.360 | 05/10/24 10:09 |            |
| 4-Ethyltoluene                 | ug/m3 | ND           | 0.982           | 0.384 | 05/10/24 10:09 |            |
| Trichlorofluoromethane         | ug/m3 | ND           | 1.12            | 0.460 | 05/10/24 10:09 |            |
| Dichlorodifluoromethane        | ug/m3 | ND           | 0.989           | 0.678 | 05/10/24 10:09 |            |
| 1,1,2-Trichlorotrifluoroethane | ug/m3 | ND           | 1.53            | 0.608 | 05/10/24 10:09 |            |
| Dichlorotetrafluoroethane      | ug/m3 | ND           | 1.40            | 0.622 | 05/10/24 10:09 |            |

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: Bristol-Monthly Air  
Pace Project No.: 92730032

METHOD BLANK: R4068293-3

Matrix: Air

Associated Lab Samples: 92730032001

| Parameter                   | Units | Blank Result | Reporting Limit | MDL   | Analyzed       | Qualifiers |
|-----------------------------|-------|--------------|-----------------|-------|----------------|------------|
| n-Heptane                   | ug/m3 | ND           | 0.818           | 0.425 | 05/10/24 10:09 |            |
| Hexachloro-1,3-butadiene    | ug/m3 | ND           | 6.73            | 1.12  | 05/10/24 10:09 |            |
| n-Hexane                    | ug/m3 | ND           | 2.22            | 0.726 | 05/10/24 10:09 |            |
| Isopropylbenzene (Cumene)   | ug/m3 | ND           | 0.983           | 0.382 | 05/10/24 10:09 |            |
| Methylene Chloride          | ug/m3 | ND           | 0.694           | 0.340 | 05/10/24 10:09 |            |
| 2-Hexanone                  | ug/m3 | ND           | 5.11            | 0.544 | 05/10/24 10:09 |            |
| 2-Butanone (MEK)            | ug/m3 | ND           | 3.69            | 0.240 | 05/10/24 10:09 |            |
| 4-Methyl-2-pentanone (MIBK) | ug/m3 | ND           | 5.12            | 0.313 | 05/10/24 10:09 |            |
| Methyl methacrylate         | ug/m3 | ND           | 0.819           | 0.359 | 05/10/24 10:09 |            |
| Methyl-tert-butyl ether     | ug/m3 | ND           | 0.721           | 0.233 | 05/10/24 10:09 |            |
| Naphthalene                 | ug/m3 | ND           | 3.30            | 1.83  | 05/10/24 10:09 |            |
| 2-Propanol                  | ug/m3 | ND           | 3.07            | 0.649 | 05/10/24 10:09 |            |
| Propylene                   | ug/m3 | ND           | 2.15            | 0.160 | 05/10/24 10:09 |            |
| Styrene                     | ug/m3 | ND           | 0.851           | 0.335 | 05/10/24 10:09 |            |
| 1,1,2,2-Tetrachloroethane   | ug/m3 | ND           | 1.37            | 0.511 | 05/10/24 10:09 |            |
| Tetrachloroethene           | ug/m3 | ND           | 1.36            | 0.553 | 05/10/24 10:09 |            |
| Tetrahydrofuran             | ug/m3 | ND           | 0.590           | 0.216 | 05/10/24 10:09 |            |
| Toluene                     | ug/m3 | ND           | 1.88            | 0.328 | 05/10/24 10:09 |            |
| 1,2,4-Trichlorobenzene      | ug/m3 | ND           | 4.66            | 1.10  | 05/10/24 10:09 |            |
| 1,1,1-Trichloroethane       | ug/m3 | ND           | 1.09            | 0.400 | 05/10/24 10:09 |            |
| 1,1,2-Trichloroethane       | ug/m3 | ND           | 1.09            | 0.422 | 05/10/24 10:09 |            |
| Trichloroethene             | ug/m3 | ND           | 1.07            | 0.364 | 05/10/24 10:09 |            |
| 1,2,4-Trimethylbenzene      | ug/m3 | ND           | 0.982           | 0.375 | 05/10/24 10:09 |            |
| 1,3,5-Trimethylbenzene      | ug/m3 | ND           | 0.982           | 0.382 | 05/10/24 10:09 |            |
| 2,2,4-Trimethylpentane      | ug/m3 | ND           | 0.934           | 0.621 | 05/10/24 10:09 |            |
| Vinyl chloride              | ug/m3 | ND           | 0.511           | 0.243 | 05/10/24 10:09 |            |
| Vinyl bromide               | ug/m3 | ND           | 0.875           | 0.373 | 05/10/24 10:09 |            |
| Vinyl acetate               | ug/m3 | ND           | 2.22            | 0.408 | 05/10/24 10:09 |            |
| m&p-Xylene                  | ug/m3 | ND           | 1.73            | 0.585 | 05/10/24 10:09 |            |
| o-Xylene                    | ug/m3 | ND           | 0.867           | 0.359 | 05/10/24 10:09 |            |
| Xylene (Total)              | ug/m3 | ND           | 2.61            | 0.586 | 05/10/24 10:09 |            |
| 4-Bromofluorobenzene (S)    | %     | 97.2         | 60.0-140        |       | 05/10/24 10:09 |            |

LABORATORY CONTROL SAMPLE & LCSD: R4068293-1

R4068293-2

| Parameter            | Units | Spike Conc. | LCS Result | LCSD Result | % Rec | LCSD % Rec | % Rec Limits | RPD   | Max RPD | Qualifiers |
|----------------------|-------|-------------|------------|-------------|-------|------------|--------------|-------|---------|------------|
| Gasoline             | ug/m3 | 349         | 1380       | 1390        | 95.4  | 96.3       | 70.0-130     | 0.897 | 25      |            |
| Acetone              | ug/m3 | 3.75        | 8.96       | 9.15        | 101   | 103        | 70.0-130     | 2.10  | 25      |            |
| Acetonitrile         | ug/m3 | 18.8        | 30.6       | 30.7        | 96.8  | 97.3       | 70.0-130     | 0.548 | 25      |            |
| Allyl chloride       | ug/m3 | 3.75        | 13.6       | 13.6        | 116   | 116        | 70.0-130     | 0.460 | 25      |            |
| Benzene              | ug/m3 | 3.75        | 12.3       | 12.5        | 102   | 104        | 70.0-130     | 1.55  | 25      |            |
| Benzyl chloride      | ug/m3 | 3.75        | 20.9       | 21.1        | 107   | 108        | 70.0-152     | 0.990 | 25      |            |
| Bromodichloromethane | ug/m3 | 3.75        | 25.4       | 25.8        | 101   | 103        | 70.0-130     | 1.83  | 25      |            |
| Bromoform            | ug/m3 | 3.75        | 30.3       | 30.4        | 78.1  | 78.4       | 70.0-130     | 0.341 | 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: Bristol-Monthly Air

Pace Project No.: 92730032

| LABORATORY CONTROL SAMPLE & LCSD: R4068293-1 |       |             | R4068293-2 |             |           |            |              |       |         |            |
|----------------------------------------------|-------|-------------|------------|-------------|-----------|------------|--------------|-------|---------|------------|
| Parameter                                    | Units | Spike Conc. | LCS Result | LCSD Result | LCS % Rec | LCSD % Rec | % Rec Limits | RPD   | Max RPD | Qualifiers |
| Bromomethane                                 | ug/m3 | 3.75        | 14.9       | 15.0        | 103       | 103        | 70.0-130     | 0.518 | 25      |            |
| 1,3-Butadiene                                | ug/m3 | 3.75        | 8.30       | 8.32        | 100       | 100        | 70.0-130     | 0.266 | 25      |            |
| Carbon disulfide                             | ug/m3 | 3.75        | 12.2       | 12.2        | 105       | 105        | 70.0-130     | 0.00  | 25      |            |
| Carbon tetrachloride                         | ug/m3 | 3.75        | 23.7       | 24.0        | 100       | 102        | 70.0-130     | 1.32  | 25      |            |
| Chlorobenzene                                | ug/m3 | 3.75        | 17.8       | 18.0        | 103       | 104        | 70.0-130     | 1.29  | 25      |            |
| Chloroethane                                 | ug/m3 | 3.75        | 10.3       | 10.3        | 104       | 105        | 70.0-130     | 0.768 | 25      |            |
| Chloroform                                   | ug/m3 | 3.75        | 18.6       | 18.8        | 102       | 103        | 70.0-130     | 1.04  | 25      |            |
| Chloromethane                                | ug/m3 | 3.75        | 7.97       | 8.14        | 103       | 105        | 70.0-130     | 2.05  | 25      |            |
| 2-Chlorotoluene                              | ug/m3 | 3.75        | 19.7       | 20.0        | 102       | 103        | 70.0-130     | 1.56  | 25      |            |
| Cyclohexane                                  | ug/m3 | 3.75        | 13.2       | 13.3        | 102       | 103        | 70.0-130     | 0.778 | 25      |            |
| Dibromochloromethane                         | ug/m3 | 3.75        | 30.6       | 30.7        | 96.0      | 96.3       | 70.0-130     | 0.277 | 25      |            |
| 1,2-Dibromoethane (EDB)                      | ug/m3 | 3.75        | 29.4       | 29.8        | 102       | 103        | 70.0-130     | 1.30  | 25      |            |
| 1,2-Dichlorobenzene                          | ug/m3 | 3.75        | 23.0       | 23.3        | 102       | 103        | 70.0-130     | 1.30  | 25      |            |
| 1,3-Dichlorobenzene                          | ug/m3 | 3.75        | 23.0       | 23.5        | 102       | 104        | 70.0-130     | 2.07  | 25      |            |
| 1,4-Dichlorobenzene                          | ug/m3 | 3.75        | 23.1       | 23.3        | 103       | 103        | 70.0-130     | 0.776 | 25      |            |
| 1,2-Dichloroethane                           | ug/m3 | 3.75        | 15.6       | 15.8        | 103       | 104        | 70.0-130     | 1.29  | 25      |            |
| 1,1-Dichloroethane                           | ug/m3 | 3.75        | 15.3       | 15.5        | 102       | 103        | 70.0-130     | 1.30  | 25      |            |
| 1,1-Dichloroethene                           | ug/m3 | 3.75        | 15.1       | 15.2        | 102       | 102        | 70.0-130     | 0.524 | 25      |            |
| cis-1,2-Dichloroethene                       | ug/m3 | 3.75        | 15.0       | 15.2        | 101       | 102        | 70.0-130     | 1.05  | 25      |            |
| trans-1,2-Dichloroethene                     | ug/m3 | 3.75        | 15.1       | 15.3        | 102       | 103        | 70.0-130     | 1.04  | 25      |            |
| 1,2-Dichloropropane                          | ug/m3 | 3.75        | 18.0       | 18.1        | 104       | 104        | 70.0-130     | 0.256 | 25      |            |
| cis-1,3-Dichloropropene                      | ug/m3 | 3.75        | 17.4       | 17.5        | 102       | 103        | 70.0-130     | 0.521 | 25      |            |
| trans-1,3-Dichloropropene                    | ug/m3 | 3.75        | 17.4       | 17.7        | 102       | 104        | 70.0-130     | 1.55  | 25      |            |
| 1,4-Dioxane (p-Dioxane)                      | ug/m3 | 3.75        | 13.5       | 13.4        | 100       | 99.5       | 70.0-140     | 0.535 | 25      |            |
| Ethanol                                      | ug/m3 | 3.75        | 7.05       | 7.03        | 99.7      | 99.5       | 55.0-148     | 0.268 | 25      |            |
| Ethylbenzene                                 | ug/m3 | 3.75        | 16.7       | 17.0        | 103       | 105        | 70.0-130     | 1.80  | 25      |            |
| Ethyl acetate                                | ug/m3 | 3.75        | 14.3       | 14.7        | 106       | 109        | 70.0-130     | 2.98  | 25      |            |
| 4-Ethyltoluene                               | ug/m3 | 3.75        | 18.9       | 19.2        | 103       | 104        | 70.0-130     | 1.55  | 25      |            |
| Trichlorofluoromethane                       | ug/m3 | 3.75        | 21.4       | 21.7        | 102       | 103        | 70.0-130     | 1.56  | 25      |            |
| Dichlorodifluoromethane                      | ug/m3 | 3.75        | 19.1       | 19.3        | 103       | 104        | 64.0-139     | 0.772 | 25      |            |
| 1,1,2-Trichlorotrifluoroethane               | ug/m3 | 3.75        | 29.0       | 29.6        | 101       | 103        | 70.0-130     | 1.83  | 25      |            |
| Dichlorotetrafluoroethane                    | ug/m3 | 3.75        | 26.5       | 26.8        | 101       | 102        | 70.0-130     | 1.05  | 25      |            |
| n-Heptane                                    | ug/m3 | 3.75        | 15.8       | 16.1        | 103       | 105        | 70.0-130     | 1.79  | 25      |            |
| Hexachloro-1,3-butadiene                     | ug/m3 | 3.75        | 40.8       | 41.0        | 102       | 102        | 70.0-151     | 0.522 | 25      |            |
| n-Hexane                                     | ug/m3 | 3.75        | 13.6       | 13.7        | 103       | 104        | 70.0-130     | 1.29  | 25      |            |
| Isopropylbenzene (Cumene)                    | ug/m3 | 3.75        | 19.1       | 19.3        | 104       | 105        | 70.0-130     | 1.02  | 25      |            |
| Methylene Chloride                           | ug/m3 | 3.75        | 13.3       | 13.4        | 102       | 103        | 70.0-130     | 0.521 | 25      |            |
| 2-Hexanone                                   | ug/m3 | 3.75        | 16.1       | 16.1        | 105       | 105        | 70.0-149     | 0.254 | 25      |            |
| 2-Butanone (MEK)                             | ug/m3 | 3.75        | 11.2       | 11.3        | 101       | 102        | 70.0-130     | 1.05  | 25      |            |
| 4-Methyl-2-pentanone (MIBK)                  | ug/m3 | 3.75        | 16.0       | 15.9        | 104       | 103        | 70.0-139     | 0.770 | 25      |            |
| Methyl methacrylate                          | ug/m3 | 3.75        | 13.6       | 13.7        | 88.5      | 89.1       | 70.0-130     | 0.601 | 25      |            |
| Methyl-tert-butyl ether                      | ug/m3 | 3.75        | 13.9       | 13.8        | 103       | 102        | 70.0-130     | 0.260 | 25      |            |
| Naphthalene                                  | ug/m3 | 3.75        | 21.0       | 21.4        | 107       | 109        | 70.0-159     | 1.73  | 25      |            |
| 2-Propanol                                   | ug/m3 | 3.75        | 9.56       | 9.59        | 104       | 104        | 70.0-139     | 0.257 | 25      |            |
| Propylene                                    | ug/m3 | 3.75        | 6.44       | 6.46        | 99.7      | 100        | 64.0-144     | 0.267 | 25      |            |
| Styrene                                      | ug/m3 | 3.75        | 16.5       | 16.7        | 104       | 105        | 70.0-130     | 0.768 | 25      |            |
| 1,1,2,2-Tetrachloroethane                    | ug/m3 | 3.75        | 26.2       | 26.5        | 102       | 103        | 70.0-130     | 0.782 | 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: Bristol-Monthly Air  
Pace Project No.: 92730032

| LABORATORY CONTROL SAMPLE & LCSD: R4068293-1 R4068293-2 |       |             |            |             |           |            |              |       |         |            |
|---------------------------------------------------------|-------|-------------|------------|-------------|-----------|------------|--------------|-------|---------|------------|
| Parameter                                               | Units | Spike Conc. | LCS Result | LCSD Result | LCS % Rec | LCSD % Rec | % Rec Limits | RPD   | Max RPD | Qualifiers |
| Tetrachloroethene                                       | ug/m3 | 3.75        | 25.8       | 26.1        | 101       | 103        | 70.0-130     | 1.31  | 25      |            |
| Tetrahydrofuran                                         | ug/m3 | 3.75        | 11.1       | 11.3        | 101       | 102        | 70.0-137     | 1.57  | 25      |            |
| Toluene                                                 | ug/m3 | 3.75        | 14.4       | 14.5        | 102       | 103        | 70.0-130     | 0.521 | 25      |            |
| 1,2,4-Trichlorobenzene                                  | ug/m3 | 3.75        | 30.1       | 30.8        | 108       | 111        | 70.0-160     | 2.43  | 25      |            |
| 1,1,1-Trichloroethane                                   | ug/m3 | 3.75        | 20.4       | 20.8        | 100       | 102        | 70.0-130     | 1.85  | 25      |            |
| 1,1,2-Trichloroethane                                   | ug/m3 | 3.75        | 20.8       | 21.2        | 102       | 104        | 70.0-130     | 1.55  | 25      |            |
| Trichloroethene                                         | ug/m3 | 3.75        | 20.4       | 20.6        | 101       | 103        | 70.0-130     | 1.31  | 25      |            |
| 1,2,4-Trimethylbenzene                                  | ug/m3 | 3.75        | 18.9       | 19.0        | 103       | 103        | 70.0-130     | 0.518 | 25      |            |
| 1,3,5-Trimethylbenzene                                  | ug/m3 | 3.75        | 19.1       | 19.3        | 104       | 105        | 70.0-130     | 1.02  | 25      |            |
| 2,2,4-Trimethylpentane                                  | ug/m3 | 3.75        | 17.8       | 18.0        | 102       | 103        | 70.0-130     | 0.782 | 25      |            |
| Vinyl chloride                                          | ug/m3 | 3.75        | 10.0       | 10.0        | 105       | 105        | 70.0-130     | 0.00  | 25      |            |
| Vinyl bromide                                           | ug/m3 | 3.75        | 16.8       | 16.9        | 102       | 103        | 70.0-130     | 1.04  | 25      |            |
| Vinyl acetate                                           | ug/m3 | 3.75        | 13.7       | 13.8        | 104       | 105        | 70.0-130     | 0.512 | 25      |            |
| m&p-Xylene                                              | ug/m3 | 7.50        | 33.6       | 34.1        | 103       | 105        | 70.0-130     | 1.41  | 25      |            |
| o-Xylene                                                | ug/m3 | 3.75        | 16.6       | 16.8        | 102       | 103        | 70.0-130     | 1.04  | 25      |            |
| Xylene (Total)                                          | ug/m3 | 11.3        | 50.4       | 51.2        | 103       | 104        | 70.0-130     | 1.71  | 25      |            |
| 4-Bromofluorobenzene (S)                                | %     |             |            |             | 99.2      | 98.8       | 60.0-140     |       |         |            |

SAMPLE DUPLICATE: R4068293-4

| Parameter               | Units | L1734461-01 Result | Dup Result | RPD  | Max RPD | Qualifiers |
|-------------------------|-------|--------------------|------------|------|---------|------------|
| Gasoline                | ug/m3 | 7440               | 8590       | 14.4 | 25      |            |
| Acetone                 | ug/m3 | 101                | 102        | 1.17 | 25      |            |
| Acetonitrile            | ug/m3 | ND                 | ND         | 0.00 | 25      |            |
| Allyl chloride          | ug/m3 | ND                 | ND         | 0.00 | 25      |            |
| Benzene                 | ug/m3 | ND                 | ND         | 0.00 | 25      |            |
| Benzyl chloride         | ug/m3 | ND                 | ND         | 0.00 | 25      |            |
| Bromodichloromethane    | ug/m3 | ND                 | ND         | 0.00 | 25      |            |
| Bromoform               | ug/m3 | ND                 | ND         | 0.00 | 25      |            |
| Bromomethane            | ug/m3 | ND                 | ND         | 0.00 | 25      |            |
| 1,3-Butadiene           | ug/m3 | ND                 | ND         | 0.00 | 25      |            |
| Carbon disulfide        | ug/m3 | ND                 | ND         | 0.00 | 25      |            |
| Carbon tetrachloride    | ug/m3 | ND                 | ND         | 0.00 | 25      |            |
| Chlorobenzene           | ug/m3 | ND                 | ND         | 0.00 | 25      |            |
| Chloroethane            | ug/m3 | ND                 | ND         | 0.00 | 25      |            |
| Chloroform              | ug/m3 | ND                 | ND         | 0.00 | 25      |            |
| Chloromethane           | ug/m3 | ND                 | ND         | 0.00 | 25      |            |
| 2-Chlorotoluene         | ug/m3 | ND                 | ND         | 0.00 | 25      |            |
| Cyclohexane             | ug/m3 | ND                 | ND         | 0.00 | 25      |            |
| Dibromochloromethane    | ug/m3 | ND                 | ND         | 0.00 | 25      |            |
| 1,2-Dibromoethane (EDB) | ug/m3 | ND                 | ND         | 0.00 | 25      |            |
| 1,2-Dichlorobenzene     | ug/m3 | ND                 | ND         | 0.00 | 25      |            |
| 1,3-Dichlorobenzene     | ug/m3 | 1.11               | ND         | 200  | 25 D8   |            |
| 1,4-Dichlorobenzene     | ug/m3 | ND                 | ND         | 0.00 | 25      |            |
| 1,2-Dichloroethane      | ug/m3 | ND                 | ND         | 0.00 | 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: Bristol-Monthly Air

Pace Project No.: 92730032

SAMPLE DUPLICATE: R4068293-4

| Parameter                      | Units | L1734461-01<br>Result | Dup<br>Result | RPD   | Max<br>RPD | Qualifiers |
|--------------------------------|-------|-----------------------|---------------|-------|------------|------------|
| 1,1-Dichloroethane             | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| 1,1-Dichloroethene             | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| cis-1,2-Dichloroethene         | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| trans-1,2-Dichloroethene       | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| 1,2-Dichloropropane            | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| cis-1,3-Dichloropropene        | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| trans-1,3-Dichloropropene      | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| 1,4-Dioxane (p-Dioxane)        | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Ethanol                        | ug/m3 | 30.5                  | 30.9          | 1.23  | 25         |            |
| Ethylbenzene                   | ug/m3 | 5.51                  | 5.55          | 0.784 | 25         |            |
| Ethyl acetate                  | ug/m3 | 8.35                  | 8.57          | 2.55  | 25         |            |
| 4-Ethyltoluene                 | ug/m3 | 7.21                  | 7.26          | 0.678 | 25         |            |
| Trichlorofluoromethane         | ug/m3 | 4.15                  | 4.16          | 0.135 | 25         |            |
| Dichlorodifluoromethane        | ug/m3 | 6.92                  | 7.32          | 5.56  | 25         |            |
| 1,1,2-Trichlorotrifluoroethane | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Dichlorotetrafluoroethane      | ug/m3 | 57.2                  | 56.8          | 0.736 | 25         |            |
| n-Heptane                      | ug/m3 | 220                   | 221           | 0.371 | 25         |            |
| Hexachloro-1,3-butadiene       | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| n-Hexane                       | ug/m3 | 814                   | 814           | 0.00  | 25         | E          |
| Isopropylbenzene (Cumene)      | ug/m3 | 1.78                  | 1.80          | 0.823 | 25         |            |
| Methylene Chloride             | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| 2-Hexanone                     | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| 2-Butanone (MEK)               | ug/m3 | 14.8                  | 15.0          | 0.991 | 25         |            |
| 4-Methyl-2-pentanone (MIBK)    | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Methyl methacrylate            | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Methyl-tert-butyl ether        | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Naphthalene                    | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| 2-Propanol                     | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Propylene                      | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Styrene                        | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| 1,1,2,2-Tetrachloroethane      | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Tetrachloroethene              | ug/m3 | 3.61                  | 3.46          | 4.03  | 25         |            |
| Tetrahydrofuran                | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Toluene                        | ug/m3 | 24.8                  | 24.6          | 1.07  | 25         |            |
| 1,2,4-Trichlorobenzene         | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| 1,1,1-Trichloroethane          | ug/m3 | 3.01                  | 3.01          | 0.181 | 25         |            |
| 1,1,2-Trichloroethane          | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Trichloroethene                | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| 1,2,4-Trimethylbenzene         | ug/m3 | 8.83                  | 8.98          | 1.65  | 25         |            |
| 1,3,5-Trimethylbenzene         | ug/m3 | 2.54                  | 2.53          | 0.387 | 25         |            |
| 2,2,4-Trimethylpentane         | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Vinyl chloride                 | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Vinyl bromide                  | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Vinyl acetate                  | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| m&p-Xylene                     | ug/m3 | 17.0                  | 17.2          | 1.02  | 25         |            |
| o-Xylene                       | ug/m3 | 6.98                  | 7.02          | 0.619 | 25         |            |
| Xylene (Total)                 | ug/m3 | ND                    | 24.2          | 200   | 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: Bristol-Monthly Air

Pace Project No.: 92730032

SAMPLE DUPLICATE: R4068293-4

| Parameter                | Units | L1734461-01<br>Result | Dup<br>Result | RPD | Max<br>RPD | Qualifiers |
|--------------------------|-------|-----------------------|---------------|-----|------------|------------|
| 4-Bromofluorobenzene (S) | %     |                       | 99.9          |     |            |            |

SAMPLE DUPLICATE: R4068293-5

| Parameter                      | Units | L1734461-02<br>Result | Dup<br>Result | RPD   | Max<br>RPD | Qualifiers |
|--------------------------------|-------|-----------------------|---------------|-------|------------|------------|
| Gasoline                       | ug/m3 | 17400                 | 16300         | 6.63  | 25         |            |
| Acetone                        | ug/m3 | 124                   | 122           | 1.55  | 25         |            |
| Acetonitrile                   | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Allyl chloride                 | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Benzene                        | ug/m3 | 27.1                  | 27.0          | 0.236 | 25         |            |
| Benzyl chloride                | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Bromodichloromethane           | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Bromoform                      | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Bromomethane                   | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| 1,3-Butadiene                  | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Carbon disulfide               | ug/m3 | 3.98                  | 3.95          | 0.784 | 25         |            |
| Carbon tetrachloride           | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Chlorobenzene                  | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Chloroethane                   | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Chloroform                     | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Chloromethane                  | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| 2-Chlorotoluene                | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Cyclohexane                    | ug/m3 | 56.8                  | 56.5          | 0.608 | 25         |            |
| Dibromochloromethane           | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| 1,2-Dibromoethane (EDB)        | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| 1,2-Dichlorobenzene            | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| 1,3-Dichlorobenzene            | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| 1,4-Dichlorobenzene            | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| 1,2-Dichloroethane             | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| 1,1-Dichloroethane             | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| 1,1-Dichloroethene             | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| cis-1,2-Dichloroethene         | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| trans-1,2-Dichloroethene       | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| 1,2-Dichloropropane            | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| cis-1,3-Dichloropropene        | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| trans-1,3-Dichloropropene      | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| 1,4-Dioxane (p-Dioxane)        | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Ethanol                        | ug/m3 | 264                   | 260           | 1.44  | 25         | E          |
| Ethylbenzene                   | ug/m3 | 18.9                  | 19.0          | 0.457 | 25         |            |
| Ethyl acetate                  | ug/m3 | 5.25                  | 5.36          | 2.03  | 25         |            |
| 4-Ethyltoluene                 | ug/m3 | 72.1                  | 71.2          | 1.37  | 25         |            |
| Trichlorofluoromethane         | ug/m3 | 4.72                  | 4.65          | 1.44  | 25         |            |
| Dichlorodifluoromethane        | ug/m3 | 2.68                  | 2.66          | 0.556 | 25         |            |
| 1,1,2-Trichlorotrifluoroethane | ug/m3 | 1.29                  | 1.23J         | 4.88  | 25         | J          |
| Dichlorotetrafluoroethane      | ug/m3 | ND                    | ND            | 0.00  | 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: Bristol-Monthly Air

Pace Project No.: 92730032

SAMPLE DUPLICATE: R4068293-5

| Parameter                   | Units | L1734461-02<br>Result | Dup<br>Result | RPD   | Max<br>RPD | Qualifiers |
|-----------------------------|-------|-----------------------|---------------|-------|------------|------------|
| n-Heptane                   | ug/m3 | 106                   | 106           | 0.387 | 25         |            |
| Hexachloro-1,3-butadiene    | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| n-Hexane                    | ug/m3 | 148                   | 146           | 1.20  | 25         |            |
| Isopropylbenzene (Cumene)   | ug/m3 | 8.21                  | 8.06          | 1.81  | 25         |            |
| Methylene Chloride          | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| 2-Hexanone                  | ug/m3 | 12.9                  | 12.7          | 1.60  | 25         |            |
| 2-Butanone (MEK)            | ug/m3 | 31.3                  | 31.0          | 0.948 | 25         |            |
| 4-Methyl-2-pentanone (MIBK) | ug/m3 | 12.3                  | 12.3          | 0.333 | 25         |            |
| Methyl methacrylate         | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Methyl-tert-butyl ether     | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Naphthalene                 | ug/m3 | 73.3                  | 73.3          | 0.00  | 25         |            |
| 2-Propanol                  | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Propylene                   | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Styrene                     | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| 1,1,2,2-Tetrachloroethane   | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Tetrachloroethene           | ug/m3 | 2.08                  | 2.10          | 1.30  | 25         |            |
| Tetrahydrofuran             | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Toluene                     | ug/m3 | 64.0                  | 64.0          | 0.00  | 25         |            |
| 1,2,4-Trichlorobenzene      | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| 1,1,1-Trichloroethane       | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| 1,1,2-Trichloroethane       | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Trichloroethene             | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| 1,2,4-Trimethylbenzene      | ug/m3 | 148                   | 146           | 1.33  | 25         |            |
| 1,3,5-Trimethylbenzene      | ug/m3 | 51.5                  | 50.6          | 1.92  | 25         |            |
| 2,2,4-Trimethylpentane      | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Vinyl chloride              | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Vinyl bromide               | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| Vinyl acetate               | ug/m3 | ND                    | ND            | 0.00  | 25         |            |
| m&p-Xylene                  | ug/m3 | 55.1                  | 54.6          | 0.791 | 25         |            |
| o-Xylene                    | ug/m3 | 25.5                  | 25.4          | 0.512 | 25         |            |
| Xylene (Total)              | ug/m3 | ND                    | 80.3          | 200   | 25         |            |
| 4-Bromofluorobenzene (S)    | %     |                       | 110           |       |            |            |

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: Bristol-Monthly Air  
Pace Project No.: 92730032

---

### 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

|    |                                                                                                                                        |
|----|----------------------------------------------------------------------------------------------------------------------------------------|
| D8 | The sample and duplicate results for this parameter are less than 5 times the reporting limit, the RPD may not be statistically valid. |
| E  | Analyte concentration exceeded the calibration range. The reported result is estimated.                                                |
| 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: Bristol-Monthly Air  
Pace Project No.: 92730032

| Lab ID      | Sample ID       | QC Batch Method | QC Batch | Analytical Method | Analytical Batch |
|-------------|-----------------|-----------------|----------|-------------------|------------------|
| 92730032001 | May 24hr Sample | TO-15           | 2284048  | TO-15             | 2284048          |

REPORT OF LABORATORY ANALYSIS

Company Name: Pace Analytical - Huntersville, NC  
Street Address: 9800 Kinney Avenue, Suite 100  
Huntersville, NC 28078  
City, State Zip:  
Customer Project #  
Project Name: City of Bristol VA  
City of Bristol  
Site Collection Info/Activity ID (as applicable):  
PAGE-POULSONVA 001  
Time Zone Collected: [ ] AM [ ] PM [ ] CT [ ] ET  
Data Deliverables: Regulatory Program (CAA, RCRA, etc.) as applicable:  
[ ] Level II [ ] Level III [ ] Level IV  
[ ] EQUIS  
[ ] Other:  
Matrix Codes (insert in Matrix box below): Ambient (A), Indoor (I), Soil Vapor (SV), Other (O)

Contact/Report to: Ebon Buchanan  
Phone #: 704-875-9092  
E-Mail: ebon.buchanan@pacelabs.com  
CC E-Mail:  
Invoice to: City of Bristol VA  
Invoice E-Mail: kanev@bristolva.org  
Purchase Order # (if applicable):  
Quote #:

State origin of sample(s): VA

Regulatory Program (CAA, RCRA, etc.) as applicable:  
Push (Pre-approval required):  
2 Day 3 day 5 day Other:  
Date Results Requested:  
Units for Reporting: ug/m<sup>3</sup> PPBV mg/m<sup>3</sup> PPBV

Permit # as applicable:  
Canister Pressure / Vacuum  
PUF / FILTER  
Flow Rate  
Total Volume  
Sampled Volume  
TO-15 Summa

Start Pressure / Vacuum (in Hg)  
End Pressure / Vacuum (in Hg)  
Duration (minutes)  
Flow Rate (m<sup>3</sup>/min or L/min)  
Sampled Volume (m<sup>3</sup> or L)

| Customer Sample ID | Matrix * | Summa Canister ID | Flow Controller ID | Begin Collection Date | End Collection Date | Time | Time |
|--------------------|----------|-------------------|--------------------|-----------------------|---------------------|------|------|
| May 24 hr sample   |          | 02406700          | 00105/1124         | 12:57/1124            | 12:57/1124          | 29   | 4    |



Scan QR code for instructions

W0#: 92730032  
PM: EDB Due Date: 05/16/24  
CLIENT: 92-BristolVA

M04B

W0#: 92730032  
92730032

Customer Remarks / Special Conditions / Possible Hazards:  
For Franklin D Cochran II - City of Bristol - Reporting through Pace-NC

Collected by: Franklin D Cochran II  
Signature: [Signature]

Received by Company: [Signature]  
Date/Time: 5/11/24

Received by Company: [Signature]  
Date/Time: 5/11/24

Received by Company: [Signature]  
Date/Time: 5/11/24

Received by Company: [Signature]  
Date/Time: 5/11/24

Additional Instructions from Pace:

|               |                 |                         |                 |                      |
|---------------|-----------------|-------------------------|-----------------|----------------------|
| # Coolant:    | Thermometer ID: | Correction Factor (°C): | Obs. Temp (°C): | Corrected Temp (°C): |
|               |                 |                         |                 |                      |
| Delivered by: |                 | In-Person               | Counter         |                      |
| radix         |                 | ups                     | ohw             |                      |

Page: 1 of 1