

## ANALYTICAL REPORT

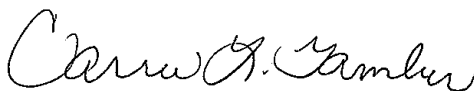
Job Number: 180-48309-1

Job Description: Harley Davidson

For:

Groundwater Sciences Corporation  
2601 Market Place Street, Suite 310  
Harrisburg, PA 17110-9307

Attention: Allan Miller



Approved for release.  
Carrie L. Gamber  
Senior Project Manager  
10/13/2015 1:45 PM

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10/13/2015

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# Table of Contents

|                                              |     |
|----------------------------------------------|-----|
| Cover Title Page . . . . .                   | 1   |
| Data Summaries . . . . .                     | 4   |
| Definitions . . . . .                        | 4   |
| Case Narrative . . . . .                     | 5   |
| Detection Summary . . . . .                  | 6   |
| Client Sample Results . . . . .              | 7   |
| Default Detection Limits . . . . .           | 17  |
| Surrogate Summary . . . . .                  | 18  |
| QC Sample Results . . . . .                  | 19  |
| QC Association . . . . .                     | 24  |
| Chronicle . . . . .                          | 25  |
| Certification Summary . . . . .              | 27  |
| Method Summary . . . . .                     | 28  |
| Sample Summary . . . . .                     | 29  |
| Manual Integration Summary . . . . .         | 30  |
| Reagent Traceability . . . . .               | 38  |
| COAs . . . . .                               | 113 |
| Organic Sample Data . . . . .                | 229 |
| GC/MS VOA . . . . .                          | 229 |
| Method 8260C Low Level . . . . .             | 229 |
| Method 8260C Low Level QC Summary . . . . .  | 230 |
| Method 8260C Low Level Sample Data . . . . . | 243 |
| Standards Data . . . . .                     | 316 |
| Method 8260C Low Level ICAL Data . . . . .   | 316 |
| Method 8260C Low Level CCAL Data . . . . .   | 422 |
| Raw QC Data . . . . .                        | 442 |

# Table of Contents

|                                                |     |
|------------------------------------------------|-----|
| Method 8260C Low Level Tune Data . . . . .     | 442 |
| Method 8260C Low Level Blank Data . . . . .    | 458 |
| Method 8260C Low Level LCS/LCSD Data . . . . . | 472 |
| Method 8260C Low Level Run Logs . . . . .      | 485 |
| GC/MS Semi VOA . . . . .                       | 489 |
| Method 8270D Low Level . . . . .               | 489 |
| Method 8270D Low Level QC Summary . . . . .    | 490 |
| Method 8270D Low Level Sample Data . . . . .   | 500 |
| Standards Data . . . . .                       | 504 |
| Method 8270D Low Level ICAL Data . . . . .     | 504 |
| Method 8270D Low Level CCAL Data . . . . .     | 563 |
| Raw QC Data . . . . .                          | 577 |
| Method 8270D Low Level Tune Data . . . . .     | 577 |
| Method 8270D Low Level Blank Data . . . . .    | 601 |
| Method 8270D Low Level LCS/LCSD Data . . . . . | 608 |
| Method 8270D Low Level Run Logs . . . . .      | 613 |
| Method 8270D Low Level Prep Data . . . . .     | 616 |
| Shipping and Receiving Documents . . . . .     | 617 |
| Client Chain of Custody . . . . .              | 618 |
| Sample Receipt Checklist . . . . .             | 620 |

## Definitions/Glossary

Client: Groundwater Sciences Corporation  
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48309-1

### Qualifiers

#### GC/MS VOA

| Qualifier | Qualifier Description                                                                                          |
|-----------|----------------------------------------------------------------------------------------------------------------|
| J         | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| ^c        | CCV Recovery is outside acceptance limits.                                                                     |
| E         | Result exceeded calibration range.                                                                             |

### Glossary

| Abbreviation   | These commonly used abbreviations may or may not be present in this report.                                 |
|----------------|-------------------------------------------------------------------------------------------------------------|
| α              | Listed under the "D" column to designate that the result is reported on a dry weight basis                  |
| %R             | Percent Recovery                                                                                            |
| CFL            | Contains Free Liquid                                                                                        |
| CNF            | Contains no Free Liquid                                                                                     |
| DER            | Duplicate error ratio (normalized absolute difference)                                                      |
| Dil Fac        | Dilution Factor                                                                                             |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC            | Decision level concentration                                                                                |
| MDA            | Minimum detectable activity                                                                                 |
| EDL            | Estimated Detection Limit                                                                                   |
| MDC            | Minimum detectable concentration                                                                            |
| MDL            | Method Detection Limit                                                                                      |
| ML             | Minimum Level (Dioxin)                                                                                      |
| NC             | Not Calculated                                                                                              |
| ND             | Not detected at the reporting limit (or MDL or EDL if shown)                                                |
| PQL            | Practical Quantitation Limit                                                                                |
| QC             | Quality Control                                                                                             |
| RER            | Relative error ratio                                                                                        |
| RL             | Reporting Limit or Requested Limit (Radiochemistry)                                                         |
| RPD            | Relative Percent Difference, a measure of the relative difference between two points                        |
| TEF            | Toxicity Equivalent Factor (Dioxin)                                                                         |
| TEQ            | Toxicity Equivalent Quotient (Dioxin)                                                                       |



## **CASE NARRATIVE**

**Client: Groundwater Sciences Corporation**

**Project: Harley Davidson**

**Report Number: 180-48309-1**

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

### **RECEIPT**

The samples were received on 10/1/2015 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.1° C.

### **VOLATILES**

The following samples was diluted to bring the concentration of target analytes within the calibration range: HD-MW-87-0/1-0 (180-48309-1), HD-MW-92-0/1-0 (180-48309-5) and HD-MW-64D-0/1-0 (180-48309-6). Elevated reporting limits (RLs) are provided.

The following analytes were outside the %D criteria but within the method criteria of the number of analytes allowed out: 1,4-Dioxane, Bromomethane, Chloroethane, and Vinyl chloride. An low level CCV was analyzed and all targets were found: (CCVIS 180-156309/5)

The following analytes were outside the %D criteria but within the method criteria of the number of analytes allowed out: Bromomethane, 2-Hexanone, 1,1,1,2-Tetrachloroethane, Bromoform, Styrene, and Acrylonitrile. An low level CCV was analyzed and all analytes were found: (CCVIS 180-156189/2)

### **SEMIVOLATILES**

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

# Detection Summary

Client: Groundwater Sciences Corporation  
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48309-1

## Client Sample ID: HD-MW-87-0/1-0

## Lab Sample ID: 180-48309-1

| Analyte                | Result | Qualifier | RL  | MDL   | Unit | Dil Fac | D | Method   | Prep Type |
|------------------------|--------|-----------|-----|-------|------|---------|---|----------|-----------|
| 1,1-Dichloroethene     | 11     | J         | 13  | 3.7   | ug/L | 12.5    |   | 8260C    | Total/NA  |
| 1,1-Dichloroethane     | 4.6    | J         | 13  | 1.5   | ug/L | 12.5    |   | 8260C    | Total/NA  |
| cis-1,2-Dichloroethene | 460    |           | 13  | 3.0   | ug/L | 12.5    |   | 8260C    | Total/NA  |
| 1,1,1-Trichloroethane  | 9.8    | J         | 13  | 3.6   | ug/L | 12.5    |   | 8260C    | Total/NA  |
| Carbon tetrachloride   | 2.0    | J         | 13  | 1.7   | ug/L | 12.5    |   | 8260C    | Total/NA  |
| Trichloroethene        | 390    |           | 13  | 1.8   | ug/L | 12.5    |   | 8260C    | Total/NA  |
| Tetrachloroethene      | 28     |           | 13  | 1.9   | ug/L | 12.5    |   | 8260C    | Total/NA  |
| 1,4-Dioxane            | 9.7    |           | 1.9 | 0.049 | ug/L | 1       |   | 8270D LL | Total/NA  |

## Client Sample ID: HD-MW-143S-0/1-0

## Lab Sample ID: 180-48309-2

| Analyte         | Result | Qualifier | RL  | MDL  | Unit | Dil Fac | D | Method | Prep Type |
|-----------------|--------|-----------|-----|------|------|---------|---|--------|-----------|
| Trichloroethene | 2.2    |           | 1.0 | 0.14 | ug/L | 1       |   | 8260C  | Total/NA  |

## Client Sample ID: HD-MW-143D-0/1-0

## Lab Sample ID: 180-48309-3

| Analyte                | Result | Qualifier | RL  | MDL  | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|-----|------|------|---------|---|--------|-----------|
| cis-1,2-Dichloroethene | 0.39   | J         | 1.0 | 0.24 | ug/L | 1       |   | 8260C  | Total/NA  |

## Client Sample ID: HD-MW-20M-0/1-0

## Lab Sample ID: 180-48309-4

| Analyte           | Result | Qualifier | RL  | MDL  | Unit | Dil Fac | D | Method | Prep Type |
|-------------------|--------|-----------|-----|------|------|---------|---|--------|-----------|
| Chloroform        | 1.0    |           | 1.0 | 0.17 | ug/L | 1       |   | 8260C  | Total/NA  |
| Trichloroethene   | 13     |           | 1.0 | 0.14 | ug/L | 1       |   | 8260C  | Total/NA  |
| Tetrachloroethene | 0.30   | J         | 1.0 | 0.15 | ug/L | 1       |   | 8260C  | Total/NA  |

## Client Sample ID: HD-MW-92-0/1-0

## Lab Sample ID: 180-48309-5

| Analyte                | Result | Qualifier | RL  | MDL  | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|-----|------|------|---------|---|--------|-----------|
| cis-1,2-Dichloroethene | 0.31   | J         | 1.0 | 0.24 | ug/L | 1       |   | 8260C  | Total/NA  |
| Trichloroethene        | 12     |           | 1.0 | 0.14 | ug/L | 1       |   | 8260C  | Total/NA  |
| Tetrachloroethene      | 150    | E         | 1.0 | 0.15 | ug/L | 1       |   | 8260C  | Total/NA  |
| Trichloroethene - DL   | 12     |           | 10  | 1.4  | ug/L | 10      |   | 8260C  | Total/NA  |
| Tetrachloroethene - DL | 150    |           | 10  | 1.5  | ug/L | 10      |   | 8260C  | Total/NA  |

## Client Sample ID: HD-MW-64D-0/1-0

## Lab Sample ID: 180-48309-6

| Analyte                | Result | Qualifier | RL  | MDL  | Unit | Dil Fac | D | Method | Prep Type |
|------------------------|--------|-----------|-----|------|------|---------|---|--------|-----------|
| Trichloroethene        | 240    | E         | 2.5 | 0.36 | ug/L | 2.5     |   | 8260C  | Total/NA  |
| Tetrachloroethene      | 420    | E         | 2.5 | 0.37 | ug/L | 2.5     |   | 8260C  | Total/NA  |
| Trichloroethene - DL   | 210    |           | 25  | 3.6  | ug/L | 25      |   | 8260C  | Total/NA  |
| Tetrachloroethene - DL | 420    |           | 25  | 3.7  | ug/L | 25      |   | 8260C  | Total/NA  |

## Client Sample ID: HD-QC12-0/1-2

## Lab Sample ID: 180-48309-7

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Pittsburgh

# Client Sample Results

Client: Groundwater Sciences Corporation  
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48309-1

## Method: 8260C - Volatile Organic Compounds (GC/MS)

Client Sample ID: HD-MW-87-0/1-0

Date Collected: 09/30/15 10:37

Date Received: 10/01/15 09:30

Lab Sample ID: 180-48309-1

Matrix: Water

| Analyte                     | Result | Qualifier | RL   | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|------|-----|------|---|----------|----------------|---------|
| Chloromethane               | ND     |           | 13   | 3.5 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| Vinyl chloride              | ND     | ^c        | 13   | 2.8 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| Bromomethane                | ND     | ^c        | 13   | 3.9 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| Chloroethane                | ND     | ^c        | 13   | 2.7 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| 1,1-Dichloroethene          | 11     | J         | 13   | 3.7 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| Acetone                     | ND     |           | 63   | 31  | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| Carbon disulfide            | ND     |           | 13   | 2.7 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| Methylene Chloride          | ND     |           | 13   | 1.6 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| trans-1,2-Dichloroethene    | ND     |           | 13   | 2.1 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| Methyl tert-butyl ether     | ND     |           | 13   | 2.3 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| 1,1-Dichloroethane          | 4.6    | J         | 13   | 1.5 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| cis-1,2-Dichloroethene      | 460    |           | 13   | 3.0 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| Bromochloromethane          | ND     |           | 13   | 2.3 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| 2-Butanone (MEK)            | ND     |           | 63   | 6.8 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| Chloroform                  | ND     |           | 13   | 2.1 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| 1,1,1-Trichloroethane       | 9.8    | J         | 13   | 3.6 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| Carbon tetrachloride        | 2.0    | J         | 13   | 1.7 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| Benzene                     | ND     |           | 13   | 1.3 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| 1,2-Dichloroethane          | ND     |           | 13   | 2.6 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| Trichloroethene             | 390    |           | 13   | 1.8 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| 1,2-Dichloropropane         | ND     |           | 13   | 1.2 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| Bromodichloromethane        | ND     |           | 13   | 1.6 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| cis-1,3-Dichloropropene     | ND     |           | 13   | 2.3 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| 4-Methyl-2-pentanone (MIBK) | ND     |           | 63   | 6.6 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| Toluene                     | ND     |           | 13   | 1.9 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| trans-1,3-Dichloropropene   | ND     |           | 13   | 1.9 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| 1,1,2-Trichloroethane       | ND     |           | 13   | 2.5 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| Tetrachloroethene           | 28     |           | 13   | 1.9 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| 2-Hexanone                  | ND     |           | 63   | 2.0 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| Dibromochloromethane        | ND     |           | 13   | 1.7 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| 1,2-Dibromoethane (EDB)     | ND     |           | 13   | 2.3 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| Chlorobenzene               | ND     |           | 13   | 1.7 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| 1,1,1,2-Tetrachloroethane   | ND     |           | 13   | 3.5 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| Ethylbenzene                | ND     |           | 13   | 2.8 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| Xylenes, Total              | ND     |           | 38   | 6.1 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| Styrene                     | ND     |           | 13   | 1.2 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| Bromoform                   | ND     |           | 13   | 2.4 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| 1,1,2,2-Tetrachloroethane   | ND     |           | 13   | 2.5 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| Acrylonitrile               | ND     |           | 250  | 6.8 | ug/L |   |          | 10/08/15 16:24 | 12.5    |
| 1,4-Dioxane                 | ND     | ^c        | 2500 | 430 | ug/L |   |          | 10/08/15 16:24 | 12.5    |

| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 91        |           | 64 - 135 |          | 10/08/15 16:24 | 12.5    |
| Toluene-d8 (Surr)            | 93        |           | 71 - 118 |          | 10/08/15 16:24 | 12.5    |
| 4-Bromofluorobenzene (Surr)  | 91        |           | 70 - 118 |          | 10/08/15 16:24 | 12.5    |
| Dibromofluoromethane (Surr)  | 102       |           | 70 - 128 |          | 10/08/15 16:24 | 12.5    |

TestAmerica Pittsburgh

# Client Sample Results

Client: Groundwater Sciences Corporation  
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48309-1

## Method: 8260C - Volatile Organic Compounds (GC/MS)

Client Sample ID: HD-MW-143S-0/1-0

Date Collected: 09/30/15 14:02

Date Received: 10/01/15 09:30

Lab Sample ID: 180-48309-2

Matrix: Water

| Analyte                     | Result | Qualifier | RL  | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|-------|------|---|----------|----------------|---------|
| Chloromethane               | ND     |           | 1.0 | 0.28  | ug/L |   |          | 10/07/15 20:03 | 1       |
| Vinyl chloride              | ND     |           | 1.0 | 0.23  | ug/L |   |          | 10/07/15 20:03 | 1       |
| Bromomethane                | ND     | ^c        | 1.0 | 0.31  | ug/L |   |          | 10/07/15 20:03 | 1       |
| Chloroethane                | ND     |           | 1.0 | 0.21  | ug/L |   |          | 10/07/15 20:03 | 1       |
| 1,1-Dichloroethene          | ND     |           | 1.0 | 0.30  | ug/L |   |          | 10/07/15 20:03 | 1       |
| Acetone                     | ND     |           | 5.0 | 2.5   | ug/L |   |          | 10/07/15 20:03 | 1       |
| Carbon disulfide            | ND     |           | 1.0 | 0.21  | ug/L |   |          | 10/07/15 20:03 | 1       |
| Methylene Chloride          | ND     |           | 1.0 | 0.13  | ug/L |   |          | 10/07/15 20:03 | 1       |
| trans-1,2-Dichloroethene    | ND     |           | 1.0 | 0.17  | ug/L |   |          | 10/07/15 20:03 | 1       |
| Methyl tert-butyl ether     | ND     |           | 1.0 | 0.18  | ug/L |   |          | 10/07/15 20:03 | 1       |
| 1,1-Dichloroethane          | ND     |           | 1.0 | 0.12  | ug/L |   |          | 10/07/15 20:03 | 1       |
| cis-1,2-Dichloroethene      | ND     |           | 1.0 | 0.24  | ug/L |   |          | 10/07/15 20:03 | 1       |
| Bromochloromethane          | ND     |           | 1.0 | 0.18  | ug/L |   |          | 10/07/15 20:03 | 1       |
| 2-Butanone (MEK)            | ND     |           | 5.0 | 0.55  | ug/L |   |          | 10/07/15 20:03 | 1       |
| Chloroform                  | ND     |           | 1.0 | 0.17  | ug/L |   |          | 10/07/15 20:03 | 1       |
| 1,1,1-Trichloroethane       | ND     |           | 1.0 | 0.29  | ug/L |   |          | 10/07/15 20:03 | 1       |
| Carbon tetrachloride        | ND     |           | 1.0 | 0.14  | ug/L |   |          | 10/07/15 20:03 | 1       |
| Benzene                     | ND     |           | 1.0 | 0.11  | ug/L |   |          | 10/07/15 20:03 | 1       |
| 1,2-Dichloroethane          | ND     |           | 1.0 | 0.21  | ug/L |   |          | 10/07/15 20:03 | 1       |
| Trichloroethene             | 2.2    |           | 1.0 | 0.14  | ug/L |   |          | 10/07/15 20:03 | 1       |
| 1,2-Dichloropropane         | ND     |           | 1.0 | 0.095 | ug/L |   |          | 10/07/15 20:03 | 1       |
| Bromodichloromethane        | ND     |           | 1.0 | 0.13  | ug/L |   |          | 10/07/15 20:03 | 1       |
| cis-1,3-Dichloropropene     | ND     |           | 1.0 | 0.19  | ug/L |   |          | 10/07/15 20:03 | 1       |
| 4-Methyl-2-pentanone (MIBK) | ND     |           | 5.0 | 0.53  | ug/L |   |          | 10/07/15 20:03 | 1       |
| Toluene                     | ND     |           | 1.0 | 0.15  | ug/L |   |          | 10/07/15 20:03 | 1       |
| trans-1,3-Dichloropropene   | ND     |           | 1.0 | 0.15  | ug/L |   |          | 10/07/15 20:03 | 1       |
| 1,1,2-Trichloroethane       | ND     |           | 1.0 | 0.20  | ug/L |   |          | 10/07/15 20:03 | 1       |
| Tetrachloroethene           | ND     |           | 1.0 | 0.15  | ug/L |   |          | 10/07/15 20:03 | 1       |
| 2-Hexanone                  | ND     | ^c        | 5.0 | 0.16  | ug/L |   |          | 10/07/15 20:03 | 1       |
| Dibromochloromethane        | ND     |           | 1.0 | 0.14  | ug/L |   |          | 10/07/15 20:03 | 1       |
| 1,2-Dibromoethane (EDB)     | ND     |           | 1.0 | 0.18  | ug/L |   |          | 10/07/15 20:03 | 1       |
| Chlorobenzene               | ND     |           | 1.0 | 0.14  | ug/L |   |          | 10/07/15 20:03 | 1       |
| 1,1,1,2-Tetrachloroethane   | ND     | ^c        | 1.0 | 0.28  | ug/L |   |          | 10/07/15 20:03 | 1       |
| Ethylbenzene                | ND     |           | 1.0 | 0.23  | ug/L |   |          | 10/07/15 20:03 | 1       |
| Xylenes, Total              | ND     |           | 3.0 | 0.49  | ug/L |   |          | 10/07/15 20:03 | 1       |
| Styrene                     | ND     | ^c        | 1.0 | 0.097 | ug/L |   |          | 10/07/15 20:03 | 1       |
| Bromoform                   | ND     | ^c        | 1.0 | 0.19  | ug/L |   |          | 10/07/15 20:03 | 1       |
| 1,1,2,2-Tetrachloroethane   | ND     |           | 1.0 | 0.20  | ug/L |   |          | 10/07/15 20:03 | 1       |
| Acrylonitrile               | ND     | ^c        | 20  | 0.55  | ug/L |   |          | 10/07/15 20:03 | 1       |
| 1,4-Dioxane                 | ND     | ^c        | 200 | 34    | ug/L |   |          | 10/07/15 20:03 | 1       |

| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 104       |           | 64 - 135 |          | 10/07/15 20:03 | 1       |
| Toluene-d8 (Surr)            | 104       |           | 71 - 118 |          | 10/07/15 20:03 | 1       |
| 4-Bromofluorobenzene (Surr)  | 87        |           | 70 - 118 |          | 10/07/15 20:03 | 1       |
| Dibromofluoromethane (Surr)  | 107       |           | 70 - 128 |          | 10/07/15 20:03 | 1       |

TestAmerica Pittsburgh

# Client Sample Results

Client: Groundwater Sciences Corporation  
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48309-1

## Method: 8260C - Volatile Organic Compounds (GC/MS)

Client Sample ID: HD-MW-143D-0/1-0

Date Collected: 09/30/15 12:42

Date Received: 10/01/15 09:30

Lab Sample ID: 180-48309-3

Matrix: Water

| Analyte                     | Result | Qualifier | RL  | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|-------|------|---|----------|----------------|---------|
| Chloromethane               | ND     |           | 1.0 | 0.28  | ug/L |   |          | 10/07/15 20:27 | 1       |
| Vinyl chloride              | ND     |           | 1.0 | 0.23  | ug/L |   |          | 10/07/15 20:27 | 1       |
| Bromomethane                | ND     | ^c        | 1.0 | 0.31  | ug/L |   |          | 10/07/15 20:27 | 1       |
| Chloroethane                | ND     |           | 1.0 | 0.21  | ug/L |   |          | 10/07/15 20:27 | 1       |
| 1,1-Dichloroethene          | ND     |           | 1.0 | 0.30  | ug/L |   |          | 10/07/15 20:27 | 1       |
| Acetone                     | ND     |           | 5.0 | 2.5   | ug/L |   |          | 10/07/15 20:27 | 1       |
| Carbon disulfide            | ND     |           | 1.0 | 0.21  | ug/L |   |          | 10/07/15 20:27 | 1       |
| Methylene Chloride          | ND     |           | 1.0 | 0.13  | ug/L |   |          | 10/07/15 20:27 | 1       |
| trans-1,2-Dichloroethene    | ND     |           | 1.0 | 0.17  | ug/L |   |          | 10/07/15 20:27 | 1       |
| Methyl tert-butyl ether     | ND     |           | 1.0 | 0.18  | ug/L |   |          | 10/07/15 20:27 | 1       |
| 1,1-Dichloroethane          | ND     |           | 1.0 | 0.12  | ug/L |   |          | 10/07/15 20:27 | 1       |
| cis-1,2-Dichloroethene      | 0.39   | J         | 1.0 | 0.24  | ug/L |   |          | 10/07/15 20:27 | 1       |
| Bromochloromethane          | ND     |           | 1.0 | 0.18  | ug/L |   |          | 10/07/15 20:27 | 1       |
| 2-Butanone (MEK)            | ND     |           | 5.0 | 0.55  | ug/L |   |          | 10/07/15 20:27 | 1       |
| Chloroform                  | ND     |           | 1.0 | 0.17  | ug/L |   |          | 10/07/15 20:27 | 1       |
| 1,1,1-Trichloroethane       | ND     |           | 1.0 | 0.29  | ug/L |   |          | 10/07/15 20:27 | 1       |
| Carbon tetrachloride        | ND     |           | 1.0 | 0.14  | ug/L |   |          | 10/07/15 20:27 | 1       |
| Benzene                     | ND     |           | 1.0 | 0.11  | ug/L |   |          | 10/07/15 20:27 | 1       |
| 1,2-Dichloroethane          | ND     |           | 1.0 | 0.21  | ug/L |   |          | 10/07/15 20:27 | 1       |
| Trichloroethene             | ND     |           | 1.0 | 0.14  | ug/L |   |          | 10/07/15 20:27 | 1       |
| 1,2-Dichloropropane         | ND     |           | 1.0 | 0.095 | ug/L |   |          | 10/07/15 20:27 | 1       |
| Bromodichloromethane        | ND     |           | 1.0 | 0.13  | ug/L |   |          | 10/07/15 20:27 | 1       |
| cis-1,3-Dichloropropene     | ND     |           | 1.0 | 0.19  | ug/L |   |          | 10/07/15 20:27 | 1       |
| 4-Methyl-2-pentanone (MIBK) | ND     |           | 5.0 | 0.53  | ug/L |   |          | 10/07/15 20:27 | 1       |
| Toluene                     | ND     |           | 1.0 | 0.15  | ug/L |   |          | 10/07/15 20:27 | 1       |
| trans-1,3-Dichloropropene   | ND     |           | 1.0 | 0.15  | ug/L |   |          | 10/07/15 20:27 | 1       |
| 1,1,2-Trichloroethane       | ND     |           | 1.0 | 0.20  | ug/L |   |          | 10/07/15 20:27 | 1       |
| Tetrachloroethene           | ND     |           | 1.0 | 0.15  | ug/L |   |          | 10/07/15 20:27 | 1       |
| 2-Hexanone                  | ND     | ^c        | 5.0 | 0.16  | ug/L |   |          | 10/07/15 20:27 | 1       |
| Dibromochloromethane        | ND     |           | 1.0 | 0.14  | ug/L |   |          | 10/07/15 20:27 | 1       |
| 1,2-Dibromoethane (EDB)     | ND     |           | 1.0 | 0.18  | ug/L |   |          | 10/07/15 20:27 | 1       |
| Chlorobenzene               | ND     |           | 1.0 | 0.14  | ug/L |   |          | 10/07/15 20:27 | 1       |
| 1,1,1,2-Tetrachloroethane   | ND     | ^c        | 1.0 | 0.28  | ug/L |   |          | 10/07/15 20:27 | 1       |
| Ethylbenzene                | ND     |           | 1.0 | 0.23  | ug/L |   |          | 10/07/15 20:27 | 1       |
| Xylenes, Total              | ND     |           | 3.0 | 0.49  | ug/L |   |          | 10/07/15 20:27 | 1       |
| Styrene                     | ND     | ^c        | 1.0 | 0.097 | ug/L |   |          | 10/07/15 20:27 | 1       |
| Bromoform                   | ND     | ^c        | 1.0 | 0.19  | ug/L |   |          | 10/07/15 20:27 | 1       |
| 1,1,2,2-Tetrachloroethane   | ND     |           | 1.0 | 0.20  | ug/L |   |          | 10/07/15 20:27 | 1       |
| Acrylonitrile               | ND     | ^c        | 20  | 0.55  | ug/L |   |          | 10/07/15 20:27 | 1       |
| 1,4-Dioxane                 | ND     | ^c        | 200 | 34    | ug/L |   |          | 10/07/15 20:27 | 1       |

| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 106       |           | 64 - 135 |          | 10/07/15 20:27 | 1       |
| Toluene-d8 (Surr)            | 101       |           | 71 - 118 |          | 10/07/15 20:27 | 1       |
| 4-Bromofluorobenzene (Surr)  | 86        |           | 70 - 118 |          | 10/07/15 20:27 | 1       |
| Dibromofluoromethane (Surr)  | 104       |           | 70 - 128 |          | 10/07/15 20:27 | 1       |

TestAmerica Pittsburgh

# Client Sample Results

Client: Groundwater Sciences Corporation  
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48309-1

## Method: 8260C - Volatile Organic Compounds (GC/MS)

Client Sample ID: HD-MW-20M-0/1-0

Date Collected: 09/30/15 08:45

Date Received: 10/01/15 09:30

Lab Sample ID: 180-48309-4

Matrix: Water

| Analyte                     | Result | Qualifier | RL  | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|-------|------|---|----------|----------------|---------|
| Chloromethane               | ND     |           | 1.0 | 0.28  | ug/L |   |          | 10/07/15 20:51 | 1       |
| Vinyl chloride              | ND     |           | 1.0 | 0.23  | ug/L |   |          | 10/07/15 20:51 | 1       |
| Bromomethane                | ND     | ^c        | 1.0 | 0.31  | ug/L |   |          | 10/07/15 20:51 | 1       |
| Chloroethane                | ND     |           | 1.0 | 0.21  | ug/L |   |          | 10/07/15 20:51 | 1       |
| 1,1-Dichloroethene          | ND     |           | 1.0 | 0.30  | ug/L |   |          | 10/07/15 20:51 | 1       |
| Acetone                     | ND     |           | 5.0 | 2.5   | ug/L |   |          | 10/07/15 20:51 | 1       |
| Carbon disulfide            | ND     |           | 1.0 | 0.21  | ug/L |   |          | 10/07/15 20:51 | 1       |
| Methylene Chloride          | ND     |           | 1.0 | 0.13  | ug/L |   |          | 10/07/15 20:51 | 1       |
| trans-1,2-Dichloroethene    | ND     |           | 1.0 | 0.17  | ug/L |   |          | 10/07/15 20:51 | 1       |
| Methyl tert-butyl ether     | ND     |           | 1.0 | 0.18  | ug/L |   |          | 10/07/15 20:51 | 1       |
| 1,1-Dichloroethane          | ND     |           | 1.0 | 0.12  | ug/L |   |          | 10/07/15 20:51 | 1       |
| cis-1,2-Dichloroethene      | ND     |           | 1.0 | 0.24  | ug/L |   |          | 10/07/15 20:51 | 1       |
| Bromochloromethane          | ND     |           | 1.0 | 0.18  | ug/L |   |          | 10/07/15 20:51 | 1       |
| 2-Butanone (MEK)            | ND     |           | 5.0 | 0.55  | ug/L |   |          | 10/07/15 20:51 | 1       |
| Chloroform                  | 1.0    |           | 1.0 | 0.17  | ug/L |   |          | 10/07/15 20:51 | 1       |
| 1,1,1-Trichloroethane       | ND     |           | 1.0 | 0.29  | ug/L |   |          | 10/07/15 20:51 | 1       |
| Carbon tetrachloride        | ND     |           | 1.0 | 0.14  | ug/L |   |          | 10/07/15 20:51 | 1       |
| Benzene                     | ND     |           | 1.0 | 0.11  | ug/L |   |          | 10/07/15 20:51 | 1       |
| 1,2-Dichloroethane          | ND     |           | 1.0 | 0.21  | ug/L |   |          | 10/07/15 20:51 | 1       |
| Trichloroethene             | 13     |           | 1.0 | 0.14  | ug/L |   |          | 10/07/15 20:51 | 1       |
| 1,2-Dichloropropane         | ND     |           | 1.0 | 0.095 | ug/L |   |          | 10/07/15 20:51 | 1       |
| Bromodichloromethane        | ND     |           | 1.0 | 0.13  | ug/L |   |          | 10/07/15 20:51 | 1       |
| cis-1,3-Dichloropropene     | ND     |           | 1.0 | 0.19  | ug/L |   |          | 10/07/15 20:51 | 1       |
| 4-Methyl-2-pentanone (MIBK) | ND     |           | 5.0 | 0.53  | ug/L |   |          | 10/07/15 20:51 | 1       |
| Toluene                     | ND     |           | 1.0 | 0.15  | ug/L |   |          | 10/07/15 20:51 | 1       |
| trans-1,3-Dichloropropene   | ND     |           | 1.0 | 0.15  | ug/L |   |          | 10/07/15 20:51 | 1       |
| 1,1,2-Trichloroethane       | ND     |           | 1.0 | 0.20  | ug/L |   |          | 10/07/15 20:51 | 1       |
| Tetrachloroethene           | 0.30   | J         | 1.0 | 0.15  | ug/L |   |          | 10/07/15 20:51 | 1       |
| 2-Hexanone                  | ND     | ^c        | 5.0 | 0.16  | ug/L |   |          | 10/07/15 20:51 | 1       |
| Dibromochloromethane        | ND     |           | 1.0 | 0.14  | ug/L |   |          | 10/07/15 20:51 | 1       |
| 1,2-Dibromoethane (EDB)     | ND     |           | 1.0 | 0.18  | ug/L |   |          | 10/07/15 20:51 | 1       |
| Chlorobenzene               | ND     |           | 1.0 | 0.14  | ug/L |   |          | 10/07/15 20:51 | 1       |
| 1,1,1,2-Tetrachloroethane   | ND     | ^c        | 1.0 | 0.28  | ug/L |   |          | 10/07/15 20:51 | 1       |
| Ethylbenzene                | ND     |           | 1.0 | 0.23  | ug/L |   |          | 10/07/15 20:51 | 1       |
| Xylenes, Total              | ND     |           | 3.0 | 0.49  | ug/L |   |          | 10/07/15 20:51 | 1       |
| Styrene                     | ND     | ^c        | 1.0 | 0.097 | ug/L |   |          | 10/07/15 20:51 | 1       |
| Bromoform                   | ND     | ^c        | 1.0 | 0.19  | ug/L |   |          | 10/07/15 20:51 | 1       |
| 1,1,2,2-Tetrachloroethane   | ND     |           | 1.0 | 0.20  | ug/L |   |          | 10/07/15 20:51 | 1       |
| Acrylonitrile               | ND     | ^c        | 20  | 0.55  | ug/L |   |          | 10/07/15 20:51 | 1       |
| 1,4-Dioxane                 | ND     | ^c        | 200 | 34    | ug/L |   |          | 10/07/15 20:51 | 1       |

| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 108       |           | 64 - 135 |          | 10/07/15 20:51 | 1       |
| Toluene-d8 (Surr)            | 108       |           | 71 - 118 |          | 10/07/15 20:51 | 1       |
| 4-Bromofluorobenzene (Surr)  | 91        |           | 70 - 118 |          | 10/07/15 20:51 | 1       |
| Dibromofluoromethane (Surr)  | 106       |           | 70 - 128 |          | 10/07/15 20:51 | 1       |

TestAmerica Pittsburgh

# Client Sample Results

Client: Groundwater Sciences Corporation  
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48309-1

## Method: 8260C - Volatile Organic Compounds (GC/MS)

Client Sample ID: HD-MW-92-0/1-0

Date Collected: 09/30/15 08:25

Date Received: 10/01/15 09:30

Lab Sample ID: 180-48309-5

Matrix: Water

| Analyte                     | Result | Qualifier | RL  | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|-------|------|---|----------|----------------|---------|
| Chloromethane               | ND     |           | 1.0 | 0.28  | ug/L |   |          | 10/07/15 23:42 | 1       |
| Vinyl chloride              | ND     |           | 1.0 | 0.23  | ug/L |   |          | 10/07/15 23:42 | 1       |
| Bromomethane                | ND     | ^c        | 1.0 | 0.31  | ug/L |   |          | 10/07/15 23:42 | 1       |
| Chloroethane                | ND     |           | 1.0 | 0.21  | ug/L |   |          | 10/07/15 23:42 | 1       |
| 1,1-Dichloroethene          | ND     |           | 1.0 | 0.30  | ug/L |   |          | 10/07/15 23:42 | 1       |
| Acetone                     | ND     |           | 5.0 | 2.5   | ug/L |   |          | 10/07/15 23:42 | 1       |
| Carbon disulfide            | ND     |           | 1.0 | 0.21  | ug/L |   |          | 10/07/15 23:42 | 1       |
| Methylene Chloride          | ND     |           | 1.0 | 0.13  | ug/L |   |          | 10/07/15 23:42 | 1       |
| trans-1,2-Dichloroethene    | ND     |           | 1.0 | 0.17  | ug/L |   |          | 10/07/15 23:42 | 1       |
| Methyl tert-butyl ether     | ND     |           | 1.0 | 0.18  | ug/L |   |          | 10/07/15 23:42 | 1       |
| 1,1-Dichloroethane          | ND     |           | 1.0 | 0.12  | ug/L |   |          | 10/07/15 23:42 | 1       |
| cis-1,2-Dichloroethene      | 0.31   | J         | 1.0 | 0.24  | ug/L |   |          | 10/07/15 23:42 | 1       |
| Bromochloromethane          | ND     |           | 1.0 | 0.18  | ug/L |   |          | 10/07/15 23:42 | 1       |
| 2-Butanone (MEK)            | ND     |           | 5.0 | 0.55  | ug/L |   |          | 10/07/15 23:42 | 1       |
| Chloroform                  | ND     |           | 1.0 | 0.17  | ug/L |   |          | 10/07/15 23:42 | 1       |
| 1,1,1-Trichloroethane       | ND     |           | 1.0 | 0.29  | ug/L |   |          | 10/07/15 23:42 | 1       |
| Carbon tetrachloride        | ND     |           | 1.0 | 0.14  | ug/L |   |          | 10/07/15 23:42 | 1       |
| Benzene                     | ND     |           | 1.0 | 0.11  | ug/L |   |          | 10/07/15 23:42 | 1       |
| 1,2-Dichloroethane          | ND     |           | 1.0 | 0.21  | ug/L |   |          | 10/07/15 23:42 | 1       |
| Trichloroethene             | 12     |           | 1.0 | 0.14  | ug/L |   |          | 10/07/15 23:42 | 1       |
| 1,2-Dichloropropane         | ND     |           | 1.0 | 0.095 | ug/L |   |          | 10/07/15 23:42 | 1       |
| Bromodichloromethane        | ND     |           | 1.0 | 0.13  | ug/L |   |          | 10/07/15 23:42 | 1       |
| cis-1,3-Dichloropropene     | ND     |           | 1.0 | 0.19  | ug/L |   |          | 10/07/15 23:42 | 1       |
| 4-Methyl-2-pentanone (MIBK) | ND     |           | 5.0 | 0.53  | ug/L |   |          | 10/07/15 23:42 | 1       |
| Toluene                     | ND     |           | 1.0 | 0.15  | ug/L |   |          | 10/07/15 23:42 | 1       |
| trans-1,3-Dichloropropene   | ND     |           | 1.0 | 0.15  | ug/L |   |          | 10/07/15 23:42 | 1       |
| 1,1,2-Trichloroethane       | ND     |           | 1.0 | 0.20  | ug/L |   |          | 10/07/15 23:42 | 1       |
| Tetrachloroethene           | 150    | E         | 1.0 | 0.15  | ug/L |   |          | 10/07/15 23:42 | 1       |
| 2-Hexanone                  | ND     | ^c        | 5.0 | 0.16  | ug/L |   |          | 10/07/15 23:42 | 1       |
| Dibromochloromethane        | ND     |           | 1.0 | 0.14  | ug/L |   |          | 10/07/15 23:42 | 1       |
| 1,2-Dibromoethane (EDB)     | ND     |           | 1.0 | 0.18  | ug/L |   |          | 10/07/15 23:42 | 1       |
| Chlorobenzene               | ND     |           | 1.0 | 0.14  | ug/L |   |          | 10/07/15 23:42 | 1       |
| 1,1,1,2-Tetrachloroethane   | ND     | ^c        | 1.0 | 0.28  | ug/L |   |          | 10/07/15 23:42 | 1       |
| Ethylbenzene                | ND     |           | 1.0 | 0.23  | ug/L |   |          | 10/07/15 23:42 | 1       |
| Xylenes, Total              | ND     |           | 3.0 | 0.49  | ug/L |   |          | 10/07/15 23:42 | 1       |
| Styrene                     | ND     | ^c        | 1.0 | 0.097 | ug/L |   |          | 10/07/15 23:42 | 1       |
| Bromoform                   | ND     | ^c        | 1.0 | 0.19  | ug/L |   |          | 10/07/15 23:42 | 1       |
| 1,1,2,2-Tetrachloroethane   | ND     |           | 1.0 | 0.20  | ug/L |   |          | 10/07/15 23:42 | 1       |
| Acrylonitrile               | ND     | ^c        | 20  | 0.55  | ug/L |   |          | 10/07/15 23:42 | 1       |
| 1,4-Dioxane                 | ND     | ^c        | 200 | 34    | ug/L |   |          | 10/07/15 23:42 | 1       |

| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 104       |           | 64 - 135 |          | 10/07/15 23:42 | 1       |
| Toluene-d8 (Surr)            | 103       |           | 71 - 118 |          | 10/07/15 23:42 | 1       |
| 4-Bromofluorobenzene (Surr)  | 85        |           | 70 - 118 |          | 10/07/15 23:42 | 1       |
| Dibromofluoromethane (Surr)  | 111       |           | 70 - 128 |          | 10/07/15 23:42 | 1       |

TestAmerica Pittsburgh

# Client Sample Results

Client: Groundwater Sciences Corporation  
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48309-1

## Method: 8260C - Volatile Organic Compounds (GC/MS)

Client Sample ID: HD-MW-64D-0/1-0

Date Collected: 09/30/15 12:40

Date Received: 10/01/15 09:30

Lab Sample ID: 180-48309-6

Matrix: Water

| Analyte                     | Result | Qualifier | RL  | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|------|------|---|----------|----------------|---------|
| Chloromethane               | ND     |           | 2.5 | 0.71 | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| Vinyl chloride              | ND     | ^c        | 2.5 | 0.57 | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| Bromomethane                | ND     | ^c        | 2.5 | 0.78 | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| Chloroethane                | ND     | ^c        | 2.5 | 0.54 | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| 1,1-Dichloroethene          | ND     |           | 2.5 | 0.74 | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| Acetone                     | ND     |           | 13  | 6.3  | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| Carbon disulfide            | ND     |           | 2.5 | 0.53 | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| Methylene Chloride          | ND     |           | 2.5 | 0.31 | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| trans-1,2-Dichloroethene    | ND     |           | 2.5 | 0.42 | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| Methyl tert-butyl ether     | ND     |           | 2.5 | 0.46 | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| 1,1-Dichloroethane          | ND     |           | 2.5 | 0.29 | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| cis-1,2-Dichloroethene      | ND     |           | 2.5 | 0.59 | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| Bromochloromethane          | ND     |           | 2.5 | 0.45 | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| 2-Butanone (MEK)            | ND     |           | 13  | 1.4  | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| Chloroform                  | ND     |           | 2.5 | 0.43 | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| 1,1,1-Trichloroethane       | ND     |           | 2.5 | 0.72 | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| Carbon tetrachloride        | ND     |           | 2.5 | 0.34 | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| Benzene                     | ND     |           | 2.5 | 0.26 | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| 1,2-Dichloroethane          | ND     |           | 2.5 | 0.53 | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| Trichloroethene             | 240    | E         | 2.5 | 0.36 | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| 1,2-Dichloropropane         | ND     |           | 2.5 | 0.24 | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| Bromodichloromethane        | ND     |           | 2.5 | 0.33 | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| cis-1,3-Dichloropropene     | ND     |           | 2.5 | 0.47 | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| 4-Methyl-2-pentanone (MIBK) | ND     |           | 13  | 1.3  | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| Toluene                     | ND     |           | 2.5 | 0.38 | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| trans-1,3-Dichloropropene   | ND     |           | 2.5 | 0.37 | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| 1,1,2-Trichloroethane       | ND     |           | 2.5 | 0.50 | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| Tetrachloroethene           | 420    | E         | 2.5 | 0.37 | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| 2-Hexanone                  | ND     |           | 13  | 0.40 | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| Dibromochloromethane        | ND     |           | 2.5 | 0.34 | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| 1,2-Dibromoethane (EDB)     | ND     |           | 2.5 | 0.45 | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| Chlorobenzene               | ND     |           | 2.5 | 0.34 | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| 1,1,1,2-Tetrachloroethane   | ND     |           | 2.5 | 0.69 | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| Ethylbenzene                | ND     |           | 2.5 | 0.57 | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| Xylenes, Total              | ND     |           | 7.5 | 1.2  | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| Styrene                     | ND     |           | 2.5 | 0.24 | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| Bromoform                   | ND     |           | 2.5 | 0.48 | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| 1,1,2,2-Tetrachloroethane   | ND     |           | 2.5 | 0.50 | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| Acrylonitrile               | ND     |           | 50  | 1.4  | ug/L |   |          | 10/08/15 22:50 | 2.5     |
| 1,4-Dioxane                 | ND     | ^c        | 500 | 86   | ug/L |   |          | 10/08/15 22:50 | 2.5     |

| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 100       |           | 64 - 135 |          | 10/08/15 22:50 | 2.5     |
| Toluene-d8 (Surr)            | 87        |           | 71 - 118 |          | 10/08/15 22:50 | 2.5     |
| 4-Bromofluorobenzene (Surr)  | 86        |           | 70 - 118 |          | 10/08/15 22:50 | 2.5     |
| Dibromofluoromethane (Surr)  | 112       |           | 70 - 128 |          | 10/08/15 22:50 | 2.5     |

TestAmerica Pittsburgh



# Client Sample Results

Client: Groundwater Sciences Corporation  
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48309-1

## Method: 8260C - Volatile Organic Compounds (GC/MS)

Client Sample ID: HD-QC12-0/1-2

Date Collected: 09/30/15 12:00

Date Received: 10/01/15 09:30

Lab Sample ID: 180-48309-7

Matrix: Water

| Analyte                     | Result | Qualifier | RL  | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|-----|-------|------|---|----------|----------------|---------|
| Chloromethane               | ND     |           | 1.0 | 0.28  | ug/L |   |          | 10/07/15 19:39 | 1       |
| Vinyl chloride              | ND     |           | 1.0 | 0.23  | ug/L |   |          | 10/07/15 19:39 | 1       |
| Bromomethane                | ND     | ^c        | 1.0 | 0.31  | ug/L |   |          | 10/07/15 19:39 | 1       |
| Chloroethane                | ND     |           | 1.0 | 0.21  | ug/L |   |          | 10/07/15 19:39 | 1       |
| 1,1-Dichloroethene          | ND     |           | 1.0 | 0.30  | ug/L |   |          | 10/07/15 19:39 | 1       |
| Acetone                     | ND     |           | 5.0 | 2.5   | ug/L |   |          | 10/07/15 19:39 | 1       |
| Carbon disulfide            | ND     |           | 1.0 | 0.21  | ug/L |   |          | 10/07/15 19:39 | 1       |
| Methylene Chloride          | ND     |           | 1.0 | 0.13  | ug/L |   |          | 10/07/15 19:39 | 1       |
| trans-1,2-Dichloroethene    | ND     |           | 1.0 | 0.17  | ug/L |   |          | 10/07/15 19:39 | 1       |
| Methyl tert-butyl ether     | ND     |           | 1.0 | 0.18  | ug/L |   |          | 10/07/15 19:39 | 1       |
| 1,1-Dichloroethane          | ND     |           | 1.0 | 0.12  | ug/L |   |          | 10/07/15 19:39 | 1       |
| cis-1,2-Dichloroethene      | ND     |           | 1.0 | 0.24  | ug/L |   |          | 10/07/15 19:39 | 1       |
| Bromochloromethane          | ND     |           | 1.0 | 0.18  | ug/L |   |          | 10/07/15 19:39 | 1       |
| 2-Butanone (MEK)            | ND     |           | 5.0 | 0.55  | ug/L |   |          | 10/07/15 19:39 | 1       |
| Chloroform                  | ND     |           | 1.0 | 0.17  | ug/L |   |          | 10/07/15 19:39 | 1       |
| 1,1,1-Trichloroethane       | ND     |           | 1.0 | 0.29  | ug/L |   |          | 10/07/15 19:39 | 1       |
| Carbon tetrachloride        | ND     |           | 1.0 | 0.14  | ug/L |   |          | 10/07/15 19:39 | 1       |
| Benzene                     | ND     |           | 1.0 | 0.11  | ug/L |   |          | 10/07/15 19:39 | 1       |
| 1,2-Dichloroethane          | ND     |           | 1.0 | 0.21  | ug/L |   |          | 10/07/15 19:39 | 1       |
| Trichloroethene             | ND     |           | 1.0 | 0.14  | ug/L |   |          | 10/07/15 19:39 | 1       |
| 1,2-Dichloropropane         | ND     |           | 1.0 | 0.095 | ug/L |   |          | 10/07/15 19:39 | 1       |
| Bromodichloromethane        | ND     |           | 1.0 | 0.13  | ug/L |   |          | 10/07/15 19:39 | 1       |
| cis-1,3-Dichloropropene     | ND     |           | 1.0 | 0.19  | ug/L |   |          | 10/07/15 19:39 | 1       |
| 4-Methyl-2-pentanone (MIBK) | ND     |           | 5.0 | 0.53  | ug/L |   |          | 10/07/15 19:39 | 1       |
| Toluene                     | ND     |           | 1.0 | 0.15  | ug/L |   |          | 10/07/15 19:39 | 1       |
| trans-1,3-Dichloropropene   | ND     |           | 1.0 | 0.15  | ug/L |   |          | 10/07/15 19:39 | 1       |
| 1,1,2-Trichloroethane       | ND     |           | 1.0 | 0.20  | ug/L |   |          | 10/07/15 19:39 | 1       |
| Tetrachloroethene           | ND     |           | 1.0 | 0.15  | ug/L |   |          | 10/07/15 19:39 | 1       |
| 2-Hexanone                  | ND     | ^c        | 5.0 | 0.16  | ug/L |   |          | 10/07/15 19:39 | 1       |
| Dibromochloromethane        | ND     |           | 1.0 | 0.14  | ug/L |   |          | 10/07/15 19:39 | 1       |
| 1,2-Dibromoethane (EDB)     | ND     |           | 1.0 | 0.18  | ug/L |   |          | 10/07/15 19:39 | 1       |
| Chlorobenzene               | ND     |           | 1.0 | 0.14  | ug/L |   |          | 10/07/15 19:39 | 1       |
| 1,1,1,2-Tetrachloroethane   | ND     | ^c        | 1.0 | 0.28  | ug/L |   |          | 10/07/15 19:39 | 1       |
| Ethylbenzene                | ND     |           | 1.0 | 0.23  | ug/L |   |          | 10/07/15 19:39 | 1       |
| Xylenes, Total              | ND     |           | 3.0 | 0.49  | ug/L |   |          | 10/07/15 19:39 | 1       |
| Styrene                     | ND     | ^c        | 1.0 | 0.097 | ug/L |   |          | 10/07/15 19:39 | 1       |
| Bromoform                   | ND     | ^c        | 1.0 | 0.19  | ug/L |   |          | 10/07/15 19:39 | 1       |
| 1,1,2,2-Tetrachloroethane   | ND     |           | 1.0 | 0.20  | ug/L |   |          | 10/07/15 19:39 | 1       |
| Acrylonitrile               | ND     | ^c        | 20  | 0.55  | ug/L |   |          | 10/07/15 19:39 | 1       |
| 1,4-Dioxane                 | ND     | ^c        | 200 | 34    | ug/L |   |          | 10/07/15 19:39 | 1       |

| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 105       |           | 64 - 135 |          | 10/07/15 19:39 | 1       |
| Toluene-d8 (Surr)            | 109       |           | 71 - 118 |          | 10/07/15 19:39 | 1       |
| 4-Bromofluorobenzene (Surr)  | 91        |           | 70 - 118 |          | 10/07/15 19:39 | 1       |
| Dibromofluoromethane (Surr)  | 106       |           | 70 - 128 |          | 10/07/15 19:39 | 1       |

TestAmerica Pittsburgh

# Client Sample Results

Client: Groundwater Sciences Corporation  
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48309-1

## Method: 8260C - Volatile Organic Compounds (GC/MS) - DL

Client Sample ID: HD-MW-92-0/1-0

Date Collected: 09/30/15 08:25

Date Received: 10/01/15 09:30

Lab Sample ID: 180-48309-5

Matrix: Water

| Analyte                     | Result | Qualifier | RL   | MDL  | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|--------|-----------|------|------|------|---|----------|----------------|---------|
| Chloromethane               | ND     |           | 10   | 2.8  | ug/L |   |          | 10/08/15 16:48 | 10      |
| Vinyl chloride              | ND     | ^c        | 10   | 2.3  | ug/L |   |          | 10/08/15 16:48 | 10      |
| Bromomethane                | ND     | ^c        | 10   | 3.1  | ug/L |   |          | 10/08/15 16:48 | 10      |
| Chloroethane                | ND     | ^c        | 10   | 2.1  | ug/L |   |          | 10/08/15 16:48 | 10      |
| 1,1-Dichloroethene          | ND     |           | 10   | 3.0  | ug/L |   |          | 10/08/15 16:48 | 10      |
| Acetone                     | ND     |           | 50   | 25   | ug/L |   |          | 10/08/15 16:48 | 10      |
| Carbon disulfide            | ND     |           | 10   | 2.1  | ug/L |   |          | 10/08/15 16:48 | 10      |
| Methylene Chloride          | ND     |           | 10   | 1.3  | ug/L |   |          | 10/08/15 16:48 | 10      |
| trans-1,2-Dichloroethene    | ND     |           | 10   | 1.7  | ug/L |   |          | 10/08/15 16:48 | 10      |
| Methyl tert-butyl ether     | ND     |           | 10   | 1.8  | ug/L |   |          | 10/08/15 16:48 | 10      |
| 1,1-Dichloroethane          | ND     |           | 10   | 1.2  | ug/L |   |          | 10/08/15 16:48 | 10      |
| cis-1,2-Dichloroethene      | ND     |           | 10   | 2.4  | ug/L |   |          | 10/08/15 16:48 | 10      |
| Bromochloromethane          | ND     |           | 10   | 1.8  | ug/L |   |          | 10/08/15 16:48 | 10      |
| 2-Butanone (MEK)            | ND     |           | 50   | 5.5  | ug/L |   |          | 10/08/15 16:48 | 10      |
| Chloroform                  | ND     |           | 10   | 1.7  | ug/L |   |          | 10/08/15 16:48 | 10      |
| 1,1,1-Trichloroethane       | ND     |           | 10   | 2.9  | ug/L |   |          | 10/08/15 16:48 | 10      |
| Carbon tetrachloride        | ND     |           | 10   | 1.4  | ug/L |   |          | 10/08/15 16:48 | 10      |
| Benzene                     | ND     |           | 10   | 1.1  | ug/L |   |          | 10/08/15 16:48 | 10      |
| 1,2-Dichloroethane          | ND     |           | 10   | 2.1  | ug/L |   |          | 10/08/15 16:48 | 10      |
| Trichloroethene             | 12     |           | 10   | 1.4  | ug/L |   |          | 10/08/15 16:48 | 10      |
| 1,2-Dichloropropane         | ND     |           | 10   | 0.95 | ug/L |   |          | 10/08/15 16:48 | 10      |
| Bromodichloromethane        | ND     |           | 10   | 1.3  | ug/L |   |          | 10/08/15 16:48 | 10      |
| cis-1,3-Dichloropropene     | ND     |           | 10   | 1.9  | ug/L |   |          | 10/08/15 16:48 | 10      |
| 4-Methyl-2-pentanone (MIBK) | ND     |           | 50   | 5.3  | ug/L |   |          | 10/08/15 16:48 | 10      |
| Toluene                     | ND     |           | 10   | 1.5  | ug/L |   |          | 10/08/15 16:48 | 10      |
| trans-1,3-Dichloropropene   | ND     |           | 10   | 1.5  | ug/L |   |          | 10/08/15 16:48 | 10      |
| 1,1,2-Trichloroethane       | ND     |           | 10   | 2.0  | ug/L |   |          | 10/08/15 16:48 | 10      |
| Tetrachloroethene           | 150    |           | 10   | 1.5  | ug/L |   |          | 10/08/15 16:48 | 10      |
| 2-Hexanone                  | ND     |           | 50   | 1.6  | ug/L |   |          | 10/08/15 16:48 | 10      |
| Dibromochloromethane        | ND     |           | 10   | 1.4  | ug/L |   |          | 10/08/15 16:48 | 10      |
| 1,2-Dibromoethane (EDB)     | ND     |           | 10   | 1.8  | ug/L |   |          | 10/08/15 16:48 | 10      |
| Chlorobenzene               | ND     |           | 10   | 1.4  | ug/L |   |          | 10/08/15 16:48 | 10      |
| 1,1,1,2-Tetrachloroethane   | ND     |           | 10   | 2.8  | ug/L |   |          | 10/08/15 16:48 | 10      |
| Ethylbenzene                | ND     |           | 10   | 2.3  | ug/L |   |          | 10/08/15 16:48 | 10      |
| Xylenes, Total              | ND     |           | 30   | 4.9  | ug/L |   |          | 10/08/15 16:48 | 10      |
| Styrene                     | ND     |           | 10   | 0.97 | ug/L |   |          | 10/08/15 16:48 | 10      |
| Bromoform                   | ND     |           | 10   | 1.9  | ug/L |   |          | 10/08/15 16:48 | 10      |
| 1,1,2,2-Tetrachloroethane   | ND     |           | 10   | 2.0  | ug/L |   |          | 10/08/15 16:48 | 10      |
| Acrylonitrile               | ND     |           | 200  | 5.5  | ug/L |   |          | 10/08/15 16:48 | 10      |
| 1,4-Dioxane                 | ND     | ^c        | 2000 | 340  | ug/L |   |          | 10/08/15 16:48 | 10      |

| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 95        |           | 64 - 135 |          | 10/08/15 16:48 | 10      |
| Toluene-d8 (Surr)            | 89        |           | 71 - 118 |          | 10/08/15 16:48 | 10      |
| 4-Bromofluorobenzene (Surr)  | 88        |           | 70 - 118 |          | 10/08/15 16:48 | 10      |
| Dibromofluoromethane (Surr)  | 101       |           | 70 - 128 |          | 10/08/15 16:48 | 10      |

TestAmerica Pittsburgh

# Client Sample Results

Client: Groundwater Sciences Corporation  
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48309-1

## Method: 8260C - Volatile Organic Compounds (GC/MS) - DL

Client Sample ID: HD-MW-64D-0/1-0

Date Collected: 09/30/15 12:40

Date Received: 10/01/15 09:30

Lab Sample ID: 180-48309-6

Matrix: Water

| Analyte                     | Result     | Qualifier | RL   | MDL | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|------------|-----------|------|-----|------|---|----------|----------------|---------|
| Chloromethane               | ND         |           | 25   | 7.1 | ug/L |   |          | 10/07/15 21:15 | 25      |
| Vinyl chloride              | ND         |           | 25   | 5.7 | ug/L |   |          | 10/07/15 21:15 | 25      |
| Bromomethane                | ND         | ^c        | 25   | 7.8 | ug/L |   |          | 10/07/15 21:15 | 25      |
| Chloroethane                | ND         |           | 25   | 5.4 | ug/L |   |          | 10/07/15 21:15 | 25      |
| 1,1-Dichloroethene          | ND         |           | 25   | 7.4 | ug/L |   |          | 10/07/15 21:15 | 25      |
| Acetone                     | ND         |           | 130  | 63  | ug/L |   |          | 10/07/15 21:15 | 25      |
| Carbon disulfide            | ND         |           | 25   | 5.3 | ug/L |   |          | 10/07/15 21:15 | 25      |
| Methylene Chloride          | ND         |           | 25   | 3.1 | ug/L |   |          | 10/07/15 21:15 | 25      |
| trans-1,2-Dichloroethene    | ND         |           | 25   | 4.2 | ug/L |   |          | 10/07/15 21:15 | 25      |
| Methyl tert-butyl ether     | ND         |           | 25   | 4.6 | ug/L |   |          | 10/07/15 21:15 | 25      |
| 1,1-Dichloroethane          | ND         |           | 25   | 2.9 | ug/L |   |          | 10/07/15 21:15 | 25      |
| cis-1,2-Dichloroethene      | ND         |           | 25   | 5.9 | ug/L |   |          | 10/07/15 21:15 | 25      |
| Bromochloromethane          | ND         |           | 25   | 4.5 | ug/L |   |          | 10/07/15 21:15 | 25      |
| 2-Butanone (MEK)            | ND         |           | 130  | 14  | ug/L |   |          | 10/07/15 21:15 | 25      |
| Chloroform                  | ND         |           | 25   | 4.3 | ug/L |   |          | 10/07/15 21:15 | 25      |
| 1,1,1-Trichloroethane       | ND         |           | 25   | 7.2 | ug/L |   |          | 10/07/15 21:15 | 25      |
| Carbon tetrachloride        | ND         |           | 25   | 3.4 | ug/L |   |          | 10/07/15 21:15 | 25      |
| Benzene                     | ND         |           | 25   | 2.6 | ug/L |   |          | 10/07/15 21:15 | 25      |
| 1,2-Dichloroethane          | ND         |           | 25   | 5.3 | ug/L |   |          | 10/07/15 21:15 | 25      |
| <b>Trichloroethene</b>      | <b>210</b> |           | 25   | 3.6 | ug/L |   |          | 10/07/15 21:15 | 25      |
| 1,2-Dichloropropane         | ND         |           | 25   | 2.4 | ug/L |   |          | 10/07/15 21:15 | 25      |
| Bromodichloromethane        | ND         |           | 25   | 3.3 | ug/L |   |          | 10/07/15 21:15 | 25      |
| cis-1,3-Dichloropropene     | ND         |           | 25   | 4.7 | ug/L |   |          | 10/07/15 21:15 | 25      |
| 4-Methyl-2-pentanone (MIBK) | ND         |           | 130  | 13  | ug/L |   |          | 10/07/15 21:15 | 25      |
| Toluene                     | ND         |           | 25   | 3.8 | ug/L |   |          | 10/07/15 21:15 | 25      |
| trans-1,3-Dichloropropene   | ND         |           | 25   | 3.7 | ug/L |   |          | 10/07/15 21:15 | 25      |
| 1,1,2-Trichloroethane       | ND         |           | 25   | 5.0 | ug/L |   |          | 10/07/15 21:15 | 25      |
| <b>Tetrachloroethene</b>    | <b>420</b> |           | 25   | 3.7 | ug/L |   |          | 10/07/15 21:15 | 25      |
| 2-Hexanone                  | ND         | ^c        | 130  | 4.0 | ug/L |   |          | 10/07/15 21:15 | 25      |
| Dibromochloromethane        | ND         |           | 25   | 3.4 | ug/L |   |          | 10/07/15 21:15 | 25      |
| 1,2-Dibromoethane (EDB)     | ND         |           | 25   | 4.5 | ug/L |   |          | 10/07/15 21:15 | 25      |
| Chlorobenzene               | ND         |           | 25   | 3.4 | ug/L |   |          | 10/07/15 21:15 | 25      |
| 1,1,1,2-Tetrachloroethane   | ND         | ^c        | 25   | 6.9 | ug/L |   |          | 10/07/15 21:15 | 25      |
| Ethylbenzene                | ND         |           | 25   | 5.7 | ug/L |   |          | 10/07/15 21:15 | 25      |
| Xylenes, Total              | ND         |           | 75   | 12  | ug/L |   |          | 10/07/15 21:15 | 25      |
| Styrene                     | ND         | ^c        | 25   | 2.4 | ug/L |   |          | 10/07/15 21:15 | 25      |
| Bromoform                   | ND         | ^c        | 25   | 4.8 | ug/L |   |          | 10/07/15 21:15 | 25      |
| 1,1,2,2-Tetrachloroethane   | ND         |           | 25   | 5.0 | ug/L |   |          | 10/07/15 21:15 | 25      |
| Acrylonitrile               | ND         | ^c        | 500  | 14  | ug/L |   |          | 10/07/15 21:15 | 25      |
| 1,4-Dioxane                 | ND         | ^c        | 5000 | 860 | ug/L |   |          | 10/07/15 21:15 | 25      |

| Surrogate                    | %Recovery | Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|-----------|-----------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 106       |           | 64 - 135 |          | 10/07/15 21:15 | 25      |
| Toluene-d8 (Surr)            | 98        |           | 71 - 118 |          | 10/07/15 21:15 | 25      |
| 4-Bromofluorobenzene (Surr)  | 83        |           | 70 - 118 |          | 10/07/15 21:15 | 25      |
| Dibromofluoromethane (Surr)  | 110       |           | 70 - 128 |          | 10/07/15 21:15 | 25      |

TestAmerica Pittsburgh

# Client Sample Results

Client: Groundwater Sciences Corporation  
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48309-1

## Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Client Sample ID: HD-MW-87-0/1-0

Date Collected: 09/30/15 10:37

Date Received: 10/01/15 09:30

Lab Sample ID: 180-48309-1

Matrix: Water

| Analyte     | Result | Qualifier | RL  | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-------------|--------|-----------|-----|-------|------|---|----------------|----------------|---------|
| 1,4-Dioxane | 9.7    |           | 1.9 | 0.049 | ug/L |   | 10/06/15 10:46 | 10/11/15 19:44 | 1       |

| Surrogate                   | %Recovery | Qualifier | Limits   | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------|-----------|----------|----------------|----------------|---------|
| 2-Fluorobiphenyl            | 59        |           | 28 - 109 | 10/06/15 10:46 | 10/11/15 19:44 | 1       |
| 2-Fluorophenol (Surr)       | 50        |           | 20 - 105 | 10/06/15 10:46 | 10/11/15 19:44 | 1       |
| 2,4,6-Tribromophenol (Surr) | 54        |           | 30 - 118 | 10/06/15 10:46 | 10/11/15 19:44 | 1       |
| Nitrobenzene-d5 (Surr)      | 60        |           | 27 - 114 | 10/06/15 10:46 | 10/11/15 19:44 | 1       |
| Phenol-d5 (Surr)            | 56        |           | 25 - 105 | 10/06/15 10:46 | 10/11/15 19:44 | 1       |
| Terphenyl-d14 (Surr)        | 76        |           | 20 - 118 | 10/06/15 10:46 | 10/11/15 19:44 | 1       |

## Default Detection Limits

Client: Groundwater Sciences Corporation  
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48309-1

### Method: 8260C - Volatile Organic Compounds (GC/MS)

| Analyte                     | RL  | MDL   | Units | Method |
|-----------------------------|-----|-------|-------|--------|
| 1,1,1,2-Tetrachloroethane   | 1.0 | 0.28  | ug/L  | 8260C  |
| 1,1,1-Trichloroethane       | 1.0 | 0.29  | ug/L  | 8260C  |
| 1,1,2,2-Tetrachloroethane   | 1.0 | 0.20  | ug/L  | 8260C  |
| 1,1,2-Trichloroethane       | 1.0 | 0.20  | ug/L  | 8260C  |
| 1,1-Dichloroethane          | 1.0 | 0.12  | ug/L  | 8260C  |
| 1,1-Dichloroethene          | 1.0 | 0.30  | ug/L  | 8260C  |
| 1,2-Dibromoethane (EDB)     | 1.0 | 0.18  | ug/L  | 8260C  |
| 1,2-Dichloroethane          | 1.0 | 0.21  | ug/L  | 8260C  |
| 1,2-Dichloropropane         | 1.0 | 0.095 | ug/L  | 8260C  |
| 1,4-Dioxane                 | 200 | 34    | ug/L  | 8260C  |
| 2-Butanone (MEK)            | 5.0 | 0.55  | ug/L  | 8260C  |
| 2-Hexanone                  | 5.0 | 0.16  | ug/L  | 8260C  |
| 4-Methyl-2-pentanone (MIBK) | 5.0 | 0.53  | ug/L  | 8260C  |
| Acetone                     | 5.0 | 2.5   | ug/L  | 8260C  |
| Acrylonitrile               | 20  | 0.55  | ug/L  | 8260C  |
| Benzene                     | 1.0 | 0.11  | ug/L  | 8260C  |
| Bromochloromethane          | 1.0 | 0.18  | ug/L  | 8260C  |
| Bromodichloromethane        | 1.0 | 0.13  | ug/L  | 8260C  |
| Bromoform                   | 1.0 | 0.19  | ug/L  | 8260C  |
| Bromomethane                | 1.0 | 0.31  | ug/L  | 8260C  |
| Carbon disulfide            | 1.0 | 0.21  | ug/L  | 8260C  |
| Carbon tetrachloride        | 1.0 | 0.14  | ug/L  | 8260C  |
| Chlorobenzene               | 1.0 | 0.14  | ug/L  | 8260C  |
| Chloroethane                | 1.0 | 0.21  | ug/L  | 8260C  |
| Chloroform                  | 1.0 | 0.17  | ug/L  | 8260C  |
| Chloromethane               | 1.0 | 0.28  | ug/L  | 8260C  |
| cis-1,2-Dichloroethene      | 1.0 | 0.24  | ug/L  | 8260C  |
| cis-1,3-Dichloropropene     | 1.0 | 0.19  | ug/L  | 8260C  |
| Dibromochloromethane        | 1.0 | 0.14  | ug/L  | 8260C  |
| Ethylbenzene                | 1.0 | 0.23  | ug/L  | 8260C  |
| Methyl tert-butyl ether     | 1.0 | 0.18  | ug/L  | 8260C  |
| Methylene Chloride          | 1.0 | 0.13  | ug/L  | 8260C  |
| Styrene                     | 1.0 | 0.097 | ug/L  | 8260C  |
| Tetrachloroethene           | 1.0 | 0.15  | ug/L  | 8260C  |
| Toluene                     | 1.0 | 0.15  | ug/L  | 8260C  |
| trans-1,2-Dichloroethene    | 1.0 | 0.17  | ug/L  | 8260C  |
| trans-1,3-Dichloropropene   | 1.0 | 0.15  | ug/L  | 8260C  |
| Trichloroethene             | 1.0 | 0.14  | ug/L  | 8260C  |
| Vinyl chloride              | 1.0 | 0.23  | ug/L  | 8260C  |
| Xylenes, Total              | 3.0 | 0.49  | ug/L  | 8260C  |

### Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

| Analyte     | RL  | MDL   | Units | Method   |
|-------------|-----|-------|-------|----------|
| 1,4-Dioxane | 2.0 | 0.052 | ug/L  | 8270D LL |

# Surrogate Summary

Client: Groundwater Sciences Corporation  
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48309-1

## Method: 8260C - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

| Lab Sample ID    | Client Sample ID   | Percent Surrogate Recovery (Acceptance Limits) |                 |                 |                  |
|------------------|--------------------|------------------------------------------------|-----------------|-----------------|------------------|
|                  |                    | 12DCE<br>(64-135)                              | TOL<br>(71-118) | BFB<br>(70-118) | DBFM<br>(70-128) |
| 180-48309-1      | HD-MW-87-0/1-0     | 91                                             | 93              | 91              | 102              |
| 180-48309-2      | HD-MW-143S-0/1-0   | 104                                            | 104             | 87              | 107              |
| 180-48309-3      | HD-MW-143D-0/1-0   | 106                                            | 101             | 86              | 104              |
| 180-48309-4      | HD-MW-20M-0/1-0    | 108                                            | 108             | 91              | 106              |
| 180-48309-5      | HD-MW-92-0/1-0     | 104                                            | 103             | 85              | 111              |
| 180-48309-5 - DL | HD-MW-92-0/1-0     | 95                                             | 89              | 88              | 101              |
| 180-48309-6 - DL | HD-MW-64D-0/1-0    | 106                                            | 98              | 83              | 110              |
| 180-48309-6      | HD-MW-64D-0/1-0    | 100                                            | 87              | 86              | 112              |
| 180-48309-7      | HD-QC12-0/1-2      | 105                                            | 109             | 91              | 106              |
| LCS 180-156189/8 | Lab Control Sample | 98                                             | 106             | 91              | 98               |
| LCS 180-156309/9 | Lab Control Sample | 90                                             | 102             | 96              | 103              |
| MB 180-156189/5  | Method Blank       | 101                                            | 102             | 86              | 101              |
| MB 180-156309/6  | Method Blank       | 90                                             | 91              | 92              | 100              |

### Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

## Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Matrix: Water

Prep Type: Total/NA

| Lab Sample ID      | Client Sample ID   | Percent Surrogate Recovery (Acceptance Limits) |                 |                 |                 |                 |                 |
|--------------------|--------------------|------------------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                    |                    | FBP<br>(28-109)                                | 2FP<br>(20-105) | TBP<br>(30-118) | NBZ<br>(27-114) | PHL<br>(25-105) | TPH<br>(20-118) |
| 180-48309-1        | HD-MW-87-0/1-0     | 59                                             | 50              | 54              | 60              | 56              | 76              |
| LCS 180-156027/2-A | Lab Control Sample | 66                                             | 67              | 73              | 68              | 67              | 78              |
| MB 180-156027/1-A  | Method Blank       | 60                                             | 64              | 58              | 62              | 64              | 71              |

### Surrogate Legend

FBP = 2-Fluorobiphenyl

2FP = 2-Fluorophenol (Surr)

TBP = 2,4,6-Tribromophenol (Surr)

NBZ = Nitrobenzene-d5 (Surr)

PHL = Phenol-d5 (Surr)

TPH = Terphenyl-d14 (Surr)

# QC Sample Results

Client: Groundwater Sciences Corporation  
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48309-1

## Method: 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 180-156189/5

Matrix: Water

Analysis Batch: 156189

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                     | MB Result | MB Qualifier | RL  | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|--------------|-----|-------|------|---|----------|----------------|---------|
| Chloromethane               | ND        |              | 1.0 | 0.28  | ug/L |   |          | 10/07/15 14:07 | 1       |
| Vinyl chloride              | ND        |              | 1.0 | 0.23  | ug/L |   |          | 10/07/15 14:07 | 1       |
| Bromomethane                | ND        |              | 1.0 | 0.31  | ug/L |   |          | 10/07/15 14:07 | 1       |
| Chloroethane                | ND        |              | 1.0 | 0.21  | ug/L |   |          | 10/07/15 14:07 | 1       |
| 1,1-Dichloroethene          | ND        |              | 1.0 | 0.30  | ug/L |   |          | 10/07/15 14:07 | 1       |
| Acetone                     | ND        |              | 5.0 | 2.5   | ug/L |   |          | 10/07/15 14:07 | 1       |
| Carbon disulfide            | ND        |              | 1.0 | 0.21  | ug/L |   |          | 10/07/15 14:07 | 1       |
| Methylene Chloride          | ND        |              | 1.0 | 0.13  | ug/L |   |          | 10/07/15 14:07 | 1       |
| trans-1,2-Dichloroethene    | ND        |              | 1.0 | 0.17  | ug/L |   |          | 10/07/15 14:07 | 1       |
| Methyl tert-butyl ether     | ND        |              | 1.0 | 0.18  | ug/L |   |          | 10/07/15 14:07 | 1       |
| 1,1-Dichloroethane          | ND        |              | 1.0 | 0.12  | ug/L |   |          | 10/07/15 14:07 | 1       |
| cis-1,2-Dichloroethene      | ND        |              | 1.0 | 0.24  | ug/L |   |          | 10/07/15 14:07 | 1       |
| Bromochloromethane          | ND        |              | 1.0 | 0.18  | ug/L |   |          | 10/07/15 14:07 | 1       |
| 2-Butanone (MEK)            | ND        |              | 5.0 | 0.55  | ug/L |   |          | 10/07/15 14:07 | 1       |
| Chloroform                  | ND        |              | 1.0 | 0.17  | ug/L |   |          | 10/07/15 14:07 | 1       |
| 1,1,1-Trichloroethane       | ND        |              | 1.0 | 0.29  | ug/L |   |          | 10/07/15 14:07 | 1       |
| Carbon tetrachloride        | ND        |              | 1.0 | 0.14  | ug/L |   |          | 10/07/15 14:07 | 1       |
| Benzene                     | ND        |              | 1.0 | 0.11  | ug/L |   |          | 10/07/15 14:07 | 1       |
| 1,2-Dichloroethane          | ND        |              | 1.0 | 0.21  | ug/L |   |          | 10/07/15 14:07 | 1       |
| Trichloroethene             | ND        |              | 1.0 | 0.14  | ug/L |   |          | 10/07/15 14:07 | 1       |
| 1,2-Dichloropropane         | ND        |              | 1.0 | 0.095 | ug/L |   |          | 10/07/15 14:07 | 1       |
| Bromodichloromethane        | ND        |              | 1.0 | 0.13  | ug/L |   |          | 10/07/15 14:07 | 1       |
| cis-1,3-Dichloropropene     | ND        |              | 1.0 | 0.19  | ug/L |   |          | 10/07/15 14:07 | 1       |
| 4-Methyl-2-pentanone (MIBK) | ND        |              | 5.0 | 0.53  | ug/L |   |          | 10/07/15 14:07 | 1       |
| Toluene                     | ND        |              | 1.0 | 0.15  | ug/L |   |          | 10/07/15 14:07 | 1       |
| trans-1,3-Dichloropropene   | ND        |              | 1.0 | 0.15  | ug/L |   |          | 10/07/15 14:07 | 1       |
| 1,1,2-Trichloroethane       | ND        |              | 1.0 | 0.20  | ug/L |   |          | 10/07/15 14:07 | 1       |
| Tetrachloroethene           | ND        |              | 1.0 | 0.15  | ug/L |   |          | 10/07/15 14:07 | 1       |
| 2-Hexanone                  | ND        |              | 5.0 | 0.16  | ug/L |   |          | 10/07/15 14:07 | 1       |
| Dibromochloromethane        | ND        |              | 1.0 | 0.14  | ug/L |   |          | 10/07/15 14:07 | 1       |
| 1,2-Dibromoethane (EDB)     | ND        |              | 1.0 | 0.18  | ug/L |   |          | 10/07/15 14:07 | 1       |
| Chlorobenzene               | ND        |              | 1.0 | 0.14  | ug/L |   |          | 10/07/15 14:07 | 1       |
| 1,1,1,2-Tetrachloroethane   | ND        |              | 1.0 | 0.28  | ug/L |   |          | 10/07/15 14:07 | 1       |
| Ethylbenzene                | ND        |              | 1.0 | 0.23  | ug/L |   |          | 10/07/15 14:07 | 1       |
| Xylenes, Total              | ND        |              | 3.0 | 0.49  | ug/L |   |          | 10/07/15 14:07 | 1       |
| Styrene                     | ND        |              | 1.0 | 0.097 | ug/L |   |          | 10/07/15 14:07 | 1       |
| Bromoform                   | ND        |              | 1.0 | 0.19  | ug/L |   |          | 10/07/15 14:07 | 1       |
| 1,1,2,2-Tetrachloroethane   | ND        |              | 1.0 | 0.20  | ug/L |   |          | 10/07/15 14:07 | 1       |
| Acrylonitrile               | ND        |              | 20  | 0.55  | ug/L |   |          | 10/07/15 14:07 | 1       |
| 1,4-Dioxane                 | ND        |              | 200 | 34    | ug/L |   |          | 10/07/15 14:07 | 1       |

| Surrogate                    | MB %Recovery | MB Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|--------------|--------------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 101          |              | 64 - 135 |          | 10/07/15 14:07 | 1       |
| Toluene-d8 (Surr)            | 102          |              | 71 - 118 |          | 10/07/15 14:07 | 1       |
| 4-Bromofluorobenzene (Surr)  | 86           |              | 70 - 118 |          | 10/07/15 14:07 | 1       |
| Dibromofluoromethane (Surr)  | 101          |              | 70 - 128 |          | 10/07/15 14:07 | 1       |

TestAmerica Pittsburgh

# QC Sample Results

Client: Groundwater Sciences Corporation  
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48309-1

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-156189/8

Matrix: Water

Analysis Batch: 156189

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                     | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------------------------|-------------|------------|---------------|------|---|------|--------------|
| Chloromethane               | 10.0        | 11.3       |               | ug/L |   | 113  | 50 - 139     |
| Vinyl chloride              | 10.0        | 9.97       |               | ug/L |   | 100  | 53 - 138     |
| Bromomethane                | 10.0        | 8.04       |               | ug/L |   | 80   | 33 - 150     |
| Chloroethane                | 10.0        | 8.97       |               | ug/L |   | 90   | 36 - 142     |
| 1,1-Dichloroethene          | 10.0        | 8.60       |               | ug/L |   | 86   | 65 - 136     |
| Acetone                     | 20.0        | 20.8       |               | ug/L |   | 104  | 22 - 150     |
| Carbon disulfide            | 10.0        | 8.38       |               | ug/L |   | 84   | 54 - 132     |
| Methylene Chloride          | 10.0        | 8.72       |               | ug/L |   | 87   | 63 - 129     |
| trans-1,2-Dichloroethene    | 10.0        | 8.87       |               | ug/L |   | 89   | 73 - 126     |
| Methyl tert-butyl ether     | 10.0        | 8.96       |               | ug/L |   | 90   | 64 - 123     |
| 1,1-Dichloroethane          | 10.0        | 9.57       |               | ug/L |   | 96   | 73 - 126     |
| cis-1,2-Dichloroethene      | 10.0        | 8.99       |               | ug/L |   | 90   | 70 - 120     |
| Bromochloromethane          | 10.0        | 10.0       |               | ug/L |   | 100  | 70 - 127     |
| 2-Butanone (MEK)            | 20.0        | 24.0       |               | ug/L |   | 120  | 39 - 138     |
| Chloroform                  | 10.0        | 8.87       |               | ug/L |   | 89   | 72 - 127     |
| 1,1,1-Trichloroethane       | 10.0        | 8.02       |               | ug/L |   | 80   | 63 - 133     |
| Carbon tetrachloride        | 10.0        | 8.84       |               | ug/L |   | 88   | 55 - 150     |
| Benzene                     | 10.0        | 9.97       |               | ug/L |   | 100  | 80 - 120     |
| 1,2-Dichloroethane          | 10.0        | 9.18       |               | ug/L |   | 92   | 68 - 132     |
| Trichloroethene             | 10.0        | 10.4       |               | ug/L |   | 104  | 73 - 120     |
| 1,2-Dichloropropane         | 10.0        | 10.7       |               | ug/L |   | 107  | 76 - 124     |
| Bromodichloromethane        | 10.0        | 9.15       |               | ug/L |   | 92   | 66 - 130     |
| cis-1,3-Dichloropropene     | 10.0        | 9.63       |               | ug/L |   | 96   | 66 - 120     |
| 4-Methyl-2-pentanone (MIBK) | 20.0        | 20.8       |               | ug/L |   | 104  | 45 - 145     |
| Toluene                     | 10.0        | 10.1       |               | ug/L |   | 101  | 80 - 123     |
| trans-1,3-Dichloropropene   | 10.0        | 8.94       |               | ug/L |   | 89   | 65 - 125     |
| 1,1,2-Trichloroethane       | 10.0        | 9.90       |               | ug/L |   | 99   | 77 - 127     |
| Tetrachloroethene           | 10.0        | 10.2       |               | ug/L |   | 102  | 70 - 135     |
| 2-Hexanone                  | 20.0        | 20.7       |               | ug/L |   | 103  | 25 - 132     |
| Dibromochloromethane        | 10.0        | 9.99       |               | ug/L |   | 100  | 60 - 140     |
| 1,2-Dibromoethane (EDB)     | 10.0        | 10.2       |               | ug/L |   | 102  | 74 - 123     |
| Chlorobenzene               | 10.0        | 10.2       |               | ug/L |   | 102  | 80 - 120     |
| 1,1,1,2-Tetrachloroethane   | 10.0        | 10.2       |               | ug/L |   | 102  | 63 - 140     |
| Ethylbenzene                | 10.0        | 9.50       |               | ug/L |   | 95   | 72 - 126     |
| Xylenes, Total              | 20.0        | 19.1       |               | ug/L |   | 95   | 76 - 128     |
| Styrene                     | 10.0        | 10.5       |               | ug/L |   | 105  | 71 - 127     |
| Bromoform                   | 10.0        | 10.8       |               | ug/L |   | 108  | 46 - 150     |
| 1,1,2,2-Tetrachloroethane   | 10.0        | 9.90       |               | ug/L |   | 99   | 62 - 125     |
| Acrylonitrile               | 100         | 125        |               | ug/L |   | 125  | 30 - 140     |
| 1,4-Dioxane                 | 200         | 223        |               | ug/L |   | 111  | 10 - 160     |

| Surrogate                    | LCS %Recovery | LCS Qualifier | Limits   |
|------------------------------|---------------|---------------|----------|
| 1,2-Dichloroethane-d4 (Surr) | 98            |               | 64 - 135 |
| Toluene-d8 (Surr)            | 106           |               | 71 - 118 |
| 4-Bromofluorobenzene (Surr)  | 91            |               | 70 - 118 |
| Dibromofluoromethane (Surr)  | 98            |               | 70 - 128 |



# QC Sample Results

Client: Groundwater Sciences Corporation  
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48309-1

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-156309/6

Matrix: Water

Analysis Batch: 156309

Client Sample ID: Method Blank

Prep Type: Total/NA

| Analyte                     | MB Result | MB Qualifier | RL  | MDL   | Unit | D | Prepared | Analyzed       | Dil Fac |
|-----------------------------|-----------|--------------|-----|-------|------|---|----------|----------------|---------|
| Chloromethane               | ND        |              | 1.0 | 0.28  | ug/L |   |          | 10/08/15 13:21 | 1       |
| Vinyl chloride              | ND        |              | 1.0 | 0.23  | ug/L |   |          | 10/08/15 13:21 | 1       |
| Bromomethane                | ND        |              | 1.0 | 0.31  | ug/L |   |          | 10/08/15 13:21 | 1       |
| Chloroethane                | ND        |              | 1.0 | 0.21  | ug/L |   |          | 10/08/15 13:21 | 1       |
| 1,1-Dichloroethene          | ND        |              | 1.0 | 0.30  | ug/L |   |          | 10/08/15 13:21 | 1       |
| Acetone                     | ND        |              | 5.0 | 2.5   | ug/L |   |          | 10/08/15 13:21 | 1       |
| Carbon disulfide            | ND        |              | 1.0 | 0.21  | ug/L |   |          | 10/08/15 13:21 | 1       |
| Methylene Chloride          | ND        |              | 1.0 | 0.13  | ug/L |   |          | 10/08/15 13:21 | 1       |
| trans-1,2-Dichloroethene    | ND        |              | 1.0 | 0.17  | ug/L |   |          | 10/08/15 13:21 | 1       |
| Methyl tert-butyl ether     | ND        |              | 1.0 | 0.18  | ug/L |   |          | 10/08/15 13:21 | 1       |
| 1,1-Dichloroethane          | ND        |              | 1.0 | 0.12  | ug/L |   |          | 10/08/15 13:21 | 1       |
| cis-1,2-Dichloroethene      | ND        |              | 1.0 | 0.24  | ug/L |   |          | 10/08/15 13:21 | 1       |
| Bromochloromethane          | ND        |              | 1.0 | 0.18  | ug/L |   |          | 10/08/15 13:21 | 1       |
| 2-Butanone (MEK)            | ND        |              | 5.0 | 0.55  | ug/L |   |          | 10/08/15 13:21 | 1       |
| Chloroform                  | ND        |              | 1.0 | 0.17  | ug/L |   |          | 10/08/15 13:21 | 1       |
| 1,1,1-Trichloroethane       | ND        |              | 1.0 | 0.29  | ug/L |   |          | 10/08/15 13:21 | 1       |
| Carbon tetrachloride        | ND        |              | 1.0 | 0.14  | ug/L |   |          | 10/08/15 13:21 | 1       |
| Benzene                     | ND        |              | 1.0 | 0.11  | ug/L |   |          | 10/08/15 13:21 | 1       |
| 1,2-Dichloroethane          | ND        |              | 1.0 | 0.21  | ug/L |   |          | 10/08/15 13:21 | 1       |
| Trichloroethene             | ND        |              | 1.0 | 0.14  | ug/L |   |          | 10/08/15 13:21 | 1       |
| 1,2-Dichloropropane         | ND        |              | 1.0 | 0.095 | ug/L |   |          | 10/08/15 13:21 | 1       |
| Bromodichloromethane        | ND        |              | 1.0 | 0.13  | ug/L |   |          | 10/08/15 13:21 | 1       |
| cis-1,3-Dichloropropene     | ND        |              | 1.0 | 0.19  | ug/L |   |          | 10/08/15 13:21 | 1       |
| 4-Methyl-2-pentanone (MIBK) | ND        |              | 5.0 | 0.53  | ug/L |   |          | 10/08/15 13:21 | 1       |
| Toluene                     | ND        |              | 1.0 | 0.15  | ug/L |   |          | 10/08/15 13:21 | 1       |
| trans-1,3-Dichloropropene   | ND        |              | 1.0 | 0.15  | ug/L |   |          | 10/08/15 13:21 | 1       |
| 1,1,2-Trichloroethane       | ND        |              | 1.0 | 0.20  | ug/L |   |          | 10/08/15 13:21 | 1       |
| Tetrachloroethene           | ND        |              | 1.0 | 0.15  | ug/L |   |          | 10/08/15 13:21 | 1       |
| 2-Hexanone                  | ND        |              | 5.0 | 0.16  | ug/L |   |          | 10/08/15 13:21 | 1       |
| Dibromochloromethane        | ND        |              | 1.0 | 0.14  | ug/L |   |          | 10/08/15 13:21 | 1       |
| 1,2-Dibromoethane (EDB)     | ND        |              | 1.0 | 0.18  | ug/L |   |          | 10/08/15 13:21 | 1       |
| Chlorobenzene               | ND        |              | 1.0 | 0.14  | ug/L |   |          | 10/08/15 13:21 | 1       |
| 1,1,1,2-Tetrachloroethane   | ND        |              | 1.0 | 0.28  | ug/L |   |          | 10/08/15 13:21 | 1       |
| Ethylbenzene                | ND        |              | 1.0 | 0.23  | ug/L |   |          | 10/08/15 13:21 | 1       |
| Xylenes, Total              | ND        |              | 3.0 | 0.49  | ug/L |   |          | 10/08/15 13:21 | 1       |
| Styrene                     | ND        |              | 1.0 | 0.097 | ug/L |   |          | 10/08/15 13:21 | 1       |
| Bromoform                   | ND        |              | 1.0 | 0.19  | ug/L |   |          | 10/08/15 13:21 | 1       |
| 1,1,2,2-Tetrachloroethane   | ND        |              | 1.0 | 0.20  | ug/L |   |          | 10/08/15 13:21 | 1       |
| Acrylonitrile               | ND        |              | 20  | 0.55  | ug/L |   |          | 10/08/15 13:21 | 1       |
| 1,4-Dioxane                 | ND        |              | 200 | 34    | ug/L |   |          | 10/08/15 13:21 | 1       |

| Surrogate                    | MB %Recovery | MB Qualifier | Limits   | Prepared | Analyzed       | Dil Fac |
|------------------------------|--------------|--------------|----------|----------|----------------|---------|
| 1,2-Dichloroethane-d4 (Surr) | 90           |              | 64 - 135 |          | 10/08/15 13:21 | 1       |
| Toluene-d8 (Surr)            | 91           |              | 71 - 118 |          | 10/08/15 13:21 | 1       |
| 4-Bromofluorobenzene (Surr)  | 92           |              | 70 - 118 |          | 10/08/15 13:21 | 1       |
| Dibromofluoromethane (Surr)  | 100          |              | 70 - 128 |          | 10/08/15 13:21 | 1       |

TestAmerica Pittsburgh

# QC Sample Results

Client: Groundwater Sciences Corporation  
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48309-1

## Method: 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-156309/9

Matrix: Water

Analysis Batch: 156309

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

| Analyte                     | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|-----------------------------|-------------|------------|---------------|------|---|------|--------------|
| Chloromethane               | 10.0        | 9.02       |               | ug/L |   | 90   | 50 - 139     |
| Vinyl chloride              | 10.0        | 7.57       |               | ug/L |   | 76   | 53 - 138     |
| Bromomethane                | 10.0        | 8.60       |               | ug/L |   | 86   | 33 - 150     |
| Chloroethane                | 10.0        | 6.91       |               | ug/L |   | 69   | 36 - 142     |
| 1,1-Dichloroethene          | 10.0        | 9.25       |               | ug/L |   | 92   | 65 - 136     |
| Acetone                     | 20.0        | 20.6       |               | ug/L |   | 103  | 22 - 150     |
| Carbon disulfide            | 10.0        | 8.90       |               | ug/L |   | 89   | 54 - 132     |
| Methylene Chloride          | 10.0        | 9.77       |               | ug/L |   | 98   | 63 - 129     |
| trans-1,2-Dichloroethene    | 10.0        | 9.37       |               | ug/L |   | 94   | 73 - 126     |
| Methyl tert-butyl ether     | 10.0        | 9.47       |               | ug/L |   | 95   | 64 - 123     |
| 1,1-Dichloroethane          | 10.0        | 8.74       |               | ug/L |   | 87   | 73 - 126     |
| cis-1,2-Dichloroethene      | 10.0        | 9.22       |               | ug/L |   | 92   | 70 - 120     |
| Bromochloromethane          | 10.0        | 10.7       |               | ug/L |   | 107  | 70 - 127     |
| 2-Butanone (MEK)            | 20.0        | 21.8       |               | ug/L |   | 109  | 39 - 138     |
| Chloroform                  | 10.0        | 9.19       |               | ug/L |   | 92   | 72 - 127     |
| 1,1,1-Trichloroethane       | 10.0        | 9.09       |               | ug/L |   | 91   | 63 - 133     |
| Carbon tetrachloride        | 10.0        | 9.75       |               | ug/L |   | 97   | 55 - 150     |
| Benzene                     | 10.0        | 9.47       |               | ug/L |   | 95   | 80 - 120     |
| 1,2-Dichloroethane          | 10.0        | 8.97       |               | ug/L |   | 90   | 68 - 132     |
| Trichloroethene             | 10.0        | 10.3       |               | ug/L |   | 103  | 73 - 120     |
| 1,2-Dichloropropane         | 10.0        | 9.63       |               | ug/L |   | 96   | 76 - 124     |
| Bromodichloromethane        | 10.0        | 9.29       |               | ug/L |   | 93   | 66 - 130     |
| cis-1,3-Dichloropropene     | 10.0        | 8.92       |               | ug/L |   | 89   | 66 - 120     |
| 4-Methyl-2-pentanone (MIBK) | 20.0        | 19.5       |               | ug/L |   | 98   | 45 - 145     |
| Toluene                     | 10.0        | 10.0       |               | ug/L |   | 100  | 80 - 123     |
| trans-1,3-Dichloropropene   | 10.0        | 8.85       |               | ug/L |   | 89   | 65 - 125     |
| 1,1,2-Trichloroethane       | 10.0        | 10.1       |               | ug/L |   | 101  | 77 - 127     |
| Tetrachloroethene           | 10.0        | 10.7       |               | ug/L |   | 107  | 70 - 135     |
| 2-Hexanone                  | 20.0        | 18.9       |               | ug/L |   | 95   | 25 - 132     |
| Dibromochloromethane        | 10.0        | 10.7       |               | ug/L |   | 107  | 60 - 140     |
| 1,2-Dibromoethane (EDB)     | 10.0        | 10.5       |               | ug/L |   | 105  | 74 - 123     |
| Chlorobenzene               | 10.0        | 10.4       |               | ug/L |   | 104  | 80 - 120     |
| 1,1,1,2-Tetrachloroethane   | 10.0        | 10.2       |               | ug/L |   | 102  | 63 - 140     |
| Ethylbenzene                | 10.0        | 10.2       |               | ug/L |   | 102  | 72 - 126     |
| Xylenes, Total              | 20.0        | 21.0       |               | ug/L |   | 105  | 76 - 128     |
| Styrene                     | 10.0        | 11.1       |               | ug/L |   | 111  | 71 - 127     |
| Bromoform                   | 10.0        | 11.0       |               | ug/L |   | 110  | 46 - 150     |
| 1,1,2,2-Tetrachloroethane   | 10.0        | 10.2       |               | ug/L |   | 102  | 62 - 125     |
| Acrylonitrile               | 100         | 102        |               | ug/L |   | 102  | 30 - 140     |
| 1,4-Dioxane                 | 200         | 258        |               | ug/L |   | 129  | 10 - 160     |

| Surrogate                    | LCS %Recovery | LCS Qualifier | Limits   |
|------------------------------|---------------|---------------|----------|
| 1,2-Dichloroethane-d4 (Surr) | 90            |               | 64 - 135 |
| Toluene-d8 (Surr)            | 102           |               | 71 - 118 |
| 4-Bromofluorobenzene (Surr)  | 96            |               | 70 - 118 |
| Dibromofluoromethane (Surr)  | 103           |               | 70 - 128 |

# QC Sample Results

Client: Groundwater Sciences Corporation  
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48309-1

## Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 180-156027/1-A

Matrix: Water

Analysis Batch: 156466

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 156027

| Analyte                     | MB<br>Result    | MB<br>Qualifier | RL       | MDL   | Unit | D | Prepared       | Analyzed       | Dil Fac |
|-----------------------------|-----------------|-----------------|----------|-------|------|---|----------------|----------------|---------|
| 1,4-Dioxane                 | ND              |                 | 2.0      | 0.052 | ug/L |   | 10/06/15 10:44 | 10/09/15 09:46 | 1       |
| Surrogate                   | MB<br>%Recovery | MB<br>Qualifier | Limits   |       |      |   | Prepared       | Analyzed       | Dil Fac |
| 2-Fluorobiphenyl            | 60              |                 | 28 - 109 |       |      |   | 10/06/15 10:44 | 10/09/15 09:46 | 1       |
| 2-Fluorophenol (Surr)       | 64              |                 | 20 - 105 |       |      |   | 10/06/15 10:44 | 10/09/15 09:46 | 1       |
| 2,4,6-Tribromophenol (Surr) | 58              |                 | 30 - 118 |       |      |   | 10/06/15 10:44 | 10/09/15 09:46 | 1       |
| Nitrobenzene-d5 (Surr)      | 62              |                 | 27 - 114 |       |      |   | 10/06/15 10:44 | 10/09/15 09:46 | 1       |
| Phenol-d5 (Surr)            | 64              |                 | 25 - 105 |       |      |   | 10/06/15 10:44 | 10/09/15 09:46 | 1       |
| Terphenyl-d14 (Surr)        | 71              |                 | 20 - 118 |       |      |   | 10/06/15 10:44 | 10/09/15 09:46 | 1       |

Lab Sample ID: LCS 180-156027/2-A

Matrix: Water

Analysis Batch: 156466

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 156027

| Analyte                     |                  | Spike<br>Added   | LCS<br>Result | LCS<br>Qualifier | Unit | D | %Rec | %Rec.<br>Limits |
|-----------------------------|------------------|------------------|---------------|------------------|------|---|------|-----------------|
| 1,4-Dioxane                 |                  | 20.0             | 14.4          |                  | ug/L |   | 72   | 36 - 100        |
| Surrogate                   | LCS<br>%Recovery | LCS<br>Qualifier | Limits        |                  |      |   |      |                 |
| 2-Fluorobiphenyl            | 66               |                  | 28 - 109      |                  |      |   |      |                 |
| 2-Fluorophenol (Surr)       | 67               |                  | 20 - 105      |                  |      |   |      |                 |
| 2,4,6-Tribromophenol (Surr) | 73               |                  | 30 - 118      |                  |      |   |      |                 |
| Nitrobenzene-d5 (Surr)      | 68               |                  | 27 - 114      |                  |      |   |      |                 |
| Phenol-d5 (Surr)            | 67               |                  | 25 - 105      |                  |      |   |      |                 |
| Terphenyl-d14 (Surr)        | 78               |                  | 20 - 118      |                  |      |   |      |                 |

# QC Association Summary

Client: Groundwater Sciences Corporation  
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48309-1

## GC/MS VOA

### Analysis Batch: 156189

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|--------|------------|
| 180-48309-2      | HD-MW-143S-0/1-0   | Total/NA  | Water  | 8260C  |            |
| 180-48309-3      | HD-MW-143D-0/1-0   | Total/NA  | Water  | 8260C  |            |
| 180-48309-4      | HD-MW-20M-0/1-0    | Total/NA  | Water  | 8260C  |            |
| 180-48309-5      | HD-MW-92-0/1-0     | Total/NA  | Water  | 8260C  |            |
| 180-48309-6 - DL | HD-MW-64D-0/1-0    | Total/NA  | Water  | 8260C  |            |
| 180-48309-7      | HD-QC12-0/1-2      | Total/NA  | Water  | 8260C  |            |
| LCS 180-156189/8 | Lab Control Sample | Total/NA  | Water  | 8260C  |            |
| MB 180-156189/5  | Method Blank       | Total/NA  | Water  | 8260C  |            |

### Analysis Batch: 156309

| Lab Sample ID    | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|------------------|--------------------|-----------|--------|--------|------------|
| 180-48309-1      | HD-MW-87-0/1-0     | Total/NA  | Water  | 8260C  |            |
| 180-48309-5 - DL | HD-MW-92-0/1-0     | Total/NA  | Water  | 8260C  |            |
| 180-48309-6      | HD-MW-64D-0/1-0    | Total/NA  | Water  | 8260C  |            |
| LCS 180-156309/9 | Lab Control Sample | Total/NA  | Water  | 8260C  |            |
| MB 180-156309/6  | Method Blank       | Total/NA  | Water  | 8260C  |            |

## GC/MS Semi VOA

### Prep Batch: 156027

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method | Prep Batch |
|--------------------|--------------------|-----------|--------|--------|------------|
| 180-48309-1        | HD-MW-87-0/1-0     | Total/NA  | Water  | 3520C  |            |
| LCS 180-156027/2-A | Lab Control Sample | Total/NA  | Water  | 3520C  |            |
| MB 180-156027/1-A  | Method Blank       | Total/NA  | Water  | 3520C  |            |

### Analysis Batch: 156466

| Lab Sample ID      | Client Sample ID   | Prep Type | Matrix | Method   | Prep Batch |
|--------------------|--------------------|-----------|--------|----------|------------|
| LCS 180-156027/2-A | Lab Control Sample | Total/NA  | Water  | 8270D LL | 156027     |
| MB 180-156027/1-A  | Method Blank       | Total/NA  | Water  | 8270D LL | 156027     |

### Analysis Batch: 156605

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method   | Prep Batch |
|---------------|------------------|-----------|--------|----------|------------|
| 180-48309-1   | HD-MW-87-0/1-0   | Total/NA  | Water  | 8270D LL | 156027     |

# Lab Chronicle

Client: Groundwater Sciences Corporation  
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48309-1

**Client Sample ID: HD-MW-87-0/1-0**

**Date Collected: 09/30/15 10:37**

**Date Received: 10/01/15 09:30**

**Lab Sample ID: 180-48309-1**

**Matrix: Water**

| Prep Type | Batch Type           | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|----------------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis             | 8260C        |     | 12.5       | 5 mL           | 5 mL         | 156309       | 10/08/15 16:24       | DLF     | TAL PIT |
|           | Instrument ID: CHHP5 |              |     |            |                |              |              |                      |         |         |
| Total/NA  | Prep                 | 3520C        |     |            | 270 mL         | 0.25 mL      | 156027       | 10/06/15 10:46       | BJT     | TAL PIT |
| Total/NA  | Analysis             | 8270D LL     |     | 1          | 270 mL         | 0.25 mL      | 156605       | 10/11/15 19:44       | VVP     | TAL PIT |
|           | Instrument ID: CH731 |              |     |            |                |              |              |                      |         |         |

**Client Sample ID: HD-MW-143S-0/1-0**

**Date Collected: 09/30/15 14:02**

**Date Received: 10/01/15 09:30**

**Lab Sample ID: 180-48309-2**

**Matrix: Water**

| Prep Type | Batch Type           | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|----------------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis             | 8260C        |     | 1          | 5 mL           | 5 mL         | 156189       | 10/07/15 20:03       | DLF     | TAL PIT |
|           | Instrument ID: CHHP6 |              |     |            |                |              |              |                      |         |         |

**Client Sample ID: HD-MW-143D-0/1-0**

**Date Collected: 09/30/15 12:42**

**Date Received: 10/01/15 09:30**

**Lab Sample ID: 180-48309-3**

**Matrix: Water**

| Prep Type | Batch Type           | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|----------------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis             | 8260C        |     | 1          | 5 mL           | 5 mL         | 156189       | 10/07/15 20:27       | DLF     | TAL PIT |
|           | Instrument ID: CHHP6 |              |     |            |                |              |              |                      |         |         |

**Client Sample ID: HD-MW-20M-0/1-0**

**Date Collected: 09/30/15 08:45**

**Date Received: 10/01/15 09:30**

**Lab Sample ID: 180-48309-4**

**Matrix: Water**

| Prep Type | Batch Type           | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|----------------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis             | 8260C        |     | 1          | 5 mL           | 5 mL         | 156189       | 10/07/15 20:51       | DLF     | TAL PIT |
|           | Instrument ID: CHHP6 |              |     |            |                |              |              |                      |         |         |

**Client Sample ID: HD-MW-92-0/1-0**

**Date Collected: 09/30/15 08:25**

**Date Received: 10/01/15 09:30**

**Lab Sample ID: 180-48309-5**

**Matrix: Water**

| Prep Type | Batch Type           | Batch Method | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|----------------------|--------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis             | 8260C        | DL  | 10         | 5 mL           | 5 mL         | 156309       | 10/08/15 16:48       | DLF     | TAL PIT |
|           | Instrument ID: CHHP5 |              |     |            |                |              |              |                      |         |         |
| Total/NA  | Analysis             | 8260C        |     | 1          | 5 mL           | 5 mL         | 156189       | 10/07/15 23:42       | DLF     | TAL PIT |
|           | Instrument ID: CHHP6 |              |     |            |                |              |              |                      |         |         |

# Lab Chronicle

Client: Groundwater Sciences Corporation  
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48309-1

**Client Sample ID: HD-MW-64D-0/1-0**

**Date Collected: 09/30/15 12:40**

**Date Received: 10/01/15 09:30**

**Lab Sample ID: 180-48309-6**

**Matrix: Water**

| Prep Type | Batch Type | Batch Method         | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|----------------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | 8260C                |     | 2.5        | 5 mL           | 5 mL         | 156309       | 10/08/15 22:50       | DLF     | TAL PIT |
|           |            | Instrument ID: CHHP5 |     |            |                |              |              |                      |         |         |
| Total/NA  | Analysis   | 8260C                | DL  | 25         | 5 mL           | 5 mL         | 156189       | 10/07/15 21:15       | DLF     | TAL PIT |
|           |            | Instrument ID: CHHP6 |     |            |                |              |              |                      |         |         |

**Client Sample ID: HD-QC12-0/1-2**

**Date Collected: 09/30/15 12:00**

**Date Received: 10/01/15 09:30**

**Lab Sample ID: 180-48309-7**

**Matrix: Water**

| Prep Type | Batch Type | Batch Method         | Run | Dil Factor | Initial Amount | Final Amount | Batch Number | Prepared or Analyzed | Analyst | Lab     |
|-----------|------------|----------------------|-----|------------|----------------|--------------|--------------|----------------------|---------|---------|
| Total/NA  | Analysis   | 8260C                |     | 1          | 5 mL           | 5 mL         | 156189       | 10/07/15 19:39       | DLF     | TAL PIT |
|           |            | Instrument ID: CHHP6 |     |            |                |              |              |                      |         |         |

## Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

## Analyst References:

Lab: TAL PIT

Batch Type: Prep

BJT = Bill Trout

Batch Type: Analysis

DLF = Donald Ferguson

VVP = Vincent Piccolino

Certification Summary

Client: Groundwater Sciences Corporation  
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48309-1

Laboratory: TestAmerica Pittsburgh

The certifications listed below are applicable to this report.

| Authority    | Program | EPA Region | Certification ID | Expiration Date |
|--------------|---------|------------|------------------|-----------------|
| Pennsylvania | NELAP   | 3          | 02-00416         | 04-30-16        |

## Method Summary

Client: Groundwater Sciences Corporation  
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48309-1

| Method   | Method Description                                  | Protocol | Laboratory |
|----------|-----------------------------------------------------|----------|------------|
| 8260C    | Volatile Organic Compounds (GC/MS)                  | SW846    | TAL PIT    |
| 8270D LL | Semivolatile Organic Compounds by GC/MS - Low Level | SW846    | TAL PIT    |

**Protocol References:**

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058



# Sample Summary

Client: Groundwater Sciences Corporation  
Project/Site: Harley Davidson

TestAmerica Job ID: 180-48309-1

| Lab Sample ID | Client Sample ID | Matrix | Collected      | Received       |
|---------------|------------------|--------|----------------|----------------|
| 180-48309-1   | HD-MW-87-0/1-0   | Water  | 09/30/15 10:37 | 10/01/15 09:30 |
| 180-48309-2   | HD-MW-143S-0/1-0 | Water  | 09/30/15 14:02 | 10/01/15 09:30 |
| 180-48309-3   | HD-MW-143D-0/1-0 | Water  | 09/30/15 12:42 | 10/01/15 09:30 |
| 180-48309-4   | HD-MW-20M-0/1-0  | Water  | 09/30/15 08:45 | 10/01/15 09:30 |
| 180-48309-5   | HD-MW-92-0/1-0   | Water  | 09/30/15 08:25 | 10/01/15 09:30 |
| 180-48309-6   | HD-MW-64D-0/1-0  | Water  | 09/30/15 12:40 | 10/01/15 09:30 |
| 180-48309-7   | HD-QC12-0/1-2    | Water  | 09/30/15 12:00 | 10/01/15 09:30 |

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

Instrument ID: CHHP5 Analysis Batch Number: 151868Lab Sample ID: IC 180-151868/6 Client Sample ID: \_\_\_\_\_Date Analyzed: 08/26/15 15:04 Lab File ID: 50826006.D GC Column: DB-624 ID: 0.18 (mm)

| COMPOUND NAME          | RETENTION<br>TIME | MANUAL INTEGRATION     |           |                |
|------------------------|-------------------|------------------------|-----------|----------------|
|                        |                   | REASON                 | ANALYST   | DATE           |
| Trichlorofluoromethane | 2.65              | Incomplete Integration | fergusond | 08/27/15 10:07 |
| Acetone                | 3.45              | Peak Tail              | fergusond | 08/27/15 10:07 |

Lab Sample ID: IC 180-151868/12 Client Sample ID: \_\_\_\_\_Date Analyzed: 08/26/15 17:04 Lab File ID: 50826012.D GC Column: DB-624 ID: 0.18 (mm)

| COMPOUND NAME | RETENTION<br>TIME | MANUAL INTEGRATION     |           |                |
|---------------|-------------------|------------------------|-----------|----------------|
|               |                   | REASON                 | ANALYST   | DATE           |
| 1,4-Dioxane   | 8.03              | Incomplete Integration | fergusond | 08/27/15 10:34 |

Lab Sample ID: IC 180-151868/14 Client Sample ID: \_\_\_\_\_Date Analyzed: 08/26/15 17:52 Lab File ID: 50826014.D GC Column: DB-624 ID: 0.18 (mm)

| COMPOUND NAME          | RETENTION<br>TIME | MANUAL INTEGRATION     |           |                |
|------------------------|-------------------|------------------------|-----------|----------------|
|                        |                   | REASON                 | ANALYST   | DATE           |
| Trichlorofluoromethane | 2.70              | Incomplete Integration | fergusond | 08/27/15 10:43 |

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

Instrument ID: CHHP5 Analysis Batch Number: 156309Lab Sample ID: CCVIS 180-156309/5 Client Sample ID: \_\_\_\_\_Date Analyzed: 10/08/15 12:33 Lab File ID: 51008005.D GC Column: DB-624 ID: 0.18 (mm)

| COMPOUND NAME | RETENTION<br>TIME | MANUAL INTEGRATION     |           |                |
|---------------|-------------------|------------------------|-----------|----------------|
|               |                   | REASON                 | ANALYST   | DATE           |
| 1,4-Dioxane   | 8.03              | Incomplete Integration | fergusond | 10/08/15 13:09 |

Lab Sample ID: 180-48309-1 Client Sample ID: HD-MW-87-0/1-0Date Analyzed: 10/08/15 16:24 Lab File ID: 51008013.D GC Column: DB-624 ID: 0.18 (mm)

| COMPOUND NAME | RETENTION<br>TIME | MANUAL INTEGRATION     |           |                |
|---------------|-------------------|------------------------|-----------|----------------|
|               |                   | REASON                 | ANALYST   | DATE           |
| Chloroform    | 6.38              | Incomplete Integration | fergusond | 10/09/15 08:29 |

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

Instrument ID: CHHP6 Analysis Batch Number: 149469Lab Sample ID: IC 180-149469/4 Client Sample ID: \_\_\_\_\_Date Analyzed: 07/31/15 14:00 Lab File ID: 60731004.D GC Column: DB-624 ID: 0.18 (mm)

| COMPOUND NAME | RETENTION<br>TIME | MANUAL INTEGRATION     |           |                |
|---------------|-------------------|------------------------|-----------|----------------|
|               |                   | REASON                 | ANALYST   | DATE           |
| Bromomethane  | 2.23              | Incomplete Integration | fergusond | 08/03/15 10:46 |
| 1,4-Dioxane   | 8.03              | Incomplete Integration | fergusond | 08/03/15 10:46 |

Lab Sample ID: ICIS 180-149469/5 Client Sample ID: \_\_\_\_\_Date Analyzed: 07/31/15 14:24 Lab File ID: 60731005.D GC Column: DB-624 ID: 0.18 (mm)

| COMPOUND NAME | RETENTION<br>TIME | MANUAL INTEGRATION |           |                |
|---------------|-------------------|--------------------|-----------|----------------|
|               |                   | REASON             | ANALYST   | DATE           |
| 1,4-Dioxane   | 8.03              | Peak Tail          | fergusond | 08/03/15 10:47 |

Lab Sample ID: IC 180-149469/7 Client Sample ID: \_\_\_\_\_Date Analyzed: 07/31/15 15:13 Lab File ID: 60731007.D GC Column: DB-624 ID: 0.18 (mm)

| COMPOUND NAME | RETENTION<br>TIME | MANUAL INTEGRATION |           |                |
|---------------|-------------------|--------------------|-----------|----------------|
|               |                   | REASON             | ANALYST   | DATE           |
| 1,4-Dioxane   | 8.03              | Peak Tail          | fergusond | 08/03/15 10:27 |

Lab Sample ID: IC 180-149469/8 Client Sample ID: \_\_\_\_\_Date Analyzed: 07/31/15 15:37 Lab File ID: 60731008.D GC Column: DB-624 ID: 0.18 (mm)

| COMPOUND NAME | RETENTION<br>TIME | MANUAL INTEGRATION |           |                |
|---------------|-------------------|--------------------|-----------|----------------|
|               |                   | REASON             | ANALYST   | DATE           |
| 1,4-Dioxane   | 8.03              | Peak Tail          | fergusond | 08/03/15 10:13 |

Lab Sample ID: IC 180-149469/9 Client Sample ID: \_\_\_\_\_Date Analyzed: 07/31/15 16:01 Lab File ID: 60731009.D GC Column: DB-624 ID: 0.18 (mm)

| COMPOUND NAME | RETENTION<br>TIME | MANUAL INTEGRATION |           |                |
|---------------|-------------------|--------------------|-----------|----------------|
|               |                   | REASON             | ANALYST   | DATE           |
| 1,4-Dioxane   | 8.03              | Peak Tail          | fergusond | 08/03/15 10:06 |

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

Instrument ID: CHHP6 Analysis Batch Number: 149469Lab Sample ID: IC 180-149469/10 Client Sample ID: \_\_\_\_\_Date Analyzed: 07/31/15 16:25 Lab File ID: 60731010.D GC Column: DB-624 ID: 0.18 (mm)

| COMPOUND NAME | RETENTION<br>TIME | MANUAL INTEGRATION |           |                |
|---------------|-------------------|--------------------|-----------|----------------|
|               |                   | REASON             | ANALYST   | DATE           |
| 1,4-Dioxane   | 8.03              | Peak Tail          | fergusond | 08/03/15 10:08 |

Lab Sample ID: IC 180-149469/14 Client Sample ID: \_\_\_\_\_Date Analyzed: 07/31/15 18:02 Lab File ID: 60731014.D GC Column: DB-624 ID: 0.18 (mm)

| COMPOUND NAME          | RETENTION<br>TIME | MANUAL INTEGRATION  |           |                |
|------------------------|-------------------|---------------------|-----------|----------------|
|                        |                   | REASON              | ANALYST   | DATE           |
| Trichlorofluoromethane | 2.68              | Poor chromatography | fergusond | 08/03/15 11:05 |
| Acetone                | 3.42              | Poor chromatography | fergusond | 08/03/15 11:05 |
| Acrylonitrile          | 4.51              | Poor chromatography | fergusond | 08/03/15 11:05 |
| 1,1,1-Trichloroethane  | 6.55              | Poor chromatography | fergusond | 08/03/15 11:05 |
| Isobutyl alcohol       | 6.90              | Poor chromatography | fergusond | 08/03/15 11:05 |

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

Instrument ID: CHHP6 Analysis Batch Number: 156189Lab Sample ID: LCS 180-156189/8 Client Sample ID: \_\_\_\_\_Date Analyzed: 10/07/15 15:36 Lab File ID: 61007008.D GC Column: DB-624 ID: 0.18 (mm)

| COMPOUND NAME | RETENTION<br>TIME | MANUAL INTEGRATION     |           |                |
|---------------|-------------------|------------------------|-----------|----------------|
|               |                   | REASON                 | ANALYST   | DATE           |
| 1,4-Dioxane   | 8.03              | Incomplete Integration | fergusond | 10/07/15 15:59 |

Lab Sample ID: 180-48309-7 Client Sample ID: HD-QC12-0/1-2Date Analyzed: 10/07/15 19:39 Lab File ID: 61007018.D GC Column: DB-624 ID: 0.18 (mm)

| COMPOUND NAME | RETENTION<br>TIME | MANUAL INTEGRATION     |           |                |
|---------------|-------------------|------------------------|-----------|----------------|
|               |                   | REASON                 | ANALYST   | DATE           |
| Chloromethane | 1.77              | Incomplete Integration | fergusond | 10/08/15 08:52 |

Lab Sample ID: 180-48309-2 Client Sample ID: HD-MW-143S-0/1-0Date Analyzed: 10/07/15 20:03 Lab File ID: 61007019.D GC Column: DB-624 ID: 0.18 (mm)

| COMPOUND NAME | RETENTION<br>TIME | MANUAL INTEGRATION     |           |                |
|---------------|-------------------|------------------------|-----------|----------------|
|               |                   | REASON                 | ANALYST   | DATE           |
| Chloromethane | 1.76              | Incomplete Integration | fergusond | 10/08/15 08:53 |

Lab Sample ID: 180-48309-3 Client Sample ID: HD-MW-143D-0/1-0Date Analyzed: 10/07/15 20:27 Lab File ID: 61007020.D GC Column: DB-624 ID: 0.18 (mm)

| COMPOUND NAME   | RETENTION<br>TIME | MANUAL INTEGRATION     |           |                |
|-----------------|-------------------|------------------------|-----------|----------------|
|                 |                   | REASON                 | ANALYST   | DATE           |
| Trichloroethene | 7.67              | Incomplete Integration | fergusond | 10/08/15 08:54 |

Lab Sample ID: 180-48309-4 Client Sample ID: HD-MW-20M-0/1-0Date Analyzed: 10/07/15 20:51 Lab File ID: 61007021.D GC Column: DB-624 ID: 0.18 (mm)

| COMPOUND NAME | RETENTION<br>TIME | MANUAL INTEGRATION     |           |                |
|---------------|-------------------|------------------------|-----------|----------------|
|               |                   | REASON                 | ANALYST   | DATE           |
| Chloromethane | 1.76              | Incomplete Integration | fergusond | 10/08/15 08:55 |

## GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

Instrument ID: CHHP6 Analysis Batch Number: 156189Lab Sample ID: 180-48309-5 Client Sample ID: HD-MW-92-0/1-0Date Analyzed: 10/07/15 23:42 Lab File ID: 61007028.D GC Column: DB-624 ID: 0.18 (mm)

| COMPOUND NAME          | RETENTION<br>TIME | MANUAL INTEGRATION     |           |                |
|------------------------|-------------------|------------------------|-----------|----------------|
|                        |                   | REASON                 | ANALYST   | DATE           |
| Chloromethane          | 1.76              | Incomplete Integration | fergusond | 10/08/15 09:01 |
| cis-1,2-Dichloroethene | 5.94              | Incomplete Integration | fergusond | 10/08/15 09:01 |

## GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

Instrument ID: CH731 Analysis Batch Number: 152241Lab Sample ID: IC 180-152241/3 Client Sample ID: \_\_\_\_\_Date Analyzed: 08/31/15 13:40 Lab File ID: V0901003.D GC Column: Rxi-5SilMS ID: 0.32 (mm)

| COMPOUND NAME                  | RETENTION TIME | MANUAL INTEGRATION  |                |                |
|--------------------------------|----------------|---------------------|----------------|----------------|
|                                |                | REASON              | ANALYST        | DATE           |
| 1,4-Dioxane                    | 1.43           | Poor chromatography | piccolino<br>v | 09/01/15 04:09 |
| N-Nitrosodimethylamine         | 2.08           | Poor chromatography | piccolino<br>v | 09/01/15 04:09 |
| Pyridine                       | 2.17           | Poor chromatography | piccolino<br>v | 09/01/15 04:09 |
| Benzoic acid                   | 7.21           | Poor chromatography | piccolino<br>v | 09/01/15 04:09 |
| Benzidine                      | 11.96          | Poor chromatography | piccolino<br>v | 09/01/15 04:09 |
| Bis(2-ethylhexyl) phthalate    | 14.04          | Poor chromatography | piccolino<br>v | 09/01/15 04:09 |
| Di-n-octyl phthalate           | 15.36          | Poor chromatography | piccolino<br>v | 09/01/15 04:09 |
| 7,12-Dimethylbenz(a)anthracene | 16.20          | Poor chromatography | piccolino<br>v | 09/01/15 04:09 |
| Benzo[e]pyrene                 | 16.80          | Poor chromatography | piccolino<br>v | 09/01/15 04:09 |
| Dibenz(a,h)anthracene          | 19.31          | Poor chromatography | piccolino<br>v | 09/01/15 04:09 |
| Benzo[g,h,i]perylene           | 19.89          | Poor chromatography | piccolino<br>v | 09/01/15 04:09 |

Lab Sample ID: IC 180-152241/4 Client Sample ID: \_\_\_\_\_Date Analyzed: 08/31/15 14:08 Lab File ID: V0901004.D GC Column: Rxi-5SilMS ID: 0.32 (mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION  |                |                |
|---------------|----------------|---------------------|----------------|----------------|
|               |                | REASON              | ANALYST        | DATE           |
| Benzoic acid  | 7.21           | Poor chromatography | piccolino<br>v | 09/01/15 04:10 |



## GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

Instrument ID: CH731 Analysis Batch Number: 152241Lab Sample ID: IC 180-152241/5 Client Sample ID: \_\_\_\_\_Date Analyzed: 08/31/15 14:36 Lab File ID: V0901005.D GC Column: Rxi-5SilMS ID: 0.32 (mm)

| COMPOUND NAME | RETENTION<br>TIME | MANUAL INTEGRATION  |                |                |
|---------------|-------------------|---------------------|----------------|----------------|
|               |                   | REASON              | ANALYST        | DATE           |
| Benzoic acid  | 7.19              | Poor chromatography | piccolino<br>v | 09/01/15 04:11 |

Lab Sample ID: ICIS 180-152241/6 Client Sample ID: \_\_\_\_\_Date Analyzed: 08/31/15 15:03 Lab File ID: V0901006.D GC Column: Rxi-5SilMS ID: 0.32 (mm)

| COMPOUND NAME | RETENTION<br>TIME | MANUAL INTEGRATION  |                |                |
|---------------|-------------------|---------------------|----------------|----------------|
|               |                   | REASON              | ANALYST        | DATE           |
| Benzoic acid  | 7.20              | Poor chromatography | piccolino<br>v | 09/01/15 04:12 |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID          | Exp Date | Prep Date | Dilutant Used            | Reagent Final Volume | Parent Reagent |              | Analyte                      | Concentration |
|---------------------|----------|-----------|--------------------------|----------------------|----------------|--------------|------------------------------|---------------|
|                     |          |           |                          |                      | Reagent ID     | Volume Added |                              |               |
| OPLVISPKMIX1i_00044 | 03/23/16 | 09/23/15  | Methanol, Lot 0000082533 | 100 mL               | SVLVstd1_00036 | 20 mL        | 1,1'-Biphenyl                | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | 1,2,4,5-Tetrachlorobenzene   | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | 1,2,4-Trichlorobenzene       | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | 1,2-Dichlorobenzene          | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | 1,2-Diphenylhydrazine        | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | 1,3-Dichlorobenzene          | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | 1,3-Dinitrobenzene           | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | 1,4-Dichlorobenzene          | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | 1,4-Dioxane                  | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | 1-Methylnaphthalene          | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | 2,2'-oxybis[1-chloropropane] | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | 2,3,4,6-Tetrachlorophenol    | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | 2,4,5-Trichlorophenol        | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | 2,4,6-Trichlorophenol        | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | 2,4-Dichlorophenol           | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | 2,4-Dimethylphenol           | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | 2,4-Dinitrophenol            | 400 ug/mL     |
|                     |          |           |                          |                      |                |              | 2,4-Dinitrotoluene           | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | 2,6-Dichlorophenol           | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | 2,6-Dinitrotoluene           | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | 2-Chloronaphthalene          | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | 2-Chlorophenol               | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | 2-Methylnaphthalene          | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | 2-Methylphenol               | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | 2-Nitroaniline               | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | 2-Nitrophenol                | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | 3 & 4 Methylphenol           | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | 3-Nitroaniline               | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | 4,6-Dinitro-2-methylphenol   | 400 ug/mL     |
|                     |          |           |                          |                      |                |              | 4-Bromophenyl phenyl ether   | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | 4-Chloro-3-methylphenol      | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | 4-Chloroaniline              | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | 4-Chlorophenyl phenyl ether  | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | 4-Methylphenol               | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | 4-Nitroaniline               | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | 4-Nitrophenol                | 400 ug/mL     |
|                     |          |           |                          |                      |                |              | Acenaphthene                 | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | Acenaphthylene               | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | Acetophenone                 | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | Aniline                      | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | Anthracene                   | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | Azobenzene                   | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | Benzo[a]anthracene           | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | Benzo[a]pyrene               | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | Benzo[b]fluoranthene         | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | Benzo[g,h,i]perylene         | 200 ug/mL     |
|                     |          |           |                          |                      |                |              | Benzo[k]fluoranthene         | 200 ug/mL     |

## REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID      | Exp Date | Prep Date            | Dilutant Used | Reagent Final Volume | Parent Reagent      |                            | Analyte                      | Concentration |
|-----------------|----------|----------------------|---------------|----------------------|---------------------|----------------------------|------------------------------|---------------|
|                 |          |                      |               |                      | Reagent ID          | Volume Added               |                              |               |
|                 |          |                      |               |                      |                     |                            | Benzyl alcohol               | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | Bis (2-chloroethoxy)methane  | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | Bis (2-chloroethyl) ether    | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | Bis (2-ethylhexyl) phthalate | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | Butyl benzyl phthalate       | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | Carbazole                    | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | Chrysene                     | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | Di-n-butyl phthalate         | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | Di-n-octyl phthalate         | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | Dibenz (a,h) anthracene      | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | Dibenzofuran                 | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | Diethyl phthalate            | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | Dimethyl phthalate           | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | Fluoranthene                 | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | Fluorene                     | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | Hexachlorobenzene            | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | Hexachlorobutadiene          | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | Hexachlorocyclopentadiene    | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | Hexachloroethane             | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | Hexadecane                   | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | Indeno[1,2,3-cd]pyrene       | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | Isophorone                   | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | Methyl Phenols, Total        | 400 ug/mL     |
|                 |          |                      |               |                      |                     |                            | n-Decane                     | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | N-Nitrosodi-n-propylamine    | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | N-Nitrosodimethylamine       | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | N-Nitrosodiphenylamine       | 400 ug/mL     |
|                 |          |                      |               |                      |                     |                            | n-Octadecane                 | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | Naphthalene                  | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | Nitrobenzene                 | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | Pentachlorophenol            | 400 ug/mL     |
|                 |          |                      |               |                      |                     |                            | Phenanthrene                 | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | Phenol                       | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | Pyrene                       | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | Pyridine                     | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | Total Cresols                | 400 ug/mL     |
|                 |          |                      |               |                      | SVLVstd10_00001     | 10 mL                      | Benzoic acid                 | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | Indene                       | 200 ug/mL     |
|                 |          |                      |               |                      | SVLVstd11_00001     | 10 mL                      | Atrazine                     | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | Benzaldehyde                 | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | Caprolactam                  | 200 ug/mL     |
|                 |          |                      |               |                      | SVLVstd9_00001      | 10 mL                      | 3,3'-Dichlorobenzidine       | 200 ug/mL     |
|                 |          |                      |               |                      |                     |                            | Benidine                     | 200 ug/mL     |
| .SVLVstd1_00036 | 09/30/16 | Restek, Lot A0109703 |               |                      | (Purchased Reagent) |                            | 1,1'-Biphenyl                | 1000 ug/mL    |
|                 |          |                      |               |                      |                     | 1,2,4,5-Tetrachlorobenzene | 1000 ug/mL                   |               |
|                 |          |                      |               |                      |                     | 1,2,4-Trichlorobenzene     | 1000 ug/mL                   |               |
|                 |          |                      |               |                      |                     | 1,2-Dichlorobenzene        | 1000 ug/mL                   |               |
|                 |          |                      |               |                      |                     | 1,2-Diphenylhydrazine      | 1000 ug/mL                   |               |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent |              | Analyte                      | Concentration |
|------------|----------|-----------|---------------|----------------------|----------------|--------------|------------------------------|---------------|
|            |          |           |               |                      | Reagent ID     | Volume Added |                              |               |
|            |          |           |               |                      |                |              | 1,3-Dichlorobenzene          | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 1,3-Dinitrobenzene           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 1,4-Dichlorobenzene          | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 1,4-Dioxane                  | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 1-Methylnaphthalene          | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,2'-oxybis[1-chloropropane] | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,3,4,6-Tetrachlorophenol    | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,4,5-Trichlorophenol        | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,4,6-Trichlorophenol        | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,4-Dichlorophenol           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,4-Dimethylphenol           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,4-Dinitrophenol            | 2000 ug/mL    |
|            |          |           |               |                      |                |              | 2,4-Dinitrotoluene           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,6-Dichlorophenol           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,6-Dinitrotoluene           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2-Chloronaphthalene          | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2-Chlorophenol               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2-Methylnaphthalene          | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2-Methylphenol               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2-Nitroaniline               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2-Nitrophenol                | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 3 & 4 Methylphenol           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 3-Nitroaniline               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4,6-Dinitro-2-methylphenol   | 2000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Bromophenyl phenyl ether   | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Chloro-3-methylphenol      | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Chloroaniline              | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Chlorophenyl phenyl ether  | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Methylphenol               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Nitroaniline               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Nitrophenol                | 2000 ug/mL    |
|            |          |           |               |                      |                |              | Acenaphthene                 | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Acenaphthylene               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Acetophenone                 | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Aniline                      | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Anthracene                   | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Azobenzene                   | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzo[a]anthracene           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzo[a]pyrene               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzo[b]fluoranthene         | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzo[g,h,i]perylene         | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzo[k]fluoranthene         | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzyl alcohol               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Bis(2-chloroethoxy)methane   | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Bis(2-chloroethyl)ether      | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Bis(2-ethylhexyl) phthalate  | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Butyl benzyl phthalate       | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Carbazole                    | 1000 ug/mL    |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID         | Exp Date | Prep Date | Dilutant Used              | Reagent Final Volume | Parent Reagent      |              | Analyte                     | Concentration |
|--------------------|----------|-----------|----------------------------|----------------------|---------------------|--------------|-----------------------------|---------------|
|                    |          |           |                            |                      | Reagent ID          | Volume Added |                             |               |
|                    |          |           |                            |                      |                     |              | Chrysene                    | 1000 ug/mL    |
|                    |          |           |                            |                      |                     |              | Di-n-butyl phthalate        | 1000 ug/mL    |
|                    |          |           |                            |                      |                     |              | Di-n-octyl phthalate        | 1000 ug/mL    |
|                    |          |           |                            |                      |                     |              | Dibenz(a,h)anthracene       | 1000 ug/mL    |
|                    |          |           |                            |                      |                     |              | Dibenzofuran                | 1000 ug/mL    |
|                    |          |           |                            |                      |                     |              | Diethyl phthalate           | 1000 ug/mL    |
|                    |          |           |                            |                      |                     |              | Dimethyl phthalate          | 1000 ug/mL    |
|                    |          |           |                            |                      |                     |              | Fluoranthene                | 1000 ug/mL    |
|                    |          |           |                            |                      |                     |              | Fluorene                    | 1000 ug/mL    |
|                    |          |           |                            |                      |                     |              | Hexachlorobenzene           | 1000 ug/mL    |
|                    |          |           |                            |                      |                     |              | Hexachlorobutadiene         | 1000 ug/mL    |
|                    |          |           |                            |                      |                     |              | Hexachlorocyclopentadiene   | 1000 ug/mL    |
|                    |          |           |                            |                      |                     |              | Hexachloroethane            | 1000 ug/mL    |
|                    |          |           |                            |                      |                     |              | Hexadecane                  | 1000 ug/mL    |
|                    |          |           |                            |                      |                     |              | Indeno[1,2,3-cd]pyrene      | 1000 ug/mL    |
|                    |          |           |                            |                      |                     |              | Isophorone                  | 1000 ug/mL    |
|                    |          |           |                            |                      |                     |              | Methyl Phenols, Total       | 2000 ug/mL    |
|                    |          |           |                            |                      |                     |              | n-Decane                    | 1000 ug/mL    |
|                    |          |           |                            |                      |                     |              | N-Nitrosodi-n-propylamine   | 1000 ug/mL    |
|                    |          |           |                            |                      |                     |              | N-Nitrosodimethylamine      | 1000 ug/mL    |
|                    |          |           |                            |                      |                     |              | N-Nitrosodiphenylamine      | 2000 ug/mL    |
|                    |          |           |                            |                      |                     |              | n-Octadecane                | 1000 ug/mL    |
|                    |          |           |                            |                      |                     |              | Naphthalene                 | 1000 ug/mL    |
|                    |          |           |                            |                      |                     |              | Nitrobenzene                | 1000 ug/mL    |
|                    |          |           |                            |                      |                     |              | Pentachlorophenol           | 2000 ug/mL    |
|                    |          |           |                            |                      |                     |              | Phenanthrene                | 1000 ug/mL    |
|                    |          |           |                            |                      |                     |              | Phenol                      | 1000 ug/mL    |
|                    |          |           |                            |                      |                     |              | Pyrene                      | 1000 ug/mL    |
|                    |          |           |                            |                      |                     |              | Pyridine                    | 1000 ug/mL    |
|                    |          |           |                            |                      |                     |              | Total Cresols               | 2000 ug/mL    |
| .SVLVstd10_00001   | 06/30/16 |           | Restek, Lot A0107943       |                      | (Purchased Reagent) |              | Benzoic acid                | 2000 ug/mL    |
|                    |          |           |                            |                      |                     |              | Indene                      | 2000 ug/mL    |
| .SVLVstd11_00001   | 06/30/16 |           | Restek, Lot A0108035       |                      | (Purchased Reagent) |              | Atrazine                    | 2000 ug/mL    |
|                    |          |           |                            |                      |                     |              | Benzaldehyde                | 2000 ug/mL    |
|                    |          |           |                            |                      |                     |              | Caprolactam                 | 2000 ug/mL    |
| .SVLVstd9_00001    | 07/31/16 |           | Restek, Lot A0108709       |                      | (Purchased Reagent) |              | 3,3'-Dichlorobenzidine      | 2000 ug/mL    |
|                    |          |           |                            |                      |                     |              | Benzydine                   | 2000 ug/mL    |
| OPQL8270SURI_00034 | 03/09/16 | 09/09/15  | Methanol, Lot b#0000049909 | 500 mL               | SVLVSURRSPK_00011   | 20 mL        | 2,4,6-Tribromophenol (Surr) | 200 ug/mL     |
|                    |          |           |                            |                      |                     |              | 2-Fluorobiphenyl            | 200 ug/mL     |
|                    |          |           |                            |                      |                     |              | 2-Fluorophenol (Surr)       | 200 ug/mL     |
|                    |          |           |                            |                      |                     |              | Nitrobenzene-d5 (Surr)      | 200 ug/mL     |
|                    |          |           |                            |                      |                     |              | Phenol-d5 (Surr)            | 200 ug/mL     |
|                    |          |           |                            |                      |                     |              | Terphenyl-d14 (Surr)        | 200 ug/mL     |
| .SVLVSURRSPK_00011 | 05/31/19 |           | Restek, Lot A0103615       |                      | (Purchased Reagent) |              | 2,4,6-Tribromophenol (Surr) | 5000 ug/mL    |
|                    |          |           |                            |                      |                     |              | 2-Fluorobiphenyl            | 5000 ug/mL    |
|                    |          |           |                            |                      |                     |              | 2-Fluorophenol (Surr)       | 5000 ug/mL    |
|                    |          |           |                            |                      |                     |              | Nitrobenzene-d5 (Surr)      | 5000 ug/mL    |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID          | Exp Date | Prep Date | Dilutant Used       | Reagent Final Volume | Parent Reagent      |              | Analyte                        | Concentration |
|---------------------|----------|-----------|---------------------|----------------------|---------------------|--------------|--------------------------------|---------------|
|                     |          |           |                     |                      | Reagent ID          | Volume Added |                                |               |
|                     |          |           |                     |                      |                     |              | Phenol-d5 (Surr)               | 5000 ug/mL    |
|                     |          |           |                     |                      |                     |              | Terphenyl-d14 (Surr)           | 5000 ug/mL    |
| SVTAPITINTRNi_00009 | 09/09/16 | 09/09/15  | MeCl2, Lot 1417620  | 25 mL                | SVLVIntstd_00003    | 5 mL         | 1,4-Dichlorobenzene-d4         | 400 ug/mL     |
|                     |          |           |                     |                      |                     |              | Acenaphthene-d10               | 400 ug/mL     |
|                     |          |           |                     |                      |                     |              | Chrysene-d12                   | 400 ug/mL     |
|                     |          |           |                     |                      |                     |              | Naphthalene-d8                 | 400 ug/mL     |
|                     |          |           |                     |                      |                     |              | Perylene-d12                   | 400 ug/mL     |
|                     |          |           |                     |                      |                     |              | Phenanthrene-d10               | 400 ug/mL     |
| .SVLVIntstd_00003   | 02/28/18 |           | Restek, Lot A093676 |                      | (Purchased Reagent) |              | 1,4-Dichlorobenzene-d4         | 2000 ug/mL    |
|                     |          |           |                     |                      |                     |              | Acenaphthene-d10               | 2000 ug/mL    |
|                     |          |           |                     |                      |                     |              | Chrysene-d12                   | 2000 ug/mL    |
|                     |          |           |                     |                      |                     |              | Naphthalene-d8                 | 2000 ug/mL    |
|                     |          |           |                     |                      |                     |              | Perylene-d12                   | 2000 ug/mL    |
|                     |          |           |                     |                      |                     |              | Phenanthrene-d10               | 2000 ug/mL    |
| SVTAPSTD0.4i_00009  | 10/23/15 | 04/23/15  | MeCl2, Lot 1417620  | 1 mL                 | SVTAPITINTRNi_00007 | 10 uL        | 1,4-Dichlorobenzene-d4         | 4 ug/mL       |
|                     |          |           |                     |                      |                     |              | Acenaphthene-d10               | 4 ug/mL       |
|                     |          |           |                     |                      |                     |              | Chrysene-d12                   | 4 ug/mL       |
|                     |          |           |                     |                      |                     |              | Naphthalene-d8                 | 4 ug/mL       |
|                     |          |           |                     |                      |                     |              | Perylene-d12                   | 4 ug/mL       |
|                     |          |           |                     |                      |                     |              | Phenanthrene-d10               | 4 ug/mL       |
|                     |          |           |                     |                      | SVTAPITSTCKi_00006  | 5 uL         | Benzo[e]pyrene                 | 0.2 ug/mL     |
|                     |          |           |                     |                      |                     |              | 2,3,5,6-Tetrachlorophenol      | 0.2 ug/mL     |
|                     |          |           |                     |                      |                     |              | 2-Naphthylamine                | 0.2 ug/mL     |
|                     |          |           |                     |                      |                     |              | 7,12-Dimethylbenz(a)anthracene | 0.2 ug/mL     |
|                     |          |           |                     |                      |                     |              | 1,1'-Biphenyl                  | 0.2 ug/mL     |
|                     |          |           |                     |                      |                     |              | 1,2,4,5-Tetrachlorobenzene     | 0.2 ug/mL     |
|                     |          |           |                     |                      |                     |              | 1,2,4-Trichlorobenzene         | 0.2 ug/mL     |
|                     |          |           |                     |                      |                     |              | 1,2-Dichlorobenzene            | 0.2 ug/mL     |
|                     |          |           |                     |                      |                     |              | 1,2-Diphenylhydrazine          | 0.2 ug/mL     |
|                     |          |           |                     |                      |                     |              | 1,3-Dichlorobenzene            | 0.2 ug/mL     |
|                     |          |           |                     |                      |                     |              | 1,3-Dinitrobenzene             | 0.2 ug/mL     |
|                     |          |           |                     |                      |                     |              | 1,4-Dichlorobenzene            | 0.2 ug/mL     |
|                     |          |           |                     |                      |                     |              | 1,4-Dioxane                    | 0.2 ug/mL     |
|                     |          |           |                     |                      |                     |              | 1-Methylnaphthalene            | 0.2 ug/mL     |
|                     |          |           |                     |                      |                     |              | 2,2'-oxybis[1-chloropropane]   | 0.2 ug/mL     |
|                     |          |           |                     |                      |                     |              | 2,3,4,6-Tetrachlorophenol      | 0.2 ug/mL     |
|                     |          |           |                     |                      |                     |              | 2,4,5-Trichlorophenol          | 0.2 ug/mL     |
|                     |          |           |                     |                      |                     |              | 2,4,6-Trichlorophenol          | 0.2 ug/mL     |
|                     |          |           |                     |                      |                     |              | 2,4-Dichlorophenol             | 0.2 ug/mL     |
|                     |          |           |                     |                      |                     |              | 2,4-Dimethylphenol             | 0.2 ug/mL     |
|                     |          |           |                     |                      |                     |              | 2,4-Dinitrophenol              | 0.4 ug/mL     |
|                     |          |           |                     |                      |                     |              | 2,4-Dinitrotoluene             | 0.2 ug/mL     |
|                     |          |           |                     |                      |                     |              | 2,6-Dichlorophenol             | 0.2 ug/mL     |
|                     |          |           |                     |                      |                     |              | 2,6-Dinitrotoluene             | 0.2 ug/mL     |
|                     |          |           |                     |                      |                     |              | 2-Chloronaphthalene            | 0.2 ug/mL     |
|                     |          |           |                     |                      |                     |              | 2-Chlorophenol                 | 0.2 ug/mL     |
|                     |          |           |                     |                      |                     |              | 2-Methylnaphthalene            | 0.2 ug/mL     |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent |              | Analyte                      | Concentration |
|------------|----------|-----------|---------------|----------------------|----------------|--------------|------------------------------|---------------|
|            |          |           |               |                      | Reagent ID     | Volume Added |                              |               |
|            |          |           |               |                      |                |              | 2-Methylphenol               | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | 2-Nitroaniline               | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | 2-Nitrophenol                | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | 3-Nitroaniline               | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | 4,6-Dinitro-2-methylphenol   | 0.4 ug/mL     |
|            |          |           |               |                      |                |              | 4-Bromophenyl phenyl ether   | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | 4-Chloro-3-methylphenol      | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | 4-Chloroaniline              | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | 4-Chlorophenyl phenyl ether  | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | 4-Methylphenol               | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | 4-Nitroaniline               | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | 4-Nitrophenol                | 0.4 ug/mL     |
|            |          |           |               |                      |                |              | Acenaphthene                 | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | Acenaphthylene               | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | Acetophenone                 | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | Aniline                      | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | Anthracene                   | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | Benzo[a]anthracene           | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | Benzo[a]pyrene               | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | Benzo[b]fluoranthene         | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | Benzo[g,h,i]perylene         | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | Benzo[k]fluoranthene         | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | Benzyl alcohol               | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | Bis (2-chloroethoxy)methane  | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | Bis (2-chloroethyl) ether    | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | Bis (2-ethylhexyl) phthalate | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | Butyl benzyl phthalate       | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | Carbazole                    | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | Chrysene                     | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | Di-n-butyl phthalate         | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | Di-n-octyl phthalate         | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | Dibenz (a,h) anthracene      | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | Dibenzofuran                 | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | Diethyl phthalate            | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | Dimethyl phthalate           | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | Fluoranthene                 | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | Fluorene                     | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | Hexachlorobenzene            | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | Hexachlorobutadiene          | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | Hexachlorocyclopentadiene    | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | Hexachloroethane             | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | Hexadecane                   | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | Indeno[1,2,3-cd]pyrene       | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | Isophorone                   | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | n-Decane                     | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | N-Nitrosodi-n-propylamine    | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | N-Nitrosodimethylamine       | 0.2 ug/mL     |
|            |          |           |               |                      |                |              | N-Nitrosodiphenylamine       | 0.4 ug/mL     |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID           | Exp Date | Prep Date | Dilutant Used       | Reagent Final Volume | Parent Reagent      |              | Analyte                        | Concentration |
|----------------------|----------|-----------|---------------------|----------------------|---------------------|--------------|--------------------------------|---------------|
|                      |          |           |                     |                      | Reagent ID          | Volume Added |                                |               |
|                      |          |           |                     |                      |                     |              | n-Octadecane                   | 0.2 ug/mL     |
|                      |          |           |                     |                      |                     |              | Naphthalene                    | 0.2 ug/mL     |
|                      |          |           |                     |                      |                     |              | Nitrobenzene                   | 0.2 ug/mL     |
|                      |          |           |                     |                      |                     |              | Pentachlorophenol              | 0.4 ug/mL     |
|                      |          |           |                     |                      |                     |              | Phenanthrene                   | 0.2 ug/mL     |
|                      |          |           |                     |                      |                     |              | Phenol                         | 0.2 ug/mL     |
|                      |          |           |                     |                      |                     |              | Pyrene                         | 0.2 ug/mL     |
|                      |          |           |                     |                      |                     |              | Pyridine                       | 0.2 ug/mL     |
|                      |          |           |                     |                      |                     |              | Benzoic acid                   | 0.2 ug/mL     |
|                      |          |           |                     |                      |                     |              | Indene                         | 0.2 ug/mL     |
|                      |          |           |                     |                      |                     |              | Atrazine                       | 0.2 ug/mL     |
|                      |          |           |                     |                      |                     |              | Benzaldehyde                   | 0.2 ug/mL     |
|                      |          |           |                     |                      |                     |              | Caprolactam                    | 0.2 ug/mL     |
|                      |          |           |                     |                      |                     |              | 3,3'-Dichlorobenzidine         | 0.2 ug/mL     |
|                      |          |           |                     |                      |                     |              | Benzidine                      | 0.2 ug/mL     |
|                      |          |           |                     |                      |                     |              | 2,4,6-Tribromophenol (Surr)    | 0.2 ug/mL     |
|                      |          |           |                     |                      |                     |              | 2-Fluorobiphenyl               | 0.2 ug/mL     |
|                      |          |           |                     |                      |                     |              | 2-Fluorophenol (Surr)          | 0.2 ug/mL     |
|                      |          |           |                     |                      |                     |              | Nitrobenzene-d5 (Surr)         | 0.2 ug/mL     |
|                      |          |           |                     |                      |                     |              | Phenol-d5 (Surr)               | 0.2 ug/mL     |
| .SVTAPITINTRNi_00007 | 12/03/15 | 12/03/14  | MeCl2, Lot 1417620  | 25 mL                | SVLVIntstd_00004    | 5 mL         | 1,4-Dichlorobenzene-d4         | 400 ug/mL     |
|                      |          |           |                     |                      |                     |              | Acenaphthene-d10               | 400 ug/mL     |
|                      |          |           |                     |                      |                     |              | Chrysene-d12                   | 400 ug/mL     |
|                      |          |           |                     |                      |                     |              | Naphthalene-d8                 | 400 ug/mL     |
|                      |          |           |                     |                      |                     |              | Perylene-d12                   | 400 ug/mL     |
| ..SVLVIntstd_00004   | 02/28/18 |           | Restek, Lot A093676 |                      | (Purchased Reagent) |              | Phenanthrene-d10               | 400 ug/mL     |
|                      |          |           |                     |                      |                     |              | 1,4-Dichlorobenzene-d4         | 2000 ug/mL    |
|                      |          |           |                     |                      |                     |              | Acenaphthene-d10               | 2000 ug/mL    |
|                      |          |           |                     |                      |                     |              | Chrysene-d12                   | 2000 ug/mL    |
|                      |          |           |                     |                      |                     |              | Naphthalene-d8                 | 2000 ug/mL    |
| .SVTAPITSTCKi_00006  | 10/23/15 | 04/23/15  | MeCl2, Lot 1417620  | 20 mL                | sv benzoepyre_00001 | 800 uL       | Benzo[e]pyrene                 | 40 ug/mL      |
|                      |          |           |                     |                      | SV2356TCPs_00002    | 800 uL       | 2,3,5,6-Tetrachlorophenol      | 40 ug/mL      |
|                      |          |           |                     |                      | SV2NAPAMINEs_00002  | 800 uL       | 2-Naphthylamine                | 40 ug/mL      |
|                      |          |           |                     |                      | sv712dimbenza_00011 | 800 uL       | 7,12-Dimethylbenz(a)anthracene | 40 ug/mL      |
|                      |          |           |                     |                      | SVLVstd1_00032      | 800 uL       | 1,1'-Biphenyl                  | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1,2,4,5-Tetrachlorobenzene     | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1,2,4-Trichlorobenzene         | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1,2-Dichlorobenzene            | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1,2-Diphenylhydrazine          | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1,3-Dichlorobenzene            | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1,3-Dinitrobenzene             | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1,4-Dichlorobenzene            | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1,4-Dioxane                    | 40 ug/mL      |



# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent |              | Analyte                      | Concentration |
|------------|----------|-----------|---------------|----------------------|----------------|--------------|------------------------------|---------------|
|            |          |           |               |                      | Reagent ID     | Volume Added |                              |               |
|            |          |           |               |                      |                |              | 1-Methylnaphthalene          | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2,2'-oxybis[1-chloropropane] | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2,3,4,6-Tetrachlorophenol    | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2,4,5-Trichlorophenol        | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2,4,6-Trichlorophenol        | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2,4-Dichlorophenol           | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2,4-Dimethylphenol           | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2,4-Dinitrophenol            | 80 ug/mL      |
|            |          |           |               |                      |                |              | 2,4-Dinitrotoluene           | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2,6-Dichlorophenol           | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2,6-Dinitrotoluene           | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2-Chloronaphthalene          | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2-Chlorophenol               | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2-Methylnaphthalene          | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2-Methylphenol               | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2-Nitroaniline               | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2-Nitrophenol                | 40 ug/mL      |
|            |          |           |               |                      |                |              | 3-Nitroaniline               | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4,6-Dinitro-2-methylphenol   | 80 ug/mL      |
|            |          |           |               |                      |                |              | 4-Bromophenyl phenyl ether   | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4-Chloro-3-methylphenol      | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4-Chloroaniline              | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4-Chlorophenyl phenyl ether  | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4-Methylphenol               | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4-Nitroaniline               | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4-Nitrophenol                | 80 ug/mL      |
|            |          |           |               |                      |                |              | Acenaphthene                 | 40 ug/mL      |
|            |          |           |               |                      |                |              | Acenaphthylene               | 40 ug/mL      |
|            |          |           |               |                      |                |              | Acetophenone                 | 40 ug/mL      |
|            |          |           |               |                      |                |              | Aniline                      | 40 ug/mL      |
|            |          |           |               |                      |                |              | Anthracene                   | 40 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[a]anthracene           | 40 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[a]pyrene               | 40 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[b]fluoranthene         | 40 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[g,h,i]perylene         | 40 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[k]fluoranthene         | 40 ug/mL      |
|            |          |           |               |                      |                |              | Benzyl alcohol               | 40 ug/mL      |
|            |          |           |               |                      |                |              | Bis (2-chloroethoxy)methane  | 40 ug/mL      |
|            |          |           |               |                      |                |              | Bis (2-chloroethyl) ether    | 40 ug/mL      |
|            |          |           |               |                      |                |              | Bis (2-ethylhexyl) phthalate | 40 ug/mL      |
|            |          |           |               |                      |                |              | Butyl benzyl phthalate       | 40 ug/mL      |
|            |          |           |               |                      |                |              | Carbazole                    | 40 ug/mL      |
|            |          |           |               |                      |                |              | Chrysene                     | 40 ug/mL      |
|            |          |           |               |                      |                |              | Di-n-butyl phthalate         | 40 ug/mL      |
|            |          |           |               |                      |                |              | Di-n-octyl phthalate         | 40 ug/mL      |
|            |          |           |               |                      |                |              | Dibenz (a,h) anthracene      | 40 ug/mL      |
|            |          |           |               |                      |                |              | Dibenzofuran                 | 40 ug/mL      |
|            |          |           |               |                      |                |              | Diethyl phthalate            | 40 ug/mL      |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID             | Exp Date | Prep Date                     | Dilutant Used | Reagent Final Volume | Parent Reagent      |              | Analyte                        | Concentration |
|------------------------|----------|-------------------------------|---------------|----------------------|---------------------|--------------|--------------------------------|---------------|
|                        |          |                               |               |                      | Reagent ID          | Volume Added |                                |               |
|                        |          |                               |               |                      |                     |              | Dimethyl phthalate             | 40 ug/mL      |
|                        |          |                               |               |                      |                     |              | Fluoranthene                   | 40 ug/mL      |
|                        |          |                               |               |                      |                     |              | Fluorene                       | 40 ug/mL      |
|                        |          |                               |               |                      |                     |              | Hexachlorobenzene              | 40 ug/mL      |
|                        |          |                               |               |                      |                     |              | Hexachlorobutadiene            | 40 ug/mL      |
|                        |          |                               |               |                      |                     |              | Hexachlorocyclopentadiene      | 40 ug/mL      |
|                        |          |                               |               |                      |                     |              | Hexachloroethane               | 40 ug/mL      |
|                        |          |                               |               |                      |                     |              | Hexadecane                     | 40 ug/mL      |
|                        |          |                               |               |                      |                     |              | Indeno[1,2,3-cd]pyrene         | 40 ug/mL      |
|                        |          |                               |               |                      |                     |              | Isophorone                     | 40 ug/mL      |
|                        |          |                               |               |                      |                     |              | n-Decane                       | 40 ug/mL      |
|                        |          |                               |               |                      |                     |              | N-Nitrosodi-n-propylamine      | 40 ug/mL      |
|                        |          |                               |               |                      |                     |              | N-Nitrosodimethylamine         | 40 ug/mL      |
|                        |          |                               |               |                      |                     |              | N-Nitrosodiphenylamine         | 80 ug/mL      |
|                        |          |                               |               |                      |                     |              | n-Octadecane                   | 40 ug/mL      |
|                        |          |                               |               |                      |                     |              | Naphthalene                    | 40 ug/mL      |
|                        |          |                               |               |                      |                     |              | Nitrobenzene                   | 40 ug/mL      |
|                        |          |                               |               |                      |                     |              | Pentachlorophenol              | 80 ug/mL      |
|                        |          |                               |               |                      |                     |              | Phenanthrene                   | 40 ug/mL      |
|                        |          |                               |               |                      |                     |              | Phenol                         | 40 ug/mL      |
|                        |          |                               |               |                      |                     |              | Pyrene                         | 40 ug/mL      |
|                        |          |                               |               |                      |                     |              | Pyridine                       | 40 ug/mL      |
|                        |          |                               |               |                      | SVLVstd10_00001     | 400 uL       | Benzoic acid                   | 40 ug/mL      |
|                        |          |                               |               |                      | Indene              | 40 ug/mL     |                                |               |
|                        |          |                               |               |                      | SVLVstd11_00001     | 400 uL       | Atrazine                       | 40 ug/mL      |
|                        |          |                               |               |                      | Benzaldehyde        | 40 ug/mL     |                                |               |
|                        |          |                               |               |                      | Caprolactam         | 40 ug/mL     |                                |               |
|                        |          |                               |               |                      | SVLVstd9_00001      | 400 uL       | 3,3'-Dichlorobenzidine         | 40 ug/mL      |
| Benزيدine              | 40 ug/mL |                               |               |                      |                     |              |                                |               |
| SVLVSURRSPK_00014      | 160 uL   | 2,4,6-Tribromophenol (Surr)   | 40 ug/mL      |                      |                     |              |                                |               |
| 2-Fluorobiphenyl       | 40 ug/mL |                               |               |                      |                     |              |                                |               |
| 2-Fluorophenol (Surr)  | 40 ug/mL |                               |               |                      |                     |              |                                |               |
| Nitrobenzene-d5 (Surr) | 40 ug/mL |                               |               |                      |                     |              |                                |               |
| Phenol-d5 (Surr)       | 40 ug/mL |                               |               |                      |                     |              |                                |               |
| Terphenyl-d14 (Surr)   | 40 ug/mL |                               |               |                      |                     |              |                                |               |
| svmethyImetha_00011    | 800 uL   | Methyl methanesulfonate       | 40 ug/mL      |                      |                     |              |                                |               |
| SVNNITROPYROS_00015    | 800 uL   | N-Nitrosopyrrolidine          | 40 ug/mL      |                      |                     |              |                                |               |
| ..sv benzoepyre 00001  | 10/03/18 | Absolute, Lot 100313          |               |                      | (Purchased Reagent) |              | Benzo[e]pyrene                 | 1000 ug/mL    |
| ..SV2356TCPs 00002     | 06/17/16 | Absolute, Lot 061711          |               |                      | (Purchased Reagent) |              | 2,3,5,6-Tetrachlorophenol      | 1000 ug/mL    |
| ..SV2NAPAMINEs 00002   | 06/30/17 | Ultra Scientific, Lot Ck-1617 |               |                      | (Purchased Reagent) |              | 2-Naphthylamine                | 1000 ug/mL    |
| ..sv712dimbenza 00011  | 04/09/20 | Absolute, Lot 040915          |               |                      | (Purchased Reagent) |              | 7,12-Dimethylbenz(a)anthracene | 1000 ug/mL    |
| ..SVLVstd1_00032       | 05/31/16 | Restek, Lot A0107399          |               |                      | (Purchased Reagent) |              | 1,1'-Biphenyl                  | 1000 ug/mL    |
|                        |          |                               |               |                      |                     |              | 1,2,4,5-Tetrachlorobenzene     | 1000 ug/mL    |
|                        |          |                               |               |                      |                     |              | 1,2,4-Trichlorobenzene         | 1000 ug/mL    |
|                        |          |                               |               |                      |                     |              | 1,2-Dichlorobenzene            | 1000 ug/mL    |
|                        |          |                               |               |                      |                     |              | 1,2-Diphenylhydrazine          | 1000 ug/mL    |
|                        |          |                               |               |                      |                     |              | 1,3-Dichlorobenzene            | 1000 ug/mL    |
|                        |          |                               |               |                      |                     |              | 1,3-Dinitrobenzene             | 1000 ug/mL    |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent |              | Analyte                      | Concentration |
|------------|----------|-----------|---------------|----------------------|----------------|--------------|------------------------------|---------------|
|            |          |           |               |                      | Reagent ID     | Volume Added |                              |               |
|            |          |           |               |                      |                |              | 1,4-Dichlorobenzene          | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 1,4-Dioxane                  | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 1-Methylnaphthalene          | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,2'-oxybis[1-chloropropane] | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,3,4,6-Tetrachlorophenol    | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,4,5-Trichlorophenol        | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,4,6-Trichlorophenol        | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,4-Dichlorophenol           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,4-Dimethylphenol           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,4-Dinitrophenol            | 2000 ug/mL    |
|            |          |           |               |                      |                |              | 2,4-Dinitrotoluene           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,6-Dichlorophenol           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,6-Dinitrotoluene           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2-Chloronaphthalene          | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2-Chlorophenol               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2-Methylnaphthalene          | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2-Methylphenol               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2-Nitroaniline               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2-Nitrophenol                | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 3-Nitroaniline               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4,6-Dinitro-2-methylphenol   | 2000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Bromophenyl phenyl ether   | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Chloro-3-methylphenol      | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Chloroaniline              | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Chlorophenyl phenyl ether  | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Methylphenol               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Nitroaniline               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Nitrophenol                | 2000 ug/mL    |
|            |          |           |               |                      |                |              | Acenaphthene                 | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Acenaphthylene               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Acetophenone                 | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Aniline                      | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Anthracene                   | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzo[a]anthracene           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzo[a]pyrene               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzo[b]fluoranthene         | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzo[g,h,i]perylene         | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzo[k]fluoranthene         | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzyl alcohol               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Bis(2-chloroethoxy)methane   | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Bis(2-chloroethyl)ether      | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Bis(2-ethylhexyl) phthalate  | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Butyl benzyl phthalate       | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Carbazole                    | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Chrysene                     | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Di-n-butyl phthalate         | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Di-n-octyl phthalate         | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Dibenz(a,h)anthracene        | 1000 ug/mL    |

## REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID            | Exp Date | Prep Date | Dilutant Used        | Reagent Final Volume | Parent Reagent      |              | Analyte                     | Concentration |
|-----------------------|----------|-----------|----------------------|----------------------|---------------------|--------------|-----------------------------|---------------|
|                       |          |           |                      |                      | Reagent ID          | Volume Added |                             |               |
|                       |          |           |                      |                      |                     |              | Dibenzofuran                | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Diethyl phthalate           | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Dimethyl phthalate          | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Fluoranthene                | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Fluorene                    | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Hexachlorobenzene           | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Hexachlorobutadiene         | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Hexachlorocyclopentadiene   | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Hexachloroethane            | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Hexadecane                  | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Indeno[1,2,3-cd]pyrene      | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Isophorone                  | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | n-Decane                    | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | N-Nitrosodi-n-propylamine   | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | N-Nitrosodimethylamine      | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | N-Nitrosodiphenylamine      | 2000 ug/mL    |
|                       |          |           |                      |                      |                     |              | n-Octadecane                | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Naphthalene                 | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Nitrobenzene                | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Pentachlorophenol           | 2000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Phenanthrene                | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Phenol                      | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Pyrene                      | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Pyridine                    | 1000 ug/mL    |
| ..SVLVstd10_00001     | 06/30/16 |           | Restek, Lot A0107943 |                      | (Purchased Reagent) |              | Benzoic acid                | 2000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Indene                      | 2000 ug/mL    |
| ..SVLVstd11_00001     | 06/30/16 |           | Restek, Lot A0108035 |                      | (Purchased Reagent) |              | Atrazine                    | 2000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Benzaldehyde                | 2000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Caprolactam                 | 2000 ug/mL    |
| ..SVLVstd9_00001      | 07/31/16 |           | Restek, Lot A0108709 |                      | (Purchased Reagent) |              | 3,3'-Dichlorobenzidine      | 2000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Benzidine                   | 2000 ug/mL    |
| ..SVLVSURRSPK_00014   | 05/31/19 |           | Restek, Lot A0103615 |                      | (Purchased Reagent) |              | 2,4,6-Tribromophenol (Surr) | 5000 ug/mL    |
|                       |          |           |                      |                      |                     |              | 2-Fluorobiphenyl            | 5000 ug/mL    |
|                       |          |           |                      |                      |                     |              | 2-Fluorophenol (Surr)       | 5000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Nitrobenzene-d5 (Surr)      | 5000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Phenol-d5 (Surr)            | 5000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Terphenyl-d14 (Surr)        | 5000 ug/mL    |
| ..svmethyImetha_00011 | 02/13/20 |           | Absolute, Lot 021315 |                      | (Purchased Reagent) |              | Methyl methanesulfonate     | 1000 ug/mL    |
| ..SVNNITROPYROs_00015 | 06/05/17 |           | absolute, Lot 060514 |                      | (Purchased Reagent) |              | N-Nitrosopyrrolidine        | 1000 ug/mL    |
| SVTAPSTD10i_00124     | 09/04/15 | 08/28/15  | MeCl2, Lot 1417620   | 1 mL                 | SVTAPITINTRNi_00007 | 10 uL        | 1,4-Dichlorobenzene-d4      | 4 ug/mL       |
|                       |          |           |                      |                      |                     |              | Acenaphthene-d10            | 4 ug/mL       |
|                       |          |           |                      |                      |                     |              | Chrysene-d12                | 4 ug/mL       |
|                       |          |           |                      |                      |                     |              | Naphthalene-d8              | 4 ug/mL       |
|                       |          |           |                      |                      |                     |              | Perylene-d12                | 4 ug/mL       |
|                       |          |           |                      |                      |                     |              | Phenanthrene-d10            | 4 ug/mL       |
|                       |          |           |                      |                      | SVTAPITSTCKi_00006  | 125 uL       | Benzo[e]pyrene              | 5 ug/mL       |
|                       |          |           |                      |                      |                     |              | 2,3,5,6-Tetrachlorophenol   | 5 ug/mL       |
|                       |          |           |                      |                      |                     |              |                             |               |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent |              | Analyte                        | Concentration |
|------------|----------|-----------|---------------|----------------------|----------------|--------------|--------------------------------|---------------|
|            |          |           |               |                      | Reagent ID     | Volume Added |                                |               |
|            |          |           |               |                      |                |              | 2-Naphthylamine                | 5 ug/mL       |
|            |          |           |               |                      |                |              | 7,12-Dimethylbenz(a)anthracene | 5 ug/mL       |
|            |          |           |               |                      |                |              | 1,1'-Biphenyl                  | 5 ug/mL       |
|            |          |           |               |                      |                |              | 1,2,4,5-Tetrachlorobenzene     | 5 ug/mL       |
|            |          |           |               |                      |                |              | 1,2,4-Trichlorobenzene         | 5 ug/mL       |
|            |          |           |               |                      |                |              | 1,2-Dichlorobenzene            | 5 ug/mL       |
|            |          |           |               |                      |                |              | 1,2-Diphenylhydrazine          | 5 ug/mL       |
|            |          |           |               |                      |                |              | 1,3-Dichlorobenzene            | 5 ug/mL       |
|            |          |           |               |                      |                |              | 1,3-Dinitrobenzene             | 5 ug/mL       |
|            |          |           |               |                      |                |              | 1,4-Dichlorobenzene            | 5 ug/mL       |
|            |          |           |               |                      |                |              | 1,4-Dioxane                    | 5 ug/mL       |
|            |          |           |               |                      |                |              | 1-Methylnaphthalene            | 5 ug/mL       |
|            |          |           |               |                      |                |              | 2,2'-oxybis[1-chloropropane]   | 5 ug/mL       |
|            |          |           |               |                      |                |              | 2,3,4,6-Tetrachlorophenol      | 5 ug/mL       |
|            |          |           |               |                      |                |              | 2,4,5-Trichlorophenol          | 5 ug/mL       |
|            |          |           |               |                      |                |              | 2,4,6-Trichlorophenol          | 5 ug/mL       |
|            |          |           |               |                      |                |              | 2,4-Dichlorophenol             | 5 ug/mL       |
|            |          |           |               |                      |                |              | 2,4-Dimethylphenol             | 5 ug/mL       |
|            |          |           |               |                      |                |              | 2,4-Dinitrophenol              | 10 ug/mL      |
|            |          |           |               |                      |                |              | 2,4-Dinitrotoluene             | 5 ug/mL       |
|            |          |           |               |                      |                |              | 2,6-Dichlorophenol             | 5 ug/mL       |
|            |          |           |               |                      |                |              | 2,6-Dinitrotoluene             | 5 ug/mL       |
|            |          |           |               |                      |                |              | 2-Chloronaphthalene            | 5 ug/mL       |
|            |          |           |               |                      |                |              | 2-Chlorophenol                 | 5 ug/mL       |
|            |          |           |               |                      |                |              | 2-Methylnaphthalene            | 5 ug/mL       |
|            |          |           |               |                      |                |              | 2-Methylphenol                 | 5 ug/mL       |
|            |          |           |               |                      |                |              | 2-Nitroaniline                 | 5 ug/mL       |
|            |          |           |               |                      |                |              | 2-Nitrophenol                  | 5 ug/mL       |
|            |          |           |               |                      |                |              | 3-Nitroaniline                 | 5 ug/mL       |
|            |          |           |               |                      |                |              | 4,6-Dinitro-2-methylphenol     | 10 ug/mL      |
|            |          |           |               |                      |                |              | 4-Bromophenyl phenyl ether     | 5 ug/mL       |
|            |          |           |               |                      |                |              | 4-Chloro-3-methylphenol        | 5 ug/mL       |
|            |          |           |               |                      |                |              | 4-Chloroaniline                | 5 ug/mL       |
|            |          |           |               |                      |                |              | 4-Chlorophenyl phenyl ether    | 5 ug/mL       |
|            |          |           |               |                      |                |              | 4-Methylphenol                 | 5 ug/mL       |
|            |          |           |               |                      |                |              | 4-Nitroaniline                 | 5 ug/mL       |
|            |          |           |               |                      |                |              | 4-Nitrophenol                  | 10 ug/mL      |
|            |          |           |               |                      |                |              | Acenaphthene                   | 5 ug/mL       |
|            |          |           |               |                      |                |              | Acenaphthylene                 | 5 ug/mL       |
|            |          |           |               |                      |                |              | Acetophenone                   | 5 ug/mL       |
|            |          |           |               |                      |                |              | Aniline                        | 5 ug/mL       |
|            |          |           |               |                      |                |              | Anthracene                     | 5 ug/mL       |
|            |          |           |               |                      |                |              | Benzo[a]anthracene             | 5 ug/mL       |
|            |          |           |               |                      |                |              | Benzo[a]pyrene                 | 5 ug/mL       |
|            |          |           |               |                      |                |              | Benzo[b]fluoranthene           | 5 ug/mL       |
|            |          |           |               |                      |                |              | Benzo[g,h,i]perylene           | 5 ug/mL       |
|            |          |           |               |                      |                |              | Benzo[k]fluoranthene           | 5 ug/mL       |
|            |          |           |               |                      |                |              | Benzyl alcohol                 | 5 ug/mL       |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent |              | Analyte                      | Concentration |
|------------|----------|-----------|---------------|----------------------|----------------|--------------|------------------------------|---------------|
|            |          |           |               |                      | Reagent ID     | Volume Added |                              |               |
|            |          |           |               |                      |                |              | Bis (2-chloroethoxy)methane  | 5 ug/mL       |
|            |          |           |               |                      |                |              | Bis (2-chloroethyl) ether    | 5 ug/mL       |
|            |          |           |               |                      |                |              | Bis (2-ethylhexyl) phthalate | 5 ug/mL       |
|            |          |           |               |                      |                |              | Butyl benzyl phthalate       | 5 ug/mL       |
|            |          |           |               |                      |                |              | Carbazole                    | 5 ug/mL       |
|            |          |           |               |                      |                |              | Chrysene                     | 5 ug/mL       |
|            |          |           |               |                      |                |              | Di-n-butyl phthalate         | 5 ug/mL       |
|            |          |           |               |                      |                |              | Di-n-octyl phthalate         | 5 ug/mL       |
|            |          |           |               |                      |                |              | Dibenz (a,h) anthracene      | 5 ug/mL       |
|            |          |           |               |                      |                |              | Dibenzofuran                 | 5 ug/mL       |
|            |          |           |               |                      |                |              | Diethyl phthalate            | 5 ug/mL       |
|            |          |           |               |                      |                |              | Dimethyl phthalate           | 5 ug/mL       |
|            |          |           |               |                      |                |              | Fluoranthene                 | 5 ug/mL       |
|            |          |           |               |                      |                |              | Fluorene                     | 5 ug/mL       |
|            |          |           |               |                      |                |              | Hexachlorobenzene            | 5 ug/mL       |
|            |          |           |               |                      |                |              | Hexachlorobutadiene          | 5 ug/mL       |
|            |          |           |               |                      |                |              | Hexachlorocyclopentadiene    | 5 ug/mL       |
|            |          |           |               |                      |                |              | Hexachloroethane             | 5 ug/mL       |
|            |          |           |               |                      |                |              | Hexadecane                   | 5 ug/mL       |
|            |          |           |               |                      |                |              | Indeno[1,2,3-cd]pyrene       | 5 ug/mL       |
|            |          |           |               |                      |                |              | Isophorone                   | 5 ug/mL       |
|            |          |           |               |                      |                |              | n-Decane                     | 5 ug/mL       |
|            |          |           |               |                      |                |              | N-Nitrosodi-n-propylamine    | 5 ug/mL       |
|            |          |           |               |                      |                |              | N-Nitrosodimethylamine       | 5 ug/mL       |
|            |          |           |               |                      |                |              | N-Nitrosodiphenylamine       | 10 ug/mL      |
|            |          |           |               |                      |                |              | n-Octadecane                 | 5 ug/mL       |
|            |          |           |               |                      |                |              | Naphthalene                  | 5 ug/mL       |
|            |          |           |               |                      |                |              | Nitrobenzene                 | 5 ug/mL       |
|            |          |           |               |                      |                |              | Pentachlorophenol            | 10 ug/mL      |
|            |          |           |               |                      |                |              | Phenanthrene                 | 5 ug/mL       |
|            |          |           |               |                      |                |              | Phenol                       | 5 ug/mL       |
|            |          |           |               |                      |                |              | Pyrene                       | 5 ug/mL       |
|            |          |           |               |                      |                |              | Pyridine                     | 5 ug/mL       |
|            |          |           |               |                      |                |              | Benzoic acid                 | 5 ug/mL       |
|            |          |           |               |                      |                |              | Indene                       | 5 ug/mL       |
|            |          |           |               |                      |                |              | Atrazine                     | 5 ug/mL       |
|            |          |           |               |                      |                |              | Benzaldehyde                 | 5 ug/mL       |
|            |          |           |               |                      |                |              | Caprolactam                  | 5 ug/mL       |
|            |          |           |               |                      |                |              | 3,3'-Dichlorobenzidine       | 5 ug/mL       |
|            |          |           |               |                      |                |              | Benzidine                    | 5 ug/mL       |
|            |          |           |               |                      |                |              | 2,4,6-Tribromophenol (Surr)  | 5 ug/mL       |
|            |          |           |               |                      |                |              | 2-Fluorobiphenyl             | 5 ug/mL       |
|            |          |           |               |                      |                |              | 2-Fluorophenol (Surr)        | 5 ug/mL       |
|            |          |           |               |                      |                |              | Nitrobenzene-d5 (Surr)       | 5 ug/mL       |
|            |          |           |               |                      |                |              | Phenol-d5 (Surr)             | 5 ug/mL       |
|            |          |           |               |                      |                |              | Terphenyl-d14 (Surr)         | 5 ug/mL       |
|            |          |           |               |                      |                |              | Methyl methanesulfonate      | 5 ug/mL       |
|            |          |           |               |                      |                |              | N-Nitrosopyrrolidine         | 5 ug/mL       |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID           | Exp Date | Prep Date           | Dilutant Used      | Reagent Final Volume | Parent Reagent      |              | Analyte                        | Concentration |
|----------------------|----------|---------------------|--------------------|----------------------|---------------------|--------------|--------------------------------|---------------|
|                      |          |                     |                    |                      | Reagent ID          | Volume Added |                                |               |
| .SVTAPITINTRNi_00007 | 12/03/15 | 12/03/14            | MeCl2, Lot 1417620 | 25 mL                | SVLVIntstd_00004    | 5 mL         | 1,4-Dichlorobenzene-d4         | 400 ug/mL     |
|                      |          |                     |                    |                      |                     |              | Acenaphthene-d10               | 400 ug/mL     |
|                      |          |                     |                    |                      |                     |              | Chrysene-d12                   | 400 ug/mL     |
|                      |          |                     |                    |                      |                     |              | Naphthalene-d8                 | 400 ug/mL     |
|                      |          |                     |                    |                      |                     |              | Perylene-d12                   | 400 ug/mL     |
|                      |          |                     |                    |                      |                     |              | Phenanthrene-d10               | 400 ug/mL     |
| ..SVLVIntstd_00004   | 02/28/18 | Restek, Lot A093676 |                    |                      | (Purchased Reagent) |              | 1,4-Dichlorobenzene-d4         | 2000 ug/mL    |
|                      |          |                     |                    |                      |                     |              | Acenaphthene-d10               | 2000 ug/mL    |
|                      |          |                     |                    |                      |                     |              | Chrysene-d12                   | 2000 ug/mL    |
|                      |          |                     |                    |                      |                     |              | Naphthalene-d8                 | 2000 ug/mL    |
|                      |          |                     |                    |                      |                     |              | Perylene-d12                   | 2000 ug/mL    |
|                      |          |                     |                    |                      |                     |              | Phenanthrene-d10               | 2000 ug/mL    |
| .SVTAPITSTCKi_00006  | 10/23/15 | 04/23/15            | MeCl2, Lot 1417620 | 20 mL                | sv benzoepyre 00001 | 800 uL       | Benzo[e]pyrene                 | 40 ug/mL      |
|                      |          |                     |                    |                      | SV2356TCPs_00002    | 800 uL       | 2,3,5,6-Tetrachlorophenol      | 40 ug/mL      |
|                      |          |                     |                    |                      | SV2NAPAMINEs_00002  | 800 uL       | 2-Naphthylamine                | 40 ug/mL      |
|                      |          |                     |                    |                      | sv712dimbenza_00011 | 800 uL       | 7,12-Dimethylbenz(a)anthracene | 40 ug/mL      |
|                      |          |                     |                    |                      | SVLVstd1_00032      | 800 uL       | 1,1'-Biphenyl                  | 40 ug/mL      |
|                      |          |                     |                    |                      |                     |              | 1,2,4,5-Tetrachlorobenzene     | 40 ug/mL      |
|                      |          |                     |                    |                      |                     |              | 1,2,4-Trichlorobenzene         | 40 ug/mL      |
|                      |          |                     |                    |                      |                     |              | 1,2-Dichlorobenzene            | 40 ug/mL      |
|                      |          |                     |                    |                      |                     |              | 1,2-Diphenylhydrazine          | 40 ug/mL      |
|                      |          |                     |                    |                      |                     |              | 1,3-Dichlorobenzene            | 40 ug/mL      |
|                      |          |                     |                    |                      |                     |              | 1,3-Dinitrobenzene             | 40 ug/mL      |
|                      |          |                     |                    |                      |                     |              | 1,4-Dichlorobenzene            | 40 ug/mL      |
|                      |          |                     |                    |                      |                     |              | 1,4-Dioxane                    | 40 ug/mL      |
|                      |          |                     |                    |                      |                     |              | 1-Methylnaphthalene            | 40 ug/mL      |
|                      |          |                     |                    |                      |                     |              | 2,2'-oxybis[1-chloropropane]   | 40 ug/mL      |
|                      |          |                     |                    |                      |                     |              | 2,3,4,6-Tetrachlorophenol      | 40 ug/mL      |
|                      |          |                     |                    |                      |                     |              | 2,4,5-Trichlorophenol          | 40 ug/mL      |
|                      |          |                     |                    |                      |                     |              | 2,4,6-Trichlorophenol          | 40 ug/mL      |
|                      |          |                     |                    |                      |                     |              | 2,4-Dichlorophenol             | 40 ug/mL      |
|                      |          |                     |                    |                      |                     |              | 2,4-Dimethylphenol             | 40 ug/mL      |
|                      |          |                     |                    |                      |                     |              | 2,4-Dinitrophenol              | 80 ug/mL      |
|                      |          |                     |                    |                      |                     |              | 2,4-Dinitrotoluene             | 40 ug/mL      |
|                      |          |                     |                    |                      |                     |              | 2,6-Dichlorophenol             | 40 ug/mL      |
|                      |          |                     |                    |                      |                     |              | 2,6-Dinitrotoluene             | 40 ug/mL      |
|                      |          |                     |                    |                      |                     |              | 2-Chloronaphthalene            | 40 ug/mL      |
|                      |          |                     |                    |                      |                     |              | 2-Chlorophenol                 | 40 ug/mL      |
|                      |          |                     |                    |                      |                     |              | 2-Methylnaphthalene            | 40 ug/mL      |
|                      |          |                     |                    |                      |                     |              | 2-Methylphenol                 | 40 ug/mL      |
|                      |          |                     |                    |                      |                     |              | 2-Nitroaniline                 | 40 ug/mL      |
|                      |          |                     |                    |                      |                     |              | 2-Nitrophenol                  | 40 ug/mL      |
|                      |          |                     |                    |                      |                     |              | 3-Nitroaniline                 | 40 ug/mL      |
|                      |          |                     |                    |                      |                     |              | 4,6-Dinitro-2-methylphenol     | 80 ug/mL      |
|                      |          |                     |                    |                      |                     |              | 4-Bromophenyl phenyl ether     | 40 ug/mL      |
|                      |          |                     |                    |                      |                     |              | 4-Chloro-3-methylphenol        | 40 ug/mL      |
|                      |          |                     |                    |                      |                     |              | 4-Chloroaniline                | 40 ug/mL      |
|                      |          |                     |                    |                      |                     |              | 4-Chlorophenyl phenyl ether    | 40 ug/mL      |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent  |              | Analyte                      | Concentration |
|------------|----------|-----------|---------------|----------------------|-----------------|--------------|------------------------------|---------------|
|            |          |           |               |                      | Reagent ID      | Volume Added |                              |               |
|            |          |           |               |                      |                 |              | 4-Methylphenol               | 40 ug/mL      |
|            |          |           |               |                      |                 |              | 4-Nitroaniline               | 40 ug/mL      |
|            |          |           |               |                      |                 |              | 4-Nitrophenol                | 80 ug/mL      |
|            |          |           |               |                      |                 |              | Acenaphthene                 | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Acenaphthylene               | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Acetophenone                 | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Aniline                      | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Anthracene                   | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Benzo[a]anthracene           | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Benzo[a]pyrene               | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Benzo[b]fluoranthene         | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Benzo[g,h,i]perylene         | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Benzo[k]fluoranthene         | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Benzyl alcohol               | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Bis (2-chloroethoxy)methane  | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Bis (2-chloroethyl) ether    | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Bis (2-ethylhexyl) phthalate | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Butyl benzyl phthalate       | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Carbazole                    | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Chrysene                     | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Di-n-butyl phthalate         | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Di-n-octyl phthalate         | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Dibenz (a,h) anthracene      | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Dibenzofuran                 | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Diethyl phthalate            | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Dimethyl phthalate           | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Fluoranthene                 | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Fluorene                     | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Hexachlorobenzene            | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Hexachlorobutadiene          | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Hexachlorocyclopentadiene    | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Hexachloroethane             | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Hexadecane                   | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Indeno[1,2,3-cd]pyrene       | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Isophorone                   | 40 ug/mL      |
|            |          |           |               |                      |                 |              | n-Decane                     | 40 ug/mL      |
|            |          |           |               |                      |                 |              | N-Nitrosodi-n-propylamine    | 40 ug/mL      |
|            |          |           |               |                      |                 |              | N-Nitrosodimethylamine       | 40 ug/mL      |
|            |          |           |               |                      |                 |              | N-Nitrosodiphenylamine       | 80 ug/mL      |
|            |          |           |               |                      |                 |              | n-Octadecane                 | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Naphthalene                  | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Nitrobenzene                 | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Pentachlorophenol            | 80 ug/mL      |
|            |          |           |               |                      |                 |              | Phenanthrene                 | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Phenol                       | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Pyrene                       | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Pyridine                     | 40 ug/mL      |
|            |          |           |               |                      | SVLVstd10_00001 | 400 uL       | Benzoic acid                 | 40 ug/mL      |



# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID              | Exp Date | Prep Date | Dilutant Used                 | Reagent Final Volume | Parent Reagent       |              | Analyte                        | Concentration |
|-------------------------|----------|-----------|-------------------------------|----------------------|----------------------|--------------|--------------------------------|---------------|
|                         |          |           |                               |                      | Reagent ID           | Volume Added |                                |               |
|                         |          |           |                               |                      | SVLVstd11_00001      | 400 uL       | Indene                         | 40 ug/mL      |
|                         |          |           |                               |                      |                      |              | Atrazine                       | 40 ug/mL      |
|                         |          |           |                               |                      |                      |              | Benzaldehyde                   | 40 ug/mL      |
|                         |          |           |                               |                      |                      |              | Caprolactam                    | 40 ug/mL      |
|                         |          |           |                               |                      | SVLVstd9_00001       | 400 uL       | 3,3'-Dichlorobenzidine         | 40 ug/mL      |
|                         |          |           |                               |                      |                      |              | Benzidine                      | 40 ug/mL      |
|                         |          |           |                               |                      | SVLVSURRSPK_00014    | 160 uL       | 2,4,6-Tribromophenol (Surr)    | 40 ug/mL      |
|                         |          |           |                               |                      |                      |              | 2-Fluorobiphenyl               | 40 ug/mL      |
|                         |          |           |                               |                      |                      |              | 2-Fluorophenol (Surr)          | 40 ug/mL      |
|                         |          |           |                               |                      |                      |              | Nitrobenzene-d5 (Surr)         | 40 ug/mL      |
|                         |          |           |                               |                      |                      |              | Phenol-d5 (Surr)               | 40 ug/mL      |
|                         |          |           |                               |                      | svmethylnmetha_00011 | 800 uL       | Methyl methanesulfonate        | 40 ug/mL      |
|                         |          |           |                               |                      | SVNNITROPYROS_00015  | 800 uL       | N-Nitrosopyrrolidine           | 40 ug/mL      |
| ..sv benzoepyrene_00001 | 10/03/18 |           | Absolute, Lot 100313          |                      | (Purchased Reagent)  |              | Benzo[e]pyrene                 | 1000 ug/mL    |
| ..SV2356TCPS_00002      | 06/17/16 |           | Absolute, Lot 061711          |                      | (Purchased Reagent)  |              | 2,3,5,6-Tetrachlorophenol      | 1000 ug/mL    |
| ..SV2NAPAMINEs_00002    | 06/30/17 |           | Ultra Scientific, Lot CK-1617 |                      | (Purchased Reagent)  |              | 2-Naphthylamine                | 1000 ug/mL    |
| ..sv712dimbenza_00011   | 04/09/20 |           | Absolute, Lot 040915          |                      | (Purchased Reagent)  |              | 7,12-Dimethylbenz(a)anthracene | 1000 ug/mL    |
| ..SVLVstd1_00032        | 05/31/16 |           | Restek, Lot A0107399          |                      | (Purchased Reagent)  |              | 1,1'-Biphenyl                  | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 1,2,4,5-Tetrachlorobenzene     | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 1,2,4-Trichlorobenzene         | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 1,2-Dichlorobenzene            | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 1,2-Diphenylhydrazine          | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 1,3-Dichlorobenzene            | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 1,3-Dinitrobenzene             | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 1,4-Dichlorobenzene            | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 1,4-Dioxane                    | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 1-Methylnaphthalene            | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2,2'-oxybis[1-chloropropane]   | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2,3,4,6-Tetrachlorophenol      | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2,4,5-Trichlorophenol          | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2,4,6-Trichlorophenol          | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2,4-Dichlorophenol             | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2,4-Dimethylphenol             | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2,4-Dinitrophenol              | 2000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2,4-Dinitrotoluene             | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2,6-Dichlorophenol             | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2,6-Dinitrotoluene             | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2-Chloronaphthalene            | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2-Chlorophenol                 | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2-Methylnaphthalene            | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2-Methylphenol                 | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2-Nitroaniline                 | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2-Nitrophenol                  | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 3-Nitroaniline                 | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 4,6-Dinitro-2-methylphenol     | 2000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 4-Bromophenyl phenyl ether     | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 4-Chloro-3-methylphenol        | 1000 ug/mL    |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent |              | Analyte                      | Concentration |
|------------|----------|-----------|---------------|----------------------|----------------|--------------|------------------------------|---------------|
|            |          |           |               |                      | Reagent ID     | Volume Added |                              |               |
|            |          |           |               |                      |                |              | 4-Chloroaniline              | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Chlorophenyl phenyl ether  | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Methylphenol               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Nitroaniline               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Nitrophenol                | 2000 ug/mL    |
|            |          |           |               |                      |                |              | Acenaphthene                 | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Acenaphthylene               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Acetophenone                 | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Aniline                      | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Anthracene                   | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzo[a]anthracene           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzo[a]pyrene               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzo[b]fluoranthene         | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzo[g,h,i]perylene         | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzo[k]fluoranthene         | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzyl alcohol               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Bis (2-chloroethoxy) methane | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Bis (2-chloroethyl) ether    | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Bis (2-ethylhexyl) phthalate | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Butyl benzyl phthalate       | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Carbazole                    | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Chrysene                     | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Di-n-butyl phthalate         | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Di-n-octyl phthalate         | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Dibenz (a,h) anthracene      | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Dibenzofuran                 | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Diethyl phthalate            | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Dimethyl phthalate           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Fluoranthene                 | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Fluorene                     | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Hexachlorobenzene            | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Hexachlorobutadiene          | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Hexachlorocyclopentadiene    | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Hexachloroethane             | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Hexadecane                   | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Indeno[1,2,3-cd]pyrene       | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Isophorone                   | 1000 ug/mL    |
|            |          |           |               |                      |                |              | n-Decane                     | 1000 ug/mL    |
|            |          |           |               |                      |                |              | N-Nitrosodi-n-propylamine    | 1000 ug/mL    |
|            |          |           |               |                      |                |              | N-Nitrosodimethylamine       | 1000 ug/mL    |
|            |          |           |               |                      |                |              | N-Nitrosodiphenylamine       | 2000 ug/mL    |
|            |          |           |               |                      |                |              | n-Octadecane                 | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Naphthalene                  | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Nitrobenzene                 | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Pentachlorophenol            | 2000 ug/mL    |
|            |          |           |               |                      |                |              | Phenanthrene                 | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Phenol                       | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Pyrene                       | 1000 ug/mL    |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID               | Exp Date | Prep Date | Dilutant Used        | Reagent Final Volume | Parent Reagent      |              | Analyte                     | Concentration |
|--------------------------|----------|-----------|----------------------|----------------------|---------------------|--------------|-----------------------------|---------------|
|                          |          |           |                      |                      | Reagent ID          | Volume Added |                             |               |
| ..SVLVstd10_00001        | 06/30/16 |           | Restek, Lot A0107943 |                      | (Purchased Reagent) |              | Pyridine                    | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Benzoic acid                | 2000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Indene                      | 2000 ug/mL    |
| ..SVLVstd11_00001        | 06/30/16 |           | Restek, Lot A0108035 |                      | (Purchased Reagent) |              | Atrazine                    | 2000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Benzaldehyde                | 2000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Caprolactam                 | 2000 ug/mL    |
| ..SVLVstd9_00001         | 07/31/16 |           | Restek, Lot A0108709 |                      | (Purchased Reagent) |              | 3,3'-Dichlorobenzidine      | 2000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Benzidine                   | 2000 ug/mL    |
| ..SVLVSURRSPK_00014      | 05/31/19 |           | Restek, Lot A0103615 |                      | (Purchased Reagent) |              | 2,4,6-Tribromophenol (Surr) | 5000 ug/mL    |
|                          |          |           |                      |                      |                     |              | 2-Fluorobiphenyl            | 5000 ug/mL    |
|                          |          |           |                      |                      |                     |              | 2-Fluorophenol (Surr)       | 5000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Nitrobenzene-d5 (Surr)      | 5000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Phenol-d5 (Surr)            | 5000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Terphenyl-d14 (Surr)        | 5000 ug/mL    |
| ..svmethyImetha_00011    | 02/13/20 |           | Absolute, Lot 021315 |                      | (Purchased Reagent) |              | Methyl methanesulfonate     | 1000 ug/mL    |
| ..SVNNITROPYROs_00015    | 06/05/17 |           | absolute, Lot 060514 |                      | (Purchased Reagent) |              | N-Nitrosopyrrolidine        | 1000 ug/mL    |
| <b>SVTAPSTD10i_00129</b> | 10/14/15 | 10/07/15  | MeCl2, Lot 1417620   | 1 mL                 | SVTAPITINTRNi_00007 | 10 uL        | 1,4-Dichlorobenzene-d4      | 4 ug/mL       |
|                          |          |           |                      |                      |                     |              | Acenaphthene-d10            | 4 ug/mL       |
|                          |          |           |                      |                      |                     |              | Chrysene-d12                | 4 ug/mL       |
|                          |          |           |                      |                      |                     |              | Naphthalene-d8              | 4 ug/mL       |
|                          |          |           |                      |                      |                     |              | Perylene-d12                | 4 ug/mL       |
|                          |          |           |                      |                      |                     |              | Phenanthrene-d10            | 4 ug/mL       |
| .SVTAPITINTRNi_00007     | 12/03/15 | 12/03/14  | MeCl2, Lot 1417620   | 25 mL                | SVLVIntstd_00004    | 5 mL         | 1,4-Dichlorobenzene-d4      | 400 ug/mL     |
|                          |          |           |                      |                      |                     |              | Acenaphthene-d10            | 400 ug/mL     |
|                          |          |           |                      |                      |                     |              | Chrysene-d12                | 400 ug/mL     |
|                          |          |           |                      |                      |                     |              | Naphthalene-d8              | 400 ug/mL     |
|                          |          |           |                      |                      |                     |              | Perylene-d12                | 400 ug/mL     |
|                          |          |           |                      |                      |                     |              | Phenanthrene-d10            | 400 ug/mL     |
| ..SVLVIntstd_00004       | 02/28/18 |           | Restek, Lot A093676  |                      | (Purchased Reagent) |              | 1,4-Dichlorobenzene-d4      | 2000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Acenaphthene-d10            | 2000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Chrysene-d12                | 2000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Naphthalene-d8              | 2000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Perylene-d12                | 2000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Phenanthrene-d10            | 2000 ug/mL    |
| <b>SVTAPSTD10i_00129</b> | 10/14/15 | 10/07/15  | MeCl2, Lot 1417620   | 1 mL                 | SVTAPITSTCKi_00006  | 125 uL       | 1,4-Dioxane                 | 5 ug/mL       |
|                          |          |           |                      |                      |                     |              | 2,4,6-Tribromophenol (Surr) | 5 ug/mL       |
|                          |          |           |                      |                      |                     |              | 2-Fluorobiphenyl            | 5 ug/mL       |
|                          |          |           |                      |                      |                     |              | 2-Fluorophenol (Surr)       | 5 ug/mL       |
|                          |          |           |                      |                      |                     |              | Nitrobenzene-d5 (Surr)      | 5 ug/mL       |
|                          |          |           |                      |                      |                     |              | Phenol-d5 (Surr)            | 5 ug/mL       |
|                          |          |           |                      |                      |                     |              | Terphenyl-d14 (Surr)        | 5 ug/mL       |
| .SVTAPITSTCKi_00006      | 10/23/15 | 04/23/15  | MeCl2, Lot 1417620   | 20 mL                | SVLVstd1_00032      | 800 uL       | 1,4-Dioxane                 | 40 ug/mL      |
|                          |          |           |                      |                      | SVLVSURRSPK_00014   | 160 uL       | 2,4,6-Tribromophenol (Surr) | 40 ug/mL      |
|                          |          |           |                      |                      |                     |              | 2-Fluorobiphenyl            | 40 ug/mL      |
|                          |          |           |                      |                      |                     |              | 2-Fluorophenol (Surr)       | 40 ug/mL      |
|                          |          |           |                      |                      |                     |              | Nitrobenzene-d5 (Surr)      | 40 ug/mL      |
|                          |          |           |                      |                      |                     |              | Phenol-d5 (Surr)            | 40 ug/mL      |

## REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID          | Exp Date | Prep Date | Dilutant Used        | Reagent Final Volume | Parent Reagent      |              | Analyte                        | Concentration |
|---------------------|----------|-----------|----------------------|----------------------|---------------------|--------------|--------------------------------|---------------|
|                     |          |           |                      |                      | Reagent ID          | Volume Added |                                |               |
|                     |          |           |                      |                      |                     |              | Terphenyl-d14 (Surr)           | 40 ug/mL      |
| ..SVLVstd1_00032    | 05/31/16 |           | Restek, Lot A0107399 |                      | (Purchased Reagent) |              | 1,4-Dioxane                    | 1000 ug/mL    |
| ..SVLVSURRSPK_00014 | 05/31/19 |           | Restek, Lot A0103615 |                      | (Purchased Reagent) |              | 2,4,6-Tribromophenol (Surr)    | 5000 ug/mL    |
|                     |          |           |                      |                      |                     |              | 2-Fluorobiphenyl               | 5000 ug/mL    |
|                     |          |           |                      |                      |                     |              | 2-Fluorophenol (Surr)          | 5000 ug/mL    |
|                     |          |           |                      |                      |                     |              | Nitrobenzene-d5 (Surr)         | 5000 ug/mL    |
|                     |          |           |                      |                      |                     |              | Phenol-d5 (Surr)               | 5000 ug/mL    |
|                     |          |           |                      |                      |                     |              | Terphenyl-d14 (Surr)           | 5000 ug/mL    |
| SVTAPSTD2.0i_00007  | 10/23/15 | 04/23/15  | MeCl2, Lot 1417620   | 1 mL                 | SVTAPITINTRNi_00007 | 10 uL        | 1,4-Dichlorobenzene-d4         | 4 ug/mL       |
|                     |          |           |                      |                      |                     |              | Acenaphthene-d10               | 4 ug/mL       |
|                     |          |           |                      |                      |                     |              | Chrysene-d12                   | 4 ug/mL       |
|                     |          |           |                      |                      |                     |              | Naphthalene-d8                 | 4 ug/mL       |
|                     |          |           |                      |                      |                     |              | Perylene-d12                   | 4 ug/mL       |
|                     |          |           |                      |                      |                     |              | Phenanthrene-d10               | 4 ug/mL       |
|                     |          |           |                      |                      | SVTAPITSTCKi_00006  | 25 uL        | Benzo[e]pyrene                 | 1 ug/mL       |
|                     |          |           |                      |                      |                     |              | 2,3,5,6-Tetrachlorophenol      | 1 ug/mL       |
|                     |          |           |                      |                      |                     |              | 2-Naphthylamine                | 1 ug/mL       |
|                     |          |           |                      |                      |                     |              | 7,12-Dimethylbenz(a)anthracene | 1 ug/mL       |
|                     |          |           |                      |                      |                     |              | 1,1'-Biphenyl                  | 1 ug/mL       |
|                     |          |           |                      |                      |                     |              | 1,2,4,5-Tetrachlorobenzene     | 1 ug/mL       |
|                     |          |           |                      |                      |                     |              | 1,2,4-Trichlorobenzene         | 1 ug/mL       |
|                     |          |           |                      |                      |                     |              | 1,2-Dichlorobenzene            | 1 ug/mL       |
|                     |          |           |                      |                      |                     |              | 1,2-Diphenylhydrazine          | 1 ug/mL       |
|                     |          |           |                      |                      |                     |              | 1,3-Dichlorobenzene            | 1 ug/mL       |
|                     |          |           |                      |                      |                     |              | 1,3-Dinitrobenzene             | 1 ug/mL       |
|                     |          |           |                      |                      |                     |              | 1,4-Dichlorobenzene            | 1 ug/mL       |
|                     |          |           |                      |                      |                     |              | 1,4-Dioxane                    | 1 ug/mL       |
|                     |          |           |                      |                      |                     |              | 1-Methylnaphthalene            | 1 ug/mL       |
|                     |          |           |                      |                      |                     |              | 2,2'-oxybis[1-chloropropane]   | 1 ug/mL       |
|                     |          |           |                      |                      |                     |              | 2,3,4,6-Tetrachlorophenol      | 1 ug/mL       |
|                     |          |           |                      |                      |                     |              | 2,4,5-Trichlorophenol          | 1 ug/mL       |
|                     |          |           |                      |                      |                     |              | 2,4,6-Trichlorophenol          | 1 ug/mL       |
|                     |          |           |                      |                      |                     |              | 2,4-Dichlorophenol             | 1 ug/mL       |
|                     |          |           |                      |                      |                     |              | 2,4-Dimethylphenol             | 1 ug/mL       |
|                     |          |           |                      |                      |                     |              | 2,4-Dinitrophenol              | 2 ug/mL       |
|                     |          |           |                      |                      |                     |              | 2,4-Dinitrotoluene             | 1 ug/mL       |
|                     |          |           |                      |                      |                     |              | 2,6-Dichlorophenol             | 1 ug/mL       |
|                     |          |           |                      |                      |                     |              | 2,6-Dinitrotoluene             | 1 ug/mL       |
|                     |          |           |                      |                      |                     |              | 2-Chloronaphthalene            | 1 ug/mL       |
|                     |          |           |                      |                      |                     |              | 2-Chlorophenol                 | 1 ug/mL       |
|                     |          |           |                      |                      |                     |              | 2-Methylnaphthalene            | 1 ug/mL       |
|                     |          |           |                      |                      |                     |              | 2-Methylphenol                 | 1 ug/mL       |
|                     |          |           |                      |                      |                     |              | 2-Nitroaniline                 | 1 ug/mL       |
|                     |          |           |                      |                      |                     |              | 2-Nitrophenol                  | 1 ug/mL       |
|                     |          |           |                      |                      |                     |              | 3-Nitroaniline                 | 1 ug/mL       |
|                     |          |           |                      |                      |                     |              | 4,6-Dinitro-2-methylphenol     | 2 ug/mL       |
|                     |          |           |                      |                      |                     |              | 4-Bromophenyl phenyl ether     | 1 ug/mL       |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent |              | Analyte                      | Concentration |
|------------|----------|-----------|---------------|----------------------|----------------|--------------|------------------------------|---------------|
|            |          |           |               |                      | Reagent ID     | Volume Added |                              |               |
|            |          |           |               |                      |                |              | 4-Chloro-3-methylphenol      | 1 ug/mL       |
|            |          |           |               |                      |                |              | 4-Chloroaniline              | 1 ug/mL       |
|            |          |           |               |                      |                |              | 4-Chlorophenyl phenyl ether  | 1 ug/mL       |
|            |          |           |               |                      |                |              | 4-Methylphenol               | 1 ug/mL       |
|            |          |           |               |                      |                |              | 4-Nitroaniline               | 1 ug/mL       |
|            |          |           |               |                      |                |              | 4-Nitrophenol                | 2 ug/mL       |
|            |          |           |               |                      |                |              | Acenaphthene                 | 1 ug/mL       |
|            |          |           |               |                      |                |              | Acenaphthylene               | 1 ug/mL       |
|            |          |           |               |                      |                |              | Acetophenone                 | 1 ug/mL       |
|            |          |           |               |                      |                |              | Aniline                      | 1 ug/mL       |
|            |          |           |               |                      |                |              | Anthracene                   | 1 ug/mL       |
|            |          |           |               |                      |                |              | Benzo[a]anthracene           | 1 ug/mL       |
|            |          |           |               |                      |                |              | Benzo[a]pyrene               | 1 ug/mL       |
|            |          |           |               |                      |                |              | Benzo[b]fluoranthene         | 1 ug/mL       |
|            |          |           |               |                      |                |              | Benzo[g,h,i]perylene         | 1 ug/mL       |
|            |          |           |               |                      |                |              | Benzo[k]fluoranthene         | 1 ug/mL       |
|            |          |           |               |                      |                |              | Benzyl alcohol               | 1 ug/mL       |
|            |          |           |               |                      |                |              | Bis (2-chloroethoxy)methane  | 1 ug/mL       |
|            |          |           |               |                      |                |              | Bis (2-chloroethyl) ether    | 1 ug/mL       |
|            |          |           |               |                      |                |              | Bis (2-ethylhexyl) phthalate | 1 ug/mL       |
|            |          |           |               |                      |                |              | Butyl benzyl phthalate       | 1 ug/mL       |
|            |          |           |               |                      |                |              | Carbazole                    | 1 ug/mL       |
|            |          |           |               |                      |                |              | Chrysene                     | 1 ug/mL       |
|            |          |           |               |                      |                |              | Di-n-butyl phthalate         | 1 ug/mL       |
|            |          |           |               |                      |                |              | Di-n-octyl phthalate         | 1 ug/mL       |
|            |          |           |               |                      |                |              | Dibenz (a,h) anthracene      | 1 ug/mL       |
|            |          |           |               |                      |                |              | Dibenzofuran                 | 1 ug/mL       |
|            |          |           |               |                      |                |              | Diethyl phthalate            | 1 ug/mL       |
|            |          |           |               |                      |                |              | Dimethyl phthalate           | 1 ug/mL       |
|            |          |           |               |                      |                |              | Fluoranthene                 | 1 ug/mL       |
|            |          |           |               |                      |                |              | Fluorene                     | 1 ug/mL       |
|            |          |           |               |                      |                |              | Hexachlorobenzene            | 1 ug/mL       |
|            |          |           |               |                      |                |              | Hexachlorobutadiene          | 1 ug/mL       |
|            |          |           |               |                      |                |              | Hexachlorocyclopentadiene    | 1 ug/mL       |
|            |          |           |               |                      |                |              | Hexachloroethane             | 1 ug/mL       |
|            |          |           |               |                      |                |              | Hexadecane                   | 1 ug/mL       |
|            |          |           |               |                      |                |              | Indeno[1,2,3-cd]pyrene       | 1 ug/mL       |
|            |          |           |               |                      |                |              | Isophorone                   | 1 ug/mL       |
|            |          |           |               |                      |                |              | n-Decane                     | 1 ug/mL       |
|            |          |           |               |                      |                |              | N-Nitrosodi-n-propylamine    | 1 ug/mL       |
|            |          |           |               |                      |                |              | N-Nitrosodimethylamine       | 1 ug/mL       |
|            |          |           |               |                      |                |              | N-Nitrosodiphenylamine       | 2 ug/mL       |
|            |          |           |               |                      |                |              | n-Octadecane                 | 1 ug/mL       |
|            |          |           |               |                      |                |              | Naphthalene                  | 1 ug/mL       |
|            |          |           |               |                      |                |              | Nitrobenzene                 | 1 ug/mL       |
|            |          |           |               |                      |                |              | Pentachlorophenol            | 2 ug/mL       |
|            |          |           |               |                      |                |              | Phenanthrene                 | 1 ug/mL       |
|            |          |           |               |                      |                |              | Phenol                       | 1 ug/mL       |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID           | Exp Date | Prep Date | Dilutant Used       | Reagent Final Volume | Parent Reagent      |              | Analyte                        | Concentration |
|----------------------|----------|-----------|---------------------|----------------------|---------------------|--------------|--------------------------------|---------------|
|                      |          |           |                     |                      | Reagent ID          | Volume Added |                                |               |
|                      |          |           |                     |                      |                     |              | Pyrene                         | 1 ug/mL       |
|                      |          |           |                     |                      |                     |              | Pyridine                       | 1 ug/mL       |
|                      |          |           |                     |                      |                     |              | Benzoic acid                   | 1 ug/mL       |
|                      |          |           |                     |                      |                     |              | Indene                         | 1 ug/mL       |
|                      |          |           |                     |                      |                     |              | Atrazine                       | 1 ug/mL       |
|                      |          |           |                     |                      |                     |              | Benzaldehyde                   | 1 ug/mL       |
|                      |          |           |                     |                      |                     |              | Caprolactam                    | 1 ug/mL       |
|                      |          |           |                     |                      |                     |              | 3,3'-Dichlorobenzidine         | 1 ug/mL       |
|                      |          |           |                     |                      |                     |              | Benzidine                      | 1 ug/mL       |
|                      |          |           |                     |                      |                     |              | 2,4,6-Tribromophenol (Surr)    | 1 ug/mL       |
|                      |          |           |                     |                      |                     |              | 2-Fluorobiphenyl               | 1 ug/mL       |
|                      |          |           |                     |                      |                     |              | 2-Fluorophenol (Surr)          | 1 ug/mL       |
|                      |          |           |                     |                      |                     |              | Nitrobenzene-d5 (Surr)         | 1 ug/mL       |
|                      |          |           |                     |                      |                     |              | Phenol-d5 (Surr)               | 1 ug/mL       |
|                      |          |           |                     |                      |                     |              | Terphenyl-d14 (Surr)           | 1 ug/mL       |
|                      |          |           |                     |                      |                     |              | Methyl methanesulfonate        | 1 ug/mL       |
|                      |          |           |                     |                      |                     |              | N-Nitrosopyrrolidine           | 1 ug/mL       |
| .SVTAPITINTRNi_00007 | 12/03/15 | 12/03/14  | MeCl2, Lot 1417620  | 25 mL                | SVLVIntstd_00004    | 5 mL         | 1,4-Dichlorobenzene-d4         | 400 ug/mL     |
|                      |          |           |                     |                      |                     |              | Acenaphthene-d10               | 400 ug/mL     |
|                      |          |           |                     |                      |                     |              | Chrysene-d12                   | 400 ug/mL     |
|                      |          |           |                     |                      |                     |              | Naphthalene-d8                 | 400 ug/mL     |
|                      |          |           |                     |                      |                     |              | Perylene-d12                   | 400 ug/mL     |
|                      |          |           |                     |                      |                     |              | Phenanthrene-d10               | 400 ug/mL     |
| ..SVLVIntstd_00004   | 02/28/18 |           | Restek, Lot A093676 |                      | (Purchased Reagent) |              | 1,4-Dichlorobenzene-d4         | 2000 ug/mL    |
|                      |          |           |                     |                      |                     |              | Acenaphthene-d10               | 2000 ug/mL    |
|                      |          |           |                     |                      |                     |              | Chrysene-d12                   | 2000 ug/mL    |
|                      |          |           |                     |                      |                     |              | Naphthalene-d8                 | 2000 ug/mL    |
|                      |          |           |                     |                      |                     |              | Perylene-d12                   | 2000 ug/mL    |
|                      |          |           |                     |                      |                     |              | Phenanthrene-d10               | 2000 ug/mL    |
| .SVTAPITSTCKi_00006  | 10/23/15 | 04/23/15  | MeCl2, Lot 1417620  | 20 mL                | sv benzoepyre_00001 | 800 uL       | Benzo[e]pyrene                 | 40 ug/mL      |
|                      |          |           |                     |                      | SV2356TCPs_00002    | 800 uL       | 2,3,5,6-Tetrachlorophenol      | 40 ug/mL      |
|                      |          |           |                     |                      | SV2NAPAMINEs_00002  | 800 uL       | 2-Naphthylamine                | 40 ug/mL      |
|                      |          |           |                     |                      | sv712dimbenza_00011 | 800 uL       | 7,12-Dimethylbenz(a)anthracene | 40 ug/mL      |
|                      |          |           |                     |                      | SVLVstd1_00032      | 800 uL       | 1,1'-Biphenyl                  | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1,2,4,5-Tetrachlorobenzene     | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1,2,4-Trichlorobenzene         | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1,2-Dichlorobenzene            | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1,2-Diphenylhydrazine          | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1,3-Dichlorobenzene            | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1,3-Dinitrobenzene             | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1,4-Dichlorobenzene            | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1,4-Dioxane                    | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1-Methylnaphthalene            | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 2,2'-oxybis[1-chloropropane]   | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 2,3,4,6-Tetrachlorophenol      | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 2,4,5-Trichlorophenol          | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 2,4,6-Trichlorophenol          | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 2,4-Dichlorophenol             | 40 ug/mL      |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent |              | Analyte                      | Concentration |
|------------|----------|-----------|---------------|----------------------|----------------|--------------|------------------------------|---------------|
|            |          |           |               |                      | Reagent ID     | Volume Added |                              |               |
|            |          |           |               |                      |                |              | 2,4-Dimethylphenol           | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2,4-Dinitrophenol            | 80 ug/mL      |
|            |          |           |               |                      |                |              | 2,4-Dinitrotoluene           | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2,6-Dichlorophenol           | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2,6-Dinitrotoluene           | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2-Chloronaphthalene          | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2-Chlorophenol               | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2-Methylnaphthalene          | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2-Methylphenol               | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2-Nitroaniline               | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2-Nitrophenol                | 40 ug/mL      |
|            |          |           |               |                      |                |              | 3-Nitroaniline               | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4,6-Dinitro-2-methylphenol   | 80 ug/mL      |
|            |          |           |               |                      |                |              | 4-Bromophenyl phenyl ether   | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4-Chloro-3-methylphenol      | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4-Chloroaniline              | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4-Chlorophenyl phenyl ether  | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4-Methylphenol               | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4-Nitroaniline               | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4-Nitrophenol                | 80 ug/mL      |
|            |          |           |               |                      |                |              | Acenaphthene                 | 40 ug/mL      |
|            |          |           |               |                      |                |              | Acenaphthylene               | 40 ug/mL      |
|            |          |           |               |                      |                |              | Acetophenone                 | 40 ug/mL      |
|            |          |           |               |                      |                |              | Aniline                      | 40 ug/mL      |
|            |          |           |               |                      |                |              | Anthracene                   | 40 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[a]anthracene           | 40 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[a]pyrene               | 40 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[b]fluoranthene         | 40 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[g,h,i]perylene         | 40 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[k]fluoranthene         | 40 ug/mL      |
|            |          |           |               |                      |                |              | Benzyl alcohol               | 40 ug/mL      |
|            |          |           |               |                      |                |              | Bis (2-chloroethoxy)methane  | 40 ug/mL      |
|            |          |           |               |                      |                |              | Bis (2-chloroethyl) ether    | 40 ug/mL      |
|            |          |           |               |                      |                |              | Bis (2-ethylhexyl) phthalate | 40 ug/mL      |
|            |          |           |               |                      |                |              | Butyl benzyl phthalate       | 40 ug/mL      |
|            |          |           |               |                      |                |              | Carbazole                    | 40 ug/mL      |
|            |          |           |               |                      |                |              | Chrysene                     | 40 ug/mL      |
|            |          |           |               |                      |                |              | Di-n-butyl phthalate         | 40 ug/mL      |
|            |          |           |               |                      |                |              | Di-n-octyl phthalate         | 40 ug/mL      |
|            |          |           |               |                      |                |              | Dibenz (a,h) anthracene      | 40 ug/mL      |
|            |          |           |               |                      |                |              | Dibenzofuran                 | 40 ug/mL      |
|            |          |           |               |                      |                |              | Diethyl phthalate            | 40 ug/mL      |
|            |          |           |               |                      |                |              | Dimethyl phthalate           | 40 ug/mL      |
|            |          |           |               |                      |                |              | Fluoranthene                 | 40 ug/mL      |
|            |          |           |               |                      |                |              | Fluorene                     | 40 ug/mL      |
|            |          |           |               |                      |                |              | Hexachlorobenzene            | 40 ug/mL      |
|            |          |           |               |                      |                |              | Hexachlorobutadiene          | 40 ug/mL      |
|            |          |           |               |                      |                |              | Hexachlorocyclopentadiene    | 40 ug/mL      |

## REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID            | Exp Date | Prep Date               | Dilutant Used                 | Reagent Final Volume | Parent Reagent      |                                | Analyte                     | Concentration |
|-----------------------|----------|-------------------------|-------------------------------|----------------------|---------------------|--------------------------------|-----------------------------|---------------|
|                       |          |                         |                               |                      | Reagent ID          | Volume Added                   |                             |               |
|                       |          |                         |                               |                      |                     |                                | Hexachloroethane            | 40 ug/mL      |
|                       |          |                         |                               |                      |                     |                                | Hexadecane                  | 40 ug/mL      |
|                       |          |                         |                               |                      |                     |                                | Indeno[1,2,3-cd]pyrene      | 40 ug/mL      |
|                       |          |                         |                               |                      |                     |                                | Isophorone                  | 40 ug/mL      |
|                       |          |                         |                               |                      |                     |                                | n-Decane                    | 40 ug/mL      |
|                       |          |                         |                               |                      |                     |                                | N-Nitrosodi-n-propylamine   | 40 ug/mL      |
|                       |          |                         |                               |                      |                     |                                | N-Nitrosodimethylamine      | 40 ug/mL      |
|                       |          |                         |                               |                      |                     |                                | N-Nitrosodiphenylamine      | 80 ug/mL      |
|                       |          |                         |                               |                      |                     |                                | n-Octadecane                | 40 ug/mL      |
|                       |          |                         |                               |                      |                     |                                | Naphthalene                 | 40 ug/mL      |
|                       |          |                         |                               |                      |                     |                                | Nitrobenzene                | 40 ug/mL      |
|                       |          |                         |                               |                      |                     |                                | Pentachlorophenol           | 80 ug/mL      |
|                       |          |                         |                               |                      |                     |                                | Phenanthrene                | 40 ug/mL      |
|                       |          |                         |                               |                      |                     |                                | Phenol                      | 40 ug/mL      |
|                       |          |                         |                               |                      |                     |                                | Pyrene                      | 40 ug/mL      |
|                       |          |                         |                               |                      |                     |                                | Pyridine                    | 40 ug/mL      |
|                       |          |                         |                               |                      | SVLVstd10_00001     | 400 uL                         | Benzoic acid                | 40 ug/mL      |
|                       |          |                         |                               |                      | SVLVstd11_00001     | 400 uL                         | Indene                      | 40 ug/mL      |
|                       |          |                         |                               |                      |                     |                                | Atrazine                    | 40 ug/mL      |
|                       |          |                         |                               |                      |                     |                                | Benzaldehyde                | 40 ug/mL      |
|                       |          |                         |                               |                      | SVLVstd9_00001      | 400 uL                         | Caprolactam                 | 40 ug/mL      |
|                       |          |                         |                               |                      |                     |                                | 3,3'-Dichlorobenzidine      | 40 ug/mL      |
|                       |          |                         |                               |                      | SVLVSURRSPK_00014   | 160 uL                         | Benzidine                   | 40 ug/mL      |
|                       |          |                         |                               |                      |                     |                                | 2,4,6-Tribromophenol (Surr) | 40 ug/mL      |
|                       |          |                         |                               |                      |                     |                                | 2-Fluorobiphenyl            | 40 ug/mL      |
|                       |          |                         |                               |                      |                     |                                | 2-Fluorophenol (Surr)       | 40 ug/mL      |
|                       |          |                         |                               |                      |                     |                                | Nitrobenzene-d5 (Surr)      | 40 ug/mL      |
| Phenol-d5 (Surr)      | 40 ug/mL |                         |                               |                      |                     |                                |                             |               |
| svmethylmetha_00011   | 800 uL   | Terphenyl-d14 (Surr)    | 40 ug/mL                      |                      |                     |                                |                             |               |
| SVNNITROPYROS_00015   | 800 uL   | Methyl methanesulfonate | 40 ug/mL                      |                      |                     |                                |                             |               |
|                       |          |                         |                               |                      |                     | N-Nitrosopyrrolidine           | 40 ug/mL                    |               |
| ..sv benzoepyre 00001 | 10/03/18 |                         | Absolute, Lot 100313          |                      | (Purchased Reagent) | Benzo[e]pyrene                 | 1000 ug/mL                  |               |
| ..SV2356TCPs 00002    | 06/17/16 |                         | Absolute, Lot 061711          |                      | (Purchased Reagent) | 2,3,5,6-Tetrachlorophenol      | 1000 ug/mL                  |               |
| ..SV2NAPAMINEs 00002  | 06/30/17 |                         | Ultra Scientific, Lot Ck-1617 |                      | (Purchased Reagent) | 2-Naphthylamine                | 1000 ug/mL                  |               |
| ..sv712dimbenza 00011 | 04/09/20 |                         | Absolute, Lot 040915          |                      | (Purchased Reagent) | 7,12-Dimethylbenz(a)anthracene | 1000 ug/mL                  |               |
| ..SVLVstd1_00032      | 05/31/16 |                         | Restek, Lot A0107399          |                      | (Purchased Reagent) | 1,1'-Biphenyl                  | 1000 ug/mL                  |               |
|                       |          |                         |                               |                      |                     | 1,2,4,5-Tetrachlorobenzene     | 1000 ug/mL                  |               |
|                       |          |                         |                               |                      |                     | 1,2,4-Trichlorobenzene         | 1000 ug/mL                  |               |
|                       |          |                         |                               |                      |                     | 1,2-Dichlorobenzene            | 1000 ug/mL                  |               |
|                       |          |                         |                               |                      |                     | 1,2-Diphenylhydrazine          | 1000 ug/mL                  |               |
|                       |          |                         |                               |                      |                     | 1,3-Dichlorobenzene            | 1000 ug/mL                  |               |
|                       |          |                         |                               |                      |                     | 1,3-Dinitrobenzene             | 1000 ug/mL                  |               |
|                       |          |                         |                               |                      |                     | 1,4-Dichlorobenzene            | 1000 ug/mL                  |               |
|                       |          |                         |                               |                      |                     | 1,4-Dioxane                    | 1000 ug/mL                  |               |
|                       |          |                         |                               |                      |                     | 1-Methylnaphthalene            | 1000 ug/mL                  |               |
|                       |          |                         |                               |                      |                     | 2,2'-oxybis[1-chloropropane]   | 1000 ug/mL                  |               |
|                       |          |                         |                               |                      |                     | 2,3,4,6-Tetrachlorophenol      | 1000 ug/mL                  |               |
|                       |          |                         |                               |                      |                     | 2,4,5-Trichlorophenol          | 1000 ug/mL                  |               |



REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent |              | Analyte                      | Concentration |
|------------|----------|-----------|---------------|----------------------|----------------|--------------|------------------------------|---------------|
|            |          |           |               |                      | Reagent ID     | Volume Added |                              |               |
|            |          |           |               |                      |                |              | 2,4,6-Trichlorophenol        | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,4-Dichlorophenol           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,4-Dimethylphenol           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,4-Dinitrophenol            | 2000 ug/mL    |
|            |          |           |               |                      |                |              | 2,4-Dinitrotoluene           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,6-Dichlorophenol           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,6-Dinitrotoluene           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2-Chloronaphthalene          | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2-Chlorophenol               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2-Methylnaphthalene          | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2-Methylphenol               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2-Nitroaniline               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2-Nitrophenol                | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 3-Nitroaniline               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4,6-Dinitro-2-methylphenol   | 2000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Bromophenyl phenyl ether   | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Chloro-3-methylphenol      | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Chloroaniline              | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Chlorophenyl phenyl ether  | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Methylphenol               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Nitroaniline               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Nitrophenol                | 2000 ug/mL    |
|            |          |           |               |                      |                |              | Acenaphthene                 | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Acenaphthylene               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Acetophenone                 | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Aniline                      | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Anthracene                   | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzo[a]anthracene           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzo[a]pyrene               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzo[b]fluoranthene         | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzo[g,h,i]perylene         | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzo[k]fluoranthene         | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzyl alcohol               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Bis (2-chloroethoxy)methane  | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Bis (2-chloroethyl) ether    | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Bis (2-ethylhexyl) phthalate | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Butyl benzyl phthalate       | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Carbazole                    | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Chrysene                     | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Di-n-butyl phthalate         | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Di-n-octyl phthalate         | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Dibenz (a,h) anthracene      | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Dibenzofuran                 | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Diethyl phthalate            | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Dimethyl phthalate           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Fluoranthene                 | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Fluorene                     | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Hexachlorobenzene            | 1000 ug/mL    |

## REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID               | Exp Date | Prep Date | Dilutant Used        | Reagent Final Volume | Parent Reagent      |              | Analyte                        | Concentration |
|--------------------------|----------|-----------|----------------------|----------------------|---------------------|--------------|--------------------------------|---------------|
|                          |          |           |                      |                      | Reagent ID          | Volume Added |                                |               |
|                          |          |           |                      |                      |                     |              | Hexachlorobutadiene            | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Hexachlorocyclopentadiene      | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Hexachloroethane               | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Hexadecane                     | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Indeno[1,2,3-cd]pyrene         | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Isophorone                     | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | n-Decane                       | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | N-Nitrosodi-n-propylamine      | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | N-Nitrosodimethylamine         | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | N-Nitrosodiphenylamine         | 2000 ug/mL    |
|                          |          |           |                      |                      |                     |              | n-Octadecane                   | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Naphthalene                    | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Nitrobenzene                   | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Pentachlorophenol              | 2000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Phenanthrene                   | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Phenol                         | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Pyrene                         | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Pyridine                       | 1000 ug/mL    |
| ..SVLVstd10_00001        | 06/30/16 |           | Restek, Lot A0107943 |                      | (Purchased Reagent) |              | Benzoic acid                   | 2000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Indene                         | 2000 ug/mL    |
| ..SVLVstd11_00001        | 06/30/16 |           | Restek, Lot A0108035 |                      | (Purchased Reagent) |              | Atrazine                       | 2000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Benzaldehyde                   | 2000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Caprolactam                    | 2000 ug/mL    |
| ..SVLVstd9_00001         | 07/31/16 |           | Restek, Lot A0108709 |                      | (Purchased Reagent) |              | 3,3'-Dichlorobenzidine         | 2000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Benzidine                      | 2000 ug/mL    |
| ..SVLVSURRSPK_00014      | 05/31/19 |           | Restek, Lot A0103615 |                      | (Purchased Reagent) |              | 2,4,6-Tribromophenol (Surr)    | 5000 ug/mL    |
|                          |          |           |                      |                      |                     |              | 2-Fluorobiphenyl               | 5000 ug/mL    |
|                          |          |           |                      |                      |                     |              | 2-Fluorophenol (Surr)          | 5000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Nitrobenzene-d5 (Surr)         | 5000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Phenol-d5 (Surr)               | 5000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Terphenyl-d14 (Surr)           | 5000 ug/mL    |
| ..svmethyImetha_00011    | 02/13/20 |           | Absolute, Lot 021315 |                      | (Purchased Reagent) |              | Methyl methanesulfonate        | 1000 ug/mL    |
| ..SVNNITROPYROS_00015    | 06/05/17 |           | absolute, Lot 060514 |                      | (Purchased Reagent) |              | N-Nitrosopyrrolidine           | 1000 ug/mL    |
| <b>SVTAPSTD20i_00007</b> | 10/23/15 | 04/23/15  | MeCl2, Lot 1417620   | 1 mL                 | SVTAPITINTRNi_00007 | 10 uL        | 1,4-Dichlorobenzene-d4         | 4 ug/mL       |
|                          |          |           |                      |                      |                     |              | Acenaphthene-d10               | 4 ug/mL       |
|                          |          |           |                      |                      |                     |              | Chrysene-d12                   | 4 ug/mL       |
|                          |          |           |                      |                      |                     |              | Naphthalene-d8                 | 4 ug/mL       |
|                          |          |           |                      |                      |                     |              | Perylene-d12                   | 4 ug/mL       |
|                          |          |           |                      |                      |                     |              | Phenanthrene-d10               | 4 ug/mL       |
|                          |          |           |                      |                      | SVTAPITSTCKi_00006  | 250 uL       | Benzo[e]pyrene                 | 10 ug/mL      |
|                          |          |           |                      |                      |                     |              | 2,3,5,6-Tetrachlorophenol      | 10 ug/mL      |
|                          |          |           |                      |                      |                     |              | 2-Naphthylamine                | 10 ug/mL      |
|                          |          |           |                      |                      |                     |              | 7,12-Dimethylbenz(a)anthracene | 10 ug/mL      |
|                          |          |           |                      |                      |                     |              | 1,1'-Biphenyl                  | 10 ug/mL      |
|                          |          |           |                      |                      |                     |              | 1,2,4,5-Tetrachlorobenzene     | 10 ug/mL      |
|                          |          |           |                      |                      |                     |              | 1,2,4-Trichlorobenzene         | 10 ug/mL      |
|                          |          |           |                      |                      |                     |              | 1,2-Dichlorobenzene            | 10 ug/mL      |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent |              | Analyte                      | Concentration |
|------------|----------|-----------|---------------|----------------------|----------------|--------------|------------------------------|---------------|
|            |          |           |               |                      | Reagent ID     | Volume Added |                              |               |
|            |          |           |               |                      |                |              | 1,2-Diphenylhydrazine        | 10 ug/mL      |
|            |          |           |               |                      |                |              | 1,3-Dichlorobenzene          | 10 ug/mL      |
|            |          |           |               |                      |                |              | 1,3-Dinitrobenzene           | 10 ug/mL      |
|            |          |           |               |                      |                |              | 1,4-Dichlorobenzene          | 10 ug/mL      |
|            |          |           |               |                      |                |              | 1,4-Dioxane                  | 10 ug/mL      |
|            |          |           |               |                      |                |              | 1-Methylnaphthalene          | 10 ug/mL      |
|            |          |           |               |                      |                |              | 2,2'-oxybis[1-chloropropane] | 10 ug/mL      |
|            |          |           |               |                      |                |              | 2,3,4,6-Tetrachlorophenol    | 10 ug/mL      |
|            |          |           |               |                      |                |              | 2,4,5-Trichlorophenol        | 10 ug/mL      |
|            |          |           |               |                      |                |              | 2,4,6-Trichlorophenol        | 10 ug/mL      |
|            |          |           |               |                      |                |              | 2,4-Dichlorophenol           | 10 ug/mL      |
|            |          |           |               |                      |                |              | 2,4-Dimethylphenol           | 10 ug/mL      |
|            |          |           |               |                      |                |              | 2,4-Dinitrophenol            | 20 ug/mL      |
|            |          |           |               |                      |                |              | 2,4-Dinitrotoluene           | 10 ug/mL      |
|            |          |           |               |                      |                |              | 2,6-Dichlorophenol           | 10 ug/mL      |
|            |          |           |               |                      |                |              | 2,6-Dinitrotoluene           | 10 ug/mL      |
|            |          |           |               |                      |                |              | 2-Chloronaphthalene          | 10 ug/mL      |
|            |          |           |               |                      |                |              | 2-Chlorophenol               | 10 ug/mL      |
|            |          |           |               |                      |                |              | 2-Methylnaphthalene          | 10 ug/mL      |
|            |          |           |               |                      |                |              | 2-Methylphenol               | 10 ug/mL      |
|            |          |           |               |                      |                |              | 2-Nitroaniline               | 10 ug/mL      |
|            |          |           |               |                      |                |              | 2-Nitrophenol                | 10 ug/mL      |
|            |          |           |               |                      |                |              | 3-Nitroaniline               | 10 ug/mL      |
|            |          |           |               |                      |                |              | 4,6-Dinitro-2-methylphenol   | 20 ug/mL      |
|            |          |           |               |                      |                |              | 4-Bromophenyl phenyl ether   | 10 ug/mL      |
|            |          |           |               |                      |                |              | 4-Chloro-3-methylphenol      | 10 ug/mL      |
|            |          |           |               |                      |                |              | 4-Chloroaniline              | 10 ug/mL      |
|            |          |           |               |                      |                |              | 4-Chlorophenyl phenyl ether  | 10 ug/mL      |
|            |          |           |               |                      |                |              | 4-Methylphenol               | 10 ug/mL      |
|            |          |           |               |                      |                |              | 4-Nitroaniline               | 10 ug/mL      |
|            |          |           |               |                      |                |              | 4-Nitrophenol                | 20 ug/mL      |
|            |          |           |               |                      |                |              | Acenaphthene                 | 10 ug/mL      |
|            |          |           |               |                      |                |              | Acenaphthylene               | 10 ug/mL      |
|            |          |           |               |                      |                |              | Acetophenone                 | 10 ug/mL      |
|            |          |           |               |                      |                |              | Aniline                      | 10 ug/mL      |
|            |          |           |               |                      |                |              | Anthracene                   | 10 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[a]anthracene           | 10 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[a]pyrene               | 10 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[b]fluoranthene         | 10 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[g,h,i]perylene         | 10 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[k]fluoranthene         | 10 ug/mL      |
|            |          |           |               |                      |                |              | Benzyl alcohol               | 10 ug/mL      |
|            |          |           |               |                      |                |              | Bis(2-chloroethoxy)methane   | 10 ug/mL      |
|            |          |           |               |                      |                |              | Bis(2-chloroethyl)ether      | 10 ug/mL      |
|            |          |           |               |                      |                |              | Bis(2-ethylhexyl) phthalate  | 10 ug/mL      |
|            |          |           |               |                      |                |              | Butyl benzyl phthalate       | 10 ug/mL      |
|            |          |           |               |                      |                |              | Carbazole                    | 10 ug/mL      |
|            |          |           |               |                      |                |              | Chrysene                     | 10 ug/mL      |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID           | Exp Date | Prep Date | Dilutant Used      | Reagent Final Volume | Parent Reagent   |              | Analyte                     | Concentration |
|----------------------|----------|-----------|--------------------|----------------------|------------------|--------------|-----------------------------|---------------|
|                      |          |           |                    |                      | Reagent ID       | Volume Added |                             |               |
|                      |          |           |                    |                      |                  |              | Di-n-butyl phthalate        | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | Di-n-octyl phthalate        | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | Dibenz(a,h)anthracene       | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | Dibenzofuran                | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | Diethyl phthalate           | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | Dimethyl phthalate          | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | Fluoranthene                | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | Fluorene                    | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | Hexachlorobenzene           | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | Hexachlorobutadiene         | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | Hexachlorocyclopentadiene   | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | Hexachloroethane            | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | Hexadecane                  | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | Indeno[1,2,3-cd]pyrene      | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | Isophorone                  | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | n-Decane                    | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | N-Nitrosodi-n-propylamine   | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | N-Nitrosodimethylamine      | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | N-Nitrosodiphenylamine      | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | n-Octadecane                | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | Naphthalene                 | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | Nitrobenzene                | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | Pentachlorophenol           | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | Phenanthrene                | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | Phenol                      | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | Pyrene                      | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | Pyridine                    | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | Benzoic acid                | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | Indene                      | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | Atrazine                    | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | Benzaldehyde                | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | Caprolactam                 | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | 3,3'-Dichlorobenzidine      | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | Benzidine                   | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | 2,4,6-Tribromophenol (Surr) | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | 2-Fluorobiphenyl            | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | 2-Fluorophenol (Surr)       | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | Nitrobenzene-d5 (Surr)      | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | Phenol-d5 (Surr)            | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | Terphenyl-d14 (Surr)        | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | Methyl methanesulfonate     | 10 ug/mL      |
|                      |          |           |                    |                      |                  |              | N-Nitrosopyrrolidine        | 10 ug/mL      |
| .SVTAPITINTRNi_00007 | 12/03/15 | 12/03/14  | MeCl2, Lot 1417620 | 25 mL                | SVLVIntstd_00004 | 5 mL         | 1,4-Dichlorobenzene-d4      | 400 ug/mL     |
|                      |          |           |                    |                      |                  |              | Acenaphthene-d10            | 400 ug/mL     |
|                      |          |           |                    |                      |                  |              | Chrysene-d12                | 400 ug/mL     |
|                      |          |           |                    |                      |                  |              | Naphthalene-d8              | 400 ug/mL     |
|                      |          |           |                    |                      |                  |              | Perylene-d12                | 400 ug/mL     |
|                      |          |           |                    |                      |                  |              | Phenanthrene-d10            | 400 ug/mL     |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID          | Exp Date | Prep Date           | Dilutant Used      | Reagent Final Volume | Parent Reagent      |              | Analyte                        | Concentration |
|---------------------|----------|---------------------|--------------------|----------------------|---------------------|--------------|--------------------------------|---------------|
|                     |          |                     |                    |                      | Reagent ID          | Volume Added |                                |               |
| ..SVLVIntstd_00004  | 02/28/18 | Restek, Lot A093676 |                    |                      | (Purchased Reagent) |              | 1,4-Dichlorobenzene-d4         | 2000 ug/mL    |
|                     |          |                     |                    |                      |                     |              | Acenaphthene-d10               | 2000 ug/mL    |
|                     |          |                     |                    |                      |                     |              | Chrysene-d12                   | 2000 ug/mL    |
|                     |          |                     |                    |                      |                     |              | Naphthalene-d8                 | 2000 ug/mL    |
|                     |          |                     |                    |                      |                     |              | Perylene-d12                   | 2000 ug/mL    |
|                     |          |                     |                    |                      |                     |              | Phenanthrene-d10               | 2000 ug/mL    |
| .SVTAPITSTCKi_00006 | 10/23/15 | 04/23/15            | MeCl2, Lot 1417620 | 20 mL                | sv benzoepyre_00001 | 800 uL       | Benzo[e]pyrene                 | 40 ug/mL      |
|                     |          |                     |                    |                      | SV2356TCPs_00002    | 800 uL       | 2,3,5,6-Tetrachlorophenol      | 40 ug/mL      |
|                     |          |                     |                    |                      | SV2NAPAMINes_00002  | 800 uL       | 2-Naphthylamine                | 40 ug/mL      |
|                     |          |                     |                    |                      | sv712dimbenza_00011 | 800 uL       | 7,12-Dimethylbenz(a)anthracene | 40 ug/mL      |
|                     |          |                     |                    |                      | SVLVstd1_00032      | 800 uL       | 1,1'-Biphenyl                  | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 1,2,4,5-Tetrachlorobenzene     | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 1,2,4-Trichlorobenzene         | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 1,2-Dichlorobenzene            | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 1,2-Diphenylhydrazine          | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 1,3-Dichlorobenzene            | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 1,3-Dinitrobenzene             | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 1,4-Dichlorobenzene            | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 1,4-Dioxane                    | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 1-Methylnaphthalene            | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 2,2'-oxybis[1-chloropropane]   | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 2,3,4,6-Tetrachlorophenol      | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 2,4,5-Trichlorophenol          | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 2,4,6-Trichlorophenol          | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 2,4-Dichlorophenol             | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 2,4-Dimethylphenol             | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 2,4-Dinitrophenol              | 80 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 2,4-Dinitrotoluene             | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 2,6-Dichlorophenol             | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 2,6-Dinitrotoluene             | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 2-Chloronaphthalene            | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 2-Chlorophenol                 | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 2-Methylnaphthalene            | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 2-Methylphenol                 | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 2-Nitroaniline                 | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 2-Nitrophenol                  | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 3-Nitroaniline                 | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 4,6-Dinitro-2-methylphenol     | 80 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 4-Bromophenyl phenyl ether     | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 4-Chloro-3-methylphenol        | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 4-Chloroaniline                | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 4-Chlorophenyl phenyl ether    | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 4-Methylphenol                 | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 4-Nitroaniline                 | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 4-Nitrophenol                  | 80 ug/mL      |
|                     |          |                     |                    |                      |                     |              | Acenaphthene                   | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | Acenaphthylene                 | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | Acetophenone                   | 40 ug/mL      |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent    |              | Analyte                      | Concentration |
|------------|----------|-----------|---------------|----------------------|-------------------|--------------|------------------------------|---------------|
|            |          |           |               |                      | Reagent ID        | Volume Added |                              |               |
|            |          |           |               |                      |                   |              | Aniline                      | 40 ug/mL      |
|            |          |           |               |                      |                   |              | Anthracene                   | 40 ug/mL      |
|            |          |           |               |                      |                   |              | Benzo[a]anthracene           | 40 ug/mL      |
|            |          |           |               |                      |                   |              | Benzo[a]pyrene               | 40 ug/mL      |
|            |          |           |               |                      |                   |              | Benzo[b]fluoranthene         | 40 ug/mL      |
|            |          |           |               |                      |                   |              | Benzo[g,h,i]perylene         | 40 ug/mL      |
|            |          |           |               |                      |                   |              | Benzo[k]fluoranthene         | 40 ug/mL      |
|            |          |           |               |                      |                   |              | Benzyl alcohol               | 40 ug/mL      |
|            |          |           |               |                      |                   |              | Bis (2-chloroethoxy)methane  | 40 ug/mL      |
|            |          |           |               |                      |                   |              | Bis (2-chloroethyl) ether    | 40 ug/mL      |
|            |          |           |               |                      |                   |              | Bis (2-ethylhexyl) phthalate | 40 ug/mL      |
|            |          |           |               |                      |                   |              | Butyl benzyl phthalate       | 40 ug/mL      |
|            |          |           |               |                      |                   |              | Carbazole                    | 40 ug/mL      |
|            |          |           |               |                      |                   |              | Chrysene                     | 40 ug/mL      |
|            |          |           |               |                      |                   |              | Di-n-butyl phthalate         | 40 ug/mL      |
|            |          |           |               |                      |                   |              | Di-n-octyl phthalate         | 40 ug/mL      |
|            |          |           |               |                      |                   |              | Dibenz (a,h) anthracene      | 40 ug/mL      |
|            |          |           |               |                      |                   |              | Dibenzofuran                 | 40 ug/mL      |
|            |          |           |               |                      |                   |              | Diethyl phthalate            | 40 ug/mL      |
|            |          |           |               |                      |                   |              | Dimethyl phthalate           | 40 ug/mL      |
|            |          |           |               |                      |                   |              | Fluoranthene                 | 40 ug/mL      |
|            |          |           |               |                      |                   |              | Fluorene                     | 40 ug/mL      |
|            |          |           |               |                      |                   |              | Hexachlorobenzene            | 40 ug/mL      |
|            |          |           |               |                      |                   |              | Hexachlorobutadiene          | 40 ug/mL      |
|            |          |           |               |                      |                   |              | Hexachlorocyclopentadiene    | 40 ug/mL      |
|            |          |           |               |                      |                   |              | Hexachloroethane             | 40 ug/mL      |
|            |          |           |               |                      |                   |              | Hexadecane                   | 40 ug/mL      |
|            |          |           |               |                      |                   |              | Indeno[1,2,3-cd]pyrene       | 40 ug/mL      |
|            |          |           |               |                      |                   |              | Isophorone                   | 40 ug/mL      |
|            |          |           |               |                      |                   |              | n-Decane                     | 40 ug/mL      |
|            |          |           |               |                      |                   |              | N-Nitrosodi-n-propylamine    | 40 ug/mL      |
|            |          |           |               |                      |                   |              | N-Nitrosodimethylamine       | 40 ug/mL      |
|            |          |           |               |                      |                   |              | N-Nitrosodiphenylamine       | 80 ug/mL      |
|            |          |           |               |                      | n-Octadecane      | 40 ug/mL     |                              |               |
|            |          |           |               |                      | Naphthalene       | 40 ug/mL     |                              |               |
|            |          |           |               |                      | Nitrobenzene      | 40 ug/mL     |                              |               |
|            |          |           |               |                      | Pentachlorophenol | 80 ug/mL     |                              |               |
|            |          |           |               |                      | Phenanthrene      | 40 ug/mL     |                              |               |
|            |          |           |               |                      | Phenol            | 40 ug/mL     |                              |               |
|            |          |           |               |                      | Pyrene            | 40 ug/mL     |                              |               |
|            |          |           |               |                      | Pyridine          | 40 ug/mL     |                              |               |
|            |          |           |               |                      | SVLVstd10_00001   | 400 uL       | Benzoic acid                 | 40 ug/mL      |
|            |          |           |               |                      | SVLVstd11_00001   | 400 uL       | Indene                       | 40 ug/mL      |
|            |          |           |               |                      |                   |              | Atrazine                     | 40 ug/mL      |
|            |          |           |               |                      |                   |              | Benzaldehyde                 | 40 ug/mL      |
|            |          |           |               |                      | SVLVstd9_00001    | 400 uL       | Caprolactam                  | 40 ug/mL      |
|            |          |           |               |                      |                   |              | 3,3'-Dichlorobenzidine       | 40 ug/mL      |
|            |          |           |               |                      |                   |              | Benzidine                    | 40 ug/mL      |

## REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID              | Exp Date | Prep Date | Dilutant Used                 | Reagent Final Volume | Parent Reagent       |              | Analyte                          | Concentration |
|-------------------------|----------|-----------|-------------------------------|----------------------|----------------------|--------------|----------------------------------|---------------|
|                         |          |           |                               |                      | Reagent ID           | Volume Added |                                  |               |
|                         |          |           |                               |                      | SVLSURRSPK_00014     | 160 uL       | 2,4,6-Tribromophenol (Surr)      | 40 ug/mL      |
|                         |          |           |                               |                      |                      |              | 2-Fluorobiphenyl                 | 40 ug/mL      |
|                         |          |           |                               |                      |                      |              | 2-Fluorophenol (Surr)            | 40 ug/mL      |
|                         |          |           |                               |                      |                      |              | Nitrobenzene-d5 (Surr)           | 40 ug/mL      |
|                         |          |           |                               |                      |                      |              | Phenol-d5 (Surr)                 | 40 ug/mL      |
|                         |          |           |                               |                      |                      |              | Terphenyl-d14 (Surr)             | 40 ug/mL      |
|                         |          |           |                               |                      | svmethylnmetha_00011 | 800 uL       | Methyl methanesulfonate          | 40 ug/mL      |
|                         |          |           |                               |                      | SVNNITROPYROS_00015  | 800 uL       | N-Nitrosopyrrolidine             | 40 ug/mL      |
| ..sv benzoepyrene_00001 | 10/03/18 |           | Absolute, Lot 100313          |                      | (Purchased Reagent)  |              | Benzo[e]pyrene                   | 1000 ug/mL    |
| ..SV2356TCPs_00002      | 06/17/16 |           | Absolute, Lot 061711          |                      | (Purchased Reagent)  |              | 2,3,5,6-Tetrachlorophenol        | 1000 ug/mL    |
| ..SV2NAPAMINEs_00002    | 06/30/17 |           | Ultra Scientific, Lot CK-1617 |                      | (Purchased Reagent)  |              | 2-Naphthylamine                  | 1000 ug/mL    |
| ..sv712dimbenza_00011   | 04/09/20 |           | Absolute, Lot 040915          |                      | (Purchased Reagent)  |              | 7,12-Dimethylbenz (a) anthracene | 1000 ug/mL    |
| ..SVLVstd1_00032        | 05/31/16 |           | Restek, Lot A0107399          |                      | (Purchased Reagent)  |              | 1,1'-Biphenyl                    | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 1,2,4,5-Tetrachlorobenzene       | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 1,2,4-Trichlorobenzene           | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 1,2-Dichlorobenzene              | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 1,2-Diphenylhydrazine            | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 1,3-Dichlorobenzene              | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 1,3-Dinitrobenzene               | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 1,4-Dichlorobenzene              | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 1,4-Dioxane                      | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 1-Methylnaphthalene              | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2,2'-oxybis[1-chloropropane]     | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2,3,4,6-Tetrachlorophenol        | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2,4,5-Trichlorophenol            | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2,4,6-Trichlorophenol            | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2,4-Dichlorophenol               | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2,4-Dimethylphenol               | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2,4-Dinitrophenol                | 2000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2,4-Dinitrotoluene               | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2,6-Dichlorophenol               | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2,6-Dinitrotoluene               | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2-Chloronaphthalene              | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2-Chlorophenol                   | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2-Methylnaphthalene              | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2-Methylphenol                   | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2-Nitroaniline                   | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2-Nitrophenol                    | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 3-Nitroaniline                   | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 4,6-Dinitro-2-methylphenol       | 2000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 4-Bromophenyl phenyl ether       | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 4-Chloro-3-methylphenol          | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 4-Chloroaniline                  | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 4-Chlorophenyl phenyl ether      | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 4-Methylphenol                   | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 4-Nitroaniline                   | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 4-Nitrophenol                    | 2000 ug/mL    |
|                         |          |           |                               |                      |                      |              | Acenaphthene                     | 1000 ug/mL    |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID        | Exp Date | Prep Date | Dilutant Used        | Reagent Final Volume | Parent Reagent      |              | Analyte                     | Concentration |
|-------------------|----------|-----------|----------------------|----------------------|---------------------|--------------|-----------------------------|---------------|
|                   |          |           |                      |                      | Reagent ID          | Volume Added |                             |               |
|                   |          |           |                      |                      |                     |              | Acenaphthylene              | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Acetophenone                | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Aniline                     | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Anthracene                  | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Benzo[a]anthracene          | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Benzo[a]pyrene              | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Benzo[b]fluoranthene        | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Benzo[g,h,i]perylene        | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Benzo[k]fluoranthene        | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Benzyl alcohol              | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Bis(2-chloroethoxy)methane  | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Bis(2-chloroethyl)ether     | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Bis(2-ethylhexyl) phthalate | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Butyl benzyl phthalate      | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Carbazole                   | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Chrysene                    | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Di-n-butyl phthalate        | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Di-n-octyl phthalate        | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Dibenz(a,h)anthracene       | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Dibenzofuran                | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Diethyl phthalate           | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Dimethyl phthalate          | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Fluoranthene                | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Fluorene                    | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Hexachlorobenzene           | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Hexachlorobutadiene         | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Hexachlorocyclopentadiene   | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Hexachloroethane            | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Hexadecane                  | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Indeno[1,2,3-cd]pyrene      | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Isophorone                  | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | n-Decane                    | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | N-Nitrosodi-n-propylamine   | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | N-Nitrosodimethylamine      | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | N-Nitrosodiphenylamine      | 2000 ug/mL    |
|                   |          |           |                      |                      |                     |              | n-Octadecane                | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Naphthalene                 | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Nitrobenzene                | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Pentachlorophenol           | 2000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Phenanthrene                | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Phenol                      | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Pyrene                      | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Pyridine                    | 1000 ug/mL    |
| ..SVLVstd10_00001 | 06/30/16 |           | Restek, Lot A0107943 |                      | (Purchased Reagent) |              | Benzoic acid                | 2000 ug/mL    |
| ..SVLVstd11_00001 | 06/30/16 |           | Restek, Lot A0108035 |                      | (Purchased Reagent) |              | Indene                      | 2000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Atrazine                    | 2000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Benzaldehyde                | 2000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Caprolactam                 | 2000 ug/mL    |



REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID             | Exp Date | Prep Date            | Dilutant Used      | Reagent Final Volume | Parent Reagent      |              | Analyte                        | Concentration |
|------------------------|----------|----------------------|--------------------|----------------------|---------------------|--------------|--------------------------------|---------------|
|                        |          |                      |                    |                      | Reagent ID          | Volume Added |                                |               |
| ..SVLVstd9_00001       | 07/31/16 | Restek, Lot A0108709 |                    |                      | (Purchased Reagent) |              | 3,3'-Dichlorobenzidine         | 2000 ug/mL    |
| ..SVLVSURRSPK_00014    | 05/31/19 | Restek, Lot A0103615 |                    |                      | (Purchased Reagent) |              | Benzidine                      | 2000 ug/mL    |
|                        |          |                      |                    |                      |                     |              | 2,4,6-Tribromophenol (Surr)    | 5000 ug/mL    |
|                        |          |                      |                    |                      |                     |              | 2-Fluorobiphenyl               | 5000 ug/mL    |
|                        |          |                      |                    |                      |                     |              | 2-Fluorophenol (Surr)          | 5000 ug/mL    |
|                        |          |                      |                    |                      |                     |              | Nitrobenzene-d5 (Surr)         | 5000 ug/mL    |
|                        |          |                      |                    |                      |                     |              | Phenol-d5 (Surr)               | 5000 ug/mL    |
| ..svmethylnmetha_00011 | 02/13/20 | Absolute, Lot 021315 |                    |                      | (Purchased Reagent) |              | Methyl methanesulfonate        | 1000 ug/mL    |
| ..SVNNITROPYROS_00015  | 06/05/17 | absolute, Lot 060514 |                    |                      | (Purchased Reagent) |              | N-Nitrosopyrrolidine           | 1000 ug/mL    |
| SVTAPSTD4.0i_00008     | 10/23/15 | 04/23/15             | MeCl2, Lot 1417620 | 1 mL                 | SVTAPITINTRNi_00007 | 10 uL        | 1,4-Dichlorobenzene-d4         | 4 ug/mL       |
|                        |          |                      |                    |                      |                     |              | Acenaphthene-d10               | 4 ug/mL       |
|                        |          |                      |                    |                      |                     |              | Chrysene-d12                   | 4 ug/mL       |
|                        |          |                      |                    |                      |                     |              | Naphthalene-d8                 | 4 ug/mL       |
|                        |          |                      |                    |                      |                     |              | Perylene-d12                   | 4 ug/mL       |
|                        |          |                      |                    |                      |                     |              | Phenanthrene-d10               | 4 ug/mL       |
|                        |          |                      |                    |                      | SVTAPITSTCKi_00006  | 50 uL        | Benzo[e]pyrene                 | 2 ug/mL       |
|                        |          |                      |                    |                      |                     |              | 2,3,5,6-Tetrachlorophenol      | 2 ug/mL       |
|                        |          |                      |                    |                      |                     |              | 2-Naphthylamine                | 2 ug/mL       |
|                        |          |                      |                    |                      |                     |              | 7,12-Dimethylbenz(a)anthracene | 2 ug/mL       |
|                        |          |                      |                    |                      |                     |              | 1,1'-Biphenyl                  | 2 ug/mL       |
|                        |          |                      |                    |                      |                     |              | 1,2,4,5-Tetrachlorobenzene     | 2 ug/mL       |
|                        |          |                      |                    |                      |                     |              | 1,2,4-Trichlorobenzene         | 2 ug/mL       |
|                        |          |                      |                    |                      |                     |              | 1,2-Dichlorobenzene            | 2 ug/mL       |
|                        |          |                      |                    |                      |                     |              | 1,2-Diphenylhydrazine          | 2 ug/mL       |
|                        |          |                      |                    |                      |                     |              | 1,3-Dichlorobenzene            | 2 ug/mL       |
|                        |          |                      |                    |                      |                     |              | 1,3-Dinitrobenzene             | 2 ug/mL       |
|                        |          |                      |                    |                      |                     |              | 1,4-Dichlorobenzene            | 2 ug/mL       |
|                        |          |                      |                    |                      |                     |              | 1,4-Dioxane                    | 2 ug/mL       |
|                        |          |                      |                    |                      |                     |              | 1-Methylnaphthalene            | 2 ug/mL       |
|                        |          |                      |                    |                      |                     |              | 2,2'-oxybis[1-chloropropane]   | 2 ug/mL       |
|                        |          |                      |                    |                      |                     |              | 2,3,4,6-Tetrachlorophenol      | 2 ug/mL       |
|                        |          |                      |                    |                      |                     |              | 2,4,5-Trichlorophenol          | 2 ug/mL       |
|                        |          |                      |                    |                      |                     |              | 2,4,6-Trichlorophenol          | 2 ug/mL       |
|                        |          |                      |                    |                      |                     |              | 2,4-Dichlorophenol             | 2 ug/mL       |
|                        |          |                      |                    |                      |                     |              | 2,4-Dimethylphenol             | 2 ug/mL       |
|                        |          |                      |                    |                      |                     |              | 2,4-Dinitrophenol              | 4 ug/mL       |
|                        |          |                      |                    |                      |                     |              | 2,4-Dinitrotoluene             | 2 ug/mL       |
|                        |          |                      |                    |                      |                     |              | 2,6-Dichlorophenol             | 2 ug/mL       |
|                        |          |                      |                    |                      |                     |              | 2,6-Dinitrotoluene             | 2 ug/mL       |
|                        |          |                      |                    |                      |                     |              | 2-Chloronaphthalene            | 2 ug/mL       |
|                        |          |                      |                    |                      |                     |              | 2-Chlorophenol                 | 2 ug/mL       |
|                        |          |                      |                    |                      |                     |              | 2-Methylnaphthalene            | 2 ug/mL       |
|                        |          |                      |                    |                      |                     |              | 2-Methylphenol                 | 2 ug/mL       |
|                        |          |                      |                    |                      |                     |              | 2-Nitroaniline                 | 2 ug/mL       |
|                        |          |                      |                    |                      |                     |              | 2-Nitrophenol                  | 2 ug/mL       |
|                        |          |                      |                    |                      |                     |              | 3-Nitroaniline                 | 2 ug/mL       |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent |              | Analyte                      | Concentration |
|------------|----------|-----------|---------------|----------------------|----------------|--------------|------------------------------|---------------|
|            |          |           |               |                      | Reagent ID     | Volume Added |                              |               |
|            |          |           |               |                      |                |              | 4,6-Dinitro-2-methylphenol   | 4 ug/mL       |
|            |          |           |               |                      |                |              | 4-Bromophenyl phenyl ether   | 2 ug/mL       |
|            |          |           |               |                      |                |              | 4-Chloro-3-methylphenol      | 2 ug/mL       |
|            |          |           |               |                      |                |              | 4-Chloroaniline              | 2 ug/mL       |
|            |          |           |               |                      |                |              | 4-Chlorophenyl phenyl ether  | 2 ug/mL       |
|            |          |           |               |                      |                |              | 4-Methylphenol               | 2 ug/mL       |
|            |          |           |               |                      |                |              | 4-Nitroaniline               | 2 ug/mL       |
|            |          |           |               |                      |                |              | 4-Nitrophenol                | 4 ug/mL       |
|            |          |           |               |                      |                |              | Acenaphthene                 | 2 ug/mL       |
|            |          |           |               |                      |                |              | Acenaphthylene               | 2 ug/mL       |
|            |          |           |               |                      |                |              | Acetophenone                 | 2 ug/mL       |
|            |          |           |               |                      |                |              | Aniline                      | 2 ug/mL       |
|            |          |           |               |                      |                |              | Anthracene                   | 2 ug/mL       |
|            |          |           |               |                      |                |              | Benzo[a]anthracene           | 2 ug/mL       |
|            |          |           |               |                      |                |              | Benzo[a]pyrene               | 2 ug/mL       |
|            |          |           |               |                      |                |              | Benzo[b]fluoranthene         | 2 ug/mL       |
|            |          |           |               |                      |                |              | Benzo[g,h,i]perylene         | 2 ug/mL       |
|            |          |           |               |                      |                |              | Benzo[k]fluoranthene         | 2 ug/mL       |
|            |          |           |               |                      |                |              | Benzyl alcohol               | 2 ug/mL       |
|            |          |           |               |                      |                |              | Bis (2-chloroethoxy)methane  | 2 ug/mL       |
|            |          |           |               |                      |                |              | Bis (2-chloroethyl) ether    | 2 ug/mL       |
|            |          |           |               |                      |                |              | Bis (2-ethylhexyl) phthalate | 2 ug/mL       |
|            |          |           |               |                      |                |              | Butyl benzyl phthalate       | 2 ug/mL       |
|            |          |           |               |                      |                |              | Carbazole                    | 2 ug/mL       |
|            |          |           |               |                      |                |              | Chrysene                     | 2 ug/mL       |
|            |          |           |               |                      |                |              | Di-n-butyl phthalate         | 2 ug/mL       |
|            |          |           |               |                      |                |              | Di-n-octyl phthalate         | 2 ug/mL       |
|            |          |           |               |                      |                |              | Dibenz (a,h) anthracene      | 2 ug/mL       |
|            |          |           |               |                      |                |              | Dibenzofuran                 | 2 ug/mL       |
|            |          |           |               |                      |                |              | Diethyl phthalate            | 2 ug/mL       |
|            |          |           |               |                      |                |              | Dimethyl phthalate           | 2 ug/mL       |
|            |          |           |               |                      |                |              | Fluoranthene                 | 2 ug/mL       |
|            |          |           |               |                      |                |              | Fluorene                     | 2 ug/mL       |
|            |          |           |               |                      |                |              | Hexachlorobenzene            | 2 ug/mL       |
|            |          |           |               |                      |                |              | Hexachlorobutadiene          | 2 ug/mL       |
|            |          |           |               |                      |                |              | Hexachlorocyclopentadiene    | 2 ug/mL       |
|            |          |           |               |                      |                |              | Hexachloroethane             | 2 ug/mL       |
|            |          |           |               |                      |                |              | Hexadecane                   | 2 ug/mL       |
|            |          |           |               |                      |                |              | Indeno[1,2,3-cd]pyrene       | 2 ug/mL       |
|            |          |           |               |                      |                |              | Isophorone                   | 2 ug/mL       |
|            |          |           |               |                      |                |              | n-Decane                     | 2 ug/mL       |
|            |          |           |               |                      |                |              | N-Nitrosodi-n-propylamine    | 2 ug/mL       |
|            |          |           |               |                      |                |              | N-Nitrosodimethylamine       | 2 ug/mL       |
|            |          |           |               |                      |                |              | N-Nitrosodiphenylamine       | 4 ug/mL       |
|            |          |           |               |                      |                |              | n-Octadecane                 | 2 ug/mL       |
|            |          |           |               |                      |                |              | Naphthalene                  | 2 ug/mL       |
|            |          |           |               |                      |                |              | Nitrobenzene                 | 2 ug/mL       |
|            |          |           |               |                      |                |              | Pentachlorophenol            | 4 ug/mL       |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID           | Exp Date | Prep Date | Dilutant Used       | Reagent Final Volume | Parent Reagent      |              | Analyte                          | Concentration |
|----------------------|----------|-----------|---------------------|----------------------|---------------------|--------------|----------------------------------|---------------|
|                      |          |           |                     |                      | Reagent ID          | Volume Added |                                  |               |
|                      |          |           |                     |                      |                     |              | Phenanthrene                     | 2 ug/mL       |
|                      |          |           |                     |                      |                     |              | Phenol                           | 2 ug/mL       |
|                      |          |           |                     |                      |                     |              | Pyrene                           | 2 ug/mL       |
|                      |          |           |                     |                      |                     |              | Pyridine                         | 2 ug/mL       |
|                      |          |           |                     |                      |                     |              | Benzoic acid                     | 2 ug/mL       |
|                      |          |           |                     |                      |                     |              | Indene                           | 2 ug/mL       |
|                      |          |           |                     |                      |                     |              | Atrazine                         | 2 ug/mL       |
|                      |          |           |                     |                      |                     |              | Benzaldehyde                     | 2 ug/mL       |
|                      |          |           |                     |                      |                     |              | Caprolactam                      | 2 ug/mL       |
|                      |          |           |                     |                      |                     |              | 3,3'-Dichlorobenzidine           | 2 ug/mL       |
|                      |          |           |                     |                      |                     |              | Benzidine                        | 2 ug/mL       |
|                      |          |           |                     |                      |                     |              | 2,4,6-Tribromophenol (Surr)      | 2 ug/mL       |
|                      |          |           |                     |                      |                     |              | 2-Fluorobiphenyl                 | 2 ug/mL       |
|                      |          |           |                     |                      |                     |              | 2-Fluorophenol (Surr)            | 2 ug/mL       |
|                      |          |           |                     |                      |                     |              | Nitrobenzene-d5 (Surr)           | 2 ug/mL       |
|                      |          |           |                     |                      |                     |              | Phenol-d5 (Surr)                 | 2 ug/mL       |
|                      |          |           |                     |                      |                     |              | Terphenyl-d14 (Surr)             | 2 ug/mL       |
| .SVTAPITINTRNi_00007 | 12/03/15 | 12/03/14  | MeCl2, Lot 1417620  | 25 mL                | SVLVIntstd_00004    | 5 mL         | Methyl methanesulfonate          | 2 ug/mL       |
|                      |          |           |                     |                      |                     |              | N-Nitrosopyrrolidine             | 2 ug/mL       |
|                      |          |           |                     |                      |                     |              | 1,4-Dichlorobenzene-d4           | 400 ug/mL     |
|                      |          |           |                     |                      |                     |              | Acenaphthene-d10                 | 400 ug/mL     |
|                      |          |           |                     |                      |                     |              | Chrysene-d12                     | 400 ug/mL     |
|                      |          |           |                     |                      |                     |              | Naphthalene-d8                   | 400 ug/mL     |
| ..SVLVIntstd_00004   | 02/28/18 |           | Restek, Lot A093676 |                      | (Purchased Reagent) |              | Perylene-d12                     | 400 ug/mL     |
|                      |          |           |                     |                      |                     |              | Phenanthrene-d10                 | 400 ug/mL     |
|                      |          |           |                     |                      |                     |              | 1,4-Dichlorobenzene-d4           | 2000 ug/mL    |
|                      |          |           |                     |                      |                     |              | Acenaphthene-d10                 | 2000 ug/mL    |
|                      |          |           |                     |                      |                     |              | Chrysene-d12                     | 2000 ug/mL    |
|                      |          |           |                     |                      |                     |              | Naphthalene-d8                   | 2000 ug/mL    |
| .SVTAPITSTCKi_00006  | 10/23/15 | 04/23/15  | MeCl2, Lot 1417620  | 20 mL                | sv benzoepyre 00001 | 800 uL       | Perylene-d12                     | 2000 ug/mL    |
|                      |          |           |                     |                      | SV2356TCPs 00002    | 800 uL       | Phenanthrene-d10                 | 2000 ug/mL    |
|                      |          |           |                     |                      | SV2NAPAMINEs 00002  | 800 uL       | 1,4-Dichlorobenzene-d4           | 2000 ug/mL    |
|                      |          |           |                     |                      | sv712dimbenza 00011 | 800 uL       | Acenaphthene-d10                 | 2000 ug/mL    |
|                      |          |           |                     |                      | SVLVstd1_00032      | 800 uL       | Chrysene-d12                     | 2000 ug/mL    |
|                      |          |           |                     |                      |                     |              | Naphthalene-d8                   | 2000 ug/mL    |
|                      |          |           |                     |                      |                     |              | Perylene-d12                     | 2000 ug/mL    |
|                      |          |           |                     |                      |                     |              | Phenanthrene-d10                 | 2000 ug/mL    |
|                      |          |           |                     |                      |                     |              | Benzo[e]pyrene                   | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 2,3,5,6-Tetrachlorophenol        | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 2-Naphthylamine                  | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 7,12-Dimethylbenz (a) anthracene | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1,1'-Biphenyl                    | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1,2,4,5-Tetrachlorobenzene       | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1,2,4-Trichlorobenzene           | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1,2-Dichlorobenzene              | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1,2-Diphenylhydrazine            | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1,3-Dichlorobenzene              | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1,3-Dinitrobenzene               | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1,4-Dichlorobenzene              | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1,4-Dioxane                      | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1-Methylnaphthalene              | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 2,2'-oxybis[1-chloropropane]     | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 2,3,4,6-Tetrachlorophenol        | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 2,4,5-Trichlorophenol            | 40 ug/mL      |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent |              | Analyte                      | Concentration |
|------------|----------|-----------|---------------|----------------------|----------------|--------------|------------------------------|---------------|
|            |          |           |               |                      | Reagent ID     | Volume Added |                              |               |
|            |          |           |               |                      |                |              | 2,4,6-Trichlorophenol        | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2,4-Dichlorophenol           | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2,4-Dimethylphenol           | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2,4-Dinitrophenol            | 80 ug/mL      |
|            |          |           |               |                      |                |              | 2,4-Dinitrotoluene           | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2,6-Dichlorophenol           | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2,6-Dinitrotoluene           | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2-Chloronaphthalene          | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2-Chlorophenol               | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2-Methylnaphthalene          | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2-Methylphenol               | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2-Nitroaniline               | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2-Nitrophenol                | 40 ug/mL      |
|            |          |           |               |                      |                |              | 3-Nitroaniline               | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4,6-Dinitro-2-methylphenol   | 80 ug/mL      |
|            |          |           |               |                      |                |              | 4-Bromophenyl phenyl ether   | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4-Chloro-3-methylphenol      | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4-Chloroaniline              | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4-Chlorophenyl phenyl ether  | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4-Methylphenol               | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4-Nitroaniline               | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4-Nitrophenol                | 80 ug/mL      |
|            |          |           |               |                      |                |              | Acenaphthene                 | 40 ug/mL      |
|            |          |           |               |                      |                |              | Acenaphthylene               | 40 ug/mL      |
|            |          |           |               |                      |                |              | Acetophenone                 | 40 ug/mL      |
|            |          |           |               |                      |                |              | Aniline                      | 40 ug/mL      |
|            |          |           |               |                      |                |              | Anthracene                   | 40 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[a]anthracene           | 40 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[a]pyrene               | 40 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[b]fluoranthene         | 40 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[g,h,i]perylene         | 40 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[k]fluoranthene         | 40 ug/mL      |
|            |          |           |               |                      |                |              | Benzyl alcohol               | 40 ug/mL      |
|            |          |           |               |                      |                |              | Bis (2-chloroethoxy)methane  | 40 ug/mL      |
|            |          |           |               |                      |                |              | Bis (2-chloroethyl) ether    | 40 ug/mL      |
|            |          |           |               |                      |                |              | Bis (2-ethylhexyl) phthalate | 40 ug/mL      |
|            |          |           |               |                      |                |              | Butyl benzyl phthalate       | 40 ug/mL      |
|            |          |           |               |                      |                |              | Carbazole                    | 40 ug/mL      |
|            |          |           |               |                      |                |              | Chrysene                     | 40 ug/mL      |
|            |          |           |               |                      |                |              | Di-n-butyl phthalate         | 40 ug/mL      |
|            |          |           |               |                      |                |              | Di-n-octyl phthalate         | 40 ug/mL      |
|            |          |           |               |                      |                |              | Dibenz (a,h) anthracene      | 40 ug/mL      |
|            |          |           |               |                      |                |              | Dibenzofuran                 | 40 ug/mL      |
|            |          |           |               |                      |                |              | Diethyl phthalate            | 40 ug/mL      |
|            |          |           |               |                      |                |              | Dimethyl phthalate           | 40 ug/mL      |
|            |          |           |               |                      |                |              | Fluoranthene                 | 40 ug/mL      |
|            |          |           |               |                      |                |              | Fluorene                     | 40 ug/mL      |
|            |          |           |               |                      |                |              | Hexachlorobenzene            | 40 ug/mL      |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID            | Exp Date | Prep Date | Dilutant Used                 | Reagent Final Volume | Parent Reagent       |              | Analyte                        | Concentration |
|-----------------------|----------|-----------|-------------------------------|----------------------|----------------------|--------------|--------------------------------|---------------|
|                       |          |           |                               |                      | Reagent ID           | Volume Added |                                |               |
|                       |          |           |                               |                      |                      |              | Hexachlorobutadiene            | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Hexachlorocyclopentadiene      | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Hexachloroethane               | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Hexadecane                     | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Indeno[1,2,3-cd]pyrene         | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Isophorone                     | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | n-Decane                       | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | N-Nitrosodi-n-propylamine      | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | N-Nitrosodimethylamine         | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | N-Nitrosodiphenylamine         | 80 ug/mL      |
|                       |          |           |                               |                      |                      |              | n-Octadecane                   | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Naphthalene                    | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Nitrobenzene                   | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Pentachlorophenol              | 80 ug/mL      |
|                       |          |           |                               |                      |                      |              | Phenanthrene                   | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Phenol                         | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Pyrene                         | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Pyridine                       | 40 ug/mL      |
|                       |          |           |                               |                      | SVLVstd10_00001      | 400 uL       | Benzoic acid                   | 40 ug/mL      |
|                       |          |           |                               |                      | SVLVstd11_00001      | 400 uL       | Indene                         | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Atrazine                       | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Benzaldehyde                   | 40 ug/mL      |
|                       |          |           |                               |                      | SVLVstd9_00001       | 400 uL       | Caprolactam                    | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | 3,3'-Dichlorobenzidine         | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Benzenidine                    | 40 ug/mL      |
|                       |          |           |                               |                      | SVLVSURRSPK_00014    | 160 uL       | 2,4,6-Tribromophenol (Surr)    | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | 2-Fluorobiphenyl               | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | 2-Fluorophenol (Surr)          | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Nitrobenzene-d5 (Surr)         | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Phenol-d5 (Surr)               | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Terphenyl-d14 (Surr)           | 40 ug/mL      |
|                       |          |           |                               |                      | svmethylnmetha_00011 | 800 uL       | Methyl methanesulfonate        | 40 ug/mL      |
|                       |          |           |                               |                      | SVNNITROPYROS_00015  | 800 uL       | N-Nitrosopyrrolidine           | 40 ug/mL      |
| ..sv benzoepyre_00001 | 10/03/18 |           | Absolute, Lot 100313          |                      | (Purchased Reagent)  |              | Benzo[e]pyrene                 | 1000 ug/mL    |
| ..SV2356TCPs_00002    | 06/17/16 |           | Absolute, Lot 061711          |                      | (Purchased Reagent)  |              | 2,3,5,6-Tetrachlorophenol      | 1000 ug/mL    |
| ..SV2NAPAMINES_00002  | 06/30/17 |           | Ultra Scientific, Lot Ck-1617 |                      | (Purchased Reagent)  |              | 2-Naphthylamine                | 1000 ug/mL    |
| ..sv712dimbenza_00011 | 04/09/20 |           | Absolute, Lot 040915          |                      | (Purchased Reagent)  |              | 7,12-Dimethylbenz(a)anthracene | 1000 ug/mL    |
| ..SVLVstdl_00032      | 05/31/16 |           | Restek, Lot A0107399          |                      | (Purchased Reagent)  |              | 1,1'-Biphenyl                  | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 1,2,4,5-Tetrachlorobenzene     | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 1,2,4-Trichlorobenzene         | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 1,2-Dichlorobenzene            | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 1,2-Diphenylhydrazine          | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 1,3-Dichlorobenzene            | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 1,3-Dinitrobenzene             | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 1,4-Dichlorobenzene            | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 1,4-Dioxane                    | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 1-Methylnaphthalene            | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 2,2'-oxybis[1-chloropropane]   | 1000 ug/mL    |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent |              | Analyte                      | Concentration |
|------------|----------|-----------|---------------|----------------------|----------------|--------------|------------------------------|---------------|
|            |          |           |               |                      | Reagent ID     | Volume Added |                              |               |
|            |          |           |               |                      |                |              | 2,3,4,6-Tetrachlorophenol    | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,4,5-Trichlorophenol        | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,4,6-Trichlorophenol        | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,4-Dichlorophenol           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,4-Dimethylphenol           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,4-Dinitrophenol            | 2000 ug/mL    |
|            |          |           |               |                      |                |              | 2,4-Dinitrotoluene           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,6-Dichlorophenol           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,6-Dinitrotoluene           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2-Chloronaphthalene          | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2-Chlorophenol               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2-Methylnaphthalene          | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2-Methylphenol               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2-Nitroaniline               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2-Nitrophenol                | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 3-Nitroaniline               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4,6-Dinitro-2-methylphenol   | 2000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Bromophenyl phenyl ether   | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Chloro-3-methylphenol      | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Chloroaniline              | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Chlorophenyl phenyl ether  | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Methylphenol               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Nitroaniline               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Nitrophenol                | 2000 ug/mL    |
|            |          |           |               |                      |                |              | Acenaphthene                 | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Acenaphthylene               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Acetophenone                 | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Aniline                      | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Anthracene                   | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzo[a]anthracene           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzo[a]pyrene               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzo[b]fluoranthene         | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzo[g,h,i]perylene         | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzo[k]fluoranthene         | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzyl alcohol               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Bis (2-chloroethoxy)methane  | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Bis (2-chloroethyl) ether    | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Bis (2-ethylhexyl) phthalate | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Butyl benzyl phthalate       | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Carbazole                    | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Chrysene                     | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Di-n-butyl phthalate         | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Di-n-octyl phthalate         | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Dibenz (a,h) anthracene      | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Dibenzofuran                 | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Diethyl phthalate            | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Dimethyl phthalate           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Fluoranthene                 | 1000 ug/mL    |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID            | Exp Date | Prep Date | Dilutant Used        | Reagent Final Volume | Parent Reagent      |              | Analyte                        | Concentration |
|-----------------------|----------|-----------|----------------------|----------------------|---------------------|--------------|--------------------------------|---------------|
|                       |          |           |                      |                      | Reagent ID          | Volume Added |                                |               |
|                       |          |           |                      |                      |                     |              | Fluorene                       | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Hexachlorobenzene              | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Hexachlorobutadiene            | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Hexachlorocyclopentadiene      | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Hexachloroethane               | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Hexadecane                     | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Indeno[1,2,3-cd]pyrene         | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Isophorone                     | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | n-Decane                       | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | N-Nitrosodi-n-propylamine      | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | N-Nitrosodimethylamine         | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | N-Nitrosodiphenylamine         | 2000 ug/mL    |
|                       |          |           |                      |                      |                     |              | n-Octadecane                   | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Naphthalene                    | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Nitrobenzene                   | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Pentachlorophenol              | 2000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Phenanthrene                   | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Phenol                         | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Pyrene                         | 1000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Pyridine                       | 1000 ug/mL    |
| ..SVLVstd10_00001     | 06/30/16 |           | Restek, Lot A0107943 |                      | (Purchased Reagent) |              | Benzoic acid                   | 2000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Indene                         | 2000 ug/mL    |
| ..SVLVstd11_00001     | 06/30/16 |           | Restek, Lot A0108035 |                      | (Purchased Reagent) |              | Atrazine                       | 2000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Benzaldehyde                   | 2000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Caprolactam                    | 2000 ug/mL    |
| ..SVLVstd9_00001      | 07/31/16 |           | Restek, Lot A0108709 |                      | (Purchased Reagent) |              | 3,3'-Dichlorobenzidine         | 2000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Benzidine                      | 2000 ug/mL    |
| ..SVLVSURRSPK_00014   | 05/31/19 |           | Restek, Lot A0103615 |                      | (Purchased Reagent) |              | 2,4,6-Tribromophenol (Surr)    | 5000 ug/mL    |
|                       |          |           |                      |                      |                     |              | 2-Fluorobiphenyl               | 5000 ug/mL    |
|                       |          |           |                      |                      |                     |              | 2-Fluorophenol (Surr)          | 5000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Nitrobenzene-d5 (Surr)         | 5000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Phenol-d5 (Surr)               | 5000 ug/mL    |
|                       |          |           |                      |                      |                     |              | Terphenyl-d14 (Surr)           | 5000 ug/mL    |
| ..svmethyImetha_00011 | 02/13/20 |           | Absolute, Lot 021315 |                      | (Purchased Reagent) |              | Methyl methanesulfonate        | 1000 ug/mL    |
| ..SVNNITROPYROS_00015 | 06/05/17 |           | absolute, Lot 060514 |                      | (Purchased Reagent) |              | N-Nitrosopyrrolidine           | 1000 ug/mL    |
| SVTAPSTD40i_00007     | 10/23/15 | 04/23/15  | MeCl2, Lot 1417620   | 1 mL                 | SVTAPITINTRNi_00007 | 10 uL        | 1,4-Dichlorobenzene-d4         | 4 ug/mL       |
|                       |          |           |                      |                      |                     |              | Acenaphthene-d10               | 4 ug/mL       |
|                       |          |           |                      |                      |                     |              | Chrysene-d12                   | 4 ug/mL       |
|                       |          |           |                      |                      |                     |              | Naphthalene-d8                 | 4 ug/mL       |
|                       |          |           |                      |                      |                     |              | Perylene-d12                   | 4 ug/mL       |
|                       |          |           |                      |                      |                     |              | Phenanthrene-d10               | 4 ug/mL       |
|                       |          |           |                      |                      | SVTAPITSTCKi_00006  | 500 uL       | Benzo[e]pyrene                 | 20 ug/mL      |
|                       |          |           |                      |                      |                     |              | 2,3,5,6-Tetrachlorophenol      | 20 ug/mL      |
|                       |          |           |                      |                      |                     |              | 2-Naphthylamine                | 20 ug/mL      |
|                       |          |           |                      |                      |                     |              | 7,12-Dimethylbenz(a)anthracene | 20 ug/mL      |
|                       |          |           |                      |                      |                     |              | 1,1'-Biphenyl                  | 20 ug/mL      |
|                       |          |           |                      |                      |                     |              | 1,2,4,5-Tetrachlorobenzene     | 20 ug/mL      |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent |              | Analyte                      | Concentration |
|------------|----------|-----------|---------------|----------------------|----------------|--------------|------------------------------|---------------|
|            |          |           |               |                      | Reagent ID     | Volume Added |                              |               |
|            |          |           |               |                      |                |              | 1,2,4-Trichlorobenzene       | 20 ug/mL      |
|            |          |           |               |                      |                |              | 1,2-Dichlorobenzene          | 20 ug/mL      |
|            |          |           |               |                      |                |              | 1,2-Diphenylhydrazine        | 20 ug/mL      |
|            |          |           |               |                      |                |              | 1,3-Dichlorobenzene          | 20 ug/mL      |
|            |          |           |               |                      |                |              | 1,3-Dinitrobenzene           | 20 ug/mL      |
|            |          |           |               |                      |                |              | 1,4-Dichlorobenzene          | 20 ug/mL      |
|            |          |           |               |                      |                |              | 1,4-Dioxane                  | 20 ug/mL      |
|            |          |           |               |                      |                |              | 1-Methylnaphthalene          | 20 ug/mL      |
|            |          |           |               |                      |                |              | 2,2'-oxybis[1-chloropropane] | 20 ug/mL      |
|            |          |           |               |                      |                |              | 2,3,4,6-Tetrachlorophenol    | 20 ug/mL      |
|            |          |           |               |                      |                |              | 2,4,5-Trichlorophenol        | 20 ug/mL      |
|            |          |           |               |                      |                |              | 2,4,6-Trichlorophenol        | 20 ug/mL      |
|            |          |           |               |                      |                |              | 2,4-Dichlorophenol           | 20 ug/mL      |
|            |          |           |               |                      |                |              | 2,4-Dimethylphenol           | 20 ug/mL      |
|            |          |           |               |                      |                |              | 2,4-Dinitrophenol            | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2,4-Dinitrotoluene           | 20 ug/mL      |
|            |          |           |               |                      |                |              | 2,6-Dichlorophenol           | 20 ug/mL      |
|            |          |           |               |                      |                |              | 2,6-Dinitrotoluene           | 20 ug/mL      |
|            |          |           |               |                      |                |              | 2-Chloronaphthalene          | 20 ug/mL      |
|            |          |           |               |                      |                |              | 2-Chlorophenol               | 20 ug/mL      |
|            |          |           |               |                      |                |              | 2-Methylnaphthalene          | 20 ug/mL      |
|            |          |           |               |                      |                |              | 2-Methylphenol               | 20 ug/mL      |
|            |          |           |               |                      |                |              | 2-Nitroaniline               | 20 ug/mL      |
|            |          |           |               |                      |                |              | 2-Nitrophenol                | 20 ug/mL      |
|            |          |           |               |                      |                |              | 3-Nitroaniline               | 20 ug/mL      |
|            |          |           |               |                      |                |              | 4,6-Dinitro-2-methylphenol   | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4-Bromophenyl phenyl ether   | 20 ug/mL      |
|            |          |           |               |                      |                |              | 4-Chloro-3-methylphenol      | 20 ug/mL      |
|            |          |           |               |                      |                |              | 4-Chloroaniline              | 20 ug/mL      |
|            |          |           |               |                      |                |              | 4-Chlorophenyl phenyl ether  | 20 ug/mL      |
|            |          |           |               |                      |                |              | 4-Methylphenol               | 20 ug/mL      |
|            |          |           |               |                      |                |              | 4-Nitroaniline               | 20 ug/mL      |
|            |          |           |               |                      |                |              | 4-Nitrophenol                | 40 ug/mL      |
|            |          |           |               |                      |                |              | Acenaphthene                 | 20 ug/mL      |
|            |          |           |               |                      |                |              | Acenaphthylene               | 20 ug/mL      |
|            |          |           |               |                      |                |              | Acetophenone                 | 20 ug/mL      |
|            |          |           |               |                      |                |              | Aniline                      | 20 ug/mL      |
|            |          |           |               |                      |                |              | Anthracene                   | 20 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[a]anthracene           | 20 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[a]pyrene               | 20 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[b]fluoranthene         | 20 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[g,h,i]perylene         | 20 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[k]fluoranthene         | 20 ug/mL      |
|            |          |           |               |                      |                |              | Benzyl alcohol               | 20 ug/mL      |
|            |          |           |               |                      |                |              | Bis(2-chloroethoxy)methane   | 20 ug/mL      |
|            |          |           |               |                      |                |              | Bis(2-chloroethyl)ether      | 20 ug/mL      |
|            |          |           |               |                      |                |              | Bis(2-ethylhexyl) phthalate  | 20 ug/mL      |
|            |          |           |               |                      |                |              | Butyl benzyl phthalate       | 20 ug/mL      |



## REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID           | Exp Date | Prep Date | Dilutant Used      | Reagent Final Volume | Parent Reagent   |              | Analyte                     | Concentration |
|----------------------|----------|-----------|--------------------|----------------------|------------------|--------------|-----------------------------|---------------|
|                      |          |           |                    |                      | Reagent ID       | Volume Added |                             |               |
|                      |          |           |                    |                      |                  |              | Carbazole                   | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | Chrysene                    | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | Di-n-butyl phthalate        | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | Di-n-octyl phthalate        | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | Dibenz(a,h)anthracene       | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | Dibenzofuran                | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | Diethyl phthalate           | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | Dimethyl phthalate          | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | Fluoranthene                | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | Fluorene                    | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | Hexachlorobenzene           | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | Hexachlorobutadiene         | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | Hexachlorocyclopentadiene   | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | Hexachloroethane            | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | Hexadecane                  | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | Indeno[1,2,3-cd]pyrene      | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | Isophorone                  | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | n-Decane                    | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | N-Nitrosodi-n-propylamine   | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | N-Nitrosodimethylamine      | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | N-Nitrosodiphenylamine      | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | n-Octadecane                | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | Naphthalene                 | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | Nitrobenzene                | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | Pentachlorophenol           | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Phenanthrene                | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | Phenol                      | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | Pyrene                      | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | Pyridine                    | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | Benzoic acid                | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | Indene                      | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | Atrazine                    | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | Benzaldehyde                | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | Caprolactam                 | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | 3,3'-Dichlorobenzidine      | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | Benzidine                   | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | 2,4,6-Tribromophenol (Surr) | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | 2-Fluorobiphenyl            | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | 2-Fluorophenol (Surr)       | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | Nitrobenzene-d5 (Surr)      | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | Phenol-d5 (Surr)            | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | Terphenyl-d14 (Surr)        | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | Methyl methanesulfonate     | 20 ug/mL      |
|                      |          |           |                    |                      |                  |              | N-Nitrosopyrrolidine        | 20 ug/mL      |
| .SVTAPITINTRNi_00007 | 12/03/15 | 12/03/14  | MeCl2, Lot 1417620 | 25 mL                | SVLVIntstd_00004 | 5 mL         | 1,4-Dichlorobenzene-d4      | 400 ug/mL     |
|                      |          |           |                    |                      |                  |              | Acenaphthene-d10            | 400 ug/mL     |
|                      |          |           |                    |                      |                  |              | Chrysene-d12                | 400 ug/mL     |
|                      |          |           |                    |                      |                  |              | Naphthalene-d8              | 400 ug/mL     |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID          | Exp Date | Prep Date           | Dilutant Used      | Reagent Final Volume | Parent Reagent      |              | Analyte                        | Concentration |
|---------------------|----------|---------------------|--------------------|----------------------|---------------------|--------------|--------------------------------|---------------|
|                     |          |                     |                    |                      | Reagent ID          | Volume Added |                                |               |
|                     |          |                     |                    |                      |                     |              | Perylene-d12                   | 400 ug/mL     |
|                     |          |                     |                    |                      |                     |              | Phenanthrene-d10               | 400 ug/mL     |
| ..SVLVIntstd_00004  | 02/28/18 | Restek, Lot A093676 |                    |                      | (Purchased Reagent) |              | 1,4-Dichlorobenzene-d4         | 2000 ug/mL    |
|                     |          |                     |                    |                      |                     |              | Acenaphthene-d10               | 2000 ug/mL    |
|                     |          |                     |                    |                      |                     |              | Chrysene-d12                   | 2000 ug/mL    |
|                     |          |                     |                    |                      |                     |              | Naphthalene-d8                 | 2000 ug/mL    |
|                     |          |                     |                    |                      |                     |              | Perylene-d12                   | 2000 ug/mL    |
|                     |          |                     |                    |                      |                     |              | Phenanthrene-d10               | 2000 ug/mL    |
| .SVTAPITSTCKi_00006 | 10/23/15 | 04/23/15            | MeCl2, Lot 1417620 | 20 mL                | sv benzoepyre_00001 | 800 uL       | Benzo[e]pyrene                 | 40 ug/mL      |
|                     |          |                     |                    |                      | SV2356TCPs_00002    | 800 uL       | 2,3,5,6-Tetrachlorophenol      | 40 ug/mL      |
|                     |          |                     |                    |                      | SV2NAPAMINEs_00002  | 800 uL       | 2-Naphthylamine                | 40 ug/mL      |
|                     |          |                     |                    |                      | sv712dimbenza_00011 | 800 uL       | 7,12-Dimethylbenz(a)anthracene | 40 ug/mL      |
|                     |          |                     |                    |                      | SVLVstd1_00032      | 800 uL       | 1,1'-Biphenyl                  | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 1,2,4,5-Tetrachlorobenzene     | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 1,2,4-Trichlorobenzene         | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 1,2-Dichlorobenzene            | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 1,2-Diphenylhydrazine          | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 1,3-Dichlorobenzene            | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 1,3-Dinitrobenzene             | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 1,4-Dichlorobenzene            | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 1,4-Dioxane                    | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 1-Methylnaphthalene            | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 2,2'-oxybis[1-chloropropane]   | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 2,3,4,6-Tetrachlorophenol      | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 2,4,5-Trichlorophenol          | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 2,4,6-Trichlorophenol          | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 2,4-Dichlorophenol             | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 2,4-Dimethylphenol             | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 2,4-Dinitrophenol              | 80 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 2,4-Dinitrotoluene             | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 2,6-Dichlorophenol             | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 2,6-Dinitrotoluene             | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 2-Chloronaphthalene            | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 2-Chlorophenol                 | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 2-Methylnaphthalene            | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 2-Methylphenol                 | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 2-Nitroaniline                 | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 2-Nitrophenol                  | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 3-Nitroaniline                 | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 4,6-Dinitro-2-methylphenol     | 80 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 4-Bromophenyl phenyl ether     | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 4-Chloro-3-methylphenol        | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 4-Chloroaniline                | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 4-Chlorophenyl phenyl ether    | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 4-Methylphenol                 | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 4-Nitroaniline                 | 40 ug/mL      |
|                     |          |                     |                    |                      |                     |              | 4-Nitrophenol                  | 80 ug/mL      |
|                     |          |                     |                    |                      |                     |              | Acenaphthene                   | 40 ug/mL      |

## REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent  |              | Analyte                      | Concentration |
|------------|----------|-----------|---------------|----------------------|-----------------|--------------|------------------------------|---------------|
|            |          |           |               |                      | Reagent ID      | Volume Added |                              |               |
|            |          |           |               |                      |                 |              | Acenaphthylene               | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Acetophenone                 | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Aniline                      | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Anthracene                   | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Benzo[a]anthracene           | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Benzo[a]pyrene               | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Benzo[b]fluoranthene         | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Benzo[g,h,i]perylene         | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Benzo[k]fluoranthene         | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Benzyl alcohol               | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Bis (2-chloroethoxy)methane  | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Bis (2-chloroethyl) ether    | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Bis (2-ethylhexyl) phthalate | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Butyl benzyl phthalate       | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Carbazole                    | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Chrysene                     | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Di-n-butyl phthalate         | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Di-n-octyl phthalate         | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Dibenz (a,h) anthracene      | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Dibenzofuran                 | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Diethyl phthalate            | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Dimethyl phthalate           | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Fluoranthene                 | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Fluorene                     | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Hexachlorobenzene            | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Hexachlorobutadiene          | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Hexachlorocyclopentadiene    | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Hexachloroethane             | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Hexadecane                   | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Indeno[1,2,3-cd]pyrene       | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Isophorone                   | 40 ug/mL      |
|            |          |           |               |                      |                 |              | n-Decane                     | 40 ug/mL      |
|            |          |           |               |                      |                 |              | N-Nitrosodi-n-propylamine    | 40 ug/mL      |
|            |          |           |               |                      |                 |              | N-Nitrosodimethylamine       | 40 ug/mL      |
|            |          |           |               |                      |                 |              | N-Nitrosodiphenylamine       | 80 ug/mL      |
|            |          |           |               |                      |                 |              | n-Octadecane                 | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Naphthalene                  | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Nitrobenzene                 | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Pentachlorophenol            | 80 ug/mL      |
|            |          |           |               |                      |                 |              | Phenanthrene                 | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Phenol                       | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Pyrene                       | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Pyridine                     | 40 ug/mL      |
|            |          |           |               |                      | SVLVstd10_00001 | 400 uL       | Benzoic acid                 | 40 ug/mL      |
|            |          |           |               |                      | SVLVstd11_00001 | 400 uL       | Indene                       | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Atrazine                     | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Benzaldehyde                 | 40 ug/mL      |
|            |          |           |               |                      |                 |              | Caprolactam                  | 40 ug/mL      |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID              | Exp Date | Prep Date | Dilutant Used                 | Reagent Final Volume | Parent Reagent       |              | Analyte                        | Concentration |
|-------------------------|----------|-----------|-------------------------------|----------------------|----------------------|--------------|--------------------------------|---------------|
|                         |          |           |                               |                      | Reagent ID           | Volume Added |                                |               |
|                         |          |           |                               |                      | SVLVstd9_00001       | 400 uL       | 3,3'-Dichlorobenzidine         | 40 ug/mL      |
|                         |          |           |                               |                      | SVLVSURRSPK_00014    | 160 uL       | Benzidine                      | 40 ug/mL      |
|                         |          |           |                               |                      |                      |              | 2,4,6-Tribromophenol (Surr)    | 40 ug/mL      |
|                         |          |           |                               |                      |                      |              | 2-Fluorobiphenyl               | 40 ug/mL      |
|                         |          |           |                               |                      |                      |              | 2-Fluorophenol (Surr)          | 40 ug/mL      |
|                         |          |           |                               |                      |                      |              | Nitrobenzene-d5 (Surr)         | 40 ug/mL      |
|                         |          |           |                               |                      |                      |              | Phenol-d5 (Surr)               | 40 ug/mL      |
|                         |          |           |                               |                      | svmethylnmetha_00011 | 800 uL       | Terphenyl-d14 (Surr)           | 40 ug/mL      |
|                         |          |           |                               |                      | SVNNITROPYROS_00015  | 800 uL       | Methyl methanesulfonate        | 40 ug/mL      |
| ..sv benzoepyrene_00001 | 10/03/18 |           | Absolute, Lot 100313          |                      | (Purchased Reagent)  |              | N-Nitrosopyrrolidine           | 40 ug/mL      |
| ..SV2356TCPs_00002      | 06/17/16 |           | Absolute, Lot 061711          |                      | (Purchased Reagent)  |              | Benzo[e]pyrene                 | 1000 ug/mL    |
| ..SV2NAPAMINEs_00002    | 06/30/17 |           | Ultra Scientific, Lot CK-1617 |                      | (Purchased Reagent)  |              | 2,3,5,6-Tetrachlorophenol      | 1000 ug/mL    |
| ..sv712dimbenza_00011   | 04/09/20 |           | Absolute, Lot 040915          |                      | (Purchased Reagent)  |              | 2-Naphthylamine                | 1000 ug/mL    |
| ..SVLVstd1_00032        | 05/31/16 |           | Restek, Lot A0107399          |                      | (Purchased Reagent)  |              | 7,12-Dimethylbenz(a)anthracene | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 1,1'-Biphenyl                  | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 1,2,4,5-Tetrachlorobenzene     | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 1,2,4-Trichlorobenzene         | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 1,2-Dichlorobenzene            | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 1,2-Diphenylhydrazine          | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 1,3-Dichlorobenzene            | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 1,3-Dinitrobenzene             | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 1,4-Dichlorobenzene            | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 1,4-Dioxane                    | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 1-Methylnaphthalene            | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2,2'-oxybis[1-chloropropane]   | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2,3,4,6-Tetrachlorophenol      | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2,4,5-Trichlorophenol          | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2,4,6-Trichlorophenol          | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2,4-Dichlorophenol             | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2,4-Dimethylphenol             | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2,4-Dinitrophenol              | 2000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2,4-Dinitrotoluene             | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2,6-Dichlorophenol             | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2,6-Dinitrotoluene             | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2-Chloronaphthalene            | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2-Chlorophenol                 | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2-Methylnaphthalene            | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2-Methylphenol                 | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2-Nitroaniline                 | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 2-Nitrophenol                  | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 3-Nitroaniline                 | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 4,6-Dinitro-2-methylphenol     | 2000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 4-Bromophenyl phenyl ether     | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 4-Chloro-3-methylphenol        | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 4-Chloroaniline                | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 4-Chlorophenyl phenyl ether    | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 4-Methylphenol                 | 1000 ug/mL    |
|                         |          |           |                               |                      |                      |              | 4-Nitroaniline                 | 1000 ug/mL    |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID        | Exp Date | Prep Date | Dilutant Used        | Reagent Final Volume | Parent Reagent      |              | Analyte                     | Concentration |
|-------------------|----------|-----------|----------------------|----------------------|---------------------|--------------|-----------------------------|---------------|
|                   |          |           |                      |                      | Reagent ID          | Volume Added |                             |               |
|                   |          |           |                      |                      |                     |              | 4-Nitrophenol               | 2000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Acenaphthene                | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Acenaphthylene              | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Acetophenone                | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Aniline                     | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Anthracene                  | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Benzo[a]anthracene          | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Benzo[a]pyrene              | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Benzo[b]fluoranthene        | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Benzo[g,h,i]perylene        | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Benzo[k]fluoranthene        | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Benzyl alcohol              | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Bis(2-chloroethoxy)methane  | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Bis(2-chloroethyl)ether     | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Bis(2-ethylhexyl) phthalate | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Butyl benzyl phthalate      | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Carbazole                   | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Chrysene                    | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Di-n-butyl phthalate        | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Di-n-octyl phthalate        | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Dibenz(a,h)anthracene       | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Dibenzofuran                | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Diethyl phthalate           | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Dimethyl phthalate          | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Fluoranthene                | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Fluorene                    | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Hexachlorobenzene           | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Hexachlorobutadiene         | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Hexachlorocyclopentadiene   | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Hexachloroethane            | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Hexadecane                  | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Indeno[1,2,3-cd]pyrene      | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Isophorone                  | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | n-Decane                    | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | N-Nitrosodi-n-propylamine   | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | N-Nitrosodimethylamine      | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | N-Nitrosodiphenylamine      | 2000 ug/mL    |
|                   |          |           |                      |                      |                     |              | n-Octadecane                | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Naphthalene                 | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Nitrobenzene                | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Pentachlorophenol           | 2000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Phenanthrene                | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Phenol                      | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Pyrene                      | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Pyridine                    | 1000 ug/mL    |
| ..SVLVstd10_00001 | 06/30/16 |           | Restek, Lot A0107943 |                      | (Purchased Reagent) | Benzoic acid | 2000 ug/mL                  |               |
|                   |          |           |                      |                      |                     | Indene       | 2000 ug/mL                  |               |
| ..SVLVstd11_00001 | 06/30/16 |           | Restek, Lot A0108035 |                      | (Purchased Reagent) | Atrazine     | 2000 ug/mL                  |               |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID             | Exp Date | Prep Date | Dilutant Used        | Reagent Final Volume | Parent Reagent      |              | Analyte                        | Concentration |
|------------------------|----------|-----------|----------------------|----------------------|---------------------|--------------|--------------------------------|---------------|
|                        |          |           |                      |                      | Reagent ID          | Volume Added |                                |               |
|                        |          |           |                      |                      |                     |              | Benzaldehyde                   | 2000 ug/mL    |
|                        |          |           |                      |                      |                     |              | Caprolactam                    | 2000 ug/mL    |
| ..SVLVstd9_00001       | 07/31/16 |           | Restek, Lot A0108709 |                      | (Purchased Reagent) |              | 3,3'-Dichlorobenzidine         | 2000 ug/mL    |
|                        |          |           |                      |                      |                     |              | Benzidine                      | 2000 ug/mL    |
| ..SVLVSURRSPK_00014    | 05/31/19 |           | Restek, Lot A0103615 |                      | (Purchased Reagent) |              | 2,4,6-Tribromophenol (Surr)    | 5000 ug/mL    |
|                        |          |           |                      |                      |                     |              | 2-Fluorobiphenyl               | 5000 ug/mL    |
|                        |          |           |                      |                      |                     |              | 2-Fluorophenol (Surr)          | 5000 ug/mL    |
|                        |          |           |                      |                      |                     |              | Nitrobenzene-d5 (Surr)         | 5000 ug/mL    |
|                        |          |           |                      |                      |                     |              | Phenol-d5 (Surr)               | 5000 ug/mL    |
|                        |          |           |                      |                      |                     |              | Terphenyl-d14 (Surr)           | 5000 ug/mL    |
| ..svmethylnmetha_00011 | 02/13/20 |           | Absolute, Lot 021315 |                      | (Purchased Reagent) |              | Methyl methanesulfonate        | 1000 ug/mL    |
| ..SVNNITROPYROs_00015  | 06/05/17 |           | absolute, Lot 060514 |                      | (Purchased Reagent) |              | N-Nitrosopyrrolidine           | 1000 ug/mL    |
| SVTAPSTD60i_00007      | 10/23/15 | 04/23/15  | MeCl2, Lot 1417620   | 1 mL                 | SVTAPITINTRNi_00007 | 10 uL        | 1,4-Dichlorobenzene-d4         | 4 ug/mL       |
|                        |          |           |                      |                      |                     |              | Acenaphthene-d10               | 4 ug/mL       |
|                        |          |           |                      |                      |                     |              | Chrysene-d12                   | 4 ug/mL       |
|                        |          |           |                      |                      |                     |              | Naphthalene-d8                 | 4 ug/mL       |
|                        |          |           |                      |                      |                     |              | Perylene-d12                   | 4 ug/mL       |
|                        |          |           |                      |                      |                     |              | Phenanthrene-d10               | 4 ug/mL       |
|                        |          |           |                      |                      | SVTAPITSTCKi_00006  | 750 uL       | Benzo[e]pyrene                 | 30 ug/mL      |
|                        |          |           |                      |                      |                     |              | 2,3,5,6-Tetrachlorophenol      | 30 ug/mL      |
|                        |          |           |                      |                      |                     |              | 2-Naphthylamine                | 30 ug/mL      |
|                        |          |           |                      |                      |                     |              | 7,12-Dimethylbenz(a)anthracene | 30 ug/mL      |
|                        |          |           |                      |                      |                     |              | 1,1'-Biphenyl                  | 30 ug/mL      |
|                        |          |           |                      |                      |                     |              | 1,2,4,5-Tetrachlorobenzene     | 30 ug/mL      |
|                        |          |           |                      |                      |                     |              | 1,2,4-Trichlorobenzene         | 30 ug/mL      |
|                        |          |           |                      |                      |                     |              | 1,2-Dichlorobenzene            | 30 ug/mL      |
|                        |          |           |                      |                      |                     |              | 1,2-Diphenylhydrazine          | 30 ug/mL      |
|                        |          |           |                      |                      |                     |              | 1,3-Dichlorobenzene            | 30 ug/mL      |
|                        |          |           |                      |                      |                     |              | 1,3-Dinitrobenzene             | 30 ug/mL      |
|                        |          |           |                      |                      |                     |              | 1,4-Dichlorobenzene            | 30 ug/mL      |
|                        |          |           |                      |                      |                     |              | 1,4-Dioxane                    | 30 ug/mL      |
|                        |          |           |                      |                      |                     |              | 1-Methylnaphthalene            | 30 ug/mL      |
|                        |          |           |                      |                      |                     |              | 2,2'-oxybis[1-chloropropane]   | 30 ug/mL      |
|                        |          |           |                      |                      |                     |              | 2,3,4,6-Tetrachlorophenol      | 30 ug/mL      |
|                        |          |           |                      |                      |                     |              | 2,4,5-Trichlorophenol          | 30 ug/mL      |
|                        |          |           |                      |                      |                     |              | 2,4,6-Trichlorophenol          | 30 ug/mL      |
|                        |          |           |                      |                      |                     |              | 2,4-Dichlorophenol             | 30 ug/mL      |
|                        |          |           |                      |                      |                     |              | 2,4-Dimethylphenol             | 30 ug/mL      |
|                        |          |           |                      |                      |                     |              | 2,4-Dinitrophenol              | 60 ug/mL      |
|                        |          |           |                      |                      |                     |              | 2,4-Dinitrotoluene             | 30 ug/mL      |
|                        |          |           |                      |                      |                     |              | 2,6-Dichlorophenol             | 30 ug/mL      |
|                        |          |           |                      |                      |                     |              | 2,6-Dinitrotoluene             | 30 ug/mL      |
|                        |          |           |                      |                      |                     |              | 2-Chloronaphthalene            | 30 ug/mL      |
|                        |          |           |                      |                      |                     |              | 2-Chlorophenol                 | 30 ug/mL      |
|                        |          |           |                      |                      |                     |              | 2-Methylnaphthalene            | 30 ug/mL      |
|                        |          |           |                      |                      |                     |              | 2-Methylphenol                 | 30 ug/mL      |
|                        |          |           |                      |                      |                     |              | 2-Nitroaniline                 | 30 ug/mL      |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent |              | Analyte                      | Concentration |
|------------|----------|-----------|---------------|----------------------|----------------|--------------|------------------------------|---------------|
|            |          |           |               |                      | Reagent ID     | Volume Added |                              |               |
|            |          |           |               |                      |                |              | 2-Nitrophenol                | 30 ug/mL      |
|            |          |           |               |                      |                |              | 3-Nitroaniline               | 30 ug/mL      |
|            |          |           |               |                      |                |              | 4,6-Dinitro-2-methylphenol   | 60 ug/mL      |
|            |          |           |               |                      |                |              | 4-Bromophenyl phenyl ether   | 30 ug/mL      |
|            |          |           |               |                      |                |              | 4-Chloro-3-methylphenol      | 30 ug/mL      |
|            |          |           |               |                      |                |              | 4-Chloroaniline              | 30 ug/mL      |
|            |          |           |               |                      |                |              | 4-Chlorophenyl phenyl ether  | 30 ug/mL      |
|            |          |           |               |                      |                |              | 4-Methylphenol               | 30 ug/mL      |
|            |          |           |               |                      |                |              | 4-Nitroaniline               | 30 ug/mL      |
|            |          |           |               |                      |                |              | 4-Nitrophenol                | 60 ug/mL      |
|            |          |           |               |                      |                |              | Acenaphthene                 | 30 ug/mL      |
|            |          |           |               |                      |                |              | Acenaphthylene               | 30 ug/mL      |
|            |          |           |               |                      |                |              | Acetophenone                 | 30 ug/mL      |
|            |          |           |               |                      |                |              | Aniline                      | 30 ug/mL      |
|            |          |           |               |                      |                |              | Anthracene                   | 30 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[a]anthracene           | 30 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[a]pyrene               | 30 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[b]fluoranthene         | 30 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[g,h,i]perylene         | 30 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[k]fluoranthene         | 30 ug/mL      |
|            |          |           |               |                      |                |              | Benzyl alcohol               | 30 ug/mL      |
|            |          |           |               |                      |                |              | Bis (2-chloroethoxy)methane  | 30 ug/mL      |
|            |          |           |               |                      |                |              | Bis (2-chloroethyl) ether    | 30 ug/mL      |
|            |          |           |               |                      |                |              | Bis (2-ethylhexyl) phthalate | 30 ug/mL      |
|            |          |           |               |                      |                |              | Butyl benzyl phthalate       | 30 ug/mL      |
|            |          |           |               |                      |                |              | Carbazole                    | 30 ug/mL      |
|            |          |           |               |                      |                |              | Chrysene                     | 30 ug/mL      |
|            |          |           |               |                      |                |              | Di-n-butyl phthalate         | 30 ug/mL      |
|            |          |           |               |                      |                |              | Di-n-octyl phthalate         | 30 ug/mL      |
|            |          |           |               |                      |                |              | Dibenz (a,h) anthracene      | 30 ug/mL      |
|            |          |           |               |                      |                |              | Dibenzofuran                 | 30 ug/mL      |
|            |          |           |               |                      |                |              | Diethyl phthalate            | 30 ug/mL      |
|            |          |           |               |                      |                |              | Dimethyl phthalate           | 30 ug/mL      |
|            |          |           |               |                      |                |              | Fluoranthene                 | 30 ug/mL      |
|            |          |           |               |                      |                |              | Fluorene                     | 30 ug/mL      |
|            |          |           |               |                      |                |              | Hexachlorobenzene            | 30 ug/mL      |
|            |          |           |               |                      |                |              | Hexachlorobutadiene          | 30 ug/mL      |
|            |          |           |               |                      |                |              | Hexachlorocyclopentadiene    | 30 ug/mL      |
|            |          |           |               |                      |                |              | Hexachloroethane             | 30 ug/mL      |
|            |          |           |               |                      |                |              | Hexadecane                   | 30 ug/mL      |
|            |          |           |               |                      |                |              | Indeno[1,2,3-cd]pyrene       | 30 ug/mL      |
|            |          |           |               |                      |                |              | Isophorone                   | 30 ug/mL      |
|            |          |           |               |                      |                |              | n-Decane                     | 30 ug/mL      |
|            |          |           |               |                      |                |              | N-Nitrosodi-n-propylamine    | 30 ug/mL      |
|            |          |           |               |                      |                |              | N-Nitrosodimethylamine       | 30 ug/mL      |
|            |          |           |               |                      |                |              | N-Nitrosodiphenylamine       | 60 ug/mL      |
|            |          |           |               |                      |                |              | n-Octadecane                 | 30 ug/mL      |
|            |          |           |               |                      |                |              | Naphthalene                  | 30 ug/mL      |

## REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID           | Exp Date | Prep Date | Dilutant Used       | Reagent Final Volume | Parent Reagent      |              | Analyte                        | Concentration |
|----------------------|----------|-----------|---------------------|----------------------|---------------------|--------------|--------------------------------|---------------|
|                      |          |           |                     |                      | Reagent ID          | Volume Added |                                |               |
|                      |          |           |                     |                      |                     |              | Nitrobenzene                   | 30 ug/mL      |
|                      |          |           |                     |                      |                     |              | Pentachlorophenol              | 60 ug/mL      |
|                      |          |           |                     |                      |                     |              | Phenanthrene                   | 30 ug/mL      |
|                      |          |           |                     |                      |                     |              | Phenol                         | 30 ug/mL      |
|                      |          |           |                     |                      |                     |              | Pyrene                         | 30 ug/mL      |
|                      |          |           |                     |                      |                     |              | Pyridine                       | 30 ug/mL      |
|                      |          |           |                     |                      |                     |              | Benzoic acid                   | 30 ug/mL      |
|                      |          |           |                     |                      |                     |              | Indene                         | 30 ug/mL      |
|                      |          |           |                     |                      |                     |              | Atrazine                       | 30 ug/mL      |
|                      |          |           |                     |                      |                     |              | Benzaldehyde                   | 30 ug/mL      |
|                      |          |           |                     |                      |                     |              | Caprolactam                    | 30 ug/mL      |
|                      |          |           |                     |                      |                     |              | 3,3'-Dichlorobenzidine         | 30 ug/mL      |
|                      |          |           |                     |                      |                     |              | Benzidine                      | 30 ug/mL      |
|                      |          |           |                     |                      |                     |              | 2,4,6-Tribromophenol (Surr)    | 30 ug/mL      |
|                      |          |           |                     |                      |                     |              | 2-Fluorobiphenyl               | 30 ug/mL      |
|                      |          |           |                     |                      |                     |              | 2-Fluorophenol (Surr)          | 30 ug/mL      |
|                      |          |           |                     |                      |                     |              | Nitrobenzene-d5 (Surr)         | 30 ug/mL      |
|                      |          |           |                     |                      |                     |              | Phenol-d5 (Surr)               | 30 ug/mL      |
|                      |          |           |                     |                      |                     |              | Terphenyl-d14 (Surr)           | 30 ug/mL      |
|                      |          |           |                     |                      |                     |              | Methyl methanesulfonate        | 30 ug/mL      |
|                      |          |           |                     |                      |                     |              | N-Nitrosopyrrolidine           | 30 ug/mL      |
| .SVTAPITINTRNi_00007 | 12/03/15 | 12/03/14  | MeCl2, Lot 1417620  | 25 mL                | SVLVIntstd_00004    | 5 mL         | 1,4-Dichlorobenzene-d4         | 400 ug/mL     |
|                      |          |           |                     |                      |                     |              | Acenaphthene-d10               | 400 ug/mL     |
|                      |          |           |                     |                      |                     |              | Chrysene-d12                   | 400 ug/mL     |
|                      |          |           |                     |                      |                     |              | Naphthalene-d8                 | 400 ug/mL     |
|                      |          |           |                     |                      |                     |              | Perylene-d12                   | 400 ug/mL     |
|                      |          |           |                     |                      |                     |              | Phenanthrene-d10               | 400 ug/mL     |
| ..SVLVIntstd_00004   | 02/28/18 |           | Restek, Lot A093676 |                      | (Purchased Reagent) |              | 1,4-Dichlorobenzene-d4         | 2000 ug/mL    |
|                      |          |           |                     |                      |                     |              | Acenaphthene-d10               | 2000 ug/mL    |
|                      |          |           |                     |                      |                     |              | Chrysene-d12                   | 2000 ug/mL    |
|                      |          |           |                     |                      |                     |              | Naphthalene-d8                 | 2000 ug/mL    |
|                      |          |           |                     |                      |                     |              | Perylene-d12                   | 2000 ug/mL    |
|                      |          |           |                     |                      |                     |              | Phenanthrene-d10               | 2000 ug/mL    |
| .SVTAPITSTCKi_00006  | 10/23/15 | 04/23/15  | MeCl2, Lot 1417620  | 20 mL                | sv benzoepyre_00001 | 800 uL       | Benzo[e]pyrene                 | 40 ug/mL      |
|                      |          |           |                     |                      | SV2356TCPs_00002    | 800 uL       | 2,3,5,6-Tetrachlorophenol      | 40 ug/mL      |
|                      |          |           |                     |                      | SV2NAPAMINEs_00002  | 800 uL       | 2-Naphthylamine                | 40 ug/mL      |
|                      |          |           |                     |                      | sv712dimbenza_00011 | 800 uL       | 7,12-Dimethylbenz(a)anthracene | 40 ug/mL      |
|                      |          |           |                     |                      | SVLVstd1_00032      | 800 uL       | 1,1'-Biphenyl                  | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1,2,4,5-Tetrachlorobenzene     | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1,2,4-Trichlorobenzene         | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1,2-Dichlorobenzene            | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1,2-Diphenylhydrazine          | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1,3-Dichlorobenzene            | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1,3-Dinitrobenzene             | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1,4-Dichlorobenzene            | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1,4-Dioxane                    | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 1-Methylnaphthalene            | 40 ug/mL      |
|                      |          |           |                     |                      |                     |              | 2,2'-oxybis[1-chloropropane]   | 40 ug/mL      |



# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent |              | Analyte                      | Concentration |
|------------|----------|-----------|---------------|----------------------|----------------|--------------|------------------------------|---------------|
|            |          |           |               |                      | Reagent ID     | Volume Added |                              |               |
|            |          |           |               |                      |                |              | 2,3,4,6-Tetrachlorophenol    | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2,4,5-Trichlorophenol        | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2,4,6-Trichlorophenol        | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2,4-Dichlorophenol           | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2,4-Dimethylphenol           | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2,4-Dinitrophenol            | 80 ug/mL      |
|            |          |           |               |                      |                |              | 2,4-Dinitrotoluene           | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2,6-Dichlorophenol           | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2,6-Dinitrotoluene           | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2-Chloronaphthalene          | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2-Chlorophenol               | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2-Methylnaphthalene          | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2-Methylphenol               | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2-Nitroaniline               | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2-Nitrophenol                | 40 ug/mL      |
|            |          |           |               |                      |                |              | 3-Nitroaniline               | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4,6-Dinitro-2-methylphenol   | 80 ug/mL      |
|            |          |           |               |                      |                |              | 4-Bromophenyl phenyl ether   | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4-Chloro-3-methylphenol      | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4-Chloroaniline              | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4-Chlorophenyl phenyl ether  | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4-Methylphenol               | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4-Nitroaniline               | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4-Nitrophenol                | 80 ug/mL      |
|            |          |           |               |                      |                |              | Acenaphthene                 | 40 ug/mL      |
|            |          |           |               |                      |                |              | Acenaphthylene               | 40 ug/mL      |
|            |          |           |               |                      |                |              | Acetophenone                 | 40 ug/mL      |
|            |          |           |               |                      |                |              | Aniline                      | 40 ug/mL      |
|            |          |           |               |                      |                |              | Anthracene                   | 40 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[a]anthracene           | 40 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[a]pyrene               | 40 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[b]fluoranthene         | 40 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[g,h,i]perylene         | 40 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[k]fluoranthene         | 40 ug/mL      |
|            |          |           |               |                      |                |              | Benzyl alcohol               | 40 ug/mL      |
|            |          |           |               |                      |                |              | Bis (2-chloroethoxy)methane  | 40 ug/mL      |
|            |          |           |               |                      |                |              | Bis (2-chloroethyl) ether    | 40 ug/mL      |
|            |          |           |               |                      |                |              | Bis (2-ethylhexyl) phthalate | 40 ug/mL      |
|            |          |           |               |                      |                |              | Butyl benzyl phthalate       | 40 ug/mL      |
|            |          |           |               |                      |                |              | Carbazole                    | 40 ug/mL      |
|            |          |           |               |                      |                |              | Chrysene                     | 40 ug/mL      |
|            |          |           |               |                      |                |              | Di-n-butyl phthalate         | 40 ug/mL      |
|            |          |           |               |                      |                |              | Di-n-octyl phthalate         | 40 ug/mL      |
|            |          |           |               |                      |                |              | Dibenz (a,h) anthracene      | 40 ug/mL      |
|            |          |           |               |                      |                |              | Dibenzofuran                 | 40 ug/mL      |
|            |          |           |               |                      |                |              | Diethyl phthalate            | 40 ug/mL      |
|            |          |           |               |                      |                |              | Dimethyl phthalate           | 40 ug/mL      |
|            |          |           |               |                      |                |              | Fluoranthene                 | 40 ug/mL      |

## REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID            | Exp Date | Prep Date | Dilutant Used                 | Reagent Final Volume | Parent Reagent       |              | Analyte                        | Concentration |
|-----------------------|----------|-----------|-------------------------------|----------------------|----------------------|--------------|--------------------------------|---------------|
|                       |          |           |                               |                      | Reagent ID           | Volume Added |                                |               |
|                       |          |           |                               |                      |                      |              | Fluorene                       | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Hexachlorobenzene              | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Hexachlorobutadiene            | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Hexachlorocyclopentadiene      | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Hexachloroethane               | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Hexadecane                     | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Indeno[1,2,3-cd]pyrene         | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Isophorone                     | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | n-Decane                       | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | N-Nitrosodi-n-propylamine      | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | N-Nitrosodimethylamine         | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | N-Nitrosodiphenylamine         | 80 ug/mL      |
|                       |          |           |                               |                      |                      |              | n-Octadecane                   | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Naphthalene                    | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Nitrobenzene                   | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Pentachlorophenol              | 80 ug/mL      |
|                       |          |           |                               |                      |                      |              | Phenanthrene                   | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Phenol                         | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Pyrene                         | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Pyridine                       | 40 ug/mL      |
|                       |          |           |                               |                      | SVLVstd10_00001      | 400 uL       | Benzoic acid                   | 40 ug/mL      |
|                       |          |           |                               |                      | SVLVstd11_00001      | 400 uL       | Indene                         | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Atrazine                       | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Benzaldehyde                   | 40 ug/mL      |
|                       |          |           |                               |                      | SVLVstd9_00001       | 400 uL       | Caprolactam                    | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | 3,3'-Dichlorobenzidine         | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Benzidine                      | 40 ug/mL      |
|                       |          |           |                               |                      | SVLVSURRSPK_00014    | 160 uL       | 2,4,6-Tribromophenol (Surr)    | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | 2-Fluorobiphenyl               | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | 2-Fluorophenol (Surr)          | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Nitrobenzene-d5 (Surr)         | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Phenol-d5 (Surr)               | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Terphenyl-d14 (Surr)           | 40 ug/mL      |
|                       |          |           |                               |                      | svmethylnmetha_00011 | 800 uL       | Methyl methanesulfonate        | 40 ug/mL      |
|                       |          |           |                               |                      | SVNNITROPYROS_00015  | 800 uL       | N-Nitrosopyrrolidine           | 40 ug/mL      |
| ..sv benzoepyre_00001 | 10/03/18 |           | Absolute, Lot 100313          |                      | (Purchased Reagent)  |              | Benzo[e]pyrene                 | 1000 ug/mL    |
| ..SV2356TCPs_00002    | 06/17/16 |           | Absolute, Lot 061711          |                      | (Purchased Reagent)  |              | 2,3,5,6-Tetrachlorophenol      | 1000 ug/mL    |
| ..SV2NAPAMINEs_00002  | 06/30/17 |           | Ultra Scientific, Lot Ck-1617 |                      | (Purchased Reagent)  |              | 2-Naphthylamine                | 1000 ug/mL    |
| ..sv712dimbenza_00011 | 04/09/20 |           | Absolute, Lot 040915          |                      | (Purchased Reagent)  |              | 7,12-Dimethylbenz(a)anthracene | 1000 ug/mL    |
| ..SVLVstd1_00032      | 05/31/16 |           | Restek, Lot A0107399          |                      | (Purchased Reagent)  |              | 1,1'-Biphenyl                  | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 1,2,4,5-Tetrachlorobenzene     | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 1,2,4-Trichlorobenzene         | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 1,2-Dichlorobenzene            | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 1,2-Diphenylhydrazine          | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 1,3-Dichlorobenzene            | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 1,3-Dinitrobenzene             | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 1,4-Dichlorobenzene            | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 1,4-Dioxane                    | 1000 ug/mL    |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent |              | Analyte                      | Concentration |
|------------|----------|-----------|---------------|----------------------|----------------|--------------|------------------------------|---------------|
|            |          |           |               |                      | Reagent ID     | Volume Added |                              |               |
|            |          |           |               |                      |                |              | 1-Methylnaphthalene          | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,2'-oxybis[1-chloropropane] | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,3,4,6-Tetrachlorophenol    | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,4,5-Trichlorophenol        | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,4,6-Trichlorophenol        | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,4-Dichlorophenol           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,4-Dimethylphenol           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,4-Dinitrophenol            | 2000 ug/mL    |
|            |          |           |               |                      |                |              | 2,4-Dinitrotoluene           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,6-Dichlorophenol           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2,6-Dinitrotoluene           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2-Chloronaphthalene          | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2-Chlorophenol               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2-Methylnaphthalene          | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2-Methylphenol               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2-Nitroaniline               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 2-Nitrophenol                | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 3-Nitroaniline               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4,6-Dinitro-2-methylphenol   | 2000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Bromophenyl phenyl ether   | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Chloro-3-methylphenol      | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Chloroaniline              | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Chlorophenyl phenyl ether  | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Methylphenol               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Nitroaniline               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | 4-Nitrophenol                | 2000 ug/mL    |
|            |          |           |               |                      |                |              | Acenaphthene                 | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Acenaphthylene               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Acetophenone                 | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Aniline                      | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Anthracene                   | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzo[a]anthracene           | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzo[a]pyrene               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzo[b]fluoranthene         | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzo[g,h,i]perylene         | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzo[k]fluoranthene         | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Benzyl alcohol               | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Bis (2-chloroethoxy)methane  | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Bis (2-chloroethyl) ether    | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Bis (2-ethylhexyl) phthalate | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Butyl benzyl phthalate       | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Carbazole                    | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Chrysene                     | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Di-n-butyl phthalate         | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Di-n-octyl phthalate         | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Dibenz (a,h) anthracene      | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Dibenzofuran                 | 1000 ug/mL    |
|            |          |           |               |                      |                |              | Diethyl phthalate            | 1000 ug/mL    |

## REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID               | Exp Date | Prep Date | Dilutant Used        | Reagent Final Volume | Parent Reagent      |              | Analyte                        | Concentration |
|--------------------------|----------|-----------|----------------------|----------------------|---------------------|--------------|--------------------------------|---------------|
|                          |          |           |                      |                      | Reagent ID          | Volume Added |                                |               |
|                          |          |           |                      |                      |                     |              | Dimethyl phthalate             | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Fluoranthene                   | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Fluorene                       | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Hexachlorobenzene              | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Hexachlorobutadiene            | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Hexachlorocyclopentadiene      | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Hexachloroethane               | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Hexadecane                     | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Indeno[1,2,3-cd]pyrene         | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Isophorone                     | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | n-Decane                       | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | N-Nitrosodi-n-propylamine      | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | N-Nitrosodimethylamine         | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | N-Nitrosodiphenylamine         | 2000 ug/mL    |
|                          |          |           |                      |                      |                     |              | n-Octadecane                   | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Naphthalene                    | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Nitrobenzene                   | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Pentachlorophenol              | 2000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Phenanthrene                   | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Phenol                         | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Pyrene                         | 1000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Pyridine                       | 1000 ug/mL    |
| ..SVLVstd10_00001        | 06/30/16 |           | Restek, Lot A0107943 |                      | (Purchased Reagent) |              | Benzoic acid                   | 2000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Indene                         | 2000 ug/mL    |
| ..SVLVstd11_00001        | 06/30/16 |           | Restek, Lot A0108035 |                      | (Purchased Reagent) |              | Atrazine                       | 2000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Benzaldehyde                   | 2000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Caprolactam                    | 2000 ug/mL    |
| ..SVLVstd9_00001         | 07/31/16 |           | Restek, Lot A0108709 |                      | (Purchased Reagent) |              | 3,3'-Dichlorobenzidine         | 2000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Benzidine                      | 2000 ug/mL    |
| ..SVLVSURRSPK_00014      | 05/31/19 |           | Restek, Lot A0103615 |                      | (Purchased Reagent) |              | 2,4,6-Tribromophenol (Surr)    | 5000 ug/mL    |
|                          |          |           |                      |                      |                     |              | 2-Fluorobiphenyl               | 5000 ug/mL    |
|                          |          |           |                      |                      |                     |              | 2-Fluorophenol (Surr)          | 5000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Nitrobenzene-d5 (Surr)         | 5000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Phenol-d5 (Surr)               | 5000 ug/mL    |
|                          |          |           |                      |                      |                     |              | Terphenyl-d14 (Surr)           | 5000 ug/mL    |
| ..svmethyImetha_00011    | 02/13/20 |           | Absolute, Lot 021315 |                      | (Purchased Reagent) |              | Methyl methanesulfonate        | 1000 ug/mL    |
| ..SVNNITROPYROs_00015    | 06/05/17 |           | absolute, Lot 060514 |                      | (Purchased Reagent) |              | N-Nitrosopyrrolidine           | 1000 ug/mL    |
| <b>SVTAPSTD80i_00007</b> | 10/23/15 | 04/23/15  | MeCl2, Lot 1417620   | 1 mL                 | SVTAPITINTRNi_00007 | 10 uL        | 1,4-Dichlorobenzene-d4         | 4 ug/mL       |
|                          |          |           |                      |                      |                     |              | Acenaphthene-d10               | 4 ug/mL       |
|                          |          |           |                      |                      |                     |              | Chrysene-d12                   | 4 ug/mL       |
|                          |          |           |                      |                      |                     |              | Naphthalene-d8                 | 4 ug/mL       |
|                          |          |           |                      |                      |                     |              | Perylene-d12                   | 4 ug/mL       |
|                          |          |           |                      |                      |                     |              | Phenanthrene-d10               | 4 ug/mL       |
|                          |          |           |                      |                      | SVTAPITSTCKi_00006  | 1000 uL      | Benzo[e]pyrene                 | 40 ug/mL      |
|                          |          |           |                      |                      |                     |              | 2,3,5,6-Tetrachlorophenol      | 40 ug/mL      |
|                          |          |           |                      |                      |                     |              | 2-Naphthylamine                | 40 ug/mL      |
|                          |          |           |                      |                      |                     |              | 7,12-Dimethylbenz(a)anthracene | 40 ug/mL      |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent |              | Analyte                      | Concentration |
|------------|----------|-----------|---------------|----------------------|----------------|--------------|------------------------------|---------------|
|            |          |           |               |                      | Reagent ID     | Volume Added |                              |               |
|            |          |           |               |                      |                |              | 1,1'-Biphenyl                | 40 ug/mL      |
|            |          |           |               |                      |                |              | 1,2,4,5-Tetrachlorobenzene   | 40 ug/mL      |
|            |          |           |               |                      |                |              | 1,2,4-Trichlorobenzene       | 40 ug/mL      |
|            |          |           |               |                      |                |              | 1,2-Dichlorobenzene          | 40 ug/mL      |
|            |          |           |               |                      |                |              | 1,2-Diphenylhydrazine        | 40 ug/mL      |
|            |          |           |               |                      |                |              | 1,3-Dichlorobenzene          | 40 ug/mL      |
|            |          |           |               |                      |                |              | 1,3-Dinitrobenzene           | 40 ug/mL      |
|            |          |           |               |                      |                |              | 1,4-Dichlorobenzene          | 40 ug/mL      |
|            |          |           |               |                      |                |              | 1,4-Dioxane                  | 40 ug/mL      |
|            |          |           |               |                      |                |              | 1-Methylnaphthalene          | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2,2'-oxybis[1-chloropropane] | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2,3,4,6-Tetrachlorophenol    | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2,4,5-Trichlorophenol        | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2,4,6-Trichlorophenol        | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2,4-Dichlorophenol           | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2,4-Dimethylphenol           | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2,4-Dinitrophenol            | 80 ug/mL      |
|            |          |           |               |                      |                |              | 2,4-Dinitrotoluene           | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2,6-Dichlorophenol           | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2,6-Dinitrotoluene           | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2-Chloronaphthalene          | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2-Chlorophenol               | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2-Methylnaphthalene          | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2-Methylphenol               | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2-Nitroaniline               | 40 ug/mL      |
|            |          |           |               |                      |                |              | 2-Nitrophenol                | 40 ug/mL      |
|            |          |           |               |                      |                |              | 3-Nitroaniline               | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4,6-Dinitro-2-methylphenol   | 80 ug/mL      |
|            |          |           |               |                      |                |              | 4-Bromophenyl phenyl ether   | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4-Chloro-3-methylphenol      | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4-Chloroaniline              | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4-Chlorophenyl phenyl ether  | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4-Methylphenol               | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4-Nitroaniline               | 40 ug/mL      |
|            |          |           |               |                      |                |              | 4-Nitrophenol                | 80 ug/mL      |
|            |          |           |               |                      |                |              | Acenaphthene                 | 40 ug/mL      |
|            |          |           |               |                      |                |              | Acenaphthylene               | 40 ug/mL      |
|            |          |           |               |                      |                |              | Acetophenone                 | 40 ug/mL      |
|            |          |           |               |                      |                |              | Aniline                      | 40 ug/mL      |
|            |          |           |               |                      |                |              | Anthracene                   | 40 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[a]anthracene           | 40 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[a]pyrene               | 40 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[b]fluoranthene         | 40 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[g,h,i]perylene         | 40 ug/mL      |
|            |          |           |               |                      |                |              | Benzo[k]fluoranthene         | 40 ug/mL      |
|            |          |           |               |                      |                |              | Benzyl alcohol               | 40 ug/mL      |
|            |          |           |               |                      |                |              | Bis (2-chloroethoxy)methane  | 40 ug/mL      |
|            |          |           |               |                      |                |              | Bis (2-chloroethyl) ether    | 40 ug/mL      |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID           | Exp Date | Prep Date | Dilutant Used      | Reagent Final Volume | Parent Reagent   |              | Analyte                     | Concentration |
|----------------------|----------|-----------|--------------------|----------------------|------------------|--------------|-----------------------------|---------------|
|                      |          |           |                    |                      | Reagent ID       | Volume Added |                             |               |
|                      |          |           |                    |                      |                  |              | Bis(2-ethylhexyl) phthalate | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Butyl benzyl phthalate      | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Carbazole                   | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Chrysene                    | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Di-n-butyl phthalate        | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Di-n-octyl phthalate        | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Dibenz(a,h)anthracene       | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Dibenzofuran                | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Diethyl phthalate           | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Dimethyl phthalate          | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Fluoranthene                | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Fluorene                    | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Hexachlorobenzene           | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Hexachlorobutadiene         | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Hexachlorocyclopentadiene   | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Hexachloroethane            | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Hexadecane                  | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Indeno[1,2,3-cd]pyrene      | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Isophorone                  | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | n-Decane                    | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | N-Nitrosodi-n-propylamine   | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | N-Nitrosodimethylamine      | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | N-Nitrosodiphenylamine      | 80 ug/mL      |
|                      |          |           |                    |                      |                  |              | n-Octadecane                | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Naphthalene                 | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Nitrobenzene                | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Pentachlorophenol           | 80 ug/mL      |
|                      |          |           |                    |                      |                  |              | Phenanthrene                | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Phenol                      | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Pyrene                      | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Pyridine                    | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Benzoic acid                | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Indene                      | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Atrazine                    | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Benzaldehyde                | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Caprolactam                 | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | 3,3'-Dichlorobenzidine      | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Benzidine                   | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | 2,4,6-Tribromophenol (Surr) | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | 2-Fluorobiphenyl            | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | 2-Fluorophenol (Surr)       | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Nitrobenzene-d5 (Surr)      | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Phenol-d5 (Surr)            | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Terphenyl-d14 (Surr)        | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | Methyl methanesulfonate     | 40 ug/mL      |
|                      |          |           |                    |                      |                  |              | N-Nitrosopyrrolidine        | 40 ug/mL      |
| .SVTAPITINTRNi_00007 | 12/03/15 | 12/03/14  | MeCl2, Lot 1417620 | 25 mL                | SVLVIntstd_00004 | 5 mL         | 1,4-Dichlorobenzene-d4      | 400 ug/mL     |
|                      |          |           |                    |                      |                  |              | Acenaphthene-d10            | 400 ug/mL     |

## REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID          | Exp Date | Prep Date | Dilutant Used       | Reagent Final Volume | Parent Reagent      |              | Analyte                        | Concentration |
|---------------------|----------|-----------|---------------------|----------------------|---------------------|--------------|--------------------------------|---------------|
|                     |          |           |                     |                      | Reagent ID          | Volume Added |                                |               |
|                     |          |           |                     |                      |                     |              | Chrysene-d12                   | 400 ug/mL     |
|                     |          |           |                     |                      |                     |              | Naphthalene-d8                 | 400 ug/mL     |
|                     |          |           |                     |                      |                     |              | Perylene-d12                   | 400 ug/mL     |
|                     |          |           |                     |                      |                     |              | Phenanthrene-d10               | 400 ug/mL     |
| ..SVLVIntstd_00004  | 02/28/18 |           | Restek, Lot A093676 |                      | (Purchased Reagent) |              | 1,4-Dichlorobenzene-d4         | 2000 ug/mL    |
|                     |          |           |                     |                      |                     |              | Acenaphthene-d10               | 2000 ug/mL    |
|                     |          |           |                     |                      |                     |              | Chrysene-d12                   | 2000 ug/mL    |
|                     |          |           |                     |                      |                     |              | Naphthalene-d8                 | 2000 ug/mL    |
|                     |          |           |                     |                      |                     |              | Perylene-d12                   | 2000 ug/mL    |
|                     |          |           |                     |                      |                     |              | Phenanthrene-d10               | 2000 ug/mL    |
| .SVTAPITSTCKi_00006 | 10/23/15 | 04/23/15  | MeCl2, Lot 1417620  | 20 mL                | sv benzoepyre 00001 | 800 uL       | Benzo[e]pyrene                 | 40 ug/mL      |
|                     |          |           |                     |                      | SV2356TCPs_00002    | 800 uL       | 2,3,5,6-Tetrachlorophenol      | 40 ug/mL      |
|                     |          |           |                     |                      | SV2NAPAMINEs_00002  | 800 uL       | 2-Naphthylamine                | 40 ug/mL      |
|                     |          |           |                     |                      | sv712dimbenza_00011 | 800 uL       | 7,12-Dimethylbenz(a)anthracene | 40 ug/mL      |
|                     |          |           |                     |                      | SVLVstd1_00032      | 800 uL       | 1,1'-Biphenyl                  | 40 ug/mL      |
|                     |          |           |                     |                      |                     |              | 1,2,4,5-Tetrachlorobenzene     | 40 ug/mL      |
|                     |          |           |                     |                      |                     |              | 1,2,4-Trichlorobenzene         | 40 ug/mL      |
|                     |          |           |                     |                      |                     |              | 1,2-Dichlorobenzene            | 40 ug/mL      |
|                     |          |           |                     |                      |                     |              | 1,2-Diphenylhydrazine          | 40 ug/mL      |
|                     |          |           |                     |                      |                     |              | 1,3-Dichlorobenzene            | 40 ug/mL      |
|                     |          |           |                     |                      |                     |              | 1,3-Dinitrobenzene             | 40 ug/mL      |
|                     |          |           |                     |                      |                     |              | 1,4-Dichlorobenzene            | 40 ug/mL      |
|                     |          |           |                     |                      |                     |              | 1,4-Dioxane                    | 40 ug/mL      |
|                     |          |           |                     |                      |                     |              | 1-Methylnaphthalene            | 40 ug/mL      |
|                     |          |           |                     |                      |                     |              | 2,2'-oxybis[1-chloropropane]   | 40 ug/mL      |
|                     |          |           |                     |                      |                     |              | 2,3,4,6-Tetrachlorophenol      | 40 ug/mL      |
|                     |          |           |                     |                      |                     |              | 2,4,5-Trichlorophenol          | 40 ug/mL      |
|                     |          |           |                     |                      |                     |              | 2,4,6-Trichlorophenol          | 40 ug/mL      |
|                     |          |           |                     |                      |                     |              | 2,4-Dichlorophenol             | 40 ug/mL      |
|                     |          |           |                     |                      |                     |              | 2,4-Dimethylphenol             | 40 ug/mL      |
|                     |          |           |                     |                      |                     |              | 2,4-Dinitrophenol              | 80 ug/mL      |
|                     |          |           |                     |                      |                     |              | 2,4-Dinitrotoluene             | 40 ug/mL      |
|                     |          |           |                     |                      |                     |              | 2,6-Dichlorophenol             | 40 ug/mL      |
|                     |          |           |                     |                      |                     |              | 2,6-Dinitrotoluene             | 40 ug/mL      |
|                     |          |           |                     |                      |                     |              | 2-Chloronaphthalene            | 40 ug/mL      |
|                     |          |           |                     |                      |                     |              | 2-Chlorophenol                 | 40 ug/mL      |
|                     |          |           |                     |                      |                     |              | 2-Methylnaphthalene            | 40 ug/mL      |
|                     |          |           |                     |                      |                     |              | 2-Methylphenol                 | 40 ug/mL      |
|                     |          |           |                     |                      |                     |              | 2-Nitroaniline                 | 40 ug/mL      |
|                     |          |           |                     |                      |                     |              | 2-Nitrophenol                  | 40 ug/mL      |
|                     |          |           |                     |                      |                     |              | 3-Nitroaniline                 | 40 ug/mL      |
|                     |          |           |                     |                      |                     |              | 4,6-Dinitro-2-methylphenol     | 80 ug/mL      |
|                     |          |           |                     |                      |                     |              | 4-Bromophenyl phenyl ether     | 40 ug/mL      |
|                     |          |           |                     |                      |                     |              | 4-Chloro-3-methylphenol        | 40 ug/mL      |
|                     |          |           |                     |                      |                     |              | 4-Chloroaniline                | 40 ug/mL      |
|                     |          |           |                     |                      |                     |              | 4-Chlorophenyl phenyl ether    | 40 ug/mL      |
|                     |          |           |                     |                      |                     |              | 4-Methylphenol                 | 40 ug/mL      |
|                     |          |           |                     |                      |                     |              | 4-Nitroaniline                 | 40 ug/mL      |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent         |              | Analyte                      | Concentration |
|------------|----------|-----------|---------------|----------------------|------------------------|--------------|------------------------------|---------------|
|            |          |           |               |                      | Reagent ID             | Volume Added |                              |               |
|            |          |           |               |                      |                        |              | 4-Nitrophenol                | 80 ug/mL      |
|            |          |           |               |                      |                        |              | Acenaphthene                 | 40 ug/mL      |
|            |          |           |               |                      |                        |              | Acenaphthylene               | 40 ug/mL      |
|            |          |           |               |                      |                        |              | Acetophenone                 | 40 ug/mL      |
|            |          |           |               |                      |                        |              | Aniline                      | 40 ug/mL      |
|            |          |           |               |                      |                        |              | Anthracene                   | 40 ug/mL      |
|            |          |           |               |                      |                        |              | Benzo[a]anthracene           | 40 ug/mL      |
|            |          |           |               |                      |                        |              | Benzo[a]pyrene               | 40 ug/mL      |
|            |          |           |               |                      |                        |              | Benzo[b]fluoranthene         | 40 ug/mL      |
|            |          |           |               |                      |                        |              | Benzo[g,h,i]perylene         | 40 ug/mL      |
|            |          |           |               |                      |                        |              | Benzo[k]fluoranthene         | 40 ug/mL      |
|            |          |           |               |                      |                        |              | Benzyl alcohol               | 40 ug/mL      |
|            |          |           |               |                      |                        |              | Bis (2-chloroethoxy)methane  | 40 ug/mL      |
|            |          |           |               |                      |                        |              | Bis (2-chloroethyl) ether    | 40 ug/mL      |
|            |          |           |               |                      |                        |              | Bis (2-ethylhexyl) phthalate | 40 ug/mL      |
|            |          |           |               |                      |                        |              | Butyl benzyl phthalate       | 40 ug/mL      |
|            |          |           |               |                      |                        |              | Carbazole                    | 40 ug/mL      |
|            |          |           |               |                      |                        |              | Chrysene                     | 40 ug/mL      |
|            |          |           |               |                      |                        |              | Di-n-butyl phthalate         | 40 ug/mL      |
|            |          |           |               |                      |                        |              | Di-n-octyl phthalate         | 40 ug/mL      |
|            |          |           |               |                      |                        |              | Dibenz (a,h) anthracene      | 40 ug/mL      |
|            |          |           |               |                      |                        |              | Dibenzofuran                 | 40 ug/mL      |
|            |          |           |               |                      |                        |              | Diethyl phthalate            | 40 ug/mL      |
|            |          |           |               |                      |                        |              | Dimethyl phthalate           | 40 ug/mL      |
|            |          |           |               |                      |                        |              | Fluoranthene                 | 40 ug/mL      |
|            |          |           |               |                      |                        |              | Fluorene                     | 40 ug/mL      |
|            |          |           |               |                      |                        |              | Hexachlorobenzene            | 40 ug/mL      |
|            |          |           |               |                      |                        |              | Hexachlorobutadiene          | 40 ug/mL      |
|            |          |           |               |                      |                        |              | Hexachlorocyclopentadiene    | 40 ug/mL      |
|            |          |           |               |                      |                        |              | Hexachloroethane             | 40 ug/mL      |
|            |          |           |               |                      |                        |              | Hexadecane                   | 40 ug/mL      |
|            |          |           |               |                      |                        |              | Indeno[1,2,3-cd]pyrene       | 40 ug/mL      |
|            |          |           |               |                      |                        |              | Isophorone                   | 40 ug/mL      |
|            |          |           |               |                      |                        |              | n-Decane                     | 40 ug/mL      |
|            |          |           |               |                      |                        |              | N-Nitrosodi-n-propylamine    | 40 ug/mL      |
|            |          |           |               |                      | N-Nitrosodimethylamine | 40 ug/mL     |                              |               |
|            |          |           |               |                      | N-Nitrosodiphenylamine | 80 ug/mL     |                              |               |
|            |          |           |               |                      | n-Octadecane           | 40 ug/mL     |                              |               |
|            |          |           |               |                      | Naphthalene            | 40 ug/mL     |                              |               |
|            |          |           |               |                      | Nitrobenzene           | 40 ug/mL     |                              |               |
|            |          |           |               |                      | Pentachlorophenol      | 80 ug/mL     |                              |               |
|            |          |           |               |                      | Phenanthrene           | 40 ug/mL     |                              |               |
|            |          |           |               |                      | Phenol                 | 40 ug/mL     |                              |               |
|            |          |           |               |                      | Pyrene                 | 40 ug/mL     |                              |               |
|            |          |           |               |                      | Pyridine               | 40 ug/mL     |                              |               |
|            |          |           |               |                      | SVLVstd10_00001        | 400 uL       | Benzoic acid                 | 40 ug/mL      |
|            |          |           |               |                      |                        |              | Indene                       | 40 ug/mL      |
|            |          |           |               |                      | SVLVstd11 00001        | 400 uL       | Atrazine                     | 40 ug/mL      |



## REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID            | Exp Date | Prep Date | Dilutant Used                 | Reagent Final Volume | Parent Reagent       |              | Analyte                        | Concentration |
|-----------------------|----------|-----------|-------------------------------|----------------------|----------------------|--------------|--------------------------------|---------------|
|                       |          |           |                               |                      | Reagent ID           | Volume Added |                                |               |
|                       |          |           |                               |                      |                      |              | Benzaldehyde                   | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Caprolactam                    | 40 ug/mL      |
|                       |          |           |                               |                      | SVLVstd9_00001       | 400 uL       | 3,3'-Dichlorobenzidine         | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Benzidine                      | 40 ug/mL      |
|                       |          |           |                               |                      | SVLVSURSPK_00014     | 160 uL       | 2,4,6-Tribromophenol (Surr)    | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | 2-Fluorobiphenyl               | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | 2-Fluorophenol (Surr)          | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Nitrobenzene-d5 (Surr)         | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Phenol-d5 (Surr)               | 40 ug/mL      |
|                       |          |           |                               |                      |                      |              | Terphenyl-d14 (Surr)           | 40 ug/mL      |
|                       |          |           |                               |                      | svmethylnmetha_00011 | 800 uL       | Methyl methanesulfonate        | 40 ug/mL      |
|                       |          |           |                               |                      | SVNNITROPYROS_00015  | 800 uL       | N-Nitrosopyrrolidine           | 40 ug/mL      |
| ..sv benzoepyre_00001 | 10/03/18 |           | Absolute, Lot 100313          |                      | (Purchased Reagent)  |              | Benzo[e]pyrene                 | 1000 ug/mL    |
| ..SV2356TCPs_00002    | 06/17/16 |           | Absolute, Lot 061711          |                      | (Purchased Reagent)  |              | 2,3,5,6-Tetrachlorophenol      | 1000 ug/mL    |
| ..SV2NAPAMINEs_00002  | 06/30/17 |           | Ultra Scientific, Lot Ck-1617 |                      | (Purchased Reagent)  |              | 2-Naphthylamine                | 1000 ug/mL    |
| ..sv712dimbenza_00011 | 04/09/20 |           | Absolute, Lot 040915          |                      | (Purchased Reagent)  |              | 7,12-Dimethylbenz(a)anthracene | 1000 ug/mL    |
| ..SVLVstd1_00032      | 05/31/16 |           | Restek, Lot A0107399          |                      | (Purchased Reagent)  |              | 1,1'-Biphenyl                  | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 1,2,4,5-Tetrachlorobenzene     | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 1,2,4-Trichlorobenzene         | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 1,2-Dichlorobenzene            | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 1,2-Diphenylhydrazine          | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 1,3-Dichlorobenzene            | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 1,3-Dinitrobenzene             | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 1,4-Dichlorobenzene            | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 1,4-Dioxane                    | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 1-Methylnaphthalene            | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 2,2'-oxybis[1-chloropropane]   | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 2,3,4,6-Tetrachlorophenol      | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 2,4,5-Trichlorophenol          | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 2,4,6-Trichlorophenol          | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 2,4-Dichlorophenol             | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 2,4-Dimethylphenol             | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 2,4-Dinitrophenol              | 2000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 2,4-Dinitrotoluene             | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 2,6-Dichlorophenol             | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 2,6-Dinitrotoluene             | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 2-Chloronaphthalene            | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 2-Chlorophenol                 | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 2-Methylnaphthalene            | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 2-Methylphenol                 | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 2-Nitroaniline                 | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 2-Nitrophenol                  | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 3-Nitroaniline                 | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 4,6-Dinitro-2-methylphenol     | 2000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 4-Bromophenyl phenyl ether     | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 4-Chloro-3-methylphenol        | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 4-Chloroaniline                | 1000 ug/mL    |
|                       |          |           |                               |                      |                      |              | 4-Chlorophenyl phenyl ether    | 1000 ug/mL    |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID        | Exp Date | Prep Date | Dilutant Used        | Reagent Final Volume | Parent Reagent      |              | Analyte                      | Concentration |
|-------------------|----------|-----------|----------------------|----------------------|---------------------|--------------|------------------------------|---------------|
|                   |          |           |                      |                      | Reagent ID          | Volume Added |                              |               |
|                   |          |           |                      |                      |                     |              | 4-Methylphenol               | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | 4-Nitroaniline               | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | 4-Nitrophenol                | 2000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Acenaphthene                 | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Acenaphthylene               | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Acetophenone                 | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Aniline                      | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Anthracene                   | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Benzo[a]anthracene           | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Benzo[a]pyrene               | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Benzo[b]fluoranthene         | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Benzo[g,h,i]perylene         | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Benzo[k]fluoranthene         | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Benzyl alcohol               | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Bis (2-chloroethoxy)methane  | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Bis (2-chloroethyl) ether    | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Bis (2-ethylhexyl) phthalate | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Butyl benzyl phthalate       | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Carbazole                    | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Chrysene                     | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Di-n-butyl phthalate         | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Di-n-octyl phthalate         | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Dibenz (a,h) anthracene      | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Dibenzofuran                 | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Diethyl phthalate            | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Dimethyl phthalate           | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Fluoranthene                 | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Fluorene                     | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Hexachlorobenzene            | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Hexachlorobutadiene          | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Hexachlorocyclopentadiene    | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Hexachloroethane             | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Hexadecane                   | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Indeno[1,2,3-cd]pyrene       | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Isophorone                   | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | n-Decane                     | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | N-Nitrosodi-n-propylamine    | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | N-Nitrosodimethylamine       | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | N-Nitrosodiphenylamine       | 2000 ug/mL    |
|                   |          |           |                      |                      |                     |              | n-Octadecane                 | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Naphthalene                  | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Nitrobenzene                 | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Pentachlorophenol            | 2000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Phenanthrene                 | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Phenol                       | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Pyrene                       | 1000 ug/mL    |
|                   |          |           |                      |                      |                     |              | Pyridine                     | 1000 ug/mL    |
| ..SVLVstd10_00001 | 06/30/16 |           | Restek, Lot A0107943 |                      | (Purchased Reagent) |              | Benzoic acid                 | 2000 ug/mL    |

## REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID             | Exp Date | Prep Date | Dilutant Used        | Reagent Final Volume | Parent Reagent      |              | Analyte                      | Concentration |
|------------------------|----------|-----------|----------------------|----------------------|---------------------|--------------|------------------------------|---------------|
|                        |          |           |                      |                      | Reagent ID          | Volume Added |                              |               |
| ..SVLVstd11_00001      | 06/30/16 |           | Restek, Lot A0108035 |                      | (Purchased Reagent) |              | Indene                       | 2000 ug/mL    |
|                        |          |           |                      |                      |                     |              | Atrazine                     | 2000 ug/mL    |
|                        |          |           |                      |                      |                     |              | Benzaldehyde                 | 2000 ug/mL    |
|                        |          |           |                      |                      |                     |              | Caprolactam                  | 2000 ug/mL    |
| ..SVLVstd9_00001       | 07/31/16 |           | Restek, Lot A0108709 |                      | (Purchased Reagent) |              | 3,3'-Dichlorobenzidine       | 2000 ug/mL    |
|                        |          |           |                      |                      |                     |              | Benzidine                    | 2000 ug/mL    |
| ..SVLVSURRSPK_00014    | 05/31/19 |           | Restek, Lot A0103615 |                      | (Purchased Reagent) |              | 2,4,6-Tribromophenol (Surr)  | 5000 ug/mL    |
|                        |          |           |                      |                      |                     |              | 2-Fluorobiphenyl             | 5000 ug/mL    |
|                        |          |           |                      |                      |                     |              | 2-Fluorophenol (Surr)        | 5000 ug/mL    |
|                        |          |           |                      |                      |                     |              | Nitrobenzene-d5 (Surr)       | 5000 ug/mL    |
|                        |          |           |                      |                      |                     |              | Phenol-d5 (Surr)             | 5000 ug/mL    |
|                        |          |           |                      |                      |                     |              | Terphenyl-d14 (Surr)         | 5000 ug/mL    |
| ..svmethylnmetha_00011 | 02/13/20 |           | Absolute, Lot 021315 |                      | (Purchased Reagent) |              | Methyl methanesulfonate      | 1000 ug/mL    |
| ..SVNNITROPYROS_00015  | 06/05/17 |           | absolute, Lot 060514 |                      | (Purchased Reagent) |              | N-Nitrosopyrrolidine         | 1000 ug/mL    |
| VOA8260INT_00039       | 08/02/15 | 07/02/15  | Methanol, Lot 85233  | 10 mL                | VOA8260INTRES_00067 | 1 mL         | 1,4-Dichlorobenzene-d4       | 25 ug/mL      |
|                        |          |           |                      |                      |                     |              | Chlorobenzene-d5             | 25 ug/mL      |
|                        |          |           |                      |                      |                     |              | Fluorobenzene (IS)           | 25 ug/mL      |
|                        |          |           |                      |                      |                     |              | TBA-d9 (IS)                  | 500 ug/mL     |
| .VOA8260INTRES_00067   | 02/01/18 |           | Restek, Lot A093504  |                      | (Purchased Reagent) |              | 1,4-Dichlorobenzene-d4       | 250 ug/mL     |
|                        |          |           |                      |                      |                     |              | Chlorobenzene-d5             | 250 ug/mL     |
|                        |          |           |                      |                      |                     |              | Fluorobenzene (IS)           | 250 ug/mL     |
|                        |          |           |                      |                      |                     |              | TBA-d9 (IS)                  | 5000 ug/mL    |
| VOA8260INT_00040       | 09/03/15 | 08/03/15  | Methanol, Lot 85233  | 10 mL                | VOA8260INTRES_00088 | 1 mL         | 1,4-Dichlorobenzene-d4       | 25 ug/mL      |
|                        |          |           |                      |                      |                     |              | Chlorobenzene-d5             | 25 ug/mL      |
|                        |          |           |                      |                      |                     |              | Fluorobenzene (IS)           | 25 ug/mL      |
|                        |          |           |                      |                      |                     |              | TBA-d9 (IS)                  | 500 ug/mL     |
| .VOA8260INTRES_00088   | 07/31/19 |           | Restek, Lot A0104742 |                      | (Purchased Reagent) |              | 1,4-Dichlorobenzene-d4       | 250 ug/mL     |
|                        |          |           |                      |                      |                     |              | Chlorobenzene-d5             | 250 ug/mL     |
|                        |          |           |                      |                      |                     |              | Fluorobenzene (IS)           | 250 ug/mL     |
|                        |          |           |                      |                      |                     |              | TBA-d9 (IS)                  | 5000 ug/mL    |
| VOA8260INT_00042       | 10/11/15 | 09/11/15  | Methanol, Lot 99494  | 10 mL                | VOA8260INTRES_00068 | 1 mL         | 1,4-Dichlorobenzene-d4       | 25 ug/mL      |
|                        |          |           |                      |                      |                     |              | Chlorobenzene-d5             | 25 ug/mL      |
|                        |          |           |                      |                      |                     |              | Fluorobenzene (IS)           | 25 ug/mL      |
|                        |          |           |                      |                      |                     |              | TBA-d9 (IS)                  | 500 ug/mL     |
| .VOA8260INTRES_00068   | 02/01/18 |           | Restek, Lot A093504  |                      | (Purchased Reagent) |              | 1,4-Dichlorobenzene-d4       | 250 ug/mL     |
|                        |          |           |                      |                      |                     |              | Chlorobenzene-d5             | 250 ug/mL     |
|                        |          |           |                      |                      |                     |              | Fluorobenzene (IS)           | 250 ug/mL     |
|                        |          |           |                      |                      |                     |              | TBA-d9 (IS)                  | 5000 ug/mL    |
| VOA8260SURR_00039      | 08/02/15 | 07/02/15  | Methanol, Lot 85233  | 100 mL               | VOA8260SURRES_00066 | 1 mL         | 1,2-Dichloroethane-d4 (Surr) | 25 ug/mL      |
|                        |          |           |                      |                      |                     |              | 4-Bromofluorobenzene (Surr)  | 25 ug/mL      |
|                        |          |           |                      |                      |                     |              | Dibromofluoromethane (Surr)  | 25 ug/mL      |
|                        |          |           |                      |                      |                     |              | Toluene-d8 (Surr)            | 25 ug/mL      |
| .VOA8260SURRES_00066   | 01/31/19 |           | Restek, Lot A0100424 |                      | (Purchased Reagent) |              | 1,2-Dichloroethane-d4 (Surr) | 2500 ug/mL    |
|                        |          |           |                      |                      |                     |              | 4-Bromofluorobenzene (Surr)  | 2500 ug/mL    |
|                        |          |           |                      |                      |                     |              | Dibromofluoromethane (Surr)  | 2500 ug/mL    |
|                        |          |           |                      |                      |                     |              | Toluene-d8 (Surr)            | 2500 ug/mL    |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID           | Exp Date | Prep Date            | Dilutant Used       | Reagent Final Volume | Parent Reagent      |              | Analyte                      | Concentration |
|----------------------|----------|----------------------|---------------------|----------------------|---------------------|--------------|------------------------------|---------------|
|                      |          |                      |                     |                      | Reagent ID          | Volume Added |                              |               |
| VOA8260SURR_00040    | 09/03/15 | 08/03/15             | Methanol, Lot 85233 | 100 mL               | VOA8260SURRES_00067 | 1 mL         | 1,2-Dichloroethane-d4 (Surr) | 25 ug/mL      |
|                      |          |                      |                     |                      |                     |              | 4-Bromofluorobenzene (Surr)  | 25 ug/mL      |
|                      |          |                      |                     |                      |                     |              | Dibromofluoromethane (Surr)  | 25 ug/mL      |
|                      |          |                      |                     |                      |                     |              | Toluene-d8 (Surr)            | 25 ug/mL      |
| .VOA8260SURRES_00067 | 01/31/19 | Restek, Lot A0100424 |                     |                      | (Purchased Reagent) |              | 1,2-Dichloroethane-d4 (Surr) | 2500 ug/mL    |
|                      |          |                      |                     |                      |                     |              | 4-Bromofluorobenzene (Surr)  | 2500 ug/mL    |
|                      |          |                      |                     |                      |                     |              | Dibromofluoromethane (Surr)  | 2500 ug/mL    |
|                      |          |                      |                     |                      |                     |              | Toluene-d8 (Surr)            | 2500 ug/mL    |
| VOA8260SURR_00042    | 10/11/15 | 09/11/15             | Methanol, Lot 99494 | 100 mL               | VOA8260SURRES_00077 | 1 mL         | 1,2-Dichloroethane-d4 (Surr) | 25 ug/mL      |
|                      |          |                      |                     |                      |                     |              | 4-Bromofluorobenzene (Surr)  | 25 ug/mL      |
|                      |          |                      |                     |                      |                     |              | Dibromofluoromethane (Surr)  | 25 ug/mL      |
|                      |          |                      |                     |                      |                     |              | Toluene-d8 (Surr)            | 25 ug/mL      |
| .VOA8260SURRES_00077 | 01/31/19 | Restek, Lot A0101000 |                     |                      | (Purchased Reagent) |              | 1,2-Dichloroethane-d4 (Surr) | 2500 ug/mL    |
|                      |          |                      |                     |                      |                     |              | 4-Bromofluorobenzene (Surr)  | 2500 ug/mL    |
|                      |          |                      |                     |                      |                     |              | Dibromofluoromethane (Surr)  | 2500 ug/mL    |
|                      |          |                      |                     |                      |                     |              | Toluene-d8 (Surr)            | 2500 ug/mL    |
| VOA8260VOA2ND_00146  | 10/09/15 | 10/02/15             | Methanol, Lot 99494 | 10 mL                | VOA8260GAS2ND_00115 | 0.1 mL       | Bromomethane                 | 25 ug/mL      |
|                      |          |                      |                     |                      |                     |              | Chloroethane                 | 25 ug/mL      |
|                      |          |                      |                     |                      |                     |              | Chloromethane                | 25 ug/mL      |
|                      |          |                      |                     |                      |                     |              | Vinyl chloride               | 25 ug/mL      |
|                      |          |                      |                     |                      | VOA8260VOA2ND_00145 | 1 mL         | 1,1,1,2-Tetrachloroethane    | 25 ug/mL      |
|                      |          |                      |                     |                      |                     |              | 1,1,1-Trichloroethane        | 25 ug/mL      |
|                      |          |                      |                     |                      |                     |              | 1,1,2,2-Tetrachloroethane    | 25 ug/mL      |
|                      |          |                      |                     |                      |                     |              | 1,1,2-Trichloroethane        | 25 ug/mL      |
|                      |          |                      |                     |                      |                     |              | 1,1-Dichloroethane           | 25 ug/mL      |
|                      |          |                      |                     |                      |                     |              | 1,1-Dichloroethene           | 25 ug/mL      |
|                      |          |                      |                     |                      |                     |              | 1,2-Dibromoethane (EDB)      | 25 ug/mL      |
|                      |          |                      |                     |                      |                     |              | 1,2-Dichloroethane           | 25 ug/mL      |
|                      |          |                      |                     |                      |                     |              | 1,2-Dichloropropane          | 25 ug/mL      |
|                      |          |                      |                     |                      |                     |              | 1,4-Dioxane                  | 500 ug/mL     |
|                      |          |                      |                     |                      |                     |              | Acrylonitrile                | 250 ug/mL     |
|                      |          |                      |                     |                      |                     |              | Benzene                      | 25 ug/mL      |
|                      |          |                      |                     |                      |                     |              | Bromochloromethane           | 25 ug/mL      |
|                      |          |                      |                     |                      |                     |              | Bromodichloromethane         | 25 ug/mL      |
|                      |          |                      |                     |                      |                     |              | Bromoform                    | 25 ug/mL      |
|                      |          |                      |                     |                      |                     |              | Carbon disulfide             | 25 ug/mL      |
|                      |          |                      |                     |                      |                     |              | Carbon tetrachloride         | 25 ug/mL      |
|                      |          |                      |                     |                      |                     |              | Chlorobenzene                | 25 ug/mL      |
|                      |          |                      |                     |                      |                     |              | Chloroform                   | 25 ug/mL      |
|                      |          |                      |                     |                      |                     |              | cis-1,2-Dichloroethene       | 25 ug/mL      |
|                      |          |                      |                     |                      |                     |              | cis-1,3-Dichloropropene      | 25 ug/mL      |
|                      |          |                      |                     |                      |                     |              | Dibromochloromethane         | 25 ug/mL      |
|                      |          |                      |                     |                      |                     |              | Ethylbenzene                 | 25 ug/mL      |
|                      |          |                      |                     |                      |                     |              | Methyl tert-butyl ether      | 25 ug/mL      |
|                      |          |                      |                     |                      |                     |              | Methylene Chloride           | 25 ug/mL      |
|                      |          |                      |                     |                      |                     |              | Styrene                      | 25 ug/mL      |
|                      |          |                      |                     |                      |                     |              | Tetrachloroethene            | 25 ug/mL      |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID           | Exp Date | Prep Date | Dilutant Used        | Reagent Final Volume | Parent Reagent      |              | Analyte                   | Concentration |
|----------------------|----------|-----------|----------------------|----------------------|---------------------|--------------|---------------------------|---------------|
|                      |          |           |                      |                      | Reagent ID          | Volume Added |                           |               |
|                      |          |           |                      |                      |                     |              | Toluene                   | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | trans-1,2-Dichloroethene  | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | trans-1,3-Dichloropropene | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | Trichloroethene           | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | Xylenes, Total            | 50 ug/mL      |
| .VOA8260GAS2ND_00115 | 04/30/18 |           | Restek, Lot A0111273 |                      | (Purchased Reagent) |              | Bromomethane              | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | Chloroethane              | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | Chloromethane             | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | Vinyl chloride            | 2500 ug/mL    |
| .VOA8260VOA2ND_00145 | 10/25/15 | 09/25/15  | Methanol, Lot 99494  | 10 mL                | VOA8260MEGA2_00037  | 1 mL         | 1,1,1,2-Tetrachloroethane | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,1,1-Trichloroethane     | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,1,2,2-Tetrachloroethane | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,1,2-Trichloroethane     | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,1-Dichloroethane        | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,1-Dichloroethene        | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,2-Dibromoethane (EDB)   | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,2-Dichloroethane        | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,2-Dichloropropane       | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,4-Dioxane               | 5000 ug/mL    |
|                      |          |           |                      |                      |                     |              | Acrylonitrile             | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | Benzene                   | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | Bromochloromethane        | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | Bromodichloromethane      | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | Bromoform                 | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | Carbon disulfide          | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | Carbon tetrachloride      | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | Chlorobenzene             | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | Chloroform                | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | cis-1,2-Dichloroethene    | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | cis-1,3-Dichloropropene   | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | Dibromochloromethane      | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | Ethylbenzene              | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | Methyl tert-butyl ether   | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | Methylene Chloride        | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | Styrene                   | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | Tetrachloroethene         | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | Toluene                   | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | trans-1,2-Dichloroethene  | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | trans-1,3-Dichloropropene | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | Trichloroethene           | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | Xylenes, Total            | 500 ug/mL     |
| ..VOA8260MEGA2_00037 | 01/31/17 |           | Restek, Lot A0108163 |                      | (Purchased Reagent) |              | 1,1,1,2-Tetrachloroethane | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | 1,1,1-Trichloroethane     | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | 1,1,2,2-Tetrachloroethane | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | 1,1,2-Trichloroethane     | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | 1,1-Dichloroethane        | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | 1,1-Dichloroethene        | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | 1,2-Dibromoethane (EDB)   | 2500 ug/mL    |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID          | Exp Date | Prep Date | Dilutant Used       | Reagent Final Volume | Parent Reagent      |              | Analyte                                   | Concentration |
|---------------------|----------|-----------|---------------------|----------------------|---------------------|--------------|-------------------------------------------|---------------|
|                     |          |           |                     |                      | Reagent ID          | Volume Added |                                           |               |
|                     |          |           |                     |                      |                     |              | 1,2-Dichloroethane                        | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | 1,2-Dichloropropane                       | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | 1,4-Dioxane                               | 50000 ug/mL   |
|                     |          |           |                     |                      |                     |              | Acrylonitrile                             | 25000 ug/mL   |
|                     |          |           |                     |                      |                     |              | Benzene                                   | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Bromochloromethane                        | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Bromodichloromethane                      | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Bromoform                                 | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Carbon disulfide                          | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Carbon tetrachloride                      | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Chlorobenzene                             | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Chloroform                                | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | cis-1,2-Dichloroethene                    | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | cis-1,3-Dichloropropene                   | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Dibromochloromethane                      | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Ethylbenzene                              | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Methyl tert-butyl ether                   | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Methylene Chloride                        | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Styrene                                   | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Tetrachloroethene                         | 2500 ug/mL    |
| VOA8260VOAPRI_00134 | 08/03/15 | 07/27/15  | Methanol, Lot 85233 | 10 mL                | VOA8260GAS1ST_00110 | 0.1 mL       | Bromomethane                              | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | Butadiene                                 | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | Chloroethane                              | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | Chloromethane                             | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | Dichlorodifluoromethane                   | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | Dichlorofluoromethane                     | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | Trichlorofluoromethane                    | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | Vinyl chloride                            | 25 ug/mL      |
|                     |          |           |                     |                      | VOA8260VOAPRI_00129 | 1 mL         | 2-Butanone (MEK)                          | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | 2-Hexanone                                | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | 4-Methyl-2-pentanone (MIBK)               | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | Acetone                                   | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | 1,1,1,2-Tetrachloroethane                 | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | 1,1,1-Trichloroethane                     | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | 1,1,2,2-Tetrachloroethane                 | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | 1,1,2-Trichloro-1,2,2-trifluor<br>oethane | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | 1,1,2-Trichloroethane                     | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | 1,1-Dichloroethane                        | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | 1,1-Dichloroethene                        | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | 1,1-Dichloropropene                       | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | 1,2,3-Trichlorobenzene                    | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | 1,2,3-Trichloropropane                    | 25 ug/mL      |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent |              | Analyte                     | Concentration |
|------------|----------|-----------|---------------|----------------------|----------------|--------------|-----------------------------|---------------|
|            |          |           |               |                      | Reagent ID     | Volume Added |                             |               |
|            |          |           |               |                      |                |              | 1,2,4-Trichlorobenzene      | 25 ug/mL      |
|            |          |           |               |                      |                |              | 1,2,4-Trimethylbenzene      | 25 ug/mL      |
|            |          |           |               |                      |                |              | 1,2-Dibromo-3-Chloropropane | 25 ug/mL      |
|            |          |           |               |                      |                |              | 1,2-Dibromoethane (EDB)     | 25 ug/mL      |
|            |          |           |               |                      |                |              | 1,2-Dichlorobenzene         | 25 ug/mL      |
|            |          |           |               |                      |                |              | 1,2-Dichloroethane          | 25 ug/mL      |
|            |          |           |               |                      |                |              | 1,2-Dichloropropane         | 25 ug/mL      |
|            |          |           |               |                      |                |              | 1,3,5-Trimethylbenzene      | 25 ug/mL      |
|            |          |           |               |                      |                |              | 1,3-Dichlorobenzene         | 25 ug/mL      |
|            |          |           |               |                      |                |              | 1,3-Dichloropropane         | 25 ug/mL      |
|            |          |           |               |                      |                |              | 1,4-Dichlorobenzene         | 25 ug/mL      |
|            |          |           |               |                      |                |              | 1,4-Dioxane                 | 500 ug/mL     |
|            |          |           |               |                      |                |              | 2,2-Dichloropropane         | 25 ug/mL      |
|            |          |           |               |                      |                |              | 2-Chlorotoluene             | 25 ug/mL      |
|            |          |           |               |                      |                |              | 2-Methyl-2-propanol         | 250 ug/mL     |
|            |          |           |               |                      |                |              | 3-Chloro-1-propene          | 25 ug/mL      |
|            |          |           |               |                      |                |              | 4-Chlorotoluene             | 25 ug/mL      |
|            |          |           |               |                      |                |              | 4-Isopropyltoluene          | 25 ug/mL      |
|            |          |           |               |                      |                |              | Acrylonitrile               | 250 ug/mL     |
|            |          |           |               |                      |                |              | Benzene                     | 25 ug/mL      |
|            |          |           |               |                      |                |              | Bromobenzene                | 25 ug/mL      |
|            |          |           |               |                      |                |              | Bromochloromethane          | 25 ug/mL      |
|            |          |           |               |                      |                |              | Bromodichloromethane        | 25 ug/mL      |
|            |          |           |               |                      |                |              | Bromoform                   | 25 ug/mL      |
|            |          |           |               |                      |                |              | Carbon disulfide            | 25 ug/mL      |
|            |          |           |               |                      |                |              | Carbon tetrachloride        | 25 ug/mL      |
|            |          |           |               |                      |                |              | Chlorobenzene               | 25 ug/mL      |
|            |          |           |               |                      |                |              | Chloroform                  | 25 ug/mL      |
|            |          |           |               |                      |                |              | cis-1,2-Dichloroethene      | 25 ug/mL      |
|            |          |           |               |                      |                |              | cis-1,3-Dichloropropene     | 25 ug/mL      |
|            |          |           |               |                      |                |              | Cyclohexane                 | 25 ug/mL      |
|            |          |           |               |                      |                |              | Dibromochloromethane        | 25 ug/mL      |
|            |          |           |               |                      |                |              | Dibromomethane              | 25 ug/mL      |
|            |          |           |               |                      |                |              | Ethyl ether                 | 25 ug/mL      |
|            |          |           |               |                      |                |              | Ethyl methacrylate          | 25 ug/mL      |
|            |          |           |               |                      |                |              | Ethylbenzene                | 25 ug/mL      |
|            |          |           |               |                      |                |              | Hexachlorobutadiene         | 25 ug/mL      |
|            |          |           |               |                      |                |              | Hexane                      | 25 ug/mL      |
|            |          |           |               |                      |                |              | Iodomethane                 | 25 ug/mL      |
|            |          |           |               |                      |                |              | Isobutyl alcohol            | 625 ug/mL     |
|            |          |           |               |                      |                |              | Isopropylbenzene            | 25 ug/mL      |
|            |          |           |               |                      |                |              | m-Xylene & p-Xylene         | 25 ug/mL      |
|            |          |           |               |                      |                |              | Methyl acetate              | 125 ug/mL     |
|            |          |           |               |                      |                |              | Methyl tert-butyl ether     | 25 ug/mL      |
|            |          |           |               |                      |                |              | Methylcyclohexane           | 25 ug/mL      |
|            |          |           |               |                      |                |              | Methylene Chloride          | 25 ug/mL      |
|            |          |           |               |                      |                |              | n-Butylbenzene              | 25 ug/mL      |
|            |          |           |               |                      |                |              | n-Heptane                   | 25 ug/mL      |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID           | Exp Date | Prep Date           | Dilutant Used       | Reagent Final Volume | Parent Reagent      |              | Analyte                               | Concentration |
|----------------------|----------|---------------------|---------------------|----------------------|---------------------|--------------|---------------------------------------|---------------|
|                      |          |                     |                     |                      | Reagent ID          | Volume Added |                                       |               |
|                      |          |                     |                     |                      |                     |              | N-Propylbenzene                       | 25 ug/mL      |
|                      |          |                     |                     |                      |                     |              | Naphthalene                           | 25 ug/mL      |
|                      |          |                     |                     |                      |                     |              | o-Xylene                              | 25 ug/mL      |
|                      |          |                     |                     |                      |                     |              | sec-Butylbenzene                      | 25 ug/mL      |
|                      |          |                     |                     |                      |                     |              | Styrene                               | 25 ug/mL      |
|                      |          |                     |                     |                      |                     |              | tert-Butylbenzene                     | 25 ug/mL      |
|                      |          |                     |                     |                      |                     |              | Tetrachloroethene                     | 25 ug/mL      |
|                      |          |                     |                     |                      |                     |              | Tetrahydrofuran                       | 50 ug/mL      |
|                      |          |                     |                     |                      |                     |              | Toluene                               | 25 ug/mL      |
|                      |          |                     |                     |                      |                     |              | trans-1,2-Dichloroethene              | 25 ug/mL      |
|                      |          |                     |                     |                      |                     |              | trans-1,3-Dichloropropene             | 25 ug/mL      |
|                      |          |                     |                     |                      |                     |              | trans-1,4-Dichloro-2-butene           | 25 ug/mL      |
|                      |          |                     |                     |                      |                     |              | Trichloroethene                       | 25 ug/mL      |
| .VOA8260GAS1ST_00110 | 04/30/18 | Restek, Lot A011070 |                     |                      | (Purchased Reagent) |              | Bromomethane                          | 2500 ug/mL    |
|                      |          |                     |                     |                      |                     |              | Butadiene                             | 2500 ug/mL    |
|                      |          |                     |                     |                      |                     |              | Chloroethane                          | 2500 ug/mL    |
|                      |          |                     |                     |                      |                     |              | Chloromethane                         | 2500 ug/mL    |
|                      |          |                     |                     |                      |                     |              | Dichlorodifluoromethane               | 2500 ug/mL    |
|                      |          |                     |                     |                      |                     |              | Dichlorofluoromethane                 | 2500 ug/mL    |
|                      |          |                     |                     |                      |                     |              | Trichlorofluoromethane                | 2500 ug/mL    |
|                      |          |                     |                     |                      |                     |              | Vinyl chloride                        | 2500 ug/mL    |
| .VOA8260VOAPRI_00129 | 08/07/15 | 07/07/15            | Methanol, Lot 85233 | 10 mL                | VOA8260KET1ST_00047 | 0.2 mL       | 2-Butanone (MEK)                      | 250 ug/mL     |
|                      |          |                     |                     |                      |                     |              | 2-Hexanone                            | 250 ug/mL     |
|                      |          |                     |                     |                      |                     |              | 4-Methyl-2-pentanone (MIBK)           | 250 ug/mL     |
|                      |          |                     |                     |                      |                     |              | Acetone                               | 250 ug/mL     |
|                      |          |                     |                     |                      |                     |              | 1,1,1,2-Tetrachloroethane             | 250 ug/mL     |
|                      |          |                     |                     |                      | VOA8260MEGA1_00030  | 1 mL         | 1,1,1-Trichloroethane                 | 250 ug/mL     |
|                      |          |                     |                     |                      |                     |              | 1,1,2,2-Tetrachloroethane             | 250 ug/mL     |
|                      |          |                     |                     |                      |                     |              | 1,1,2-Trichloro-1,2,2-trifluoroethane | 250 ug/mL     |
|                      |          |                     |                     |                      |                     |              | 1,1,2-Trichloroethane                 | 250 ug/mL     |
|                      |          |                     |                     |                      |                     |              | 1,1-Dichloroethane                    | 250 ug/mL     |
|                      |          |                     |                     |                      |                     |              | 1,1-Dichloroethene                    | 250 ug/mL     |
|                      |          |                     |                     |                      |                     |              | 1,1-Dichloropropene                   | 250 ug/mL     |
|                      |          |                     |                     |                      |                     |              | 1,2,3-Trichlorobenzene                | 250 ug/mL     |
|                      |          |                     |                     |                      |                     |              | 1,2,3-Trichloropropane                | 250 ug/mL     |
|                      |          |                     |                     |                      |                     |              | 1,2,4-Trichlorobenzene                | 250 ug/mL     |
|                      |          |                     |                     |                      |                     |              | 1,2,4-Trimethylbenzene                | 250 ug/mL     |
|                      |          |                     |                     |                      |                     |              | 1,2-Dibromo-3-Chloropropane           | 250 ug/mL     |
|                      |          |                     |                     |                      |                     |              | 1,2-Dibromoethane (EDB)               | 250 ug/mL     |
|                      |          |                     |                     |                      |                     |              | 1,2-Dichlorobenzene                   | 250 ug/mL     |
|                      |          |                     |                     |                      |                     |              | 1,2-Dichloroethane                    | 250 ug/mL     |
|                      |          |                     |                     |                      |                     |              | 1,2-Dichloropropane                   | 250 ug/mL     |
|                      |          |                     |                     |                      |                     |              | 1,3,5-Trimethylbenzene                | 250 ug/mL     |
|                      |          |                     |                     |                      |                     |              | 1,3-Dichlorobenzene                   | 250 ug/mL     |
|                      |          |                     |                     |                      |                     |              | 1,3-Dichloropropane                   | 250 ug/mL     |
|                      |          |                     |                     |                      |                     |              | 1,4-Dichlorobenzene                   | 250 ug/mL     |
|                      |          |                     |                     |                      |                     |              | 1,4-Dioxane                           | 5000 ug/mL    |



# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent |              | Analyte                     | Concentration |
|------------|----------|-----------|---------------|----------------------|----------------|--------------|-----------------------------|---------------|
|            |          |           |               |                      | Reagent ID     | Volume Added |                             |               |
|            |          |           |               |                      |                |              | 2,2-Dichloropropane         | 250 ug/mL     |
|            |          |           |               |                      |                |              | 2-Chlorotoluene             | 250 ug/mL     |
|            |          |           |               |                      |                |              | 2-Methyl-2-propanol         | 2500 ug/mL    |
|            |          |           |               |                      |                |              | 3-Chloro-1-propene          | 250 ug/mL     |
|            |          |           |               |                      |                |              | 4-Chlorotoluene             | 250 ug/mL     |
|            |          |           |               |                      |                |              | 4-Isopropyltoluene          | 250 ug/mL     |
|            |          |           |               |                      |                |              | Acrylonitrile               | 2500 ug/mL    |
|            |          |           |               |                      |                |              | Benzene                     | 250 ug/mL     |
|            |          |           |               |                      |                |              | Bromobenzene                | 250 ug/mL     |
|            |          |           |               |                      |                |              | Bromochloromethane          | 250 ug/mL     |
|            |          |           |               |                      |                |              | Bromodichloromethane        | 250 ug/mL     |
|            |          |           |               |                      |                |              | Bromoform                   | 250 ug/mL     |
|            |          |           |               |                      |                |              | Carbon disulfide            | 250 ug/mL     |
|            |          |           |               |                      |                |              | Carbon tetrachloride        | 250 ug/mL     |
|            |          |           |               |                      |                |              | Chlorobenzene               | 250 ug/mL     |
|            |          |           |               |                      |                |              | Chloroform                  | 250 ug/mL     |
|            |          |           |               |                      |                |              | cis-1,2-Dichloroethene      | 250 ug/mL     |
|            |          |           |               |                      |                |              | cis-1,3-Dichloropropene     | 250 ug/mL     |
|            |          |           |               |                      |                |              | Cyclohexane                 | 250 ug/mL     |
|            |          |           |               |                      |                |              | Dibromochloromethane        | 250 ug/mL     |
|            |          |           |               |                      |                |              | Dibromomethane              | 250 ug/mL     |
|            |          |           |               |                      |                |              | Ethyl ether                 | 250 ug/mL     |
|            |          |           |               |                      |                |              | Ethyl methacrylate          | 250 ug/mL     |
|            |          |           |               |                      |                |              | Ethylbenzene                | 250 ug/mL     |
|            |          |           |               |                      |                |              | Hexachlorobutadiene         | 250 ug/mL     |
|            |          |           |               |                      |                |              | Hexane                      | 250 ug/mL     |
|            |          |           |               |                      |                |              | Iodomethane                 | 250 ug/mL     |
|            |          |           |               |                      |                |              | Isobutyl alcohol            | 6250 ug/mL    |
|            |          |           |               |                      |                |              | Isopropylbenzene            | 250 ug/mL     |
|            |          |           |               |                      |                |              | m-Xylene & p-Xylene         | 250 ug/mL     |
|            |          |           |               |                      |                |              | Methyl acetate              | 1250 ug/mL    |
|            |          |           |               |                      |                |              | Methyl tert-butyl ether     | 250 ug/mL     |
|            |          |           |               |                      |                |              | Methylcyclohexane           | 250 ug/mL     |
|            |          |           |               |                      |                |              | Methylene Chloride          | 250 ug/mL     |
|            |          |           |               |                      |                |              | n-Butylbenzene              | 250 ug/mL     |
|            |          |           |               |                      |                |              | n-Heptane                   | 250 ug/mL     |
|            |          |           |               |                      |                |              | N-Propylbenzene             | 250 ug/mL     |
|            |          |           |               |                      |                |              | Naphthalene                 | 250 ug/mL     |
|            |          |           |               |                      |                |              | o-Xylene                    | 250 ug/mL     |
|            |          |           |               |                      |                |              | sec-Butylbenzene            | 250 ug/mL     |
|            |          |           |               |                      |                |              | Styrene                     | 250 ug/mL     |
|            |          |           |               |                      |                |              | tert-Butylbenzene           | 250 ug/mL     |
|            |          |           |               |                      |                |              | Tetrachloroethene           | 250 ug/mL     |
|            |          |           |               |                      |                |              | Tetrahydrofuran             | 500 ug/mL     |
|            |          |           |               |                      |                |              | Toluene                     | 250 ug/mL     |
|            |          |           |               |                      |                |              | trans-1,2-Dichloroethene    | 250 ug/mL     |
|            |          |           |               |                      |                |              | trans-1,3-Dichloropropene   | 250 ug/mL     |
|            |          |           |               |                      |                |              | trans-1,4-Dichloro-2-butene | 250 ug/mL     |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID            | Exp Date | Prep Date | Dilutant Used        | Reagent Final Volume | Parent Reagent      |              | Analyte                               | Concentration |
|-----------------------|----------|-----------|----------------------|----------------------|---------------------|--------------|---------------------------------------|---------------|
|                       |          |           |                      |                      | Reagent ID          | Volume Added |                                       |               |
| ..VOA8260KET1ST_00047 | 04/30/18 |           | Restek, Lot A0110400 |                      | (Purchased Reagent) |              | Trichloroethene                       | 250 ug/mL     |
|                       |          |           |                      |                      |                     |              | 2-Butanone (MEK)                      | 12500 ug/mL   |
|                       |          |           |                      |                      |                     |              | 2-Hexanone                            | 12500 ug/mL   |
|                       |          |           |                      |                      |                     |              | 4-Methyl-2-pentanone (MIBK)           | 12500 ug/mL   |
|                       |          |           |                      |                      |                     |              | Acetone                               | 12500 ug/mL   |
| ..VOA8260MEGA1_00030  | 02/28/16 |           | Restek, Lot A0108166 |                      | (Purchased Reagent) |              | 1,1,1,2-Tetrachloroethane             | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,1,1-Trichloroethane                 | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,1,2,2-Tetrachloroethane             | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,1,2-Trichloro-1,2,2-trifluoroethane | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,1,2-Trichloroethane                 | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,1-Dichloroethane                    | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,1-Dichloroethene                    | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,1-Dichloropropene                   | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,2,3-Trichlorobenzene                | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,2,3-Trichloropropane                | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,2,4-Trichlorobenzene                | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,2,4-Trimethylbenzene                | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,2-Dibromo-3-Chloropropane           | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,2-Dibromoethane (EDB)               | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,2-Dichlorobenzene                   | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,2-Dichloroethane                    | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,2-Dichloropropane                   | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,3,5-Trimethylbenzene                | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,3-Dichlorobenzene                   | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,3-Dichloropropane                   | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,4-Dichlorobenzene                   | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,4-Dioxane                           | 50000 ug/mL   |
|                       |          |           |                      |                      |                     |              | 2,2-Dichloropropane                   | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 2-Chlorotoluene                       | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 2-Methyl-2-propanol                   | 25000 ug/mL   |
|                       |          |           |                      |                      |                     |              | 3-Chloro-1-propene                    | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 4-Chlorotoluene                       | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 4-Isopropyltoluene                    | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | Acrylonitrile                         | 25000 ug/mL   |
|                       |          |           |                      |                      |                     |              | Benzene                               | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | Bromobenzene                          | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | Bromochloromethane                    | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | Bromodichloromethane                  | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | Bromoform                             | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | Carbon disulfide                      | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | Carbon tetrachloride                  | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | Chlorobenzene                         | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | Chloroform                            | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | cis-1,2-Dichloroethene                | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | cis-1,3-Dichloropropene               | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | Cyclohexane                           | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | Dibromochloromethane                  | 2500 ug/mL    |

## REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID          | Exp Date | Prep Date | Dilutant Used       | Reagent Final Volume | Parent Reagent      |              | Analyte                                | Concentration |
|---------------------|----------|-----------|---------------------|----------------------|---------------------|--------------|----------------------------------------|---------------|
|                     |          |           |                     |                      | Reagent ID          | Volume Added |                                        |               |
|                     |          |           |                     |                      |                     |              | Dibromomethane                         | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Ethyl ether                            | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Ethyl methacrylate                     | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Ethylbenzene                           | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Hexachlorobutadiene                    | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Hexane                                 | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Iodomethane                            | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Isobutyl alcohol                       | 62500 ug/mL   |
|                     |          |           |                     |                      |                     |              | Isopropylbenzene                       | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | m-Xylene & p-Xylene                    | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Methyl acetate                         | 12500 ug/mL   |
|                     |          |           |                     |                      |                     |              | Methyl tert-butyl ether                | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Methylcyclohexane                      | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Methylene Chloride                     | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | n-Butylbenzene                         | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | n-Heptane                              | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | N-Propylbenzene                        | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Naphthalene                            | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | o-Xylene                               | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | sec-Butylbenzene                       | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Styrene                                | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | tert-Butylbenzene                      | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Tetrachloroethene                      | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Tetrahydrofuran                        | 5000 ug/mL    |
|                     |          |           |                     |                      |                     |              | Toluene                                | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | trans-1,2-Dichloroethene               | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | trans-1,3-Dichloropropene              | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | trans-1,4-Dichloro-2-butene            | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Trichloroethene                        | 2500 ug/mL    |
| VOA8260VOAPRI_00139 | 09/01/15 | 08/25/15  | Methanol, Lot 85233 | 10 mL                | VOA8260GAS1ST_00113 | 0.1 mL       | Bromomethane                           | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | Butadiene                              | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | Chloroethane                           | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | Chloromethane                          | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | Dichlorodifluoromethane                | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | Dichlorofluoromethane                  | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | Trichlorofluoromethane                 | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | Vinyl chloride                         | 25 ug/mL      |
|                     |          |           |                     |                      | VOA8260VOAPRI_00136 | 1 mL         | 2-Butanone (MEK)                       | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | 2-Hexanone                             | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | 4-Methyl-2-pentanone (MIBK)            | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | Acetone                                | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | 1,1,1,2-Tetrachloroethane              | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | 1,1,1-Trichloroethane                  | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | 1,1,2,2-Tetrachloroethane              | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | 1,1,2-Trichloro-1,2,2-trifluor oethane | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | 1,1,2-Trichloroethane                  | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | 1,1-Dichloroethane                     | 25 ug/mL      |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent |              | Analyte                     | Concentration |
|------------|----------|-----------|---------------|----------------------|----------------|--------------|-----------------------------|---------------|
|            |          |           |               |                      | Reagent ID     | Volume Added |                             |               |
|            |          |           |               |                      |                |              | 1,1-Dichloroethene          | 25 ug/mL      |
|            |          |           |               |                      |                |              | 1,1-Dichloropropene         | 25 ug/mL      |
|            |          |           |               |                      |                |              | 1,2,3-Trichlorobenzene      | 25 ug/mL      |
|            |          |           |               |                      |                |              | 1,2,3-Trichloropropane      | 25 ug/mL      |
|            |          |           |               |                      |                |              | 1,2,4-Trichlorobenzene      | 25 ug/mL      |
|            |          |           |               |                      |                |              | 1,2,4-Trimethylbenzene      | 25 ug/mL      |
|            |          |           |               |                      |                |              | 1,2-Dibromo-3-Chloropropane | 25 ug/mL      |
|            |          |           |               |                      |                |              | 1,2-Dibromoethane (EDB)     | 25 ug/mL      |
|            |          |           |               |                      |                |              | 1,2-Dichlorobenzene         | 25 ug/mL      |
|            |          |           |               |                      |                |              | 1,2-Dichloroethane          | 25 ug/mL      |
|            |          |           |               |                      |                |              | 1,2-Dichloropropane         | 25 ug/mL      |
|            |          |           |               |                      |                |              | 1,3,5-Trimethylbenzene      | 25 ug/mL      |
|            |          |           |               |                      |                |              | 1,3-Dichlorobenzene         | 25 ug/mL      |
|            |          |           |               |                      |                |              | 1,3-Dichloropropane         | 25 ug/mL      |
|            |          |           |               |                      |                |              | 1,4-Dichlorobenzene         | 25 ug/mL      |
|            |          |           |               |                      |                |              | 1,4-Dioxane                 | 500 ug/mL     |
|            |          |           |               |                      |                |              | 2,2-Dichloropropane         | 25 ug/mL      |
|            |          |           |               |                      |                |              | 2-Chlorotoluene             | 25 ug/mL      |
|            |          |           |               |                      |                |              | 2-Methyl-2-propanol         | 250 ug/mL     |
|            |          |           |               |                      |                |              | 3-Chloro-1-propene          | 25 ug/mL      |
|            |          |           |               |                      |                |              | 4-Chlorotoluene             | 25 ug/mL      |
|            |          |           |               |                      |                |              | 4-Isopropyltoluene          | 25 ug/mL      |
|            |          |           |               |                      |                |              | Acrylonitrile               | 250 ug/mL     |
|            |          |           |               |                      |                |              | Benzene                     | 25 ug/mL      |
|            |          |           |               |                      |                |              | Bromobenzene                | 25 ug/mL      |
|            |          |           |               |                      |                |              | Bromochloromethane          | 25 ug/mL      |
|            |          |           |               |                      |                |              | Bromodichloromethane        | 25 ug/mL      |
|            |          |           |               |                      |                |              | Bromoform                   | 25 ug/mL      |
|            |          |           |               |                      |                |              | Carbon disulfide            | 25 ug/mL      |
|            |          |           |               |                      |                |              | Carbon tetrachloride        | 25 ug/mL      |
|            |          |           |               |                      |                |              | Chlorobenzene               | 25 ug/mL      |
|            |          |           |               |                      |                |              | Chloroform                  | 25 ug/mL      |
|            |          |           |               |                      |                |              | cis-1,2-Dichloroethene      | 25 ug/mL      |
|            |          |           |               |                      |                |              | cis-1,3-Dichloropropene     | 25 ug/mL      |
|            |          |           |               |                      |                |              | Cyclohexane                 | 25 ug/mL      |
|            |          |           |               |                      |                |              | Dibromochloromethane        | 25 ug/mL      |
|            |          |           |               |                      |                |              | Dibromomethane              | 25 ug/mL      |
|            |          |           |               |                      |                |              | Ethyl ether                 | 25 ug/mL      |
|            |          |           |               |                      |                |              | Ethyl methacrylate          | 25 ug/mL      |
|            |          |           |               |                      |                |              | Ethylbenzene                | 25 ug/mL      |
|            |          |           |               |                      |                |              | Hexachlorobutadiene         | 25 ug/mL      |
|            |          |           |               |                      |                |              | Hexane                      | 25 ug/mL      |
|            |          |           |               |                      |                |              | Iodomethane                 | 25 ug/mL      |
|            |          |           |               |                      |                |              | Isobutyl alcohol            | 625 ug/mL     |
|            |          |           |               |                      |                |              | Isopropylbenzene            | 25 ug/mL      |
|            |          |           |               |                      |                |              | m-Xylene & p-Xylene         | 25 ug/mL      |
|            |          |           |               |                      |                |              | Methyl acetate              | 125 ug/mL     |
|            |          |           |               |                      |                |              | Methyl tert-butyl ether     | 25 ug/mL      |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID           | Exp Date | Prep Date | Dilutant Used        | Reagent Final Volume | Parent Reagent      |              | Analyte                                   | Concentration |
|----------------------|----------|-----------|----------------------|----------------------|---------------------|--------------|-------------------------------------------|---------------|
|                      |          |           |                      |                      | Reagent ID          | Volume Added |                                           |               |
|                      |          |           |                      |                      |                     |              | Methylcyclohexane                         | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | Methylene Chloride                        | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | n-Butylbenzene                            | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | n-Heptane                                 | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | N-Propylbenzene                           | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | Naphthalene                               | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | o-Xylene                                  | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | sec-Butylbenzene                          | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | Styrene                                   | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | tert-Butylbenzene                         | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | Tetrachloroethene                         | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | Tetrahydrofuran                           | 50 ug/mL      |
|                      |          |           |                      |                      |                     |              | Toluene                                   | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | trans-1,2-Dichloroethene                  | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | trans-1,3-Dichloropropene                 | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | trans-1,4-Dichloro-2-butene               | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | Trichloroethene                           | 25 ug/mL      |
| .VOA8260GAS1ST_00113 | 04/30/18 |           | Restek, Lot A0110070 |                      | (Purchased Reagent) |              | Bromomethane                              | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | Butadiene                                 | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | Chloroethane                              | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | Chloromethane                             | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | Dichlorodifluoromethane                   | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | Dichlorofluoromethane                     | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | Trichlorofluoromethane                    | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | Vinyl chloride                            | 2500 ug/mL    |
| .VOA8260VOAPRI_00136 | 09/06/15 | 08/06/15  | Methanol, Lot 85233  | 10 mL                | VOA8260KET1ST_00048 | 0.2 mL       | 2-Butanone (MEK)                          | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 2-Hexanone                                | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 4-Methyl-2-pentanone (MIBK)               | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | Acetone                                   | 250 ug/mL     |
|                      |          |           |                      |                      | VOA8260MEGA1_00032  | 1 mL         | 1,1,1,2-Tetrachloroethane                 | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,1,1-Trichloroethane                     | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,1,2,2-Tetrachloroethane                 | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,1,2-Trichloro-1,2,2-trifluor<br>oethane | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,1,2-Trichloroethane                     | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,1-Dichloroethane                        | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,1-Dichloroethene                        | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,1-Dichloropropene                       | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,2,3-Trichlorobenzene                    | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,2,3-Trichloropropane                    | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,2,4-Trichlorobenzene                    | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,2,4-Trimethylbenzene                    | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,2-Dibromo-3-Chloropropane               | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,2-Dibromoethane (EDB)                   | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,2-Dichlorobenzene                       | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,2-Dichloroethane                        | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,2-Dichloropropane                       | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,3,5-Trimethylbenzene                    | 250 ug/mL     |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent |              | Analyte                 | Concentration |
|------------|----------|-----------|---------------|----------------------|----------------|--------------|-------------------------|---------------|
|            |          |           |               |                      | Reagent ID     | Volume Added |                         |               |
|            |          |           |               |                      |                |              | 1,3-Dichlorobenzene     | 250 ug/mL     |
|            |          |           |               |                      |                |              | 1,3-Dichloropropane     | 250 ug/mL     |
|            |          |           |               |                      |                |              | 1,4-Dichlorobenzene     | 250 ug/mL     |
|            |          |           |               |                      |                |              | 1,4-Dioxane             | 5000 ug/mL    |
|            |          |           |               |                      |                |              | 2,2-Dichloropropane     | 250 ug/mL     |
|            |          |           |               |                      |                |              | 2-Chlorotoluene         | 250 ug/mL     |
|            |          |           |               |                      |                |              | 2-Methyl-2-propanol     | 2500 ug/mL    |
|            |          |           |               |                      |                |              | 3-Chloro-1-propene      | 250 ug/mL     |
|            |          |           |               |                      |                |              | 4-Chlorotoluene         | 250 ug/mL     |
|            |          |           |               |                      |                |              | 4-Isopropyltoluene      | 250 ug/mL     |
|            |          |           |               |                      |                |              | Acrylonitrile           | 2500 ug/mL    |
|            |          |           |               |                      |                |              | Benzene                 | 250 ug/mL     |
|            |          |           |               |                      |                |              | Bromobenzene            | 250 ug/mL     |
|            |          |           |               |                      |                |              | Bromochloromethane      | 250 ug/mL     |
|            |          |           |               |                      |                |              | Bromodichloromethane    | 250 ug/mL     |
|            |          |           |               |                      |                |              | Bromoform               | 250 ug/mL     |
|            |          |           |               |                      |                |              | Carbon disulfide        | 250 ug/mL     |
|            |          |           |               |                      |                |              | Carbon tetrachloride    | 250 ug/mL     |
|            |          |           |               |                      |                |              | Chlorobenzene           | 250 ug/mL     |
|            |          |           |               |                      |                |              | Chloroform              | 250 ug/mL     |
|            |          |           |               |                      |                |              | cis-1,2-Dichloroethene  | 250 ug/mL     |
|            |          |           |               |                      |                |              | cis-1,3-Dichloropropene | 250 ug/mL     |
|            |          |           |               |                      |                |              | Cyclohexane             | 250 ug/mL     |
|            |          |           |               |                      |                |              | Dibromochloromethane    | 250 ug/mL     |
|            |          |           |               |                      |                |              | Dibromomethane          | 250 ug/mL     |
|            |          |           |               |                      |                |              | Ethyl ether             | 250 ug/mL     |
|            |          |           |               |                      |                |              | Ethyl methacrylate      | 250 ug/mL     |
|            |          |           |               |                      |                |              | Ethylbenzene            | 250 ug/mL     |
|            |          |           |               |                      |                |              | Hexachlorobutadiene     | 250 ug/mL     |
|            |          |           |               |                      |                |              | Hexane                  | 250 ug/mL     |
|            |          |           |               |                      |                |              | Iodomethane             | 250 ug/mL     |
|            |          |           |               |                      |                |              | Isobutyl alcohol        | 6250 ug/mL    |
|            |          |           |               |                      |                |              | Isopropylbenzene        | 250 ug/mL     |
|            |          |           |               |                      |                |              | m-Xylene & p-Xylene     | 250 ug/mL     |
|            |          |           |               |                      |                |              | Methyl acetate          | 1250 ug/mL    |
|            |          |           |               |                      |                |              | Methyl tert-butyl ether | 250 ug/mL     |
|            |          |           |               |                      |                |              | Methylcyclohexane       | 250 ug/mL     |
|            |          |           |               |                      |                |              | Methylene Chloride      | 250 ug/mL     |
|            |          |           |               |                      |                |              | n-Butylbenzene          | 250 ug/mL     |
|            |          |           |               |                      |                |              | n-Heptane               | 250 ug/mL     |
|            |          |           |               |                      |                |              | N-Propylbenzene         | 250 ug/mL     |
|            |          |           |               |                      |                |              | Naphthalene             | 250 ug/mL     |
|            |          |           |               |                      |                |              | o-Xylene                | 250 ug/mL     |
|            |          |           |               |                      |                |              | sec-Butylbenzene        | 250 ug/mL     |
|            |          |           |               |                      |                |              | Styrene                 | 250 ug/mL     |
|            |          |           |               |                      |                |              | tert-Butylbenzene       | 250 ug/mL     |
|            |          |           |               |                      |                |              | Tetrachloroethene       | 250 ug/mL     |
|            |          |           |               |                      |                |              | Tetrahydrofuran         | 500 ug/mL     |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID            | Exp Date | Prep Date | Dilutant Used        | Reagent Final Volume | Parent Reagent      |              | Analyte                                | Concentration |
|-----------------------|----------|-----------|----------------------|----------------------|---------------------|--------------|----------------------------------------|---------------|
|                       |          |           |                      |                      | Reagent ID          | Volume Added |                                        |               |
|                       |          |           |                      |                      |                     |              | Toluene                                | 250 ug/mL     |
|                       |          |           |                      |                      |                     |              | trans-1,2-Dichloroethene               | 250 ug/mL     |
|                       |          |           |                      |                      |                     |              | trans-1,3-Dichloropropene              | 250 ug/mL     |
|                       |          |           |                      |                      |                     |              | trans-1,4-Dichloro-2-butene            | 250 ug/mL     |
|                       |          |           |                      |                      |                     |              | Trichloroethene                        | 250 ug/mL     |
| ..VOA8260KET1ST_00048 | 04/30/18 |           | Restek, Lot A0110400 |                      | (Purchased Reagent) |              | 2-Butanone (MEK)                       | 12500 ug/mL   |
|                       |          |           |                      |                      |                     |              | 2-Hexanone                             | 12500 ug/mL   |
|                       |          |           |                      |                      |                     |              | 4-Methyl-2-pentanone (MIBK)            | 12500 ug/mL   |
|                       |          |           |                      |                      |                     |              | Acetone                                | 12500 ug/mL   |
|                       |          |           |                      |                      |                     |              |                                        |               |
| ..VOA8260MEGA1_00032  | 02/28/16 |           | Restek, Lot A0108166 |                      | (Purchased Reagent) |              | 1,1,1,2-Tetrachloroethane              | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,1,1-Trichloroethane                  | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,1,2,2-Tetrachloroethane              | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,1,2-Trichloro-1,2,2-trifluor oethane | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,1,2-Trichloroethane                  | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,1-Dichloroethane                     | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,1-Dichloroethene                     | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,1-Dichloropropene                    | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,2,3-Trichlorobenzene                 | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,2,3-Trichloropropane                 | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,2,4-Trichlorobenzene                 | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,2,4-Trimethylbenzene                 | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,2-Dibromo-3-Chloropropane            | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,2-Dibromoethane (EDB)                | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,2-Dichlorobenzene                    | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,2-Dichloroethane                     | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,2-Dichloropropane                    | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,3,5-Trimethylbenzene                 | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,3-Dichlorobenzene                    | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,3-Dichloropropane                    | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,4-Dichlorobenzene                    | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 1,4-Dioxane                            | 50000 ug/mL   |
|                       |          |           |                      |                      |                     |              | 2,2-Dichloropropane                    | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 2-Chlorotoluene                        | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 2-Methyl-2-propanol                    | 25000 ug/mL   |
|                       |          |           |                      |                      |                     |              | 3-Chloro-1-propene                     | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 4-Chlorotoluene                        | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | 4-Isopropyltoluene                     | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | Acrylonitrile                          | 25000 ug/mL   |
|                       |          |           |                      |                      |                     |              | Benzene                                | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | Bromobenzene                           | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | Bromochloromethane                     | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | Bromodichloromethane                   | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | Bromoform                              | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | Carbon disulfide                       | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | Carbon tetrachloride                   | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | Chlorobenzene                          | 2500 ug/mL    |
|                       |          |           |                      |                      |                     |              | Chloroform                             | 2500 ug/mL    |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID          | Exp Date | Prep Date | Dilutant Used       | Reagent Final Volume | Parent Reagent      |              | Analyte                   | Concentration |
|---------------------|----------|-----------|---------------------|----------------------|---------------------|--------------|---------------------------|---------------|
|                     |          |           |                     |                      | Reagent ID          | Volume Added |                           |               |
|                     |          |           |                     |                      |                     |              | cis-1,2-Dichloroethene    | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | cis-1,3-Dichloropropene   | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Cyclohexane               | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Dibromochloromethane      | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Dibromomethane            | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Ethyl ether               | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Ethyl methacrylate        | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Ethylbenzene              | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Hexachlorobutadiene       | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Hexane                    | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Iodomethane               | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Isobutyl alcohol          | 62500 ug/mL   |
|                     |          |           |                     |                      |                     |              | Isopropylbenzene          | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | m-Xylene & p-Xylene       | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Methyl acetate            | 12500 ug/mL   |
|                     |          |           |                     |                      |                     |              | Methyl tert-butyl ether   | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Methylcyclohexane         | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Methylene Chloride        | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | n-Butylbenzene            | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | n-Heptane                 | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | N-Propylbenzene           | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Naphthalene               | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | o-Xylene                  | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | sec-Butylbenzene          | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Styrene                   | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | tert-Butylbenzene         | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Tetrachloroethene         | 2500 ug/mL    |
|                     |          |           |                     |                      |                     |              | Tetrahydrofuran           | 5000 ug/mL    |
|                     |          |           |                     |                      |                     |              | Toluene                   | 2500 ug/mL    |
| VOA8260VOAPRI_00147 | 10/09/15 | 10/02/15  | Methanol, Lot 99494 | 10 mL                | VOA8260GAS1ST_00118 | 0.1 mL       | Bromomethane              | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | Chloroethane              | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | Chloromethane             | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | Vinyl chloride            | 25 ug/mL      |
|                     |          |           |                     |                      | VOA8260VOAPRI_00146 | 1 mL         | 1,1,1,2-Tetrachloroethane | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | 1,1,1-Trichloroethane     | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | 1,1,2,2-Tetrachloroethane | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | 1,1,2-Trichloroethane     | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | 1,1-Dichloroethane        | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | 1,1-Dichloroethene        | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | 1,2-Dibromoethane (EDB)   | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | 1,2-Dichloroethane        | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | 1,2-Dichloropropane       | 25 ug/mL      |
|                     |          |           |                     |                      |                     |              | 1,4-Dioxane               | 500 ug/mL     |



## REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh

Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID           | Exp Date | Prep Date | Dilutant Used        | Reagent Final Volume | Parent Reagent      |              | Analyte                   | Concentration |
|----------------------|----------|-----------|----------------------|----------------------|---------------------|--------------|---------------------------|---------------|
|                      |          |           |                      |                      | Reagent ID          | Volume Added |                           |               |
|                      |          |           |                      |                      |                     |              | Acrylonitrile             | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | Benzene                   | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | Bromochloromethane        | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | Bromodichloromethane      | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | Bromoform                 | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | Carbon disulfide          | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | Carbon tetrachloride      | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | Chlorobenzene             | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | Chloroform                | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | cis-1,2-Dichloroethene    | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | cis-1,3-Dichloropropene   | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | Dibromochloromethane      | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | Ethylbenzene              | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | Methyl tert-butyl ether   | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | Methylene Chloride        | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | Styrene                   | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | Tetrachloroethene         | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | Toluene                   | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | trans-1,2-Dichloroethene  | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | trans-1,3-Dichloropropene | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | Trichloroethene           | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | Xylenes, Total            | 50 ug/mL      |
| .VOA8260GAS1ST_00118 | 04/30/18 |           | Restek, Lot A0110070 |                      | (Purchased Reagent) |              | Bromomethane              | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | Chloroethane              | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | Chloromethane             | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | Vinyl chloride            | 2500 ug/mL    |
| .VOA8260VOAPRI_00146 | 10/25/15 | 09/25/15  | Methanol, Lot 99494  | 10 mL                | VOA8260MEGA1_00034  | 1 mL         | 1,1,1,2-Tetrachloroethane | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,1,1-Trichloroethane     | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,1,2,2-Tetrachloroethane | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,1,2-Trichloroethane     | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,1-Dichloroethane        | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,1-Dichloroethene        | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,2-Dibromoethane (EDB)   | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,2-Dichloroethane        | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,2-Dichloropropane       | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | 1,4-Dioxane               | 5000 ug/mL    |
|                      |          |           |                      |                      |                     |              | Acrylonitrile             | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | Benzene                   | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | Bromochloromethane        | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | Bromodichloromethane      | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | Bromoform                 | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | Carbon disulfide          | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | Carbon tetrachloride      | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | Chlorobenzene             | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | Chloroform                | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | cis-1,2-Dichloroethene    | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | cis-1,3-Dichloropropene   | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | Dibromochloromethane      | 250 ug/mL     |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID           | Exp Date | Prep Date | Dilutant Used        | Reagent Final Volume | Parent Reagent      |              | Analyte                   | Concentration |
|----------------------|----------|-----------|----------------------|----------------------|---------------------|--------------|---------------------------|---------------|
|                      |          |           |                      |                      | Reagent ID          | Volume Added |                           |               |
|                      |          |           |                      |                      |                     |              | Ethylbenzene              | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | Methyl tert-butyl ether   | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | Methylene Chloride        | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | Styrene                   | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | Tetrachloroethene         | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | Toluene                   | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | trans-1,2-Dichloroethene  | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | trans-1,3-Dichloropropene | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | Trichloroethene           | 250 ug/mL     |
|                      |          |           |                      |                      |                     |              | Xylenes, Total            | 500 ug/mL     |
| ..VOA8260MEGA1_00034 | 02/28/16 |           | Restek, Lot A0108166 |                      | (Purchased Reagent) |              | 1,1,1,2-Tetrachloroethane | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | 1,1,1-Trichloroethane     | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | 1,1,2,2-Tetrachloroethane | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | 1,1,2-Trichloroethane     | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | 1,1-Dichloroethane        | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | 1,1-Dichloroethene        | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | 1,2-Dibromoethane (EDB)   | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | 1,2-Dichloroethane        | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | 1,2-Dichloropropane       | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | 1,4-Dioxane               | 50000 ug/mL   |
|                      |          |           |                      |                      |                     |              | Acrylonitrile             | 25000 ug/mL   |
|                      |          |           |                      |                      |                     |              | Benzene                   | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | Bromochloromethane        | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | Bromodichloromethane      | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | Bromoform                 | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | Carbon disulfide          | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | Carbon tetrachloride      | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | Chlorobenzene             | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | Chloroform                | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | cis-1,2-Dichloroethene    | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | cis-1,3-Dichloropropene   | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | Dibromochloromethane      | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | Ethylbenzene              | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | Methyl tert-butyl ether   | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | Methylene Chloride        | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | Styrene                   | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | Tetrachloroethene         | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | Toluene                   | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | trans-1,2-Dichloroethene  | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | trans-1,3-Dichloropropene | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | Trichloroethene           | 2500 ug/mL    |
|                      |          |           |                      |                      |                     |              | Xylenes, Total            | 5000 ug/mL    |
| VOAACROLEINPR_00006  | 09/11/15 | 08/11/15  | Methanol, Lot 85233  | 100 mL               | VOAACRORES_00077    | 0.125 mL     | Acrolein                  | 25 ug/mL      |
| .VOAACRORES_00077    | 09/30/15 |           | Restek, Lot A0111006 |                      | (Purchased Reagent) |              | Acrolein                  | 20000 ug/mL   |
| VOAVAPRI_00006       | 08/31/15 | 08/25/15  | Methanol, Lot 85233  | 50 mL                | VOA8260VARES_00054  | 0.25 mL      | Vinyl acetate             | 25 ug/mL      |
| .VOA8260VARES_00054  | 08/31/15 |           | Restek, Lot A0109190 |                      | (Purchased Reagent) |              | Vinyl acetate             | 5000 ug/mL    |
| voaWAcro2nd R_00006  | 08/07/15 | 07/07/15  | Methanol, Lot 85233  | 100 mL               | VOAACRRES2ND_00065  | 0.125 mL     | Acrolein                  | 25 ug/mL      |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID          | Exp Date | Prep Date | Dilutant Used        | Reagent Final Volume | Parent Reagent      |                     | Analyte                                  | Concentration |
|---------------------|----------|-----------|----------------------|----------------------|---------------------|---------------------|------------------------------------------|---------------|
|                     |          |           |                      |                      | Reagent ID          | Volume Added        |                                          |               |
| .VOAACRES2ND_00065  | 09/30/15 |           | Restek, Lot A0111005 |                      | (Purchased Reagent) |                     | Acrolein                                 | 20000 ug/mL   |
| voaWEE1stRest_00001 | 09/21/15 | 08/21/15  | Methanol, Lot 85233  | 25 mL                | VOARESEE1ST_00021   | 0.125 mL            | 1,2-dichloro-4-(trifluoromethyl)benzene  | 25 ug/mL      |
|                     |          |           |                      |                      |                     |                     | 2,3,6-Trichlorotoluene                   | 25 ug/mL      |
|                     |          |           |                      |                      |                     |                     | 2,3- & 3,4- Dichlorotoluene              | 50 ug/mL      |
|                     |          |           |                      |                      |                     |                     | 2,4,5-Trichlorotoluene                   | 25 ug/mL      |
|                     |          |           |                      |                      |                     |                     | 2,4- & 2,5- & 2,6-Dichlorotoluene        | 75 ug/mL      |
|                     |          |           |                      |                      |                     |                     | 2,4-Dichloro-1-(trifluoromethyl)-benzene | 25 ug/mL      |
|                     |          |           |                      |                      |                     |                     | 2,5-Dichlorobenzotrifluoride             | 25 ug/mL      |
|                     |          |           |                      |                      |                     |                     | 2-Chlorobenzotrifluoride                 | 25 ug/mL      |
|                     |          |           |                      |                      |                     |                     | 3-Chlorobenzotrifluoride                 | 25 ug/mL      |
|                     |          |           |                      |                      |                     |                     | 3-Chlorotoluene                          | 25 ug/mL      |
|                     |          |           |                      |                      |                     |                     | 4-Chlorobenzotrifluoride                 | 25 ug/mL      |
|                     |          |           |                      |                      |                     |                     |                                          |               |
| .VOARESEE1ST_00021  | 09/30/16 |           | Restek, Lot A0109701 |                      |                     | (Purchased Reagent) | 1,2-dichloro-4-(trifluoromethyl)benzene  | 5000 ug/mL    |
|                     |          |           |                      |                      |                     |                     | 2,3,6-Trichlorotoluene                   | 5000 ug/mL    |
|                     |          |           |                      |                      |                     |                     | 2,3- & 3,4- Dichlorotoluene              | 10000 ug/mL   |
|                     |          |           |                      |                      |                     |                     | 2,4,5-Trichlorotoluene                   | 5000 ug/mL    |
|                     |          |           |                      |                      |                     |                     | 2,4- & 2,5- & 2,6-Dichlorotoluene        | 15000 ug/mL   |
|                     |          |           |                      |                      |                     |                     | 2,4-Dichloro-1-(trifluoromethyl)-benzene | 5000 ug/mL    |
|                     |          |           |                      |                      |                     |                     | 2,5-Dichlorobenzotrifluoride             | 5000 ug/mL    |
|                     |          |           |                      |                      |                     |                     | 2-Chlorobenzotrifluoride                 | 5000 ug/mL    |
|                     |          |           |                      |                      |                     |                     | 3-Chlorobenzotrifluoride                 | 5000 ug/mL    |
|                     |          |           |                      |                      |                     |                     | 3-Chlorotoluene                          | 5000 ug/mL    |
|                     |          |           |                      |                      |                     |                     | 4-Chlorobenzotrifluoride                 | 5000 ug/mL    |
|                     |          |           |                      |                      |                     |                     |                                          |               |
| voaWeemix1Res_00001 | 08/20/15 | 07/20/15  | Methanol, Lot 85233  | 25 mL                | VOARESEE1ST_00025   | 0.125 mL            | 1,2-dichloro-4-(trifluoromethyl)benzene  | 25 ug/mL      |
|                     |          |           |                      |                      |                     |                     | 2,3,6-Trichlorotoluene                   | 25 ug/mL      |
|                     |          |           |                      |                      |                     |                     | 2,3- & 3,4- Dichlorotoluene              | 50 ug/mL      |
|                     |          |           |                      |                      |                     |                     | 2,4,5-Trichlorotoluene                   | 25 ug/mL      |
|                     |          |           |                      |                      |                     |                     | 2,4- & 2,5- & 2,6-Dichlorotoluene        | 75 ug/mL      |
|                     |          |           |                      |                      |                     |                     | 2,4-Dichloro-1-(trifluoromethyl)-benzene | 25 ug/mL      |
|                     |          |           |                      |                      |                     |                     | 2,5-Dichlorobenzotrifluoride             | 25 ug/mL      |
|                     |          |           |                      |                      |                     |                     | 2-Chlorobenzotrifluoride                 | 25 ug/mL      |
|                     |          |           |                      |                      |                     |                     | 3-Chlorobenzotrifluoride                 | 25 ug/mL      |
|                     |          |           |                      |                      |                     |                     | 3-Chlorotoluene                          | 25 ug/mL      |
|                     |          |           |                      |                      |                     |                     | 4-Chlorobenzotrifluoride                 | 25 ug/mL      |
|                     |          |           |                      |                      |                     |                     |                                          |               |
| .VOARESEE1ST_00025  | 09/30/16 |           | Restek, Lot A0109701 |                      |                     | (Purchased Reagent) | 1,2-dichloro-4-(trifluoromethyl)benzene  | 5000 ug/mL    |
|                     |          |           |                      |                      |                     |                     | 2,3,6-Trichlorotoluene                   | 5000 ug/mL    |
|                     |          |           |                      |                      |                     |                     | 2,3- & 3,4- Dichlorotoluene              | 10000 ug/mL   |
|                     |          |           |                      |                      |                     |                     | 2,4,5-Trichlorotoluene                   | 5000 ug/mL    |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

| Reagent ID           | Exp Date | Prep Date | Dilutant Used        | Reagent Final Volume | Parent Reagent      |              | Analyte                                  | Concentration |
|----------------------|----------|-----------|----------------------|----------------------|---------------------|--------------|------------------------------------------|---------------|
|                      |          |           |                      |                      | Reagent ID          | Volume Added |                                          |               |
|                      |          |           |                      |                      |                     |              | 2,4- & 2,5- & 2,6-Dichlorotoluene        | 15000 ug/mL   |
|                      |          |           |                      |                      |                     |              | 2,4-Dichloro-1-(triflouromethyl)-benzene | 5000 ug/mL    |
|                      |          |           |                      |                      |                     |              | 2,5-Dichlorobenzotrifluoride             | 5000 ug/mL    |
|                      |          |           |                      |                      |                     |              | 2-Chlorobenzotrifluoride                 | 5000 ug/mL    |
|                      |          |           |                      |                      |                     |              | 3-Chlorobenzotrifluoride                 | 5000 ug/mL    |
|                      |          |           |                      |                      |                     |              | 3-Chlorotoluene                          | 5000 ug/mL    |
|                      |          |           |                      |                      |                     |              | 4-Chlorobenzotrifluoride                 | 5000 ug/mL    |
| voaWKet1 Rest_00001  | 09/11/15 | 08/11/15  | Methanol, Lot 85233  | 50 mL                | VOA8260KET1ST_00049 | 0.1 mL       | 2-Butanone (MEK)                         | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | 2-Hexanone                               | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | 4-Methyl-2-pentanone (MIBK)              | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | Acetone                                  | 25 ug/mL      |
| .VOA8260KET1ST_00049 | 04/30/18 |           | Restek, Lot A0110400 |                      | (Purchased Reagent) |              | 2-Butanone (MEK)                         | 12500 ug/mL   |
|                      |          |           |                      |                      |                     |              | 2-Hexanone                               | 12500 ug/mL   |
|                      |          |           |                      |                      |                     |              | 4-Methyl-2-pentanone (MIBK)              | 12500 ug/mL   |
|                      |          |           |                      |                      |                     |              | Acetone                                  | 12500 ug/mL   |
| voaWKet1Reste_00001  | 08/02/15 | 07/02/15  | Methanol, Lot 85233  | 50 mL                | VOA8260KET1ST_00046 | 0.1 mL       | 2-Butanone (MEK)                         | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | 2-Hexanone                               | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | 4-Methyl-2-pentanone (MIBK)              | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | Acetone                                  | 25 ug/mL      |
| .VOA8260KET1ST_00046 | 04/30/18 |           | Restek, Lot A0110400 |                      | (Purchased Reagent) |              | 2-Butanone (MEK)                         | 12500 ug/mL   |
|                      |          |           |                      |                      |                     |              | 2-Hexanone                               | 12500 ug/mL   |
|                      |          |           |                      |                      |                     |              | 4-Methyl-2-pentanone (MIBK)              | 12500 ug/mL   |
|                      |          |           |                      |                      |                     |              | Acetone                                  | 12500 ug/mL   |
| voaWKet1stRes_00001  | 10/14/15 | 09/14/15  | Methanol, Lot 99494  | 50 mL                | VOA8260KET1ST_00051 | 0.1 mL       | 2-Butanone (MEK)                         | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | 2-Hexanone                               | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | 4-Methyl-2-pentanone (MIBK)              | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | Acetone                                  | 25 ug/mL      |
| .VOA8260KET1ST_00051 | 04/30/18 |           | Restek, Lot A0110400 |                      | (Purchased Reagent) |              | 2-Butanone (MEK)                         | 12500 ug/mL   |
|                      |          |           |                      |                      |                     |              | 2-Hexanone                               | 12500 ug/mL   |
|                      |          |           |                      |                      |                     |              | 4-Methyl-2-pentanone (MIBK)              | 12500 ug/mL   |
|                      |          |           |                      |                      |                     |              | Acetone                                  | 12500 ug/mL   |
| voaWKetmix2nd_00002  | 10/22/15 | 09/22/15  | Methanol, Lot 99494  | 50 mL                | VOA8260KET2ND_00054 | 0.1 mL       | 2-Butanone (MEK)                         | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | 2-Hexanone                               | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | 4-Methyl-2-pentanone (MIBK)              | 25 ug/mL      |
|                      |          |           |                      |                      |                     |              | Acetone                                  | 25 ug/mL      |
| .VOA8260KET2ND_00054 | 05/31/18 |           | Restek, Lot A0110970 |                      | (Purchased Reagent) |              | 2-Butanone (MEK)                         | 12500 ug/mL   |
|                      |          |           |                      |                      |                     |              | 2-Hexanone                               | 12500 ug/mL   |
|                      |          |           |                      |                      |                     |              | 4-Methyl-2-pentanone (MIBK)              | 12500 ug/mL   |
|                      |          |           |                      |                      |                     |              | Acetone                                  | 12500 ug/mL   |
| voaWVA1st Res_00003  | 08/23/15 | 07/23/15  | Methanol, Lot 85233  | 25 mL                | VOA8260VARES_00055  | 0.125 mL     | Vinyl acetate                            | 25 ug/mL      |
| .VOA8260VARES_00055  | 08/31/15 |           | Restek, Lot A0109190 |                      | (Purchased Reagent) |              | Vinyl acetate                            | 5000 ug/mL    |

Reagent

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**sv benzoepyre\_00001**



**CERTIFIED WEIGHT REPORT**

**Part Number:** 71016  
**Lot Number:** 100313  
**Description:** Benzo(e)pyrene  
**Expiration Date:** 100318  
**Recommended Storage:** Refrigerate (4 °C)  
**Nominal Concentration (µg/mL):** 1000

**Solvent(s):** 44325 Methylene chloride

Weight(s) shown below were combined and diluted to:

100.0 0.003 SE-05 Balance Uncertainty  
Fask Uncertainty

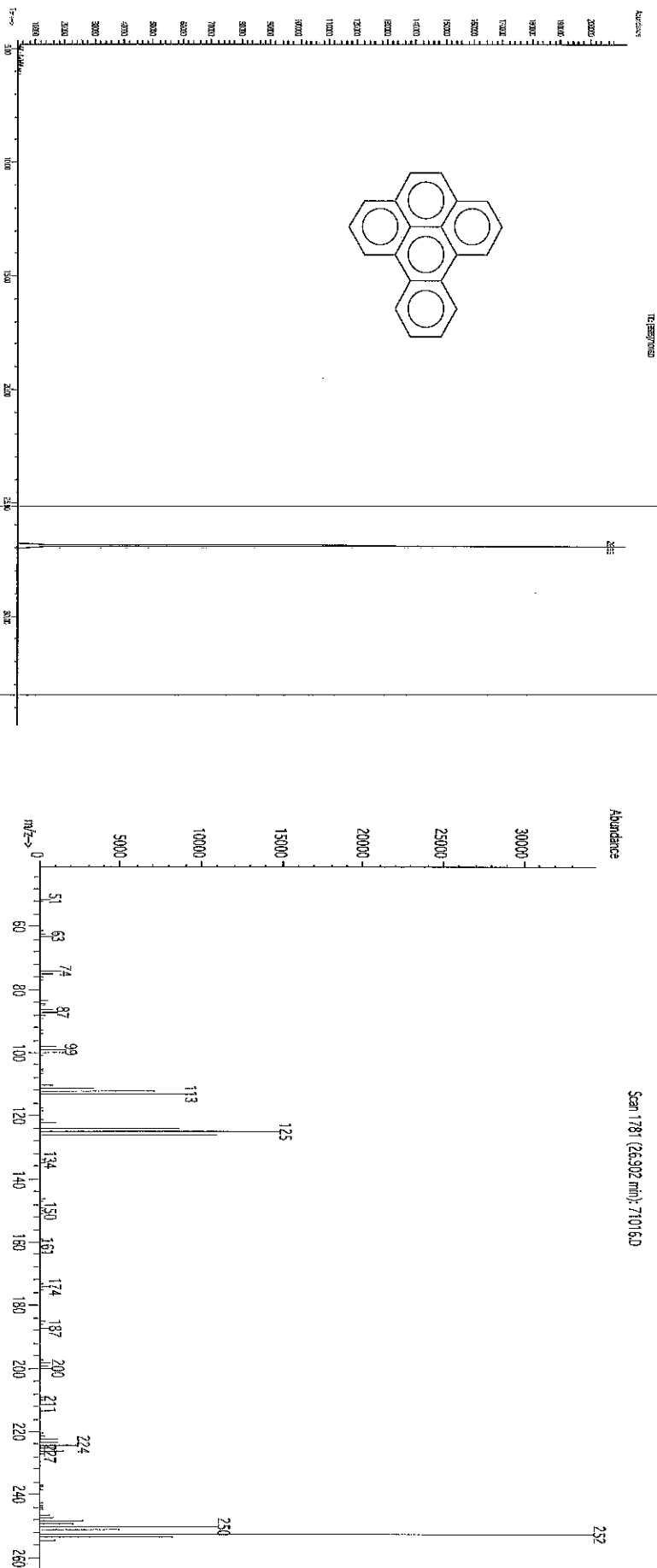
|                                     |        |
|-------------------------------------|--------|
| <i>Paul Barron</i>                  |        |
| Formulated By: Paul Barron          | 100313 |
| DATE                                |        |
| Reviewed By: <i>Pedro L. Rentas</i> | 100313 |
| DATE                                |        |

**MSDS Information**

| Compound | Lot Number | Nominal Conc (µg/mL) | Purity (%) | Uncertainty | Target Weight(g) | Actual Weight(g) | Actual Conc (µg/mL) | Expanded Uncertainty | (Solvent Safety Info. On Attached pg.) | CAS# | OSHA PEL (TWA) | LD50 |
|----------|------------|----------------------|------------|-------------|------------------|------------------|---------------------|----------------------|----------------------------------------|------|----------------|------|
|----------|------------|----------------------|------------|-------------|------------------|------------------|---------------------|----------------------|----------------------------------------|------|----------------|------|

|                   |      |        |      |    |     |         |         |        |        |            |     |     |
|-------------------|------|--------|------|----|-----|---------|---------|--------|--------|------------|-----|-----|
| 1. Benzo(e)pyrene | 1016 | 012011 | 1000 | 99 | 0.2 | 0.10100 | 0.10125 | 1002.5 | 0.0042 | 00192-97-2 | N/A | N/A |
|-------------------|------|--------|------|----|-----|---------|---------|--------|--------|------------|-----|-----|

**Method GC/MSD-3.M:** Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B = 250°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Candice Warren.



Reagent

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**SV2356TCPs\_00002**



## CERTIFIED WEIGHT REPORT

Lot #

Part Number:

Solvent(s):

J42S08

Methylene chloride

Lot Number:

061711

Description:

2,3,5,6-Tetrachlorophenol

Expiration Date:

061716

Storage: 4 °C

Nominal Concentration (µg/mL):

1000

SE-05 Balance Uncertainty

Weight(s) shown below were combined and diluted to:

25.0

0.001 Flask Uncertainty

## MSDS Information

|                |                 |        |      |
|----------------|-----------------|--------|------|
| Formulated By: | Pat Scaturchio  | 061711 | DATE |
| Reviewed By:   | Pedro L. Rentes | 061711 | DATE |

## Compound

1, 2,3,5,6-Tetrachlorophenol

315

060697

1000

98

0.2

0.02550

0.02559

1003.4

0.0057

00935-95-5

N/A

N/A

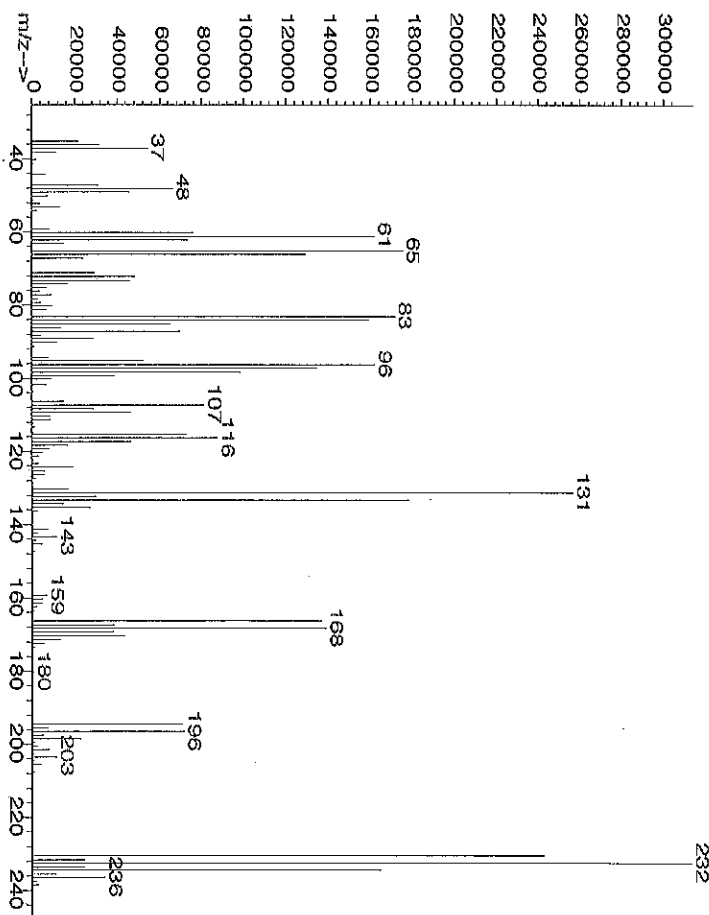
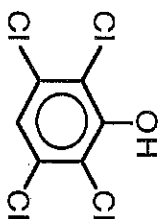
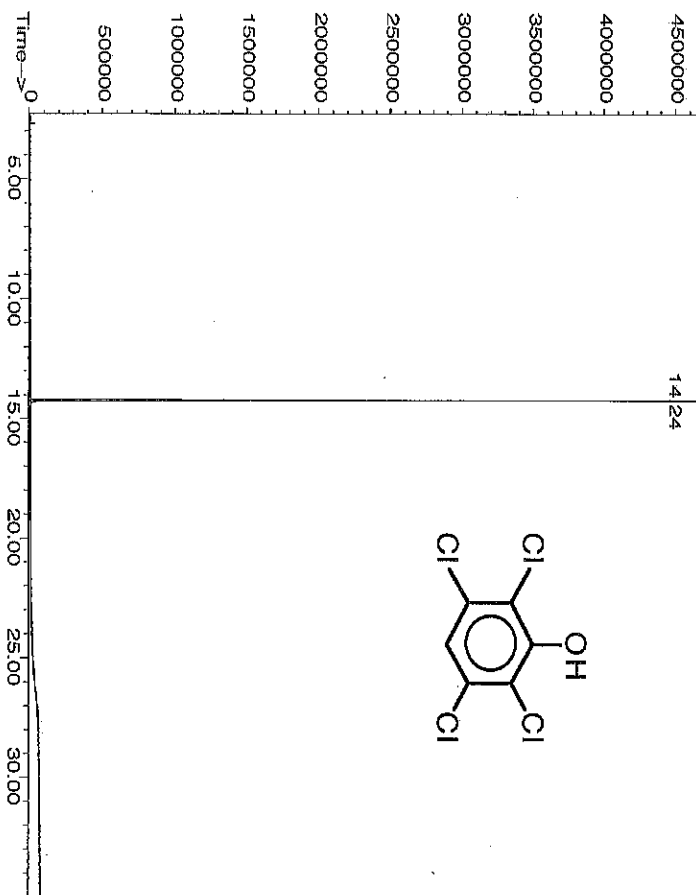
Method GC8MSD-3.M: Column: SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9 min.), Rate = 10°C/min., Injector B = 200°C, Detector B = 300°C. Scan Rate = 2, Split Ratio = 100:1. Analysis performed by Lance R. Boynton.

Abundance

TIC: P79129.D

Abundance

Scan 799 (14.237 min): P79129.D





Reagent

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**SV2NAPAMINEs\_00002**

# Certificate of Analysis

## 2-Naphthylamine Solution

**Product Number:** EPA-1135

**Page:** 1 of 1

**Lot Number:** CK-1617

**Lot Issue Date:** 20-May-2013

**Expiration Date:** 30-Jun-2017

This certified Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

| Analyte         | CAS#        | Analyte Lot | True Value     |
|-----------------|-------------|-------------|----------------|
| 2-naphthylamine | 000091-59-8 | RM06488     | 1001 ± 5 µg/mL |

**Matrix:** methanol (methyl alcohol)

**Storage:** Store at Room Temperature (15-30°C)

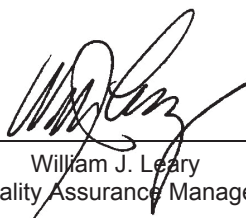
ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.



ISO 17025:2005  
Accredited  
A2LA  
Cert. No. 0851-01

ISO 9001:2008  
Registered  
TUV USA, Inc.  
Cert. No. 09-1009

250 Smith Street, North Kingstown, RI 02852 USA  
401-294-9400 Fax: 295-2330  
www.ultrasci.com



William J. Leary  
Quality Assurance Manager

Reagent

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**sv712dimbenza\_00011**



**CERTIFIED WEIGHT REPORT**

**Part Number:** Z0411  
**Lot Number:** 040915  
**Description:** Z,12-Dimethylbenz(a)anthracene  
**Expiration Date:** 040920  
**Recommended Storage:** Refrigerate (4 °C)  
**Nominal Concentration (µg/mL):** 1000

**Solvent(s):** Methylene chloride  
**Lot#** 72062

Weight(s) shown below were combined and diluted to (mL):

25.0 0.001 Balance Uncertainty  
Peak Uncertainty

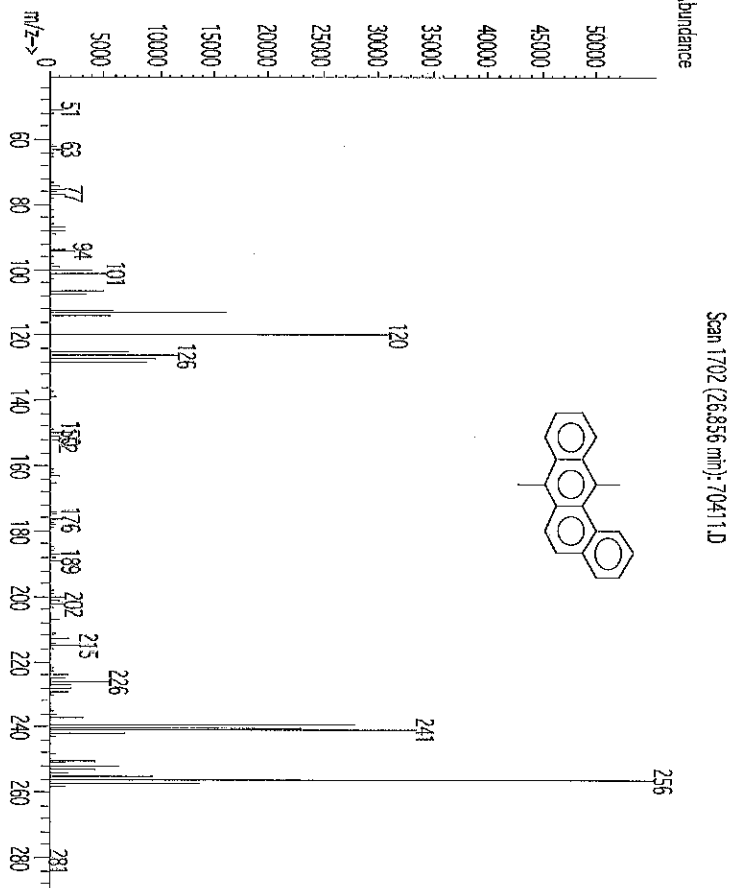
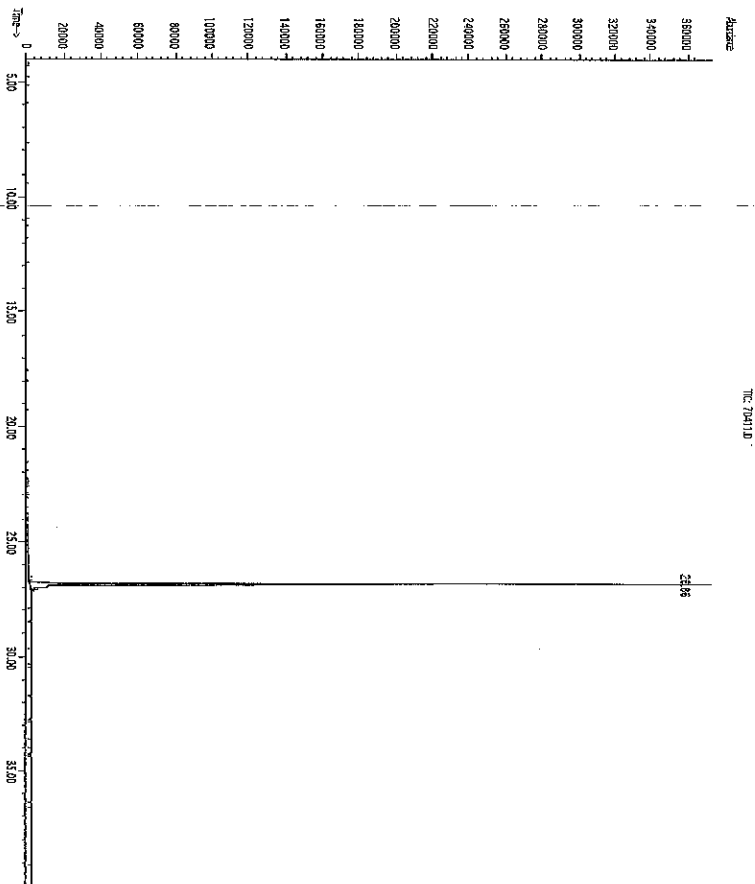
|                |                   |      |        |
|----------------|-------------------|------|--------|
| Formulated By: | Paul Barron       | DATE | 040915 |
| Reviewed By:   | Pedro L. Renteria | DATE | 040915 |

**MSDS Information**

| Compound | Lot Number | Normal Conc (µg/mL) | Purity (%) | Uncertainty Purity | Target Weight (g) | Actual Weight (g) | Actual Conc (µg/mL) | Expanded Uncertainty | CAS# | OSHA PEL (TWA) | LD50 |
|----------|------------|---------------------|------------|--------------------|-------------------|-------------------|---------------------|----------------------|------|----------------|------|
|----------|------------|---------------------|------------|--------------------|-------------------|-------------------|---------------------|----------------------|------|----------------|------|

1. Z,12-Dimethylbenz(a)anthracene 411. GGR4E-DC 1000 98 0.2 0.02551 0.02553 1000.9 0.00566 00057-97-6 N/A orl-rat 327mg/kg

**Method GC8MSD-3.M:** Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness), Temp 1 = 50°C (1min.), Temp 2 = 300°C (9 min.), Rate = 10°C/min., Injector B= 200°C, Detector B = 300°C, Scan Rate = 2, Analysis performed by Candice Warren.



Reagent

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**SVLVIntstd\_00003**



110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

www.restek.com

700936  
700935



## Certificate of Analysis

FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

S VLV INT STD

Catalog No.: 567684 Lot No.: A093676  
Description: 8270 Internal Standard  
8270 Internal Standard 2,000µg/mL, Methylene Chloride, 5mL/ampul  
Container Size: 5 mL Pkg Amt: > 5 mL  
Expiration Date: February 2018 Storage: 10°C or colder  
Handling: Sonication required. Mix is photosensitive.

### CERTIFIED VALUES

| Elution Order | Compound                                                | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.: K=2)                         |                                       |
|---------------|---------------------------------------------------------|-----------------------------|--------------------------------------------------------------|---------------------------------------|
| 1             | 1,4-Dichlorobenzene-d4<br>CAS # 3855-82-1<br>Purity 99% | 2,000.0 µg/mL               | +/- 11.6282 µg/mL<br>+/- 92.7158 µg/mL<br>+/- 101.3766 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 2             | Naphthalene-d8<br>CAS # 1146-65-2<br>Purity 99%         | 2,000.0 µg/mL               | +/- 11.6282 µg/mL<br>+/- 92.7158 µg/mL<br>+/- 101.3766 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 3             | Acenaphthene-d10<br>CAS # 15067-26-2<br>Purity 97%      | 2,000.0 µg/mL               | +/- 11.6282 µg/mL<br>+/- 92.7163 µg/mL<br>+/- 101.3771 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 4             | Phenanthrene-d10<br>CAS # 1517-22-2<br>Purity 99%       | 2,000.0 µg/mL               | +/- 11.6282 µg/mL<br>+/- 92.7158 µg/mL<br>+/- 101.3766 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 5             | Chrysene-d12<br>CAS # 1719-03-5<br>Purity 98%           | 2,000.0 µg/mL               | +/- 11.6281 µg/mL<br>+/- 92.7150 µg/mL<br>+/- 101.3758 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 6             | Perylene-d12<br>CAS # 1520-96-3<br>Purity 99%           | 2,000.0 µg/mL               | +/- 11.6282 µg/mL<br>+/- 92.7158 µg/mL<br>+/- 101.3766 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| Solvent:      | Methylene Chloride<br>CAS # 75-09-2<br>Purity 99%       |                             |                                                              |                                       |

**Column:**

30m x .25mm x .25um  
Rtx-5 (cat.#10223)

**Carrier Gas:**

hydrogen-constant pressure 10 psi.

**Temp. Program:**

75°C (hold 1 min.) to 330°C  
@ 20°C/min. (hold 10 min.)

**Inj. Temp:**

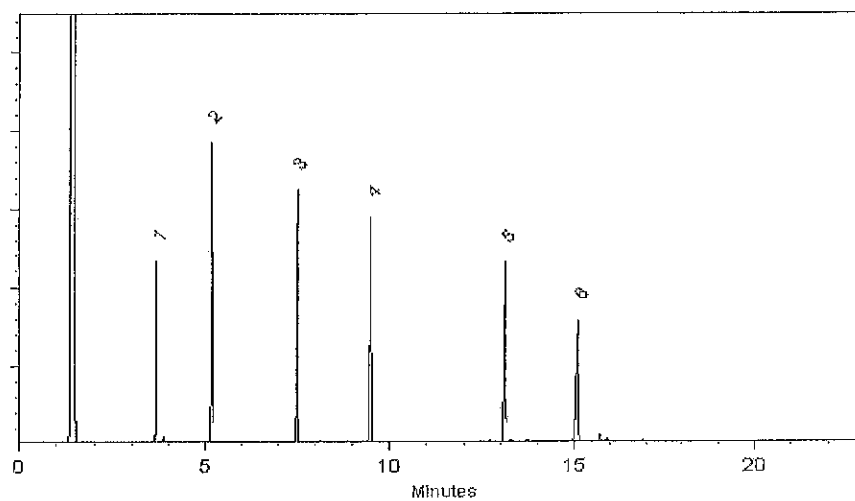
250°C

**Det. Temp:**

330°C

**Det. Type:**

FID



*Jodi E. Breon*  
Jodi E. Breon - QA Analyst

Date Passed: 27-Feb-2013

Balance: 1128342313

Manufactured under Restek's ISO 9001:2008  
Registered Quality System  
Certificate #FM 80397

Reagent

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**SVLVIntstd\_00004**





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## Certificate of Analysis

### FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 567684 **Lot No.:** A093676

**Description :** 8270 Internal Standard

8270 Internal Standard 2,000µg/mL, Methylene Chloride, 5mL/ampul

**Container Size :** 5 mL **Pkg Amt:** > 5 mL

**Expiration Date :** February 2018 **Storage:** 10°C or colder

**Handling:** Sonication required. Mix is photosensitive.

### CERTIFIED VALUES

| Elution Order | Compound               |            | Grav. Conc. (weight/volume) |       | Expanded Uncertainty (95% C.L.; K=2) |          |       |             |
|---------------|------------------------|------------|-----------------------------|-------|--------------------------------------|----------|-------|-------------|
| 1             | 1,4-Dichlorobenzene-d4 |            | 2,000.0                     | µg/mL | +/-                                  | 11.6282  | µg/mL | Gravimetric |
|               | CAS #                  | 3855-82-1  |                             |       | +/-                                  | 92.7158  | µg/mL | Unstressed  |
|               | Purity                 | 99%        |                             |       | +/-                                  | 101.3766 | µg/mL | Stressed    |
| 2             | Naphthalene-d8         |            | 2,000.0                     | µg/mL | +/-                                  | 11.6282  | µg/mL | Gravimetric |
|               | CAS #                  | 1146-65-2  |                             |       | +/-                                  | 92.7158  | µg/mL | Unstressed  |
|               | Purity                 | 99%        |                             |       | +/-                                  | 101.3766 | µg/mL | Stressed    |
| 3             | Acenaphthene-d10       |            | 2,000.0                     | µg/mL | +/-                                  | 11.6282  | µg/mL | Gravimetric |
|               | CAS #                  | 15067-26-2 |                             |       | +/-                                  | 92.7163  | µg/mL | Unstressed  |
|               | Purity                 | 97%        |                             |       | +/-                                  | 101.3771 | µg/mL | Stressed    |
| 4             | Phenanthrene-d10       |            | 2,000.0                     | µg/mL | +/-                                  | 11.6282  | µg/mL | Gravimetric |
|               | CAS #                  | 1517-22-2  |                             |       | +/-                                  | 92.7158  | µg/mL | Unstressed  |
|               | Purity                 | 99%        |                             |       | +/-                                  | 101.3766 | µg/mL | Stressed    |
| 5             | Chrysene-d12           |            | 2,000.0                     | µg/mL | +/-                                  | 11.6281  | µg/mL | Gravimetric |
|               | CAS #                  | 1719-03-5  |                             |       | +/-                                  | 92.7150  | µg/mL | Unstressed  |
|               | Purity                 | 98%        |                             |       | +/-                                  | 101.3758 | µg/mL | Stressed    |
| 6             | Perylene-d12           |            | 2,000.0                     | µg/mL | +/-                                  | 11.6282  | µg/mL | Gravimetric |
|               | CAS #                  | 1520-96-3  |                             |       | +/-                                  | 92.7158  | µg/mL | Unstressed  |
|               | Purity                 | 99%        |                             |       | +/-                                  | 101.3766 | µg/mL | Stressed    |
| Solvent:      | Methylene Chloride     |            |                             |       |                                      |          |       |             |
|               | CAS #                  | 75-09-2    |                             |       |                                      |          |       |             |
|               | Purity                 | 99%        |                             |       |                                      |          |       |             |

**Column:**  
30m x .25mm x .25um  
Rtx-5 (cat.#10223)

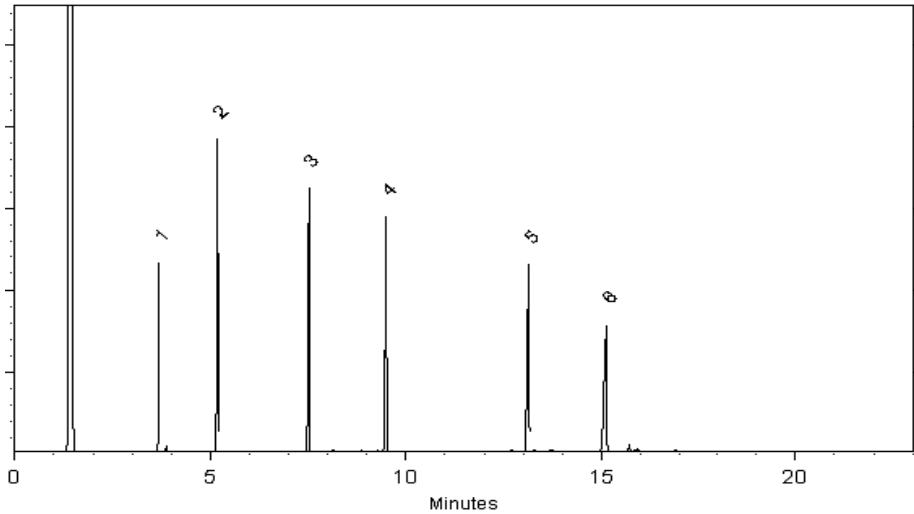
**Carrier Gas:**  
hydrogen-constant pressure 10 psi.

**Temp. Program:**  
75°C (hold 1 min.) to 330°C  
@ 20°C/min. (hold 10 min.)

**Inj. Temp:**  
250°C

**Det. Temp:**  
330°C

**Det. Type:**  
FID



*Jodi E. Breon*  
Jodi E. Breon - QA Analyst

Date Passed: 27-Feb-2013      Balance: 1128342313

Manufactured under Restek's ISO 9001:2008  
Registered Quality System  
Certificate #FM 80397

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date of the unopened ampul stored at the recommended storage condition is the last day of the month listed in the expiration date field.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value ( includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

$k$  is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at [www.restek.com/Contact-Us](http://www.restek.com/Contact-Us) for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

| Label Conditions                | Standard Conditions | Non-Standard Conditions |
|---------------------------------|---------------------|-------------------------|
| 25°C Nominal (Room Temperature) | < 60°C              | ≥ 60°C up to 7 days     |
| 10°C or colder (Refrigerate)    | < 40°C              | ≥ 40°C up to 7 days     |
| 0°C or colder (Freezer)         | < 25°C              | ≥ 25°C up to 7 days     |

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at [www.restek.com/Contact-Us](http://www.restek.com/Contact-Us).
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

### Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31840, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

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**SVLVstd1\_00032**



# CERTIFIED REFERENCE MATERIAL

110 Benner Circle  
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## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 569729 **Lot No.:** A0107399

**Description :** 8270 List 1 / Std #1 MegaMix (2015)  
8270 List 1 / Std #1 MegaMix (2015) 500-2000 ug/ml, Methylene Chloride, 5 ml/ampul

**Container Size :** 10 mL **Pkg Amt:** > 5 mL

**Expiration Date :** May 31, 2016 **Storage:** 10°C or colder

**Handling:** Carcinogen/reproductive toxin. Photosensitive. Sonicate.

### CERTIFIED VALUES

| Elution Order | Compound                                                               | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2)                                                       |
|---------------|------------------------------------------------------------------------|-----------------------------|--------------------------------------------------------------------------------------------|
| 1             | 1,4-Dioxane<br>CAS # 123-91-1 (Lot SHBD8744V)<br>Purity 99%            | 1,004.4 µg/mL               | +/- 5.8397 µg/mL Gravimetric<br>+/- 10.9969 µg/mL Unstressed<br>+/- 18.6525 µg/mL Stressed |
| 2             | Pyridine<br>CAS # 110-86-1 (Lot SHBC7174V)<br>Purity 99%               | 1,001.0 µg/mL               | +/- 5.8199 µg/mL Gravimetric<br>+/- 10.9596 µg/mL Unstressed<br>+/- 18.5894 µg/mL Stressed |
| 3             | N-Nitrosodimethylamine<br>CAS # 62-75-9 (Lot 3213100)<br>Purity 99%    | 1,000.2 µg/mL               | +/- 5.8152 µg/mL Gravimetric<br>+/- 10.9509 µg/mL Unstressed<br>+/- 18.5745 µg/mL Stressed |
| 4             | Aniline<br>CAS # 62-53-3 (Lot K22Z462)<br>Purity 99%                   | 1,002.3 µg/mL               | +/- 5.8275 µg/mL Gravimetric<br>+/- 10.9739 µg/mL Unstressed<br>+/- 18.6135 µg/mL Stressed |
| 5             | Bis(2-chloroethyl)ether<br>CAS # 111-44-4 (Lot 45296HKV)<br>Purity 99% | 1,001.4 µg/mL               | +/- 5.8222 µg/mL Gravimetric<br>+/- 10.9640 µg/mL Unstressed<br>+/- 18.5968 µg/mL Stressed |
| 6             | 2-Chlorophenol<br>CAS # 95-57-8 (Lot MKBD3900V)<br>Purity 99%          | 1,000.8 µg/mL               | +/- 5.8187 µg/mL Gravimetric<br>+/- 10.9575 µg/mL Unstressed<br>+/- 18.5856 µg/mL Stressed |
| 7             | Phenol<br>CAS # 108-95-2 (Lot SHBC6998V)<br>Purity 99%                 | 1,006.9 µg/mL               | +/- 5.8542 µg/mL Gravimetric<br>+/- 11.0242 µg/mL Unstressed<br>+/- 18.6989 µg/mL Stressed |

|    |                                                            |                 |               |     |         |       |             |
|----|------------------------------------------------------------|-----------------|---------------|-----|---------|-------|-------------|
| 24 | Bis(2-chloroethoxy)methane<br>CAS # 111-91-1<br>Purity 99% | (Lot 317200)    | 1,004.5 µg/mL | +/- | 5.8402  | µg/mL | Gravimetric |
|    |                                                            |                 |               | +/- | 10.9980 | µg/mL | Unstressed  |
|    |                                                            |                 |               | +/- | 18.6544 | µg/mL | Stressed    |
| 25 | 2,4-Dichlorophenol<br>CAS # 120-83-2<br>Purity 99%         | (Lot BCBH1617V) | 1,000.0 µg/mL | +/- | 5.8141  | µg/mL | Gravimetric |
|    |                                                            |                 |               | +/- | 10.9487 | µg/mL | Unstressed  |
|    |                                                            |                 |               | +/- | 18.5708 | µg/mL | Stressed    |
| 26 | 1,2,4-Trichlorobenzene<br>CAS # 120-82-1<br>Purity 99%     | (Lot 26896BM)   | 1,000.6 µg/mL | +/- | 5.8176  | µg/mL | Gravimetric |
|    |                                                            |                 |               | +/- | 10.9553 | µg/mL | Unstressed  |
|    |                                                            |                 |               | +/- | 18.5819 | µg/mL | Stressed    |
| 27 | Naphthalene<br>CAS # 91-20-3<br>Purity 99%                 | (Lot MKBH4351V) | 1,002.3 µg/mL | +/- | 5.8275  | µg/mL | Gravimetric |
|    |                                                            |                 |               | +/- | 10.9739 | µg/mL | Unstressed  |
|    |                                                            |                 |               | +/- | 18.6135 | µg/mL | Stressed    |
| 28 | 2,6-Dichlorophenol<br>CAS # 87-65-0<br>Purity 99%          | (Lot MKBN2776V) | 1,000.1 µg/mL | +/- | 5.8147  | µg/mL | Gravimetric |
|    |                                                            |                 |               | +/- | 10.9498 | µg/mL | Unstressed  |
|    |                                                            |                 |               | +/- | 18.5726 | µg/mL | Stressed    |
| 29 | 4-Chloroaniline<br>CAS # 106-47-8<br>Purity 98%            | (Lot 12528PH)   | 1,000.3 µg/mL | +/- | 5.8157  | µg/mL | Gravimetric |
|    |                                                            |                 |               | +/- | 10.9518 | µg/mL | Unstressed  |
|    |                                                            |                 |               | +/- | 18.5761 | µg/mL | Stressed    |
| 30 | Hexachlorobutadiene<br>CAS # 87-68-3<br>Purity 98%         | (Lot K22W009)   | 999.9 µg/mL   | +/- | 5.8135  | µg/mL | Gravimetric |
|    |                                                            |                 |               | +/- | 10.9475 | µg/mL | Unstressed  |
|    |                                                            |                 |               | +/- | 18.5688 | µg/mL | Stressed    |
| 31 | 2-Methylnaphthalene<br>CAS # 91-57-6<br>Purity 96%         | (Lot 19399MJV)  | 998.6 µg/mL   | +/- | 5.8059  | µg/mL | Gravimetric |
|    |                                                            |                 |               | +/- | 10.9333 | µg/mL | Unstressed  |
|    |                                                            |                 |               | +/- | 18.5446 | µg/mL | Stressed    |
| 32 | 4-Chloro-3-methylphenol<br>CAS # 59-50-7<br>Purity 99%     | (Lot STBC0769V) | 1,001.3 µg/mL | +/- | 5.8216  | µg/mL | Gravimetric |
|    |                                                            |                 |               | +/- | 10.9629 | µg/mL | Unstressed  |
|    |                                                            |                 |               | +/- | 18.5949 | µg/mL | Stressed    |
| 33 | 1-Methylnaphthalene<br>CAS # 90-12-0<br>Purity 99%         | (Lot 525000-10) | 1,000.0 µg/mL | +/- | 5.8141  | µg/mL | Gravimetric |
|    |                                                            |                 |               | +/- | 10.9487 | µg/mL | Unstressed  |
|    |                                                            |                 |               | +/- | 18.5708 | µg/mL | Stressed    |
| 34 | 1,2,4,5-Tetrachlorobenzene<br>CAS # 95-94-3<br>Purity 99%  | (Lot 06024AIV)  | 1,000.2 µg/mL | +/- | 5.8152  | µg/mL | Gravimetric |
|    |                                                            |                 |               | +/- | 10.9509 | µg/mL | Unstressed  |
|    |                                                            |                 |               | +/- | 18.5745 | µg/mL | Stressed    |
| 35 | Hexachlorocyclopentadiene<br>CAS # 77-47-4<br>Purity 99%   | (Lot 3140300)   | 1,002.4 µg/mL | +/- | 5.8280  | µg/mL | Gravimetric |
|    |                                                            |                 |               | +/- | 10.9750 | µg/mL | Unstressed  |
|    |                                                            |                 |               | +/- | 18.6154 | µg/mL | Stressed    |
| 36 | 2,4,6-Trichlorophenol<br>CAS # 88-06-2<br>Purity 99%       | (Lot MKBH7393V) | 1,001.4 µg/mL | +/- | 5.8222  | µg/mL | Gravimetric |
|    |                                                            |                 |               | +/- | 10.9640 | µg/mL | Unstressed  |
|    |                                                            |                 |               | +/- | 18.5968 | µg/mL | Stressed    |
| 37 | 2,4,5-Trichlorophenol<br>CAS # 95-95-4<br>Purity 99%       | (Lot FHM01)     | 1,000.0 µg/mL | +/- | 5.8141  | µg/mL | Gravimetric |
|    |                                                            |                 |               | +/- | 10.9487 | µg/mL | Unstressed  |
|    |                                                            |                 |               | +/- | 18.5708 | µg/mL | Stressed    |
| 38 | 2-Chloronaphthalene<br>CAS # 91-58-7<br>Purity 99%         | (Lot FIJ01)     | 1,000.0 µg/mL | +/- | 5.8141  | µg/mL | Gravimetric |
|    |                                                            |                 |               | +/- | 10.9487 | µg/mL | Unstressed  |
|    |                                                            |                 |               | +/- | 18.5708 | µg/mL | Stressed    |
| 39 | Biphenyl<br>CAS # 92-52-4<br>Purity 99%                    | (Lot 1277976)   | 1,006.1 µg/mL | +/- | 5.8496  | µg/mL | Gravimetric |
|    |                                                            |                 |               | +/- | 11.0155 | µg/mL | Unstressed  |
|    |                                                            |                 |               | +/- | 18.6841 | µg/mL | Stressed    |

|    |                                                                               |                   |               |                   |                               |                         |                                       |
|----|-------------------------------------------------------------------------------|-------------------|---------------|-------------------|-------------------------------|-------------------------|---------------------------------------|
| 56 | Azobenzene<br>CAS # 103-33-3<br>Purity 99%                                    | (Lot MKBS2559V)   | 1,002.3 µg/mL | +/-<br>+/-<br>+/- | 5.8275<br>10.9739<br>18.6135  | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 57 | Diphenylamine<br>CAS # 122-39-4<br>Purity 99%                                 | (Lot 07525MF)     | 1,713.4 µg/mL | +/-<br>+/-<br>+/- | 9.9619<br>18.7595<br>31.8192  | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 58 | 4-Nitroaniline<br>CAS # 100-01-6<br>Purity 99%                                | (Lot BCBG4702V)   | 1,002.8 µg/mL | +/-<br>+/-<br>+/- | 5.8304<br>10.9794<br>18.6228  | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 59 | 4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)<br>CAS # 534-52-1<br>Purity 99% | (Lot LC06195V)    | 2,002.0 µg/mL | +/-<br>+/-<br>+/- | 11.6398<br>21.9193<br>37.1787 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 60 | 4-Bromophenyl phenyl ether<br>CAS # 101-55-3<br>Purity 99%                    | (Lot STBB9729V)   | 1,000.5 µg/mL | +/-<br>+/-<br>+/- | 5.8170<br>10.9542<br>18.5801  | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 61 | Hexachlorobenzene<br>CAS # 118-74-1<br>Purity 98%                             | (Lot LC04221V)    | 1,002.1 µg/mL | +/-<br>+/-<br>+/- | 5.8260<br>10.9711<br>18.6089  | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 62 | Pentachlorophenol<br>CAS # 87-86-5<br>Purity 99%                              | (Lot 140626JLM)   | 2,000.3 µg/mL | +/-<br>+/-<br>+/- | 11.6299<br>21.9007<br>37.1471 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 63 | Phenanthrene<br>CAS # 85-01-8<br>Purity 98%                                   | (Lot MKBL6906V)   | 999.0 µg/mL   | +/-<br>+/-<br>+/- | 5.8083<br>10.9379<br>18.5524  | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 64 | n-Octadecane (C18)<br>CAS # 593-45-3<br>Purity 99%                            | (Lot OGCDK)       | 1,006.5 µg/mL | +/-<br>+/-<br>+/- | 5.8519<br>11.0199<br>18.6915  | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 65 | Anthracene<br>CAS # 120-12-7<br>Purity 99%                                    | (Lot MKBK5208V)   | 1,000.0 µg/mL | +/-<br>+/-<br>+/- | 5.8141<br>10.9487<br>18.5708  | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 66 | Carbazole<br>CAS # 86-74-8<br>Purity 98%                                      | (Lot S42950-417)  | 1,000.1 µg/mL | +/-<br>+/-<br>+/- | 5.8146<br>10.9497<br>18.5725  | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 67 | Di-n-butylphthalate<br>CAS # 84-74-2<br>Purity 99%                            | (Lot MKBL8501V)   | 1,000.0 µg/mL | +/-<br>+/-<br>+/- | 5.8141<br>10.9487<br>18.5708  | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 68 | Fluoranthene<br>CAS # 206-44-0<br>Purity 98%                                  | (Lot MKBQ6360V)   | 999.7 µg/mL   | +/-<br>+/-<br>+/- | 5.8123<br>10.9454<br>18.5652  | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 69 | Pyrene<br>CAS # 129-00-0<br>Purity 98%                                        | (Lot BCBJ0984V)   | 999.1 µg/mL   | +/-<br>+/-<br>+/- | 5.8089<br>10.9390<br>18.5543  | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 70 | Benzyl butyl phthalate<br>CAS # 85-68-7<br>Purity 99%                         | (Lot 03027HV)     | 1,001.2 µg/mL | +/-<br>+/-<br>+/- | 5.8211<br>10.9618<br>18.5931  | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 71 | Benz(a)anthracene<br>CAS # 56-55-3<br>Purity 99%                              | (Lot ER031412-01) | 1,001.4 µg/mL | +/-<br>+/-<br>+/- | 5.8222<br>10.9640<br>18.5968  | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |

**Column:**  
30m x 0.25mm x 0.25µm  
Rtx-5 (cat.#10223)

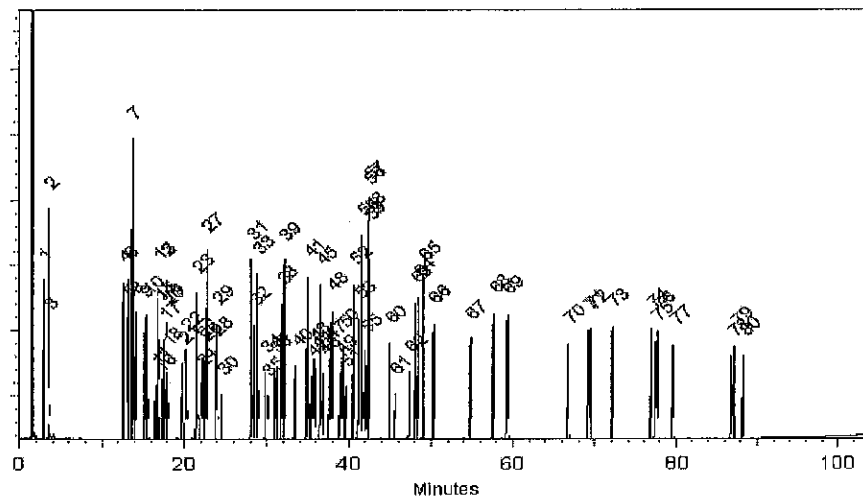
**Carrier Gas:**  
hydrogen-constant pressure 10 psi

**Temp. Program:**  
35°C (hold 3 min.) to 330°C  
@ 3°C/min. (hold 3 min.)

**Inj. Temp:**  
250°C

**Det. Temp:**  
300°C

**Det. Type:**  
FID

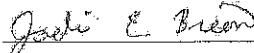


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

  
F. Joseph Tallon - Mix Technician

Date Mixed: 24-Nov-2014

Balance: 1128360905

  
Jodi E. Breon - QA Analyst

Date Passed: 05-Dec-2014

Manufactured under Restek's ISO 9001:2008  
Registered Quality System  
Certificate #FM 80397



Reagent

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**SVLVstd1\_00036**



110 Benner Circle  
Bellefonte, PA 16823-8812  
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# CERTIFIED REFERENCE MATERIAL

## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 569729 **Lot No.:** A0109703

**Description :** 8270 List 1 / Std #1 MegaMix (2015)  
8270 List 1 / Std #1 MegaMix (2015) 500-2000 ug/ml, Methylene Chloride, 5 ml/ampul

**Container Size :** 10 mL **Pkg Amt:** > 5 mL

**Expiration Date :** September 30, 2016 **Storage:** 10°C or colder

**Handling:** Carcinogen/reproductive toxin. Photosensitive. Sonicate.

### CERTIFIED VALUES

| Elution Order | Compound                       | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) |         |       |             |
|---------------|--------------------------------|-----------------------------|--------------------------------------|---------|-------|-------------|
| 1             | 1,4-Dioxane                    | 1,001.8 µg/mL               | +/-                                  | 5.8246  | µg/mL | Gravimetric |
|               | CAS # 123-91-1 (Lot SHBF2002V) |                             | +/-                                  | 10.9684 | µg/mL | Unstressed  |
|               | Purity 99%                     |                             | +/-                                  | 18.6042 | µg/mL | Stressed    |
| 2             | Pyridine                       | 1,004.7 µg/mL               | +/-                                  | 5.8414  | µg/mL | Gravimetric |
|               | CAS # 110-86-1 (Lot SHBC7174V) |                             | +/-                                  | 11.0002 | µg/mL | Unstressed  |
|               | Purity 99%                     |                             | +/-                                  | 18.6581 | µg/mL | Stressed    |
| 3             | N-Nitrosodimethylamine         | 1,000.0 µg/mL               | +/-                                  | 5.8141  | µg/mL | Gravimetric |
|               | CAS # 62-75-9 (Lot 3498100)    |                             | +/-                                  | 10.9487 | µg/mL | Unstressed  |
|               | Purity 99%                     |                             | +/-                                  | 18.5708 | µg/mL | Stressed    |
| 4             | Aniline                        | 1,000.9 µg/mL               | +/-                                  | 5.8193  | µg/mL | Gravimetric |
|               | CAS # 62-53-3 (Lot K22Z462)    |                             | +/-                                  | 10.9586 | µg/mL | Unstressed  |
|               | Purity 99%                     |                             | +/-                                  | 18.5875 | µg/mL | Stressed    |
| 5             | Bis(2-chloroethyl)ether        | 1,001.9 µg/mL               | +/-                                  | 5.8251  | µg/mL | Gravimetric |
|               | CAS # 111-44-4 (Lot 45296HKV)  |                             | +/-                                  | 10.9695 | µg/mL | Unstressed  |
|               | Purity 99%                     |                             | +/-                                  | 18.6061 | µg/mL | Stressed    |
| 6             | 2-Chlorophenol                 | 1,001.4 µg/mL               | +/-                                  | 5.8222  | µg/mL | Gravimetric |
|               | CAS # 95-57-8 (Lot MKBD3900V)  |                             | +/-                                  | 10.9640 | µg/mL | Unstressed  |
|               | Purity 99%                     |                             | +/-                                  | 18.5968 | µg/mL | Stressed    |
| 7             | Phenol                         | 1,000.3 µg/mL               | +/-                                  | 5.8158  | µg/mL | Gravimetric |
|               | CAS # 108-95-2 (Lot SHBC6998V) |                             | +/-                                  | 10.9520 | µg/mL | Unstressed  |
|               | Purity 99%                     |                             | +/-                                  | 18.5764 | µg/mL | Stressed    |

|    |                                                            |                 |               |                   |                              |                         |                                       |
|----|------------------------------------------------------------|-----------------|---------------|-------------------|------------------------------|-------------------------|---------------------------------------|
| 24 | Bis(2-chloroethoxy)methane<br>CAS # 111-91-1<br>Purity 99% | (Lot 2238100)   | 1,002.1 µg/mL | +/-<br>+/-<br>+/- | 5.8263<br>10.9717<br>18.6098 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 25 | 2,4-Dichlorophenol<br>CAS # 120-83-2<br>Purity 99%         | (Lot BCBH1617V) | 1,002.8 µg/mL | +/-<br>+/-<br>+/- | 5.8304<br>10.9794<br>18.6228 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 26 | 1,2,4-Trichlorobenzene<br>CAS # 120-82-1<br>Purity 98%     | (Lot SHBC5541V) | 1,000.4 µg/mL | +/-<br>+/-<br>+/- | 5.8163<br>10.9529<br>18.5779 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 27 | Naphthalene<br>CAS # 91-20-3<br>Purity 99%                 | (Lot MKBH4351V) | 1,002.5 µg/mL | +/-<br>+/-<br>+/- | 5.8286<br>10.9761<br>18.6172 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 28 | 2,6-Dichlorophenol<br>CAS # 87-65-0<br>Purity 99%          | (Lot MKBN2776V) | 1,001.7 µg/mL | +/-<br>+/-<br>+/- | 5.8240<br>10.9673<br>18.6024 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 29 | 4-Chloroaniline<br>CAS # 106-47-8<br>Purity 98%            | (Lot 12528PH)   | 1,000.3 µg/mL | +/-<br>+/-<br>+/- | 5.8157<br>10.9518<br>18.5761 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 30 | Hexachlorobutadiene<br>CAS # 87-68-3<br>Purity 98%         | (Lot J31X013)   | 1,002.1 µg/mL | +/-<br>+/-<br>+/- | 5.8260<br>10.9711<br>18.6089 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 31 | 2-Methylnaphthalene<br>CAS # 91-57-6<br>Purity 96%         | (Lot 19399MJV)  | 1,000.2 µg/mL | +/-<br>+/-<br>+/- | 5.8154<br>10.9512<br>18.5749 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 32 | 4-Chloro-3-methylphenol<br>CAS # 59-50-7<br>Purity 99%     | (Lot STBC0769V) | 1,000.9 µg/mL | +/-<br>+/-<br>+/- | 5.8193<br>10.9586<br>18.5875 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 33 | 1-Methylnaphthalene<br>CAS # 90-12-0<br>Purity 99%         | (Lot 525000-10) | 990.0 µg/mL   | +/-<br>+/-<br>+/- | 5.7692<br>10.8463<br>18.3892 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 34 | 1,2,4,5-Tetrachlorobenzene<br>CAS # 95-94-3<br>Purity 99%  | (Lot 06024AIV)  | 1,000.2 µg/mL | +/-<br>+/-<br>+/- | 5.8152<br>10.9509<br>18.5745 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 35 | Hexachlorocyclopentadiene<br>CAS # 77-47-4<br>Purity 99%   | (Lot 3691100)   | 1,000.2 µg/mL | +/-<br>+/-<br>+/- | 5.8152<br>10.9509<br>18.5745 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 36 | 2,4,6-Trichlorophenol<br>CAS # 88-06-2<br>Purity 98%       | (Lot MKBL4698V) | 999.9 µg/mL   | +/-<br>+/-<br>+/- | 5.8135<br>10.9475<br>18.5688 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 37 | 2,4,5-Trichlorophenol<br>CAS # 95-95-4<br>Purity 99%       | (Lot FHM01)     | 1,002.2 µg/mL | +/-<br>+/-<br>+/- | 5.8269<br>10.9728<br>18.6116 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 38 | 2-Chloronaphthalene<br>CAS # 91-58-7<br>Purity 99%         | (Lot FIJ01)     | 1,000.3 µg/mL | +/-<br>+/-<br>+/- | 5.8158<br>10.9520<br>18.5764 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 39 | Biphenyl<br>CAS # 92-52-4<br>Purity 99%                    | (Lot 1277976)   | 1,002.7 µg/mL | +/-<br>+/-<br>+/- | 5.8298<br>10.9783<br>18.6209 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |

|    |                                                                               |                   |               |                   |                               |                         |                                       |
|----|-------------------------------------------------------------------------------|-------------------|---------------|-------------------|-------------------------------|-------------------------|---------------------------------------|
| 56 | Azobenzene<br>CAS # 103-33-3<br>Purity 99%                                    | (Lot MKBS2559V)   | 1,000.9 µg/mL | +/-<br>+/-<br>+/- | 5.8193<br>10.9586<br>18.5875  | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 57 | Diphenylamine<br>CAS # 122-39-4<br>Purity 99%                                 | (Lot MKBN8295V)   | 1,701.0 µg/mL | +/-<br>+/-<br>+/- | 9.8898<br>18.6237<br>31.5889  | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 58 | 4-Nitroaniline<br>CAS # 100-01-6<br>Purity 99%                                | (Lot BCBG4702V)   | 1,002.6 µg/mL | +/-<br>+/-<br>+/- | 5.8292<br>10.9772<br>18.6191  | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 59 | 4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)<br>CAS # 534-52-1<br>Purity 99% | (Lot LC06195V)    | 2,000.8 µg/mL | +/-<br>+/-<br>+/- | 11.6328<br>21.9062<br>37.1564 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 60 | 4-Bromophenyl phenyl ether<br>CAS # 101-55-3<br>Purity 98%                    | (Lot STBB9729V)   | 999.5 µg/mL   | +/-<br>+/-<br>+/- | 5.8112<br>10.9432<br>18.5615  | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 61 | Hexachlorobenzene<br>CAS # 118-74-1<br>Purity 98%                             | (Lot LC04221V)    | 1,002.7 µg/mL | +/-<br>+/-<br>+/- | 5.8300<br>10.9787<br>18.6216  | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 62 | Pentachlorophenol<br>CAS # 87-86-5<br>Purity 99%                              | (Lot 150212JLM)   | 2,006.0 µg/mL | +/-<br>+/-<br>+/- | 11.6631<br>21.9631<br>37.2530 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 63 | Phenanthrene<br>CAS # 85-01-8<br>Purity 98%                                   | (Lot MKBQ8219V)   | 1,001.9 µg/mL | +/-<br>+/-<br>+/- | 5.8249<br>10.9690<br>18.6052  | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 64 | n-Octadecane (C18)<br>CAS # 593-45-3<br>Purity 99%                            | (Lot OGCDK)       | 1,000.3 µg/mL | +/-<br>+/-<br>+/- | 5.8158<br>10.9520<br>18.5764  | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 65 | Anthracene<br>CAS # 120-12-7<br>Purity 99%                                    | (Lot MKBR2268V)   | 1,001.2 µg/mL | +/-<br>+/-<br>+/- | 5.8211<br>10.9618<br>18.5931  | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 66 | Carbazole<br>CAS # 86-74-8<br>Purity 98%                                      | (Lot S42950-417)  | 1,002.9 µg/mL | +/-<br>+/-<br>+/- | 5.8311<br>10.9808<br>18.6252  | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 67 | Di-n-butylphthalate<br>CAS # 84-74-2<br>Purity 99%                            | (Lot MKBL8501V)   | 1,001.5 µg/mL | +/-<br>+/-<br>+/- | 5.8228<br>10.9651<br>18.5986  | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 68 | Fluoranthene<br>CAS # 206-44-0<br>Purity 98%                                  | (Lot MKBQ6360V)   | 999.8 µg/mL   | +/-<br>+/-<br>+/- | 5.8129<br>10.9465<br>18.5670  | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 69 | Pyrene<br>CAS # 129-00-0<br>Purity 99%                                        | (Lot BCBL6786V)   | 1,001.3 µg/mL | +/-<br>+/-<br>+/- | 5.8216<br>10.9629<br>18.5949  | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 70 | Benzyl butyl phthalate<br>CAS # 85-68-7<br>Purity 99%                         | (Lot 03027HV)     | 1,000.2 µg/mL | +/-<br>+/-<br>+/- | 5.8152<br>10.9509<br>18.5745  | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 71 | Benz(a)anthracene<br>CAS # 56-55-3<br>Purity 99%                              | (Lot ER031412-01) | 1,000.0 µg/mL | +/-<br>+/-<br>+/- | 5.8141<br>10.9487<br>18.5708  | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |

**Column:**  
30m x 0.25mm x 0.25µm  
Rtx-5 (cat.#10223)

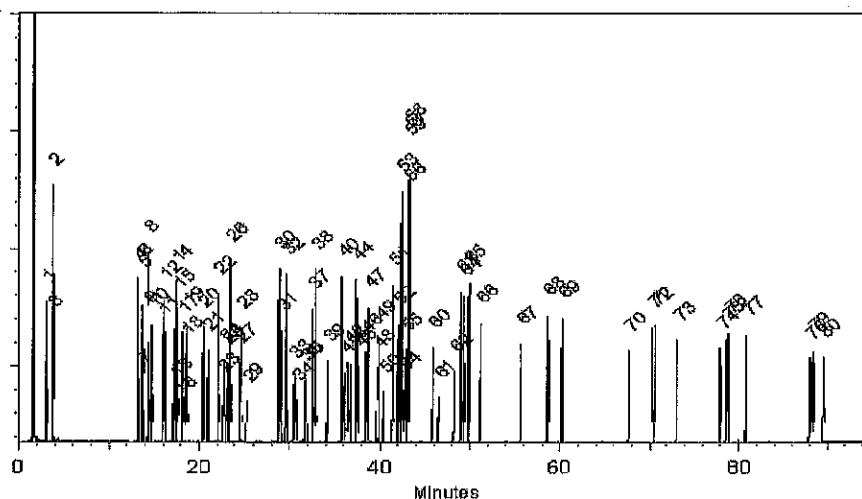
**Carrier Gas:**  
hydrogen-constant pressure 10 psi

**Temp. Program:**  
35°C (hold 3 min.) to 330°C  
@ 3°C/min. (hold 3 min.)

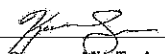
**Inj. Temp:**  
250°C

**Det. Temp:**  
300°C

**Det. Type:**  
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

  
Kendra Swope - Mix Technician

Date Mixed: 16-Mar-2015      Balance: B442140311

  
Tyler Brown - QA Analyst

Date Passed: 23-Mar-2015

Manufactured under Restek's ISO 9001:2008  
Registered Quality System  
Certificate #FM 80397

Reagent

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**SVLVstd10\_00001**



CERTIFIED REFERENCE MATERIAL

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## Certificate of Analysis



**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 569731 **Lot No.:** A0107943  
**Description :** 8270 List 1 / Std #10  
8270 List 1 / Std #10 2,000 ug/ml, Methylene Chloride, 5 ml/ampul  
**Container Size :** 5 mL **Pkg Amt:** > 5 mL  
**Expiration Date :** June 30, 2016 **Storage:** 10°C or colder

### CERTIFIED VALUES

| Elution Order | Compound           |         | Grav. Conc.<br>(weight/volume) | Expanded Uncertainty<br>(95% C.L.; K=2) |         |         |             |            |
|---------------|--------------------|---------|--------------------------------|-----------------------------------------|---------|---------|-------------|------------|
| 1             | Indene             |         | 2,001.4    µg/mL               | +/-                                     | 11.6363 | µg/mL   | Gravimetric |            |
|               | CAS #              | 95-13-6 |                                | (Lot MKBP3098V)                         | +/-     | 22.5687 | µg/mL       | Unstressed |
|               | Purity             | 99%     |                                |                                         | +/-     | 25.9700 | µg/mL       | Stressed   |
|               |                    |         |                                |                                         |         |         |             |            |
| 2             | Benzoic acid       |         | 2,005.8    µg/mL               | +/-                                     | 11.6619 | µg/mL   | Gravimetric |            |
|               | CAS #              | 65-85-0 |                                | (Lot MKBL6689V)                         | +/-     | 22.6183 | µg/mL       | Unstressed |
|               | Purity             | 99%     |                                |                                         | +/-     | 26.0271 | µg/mL       | Stressed   |
|               |                    |         |                                |                                         |         |         |             |            |
| Solvent:      | Methylene Chloride |         |                                |                                         |         |         |             |            |
|               | CAS #              | 75-09-2 |                                |                                         |         |         |             |            |
|               | Purity             | 99%     |                                |                                         |         |         |             |            |

Reagent

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**SVLVstd11\_00001**





# CERTIFIED REFERENCE MATERIAL

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## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 569732 **Lot No.:** A0108035

**Description :** 8270 List 1 / Std #11

8270 List 1 / Std #11 2,000 ug/ml, Methylene Chloride, 5 ml/ampul

**Container Size :** 5 mL **Pkg Amt:** > 5 mL

**Expiration Date :** June 30, 2016 **Storage:** 10°C or colder

**Handling:** This product is photosensitive.

### CERTIFIED VALUES

| Elution Order | Compound                                                             | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2)                                                                 |
|---------------|----------------------------------------------------------------------|-----------------------------|------------------------------------------------------------------------------------------------------|
| 1             | Benzaldehyde<br>CAS # 100-52-7<br>Purity 99%<br>(Lot SHBD3510V)      | 2,000.6 µg/mL               | +/- 11.6317 µg/mL<br>+/- 64.1305 µg/mL<br>+/- 74.5493 µg/mL<br>Gravimetric<br>Unstressed<br>Stressed |
| 2             | epsilon-Caprolactam<br>CAS # 105-60-2<br>Purity 99%<br>(Lot I16X016) | 2,001.2 µg/mL               | +/- 11.6351 µg/mL<br>+/- 64.1498 µg/mL<br>+/- 74.5716 µg/mL<br>Gravimetric<br>Unstressed<br>Stressed |
| 3             | Atrazine<br>CAS # 1912-24-9<br>Purity 98%<br>(Lot TZ8ED)             | 2,004.3 µg/mL               | +/- 11.6532 µg/mL<br>+/- 64.2490 µg/mL<br>+/- 74.6870 µg/mL<br>Gravimetric<br>Unstressed<br>Stressed |

**Solvent:** Methylene Chloride  
CAS # 75-09-2  
Purity 99%

Reagent

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**SVLVstd9\_00001**



CERTIFIED REFERENCE MATERIAL

110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

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## Certificate of Analysis



**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 569730 **Lot No.:** A0108709  
**Description :** 8270 List 1 / Std #9  
8270 List 1 / Std #9 2,000 ug/ml, Methylene Chloride, 5 ml/ampul  
**Container Size :** 10 mL **Pkg Amt:** > 5 mL  
**Expiration Date :** July 31, 2016 **Storage:** 10°C or colder  
**Handling:** Contains carcinogen/reproductive toxin.

### CERTIFIED VALUES

| Elution Order | Compound                                                              | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2)                                                        |
|---------------|-----------------------------------------------------------------------|-----------------------------|---------------------------------------------------------------------------------------------|
| 1             | Benzidine<br>CAS # 92-87-5 (Lot 141208JLM)<br>Purity 99%              | 2,006.6 µg/mL               | +/- 11.6665 µg/mL Gravimetric<br>+/- 21.9697 µg/mL Unstressed<br>+/- 37.2641 µg/mL Stressed |
| 2             | 3,3'-Dichlorobenzidine<br>CAS # 91-94-1 (Lot 141205JLM)<br>Purity 99% | 2,001.0 µg/mL               | +/- 11.6340 µg/mL Gravimetric<br>+/- 21.9083 µg/mL Unstressed<br>+/- 37.1601 µg/mL Stressed |
| Solvent:      | Methylene Chloride<br>CAS # 75-09-2<br>Purity 99%                     |                             |                                                                                             |

Reagent

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**SVLVSURRSPK\_00011**



**CERTIFIED REFERENCE MATERIAL**

110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

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# Certificate of Analysis



**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

Catalog No.: 567685 Lot No.: A0103615  
Description: 8270 Surrogate Standard  
8270 Surrogate Standard 5,000 ug/ml, Methylene Chloride, 5 ml/ampul  
Container Size: 5 mL Pkg Amt: > 5 mL  
Expiration Date: May 31, 2019 Storage: 10°C or colder  
Handling: Sonicate prior to use.

OT #1310492  
91  
90  
89  
88

## CERTIFIED VALUES

| Elution Order | Compound                                                               | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2)                          |                                       |
|---------------|------------------------------------------------------------------------|-----------------------------|---------------------------------------------------------------|---------------------------------------|
| 1             | 2-Fluorophenol<br>CAS # 367-12-4<br>Purity 99%<br>(Lot STBC5591V)      | 5,003.5 µg/mL               | +/- 29.0892 µg/mL<br>+/- 124.6713 µg/mL<br>+/- 156.7818 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 2             | Phenol-d5<br>CAS # 4165-62-2<br>Purity 99%<br>(Lot M387P4)             | 5,002.9 µg/mL               | +/- 29.0860 µg/mL<br>+/- 124.6575 µg/mL<br>+/- 156.7644 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 3             | Nitrobenzene-d5<br>CAS # 4165-60-0<br>Purity 99%<br>(Lot PR-20474)     | 5,001.4 µg/mL               | +/- 29.0773 µg/mL<br>+/- 124.6201 µg/mL<br>+/- 156.7174 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 4             | 2-Fluorobiphenyl<br>CAS # 321-60-8<br>Purity 99%<br>(Lot B11Y047)      | 5,004.4 µg/mL               | +/- 29.0947 µg/mL<br>+/- 124.6949 µg/mL<br>+/- 156.8114 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 5             | 2,4,6-Tribromophenol<br>CAS # 118-79-6<br>Purity 99%<br>(Lot 29699MJV) | 5,003.9 µg/mL               | +/- 29.0914 µg/mL<br>+/- 124.6805 µg/mL<br>+/- 156.7934 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 6             | p-Terphenyl-d14<br>CAS # 1718-51-0<br>Purity 99%<br>(Lot PR-20577)     | 5,007.1 µg/mL               | +/- 29.1100 µg/mL<br>+/- 124.7604 µg/mL<br>+/- 156.8938 µg/mL | Gravimetric<br>Unstressed<br>Stressed |

78501  
4247-4671-32

1243184

Reagent

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**SVLVSURRSPK\_00014**



# CERTIFIED REFERENCE MATERIAL

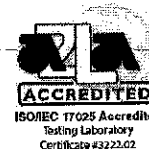
110 Benner Circle  
Bellefonte, PA 16823-8812

Tel: (800)356-1688

Fax: (814)353-1309

www.restek.com

## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 567685 **Lot No.:** A0103615

**Description :** 8270 Surrogate Standard  
8270 Surrogate Standard 5,000 ug/ml, Methylene Chloride, 5 ml/ampul

**Container Size :** 5 mL **Pkg Amt:** > 5 mL

**Expiration Date :** May 31, 2019 **Storage:** 10°C or colder

**Handling:** Sonicate prior to use.

### CERTIFIED VALUES

| Elution Order | Compound                                                               | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2)                                                          |
|---------------|------------------------------------------------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------|
| 1             | 2-Fluorophenol<br>CAS # 367-12-4<br>Purity 99%<br>(Lot STBC5591V)      | 5,003.5 µg/mL               | +/- 29.0892 µg/mL Gravimetric<br>+/- 124.6713 µg/mL Unstressed<br>+/- 156.7818 µg/mL Stressed |
| 2             | Phenol-d5<br>CAS # 4165-62-2<br>Purity 99%<br>(Lot M387P4)             | 5,002.9 µg/mL               | +/- 29.0860 µg/mL Gravimetric<br>+/- 124.6575 µg/mL Unstressed<br>+/- 156.7644 µg/mL Stressed |
| 3             | Nitrobenzene-d5<br>CAS # 4165-60-0<br>Purity 99%<br>(Lot PR-20474)     | 5,001.4 µg/mL               | +/- 29.0773 µg/mL Gravimetric<br>+/- 124.6201 µg/mL Unstressed<br>+/- 156.7174 µg/mL Stressed |
| 4             | 2-Fluorobiphenyl<br>CAS # 321-60-8<br>Purity 99%<br>(Lot E11Y047)      | 5,004.4 µg/mL               | +/- 29.0947 µg/mL Gravimetric<br>+/- 124.6949 µg/mL Unstressed<br>+/- 156.8114 µg/mL Stressed |
| 5             | 2,4,6-Tribromophenol<br>CAS # 118-79-6<br>Purity 99%<br>(Lot 29699MJV) | 5,003.9 µg/mL               | +/- 29.0914 µg/mL Gravimetric<br>+/- 124.6805 µg/mL Unstressed<br>+/- 156.7934 µg/mL Stressed |
| 6             | p-Terphenyl-d14<br>CAS # 1718-51-0<br>Purity 99%<br>(Lot PR-20577)     | 5,007.1 µg/mL               | +/- 29.1100 µg/mL Gravimetric<br>+/- 124.7604 µg/mL Unstressed<br>+/- 156.8938 µg/mL Stressed |

Reagent

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**svmethy1metha\_00011**





**CERTIFIED WEIGHT REPORT**

**Part Number:** 70443  
**Lot Number:** 021315  
**Description:** Methyl methane sulfonate

**Solvent(s):** Lot#  
Methylene chloride 72062

**Expiration Date:** 021320  
**Recommended Storage:** Refrigerate (4 °C)  
**Nominal Concentration (µg/mL):** 1000

**Weight(s) shown below were combined and diluted to:** 25.0  
**Balance Uncertainty:** 5E-05  
**Flask Uncertainty:** 0.001

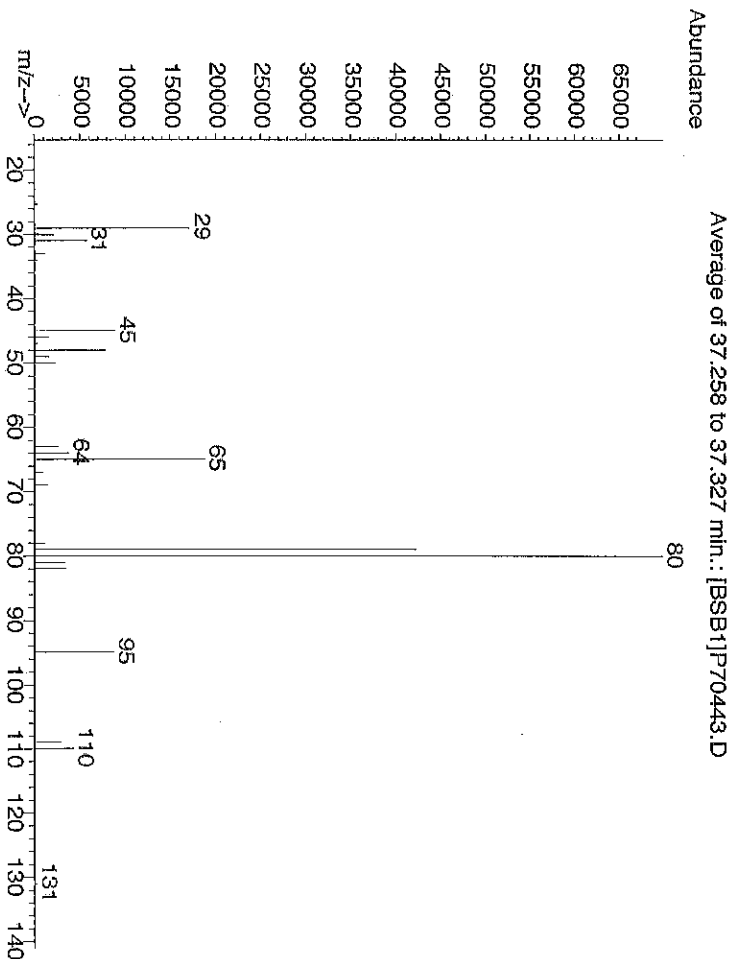
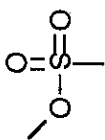
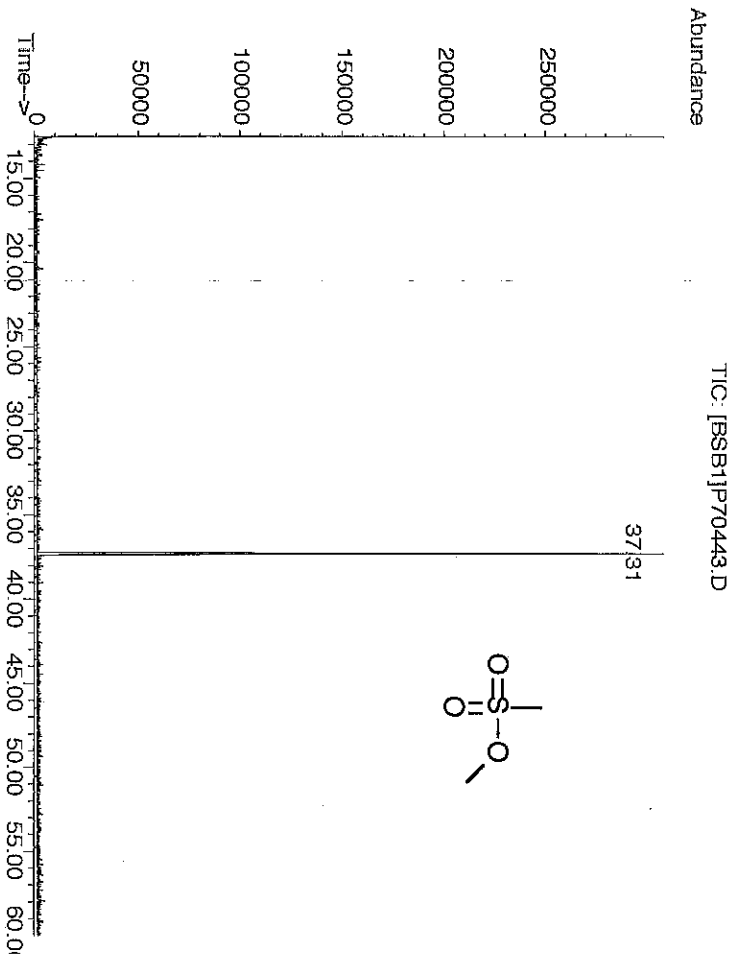
|                        |                 |
|------------------------|-----------------|
| <i>Paul Barron</i>     |                 |
| Formulated By:         | Paul Barron     |
| DATE                   | 021315          |
| <i>Pedro L. Rentas</i> |                 |
| Reviewed By:           | Pedro L. Rentas |
| DATE                   | 021315          |

**MSDS Information**

| Compound | RW# | Lot Number | Conc (µg/mL) | Nominal Purity (%) | Uncertainty Purity (%) | Target Weight (g) | Actual Weight (g) | Actual Conc (µg/mL) | Expanded Uncertainty | (Solvent Safety Info. On Attached pg.) | CAS# | OSHA PEL (TWA) | LD50 |
|----------|-----|------------|--------------|--------------------|------------------------|-------------------|-------------------|---------------------|----------------------|----------------------------------------|------|----------------|------|
|----------|-----|------------|--------------|--------------------|------------------------|-------------------|-------------------|---------------------|----------------------|----------------------------------------|------|----------------|------|

|                             |     |         |      |    |     |         |         |        |         |            |     |                   |
|-----------------------------|-----|---------|------|----|-----|---------|---------|--------|---------|------------|-----|-------------------|
| 1. Methyl methane sulfonate | 443 | 07322PW | 1000 | 99 | 0.2 | 0.02524 | 0.02530 | 1002.2 | 0.00565 | 00066-27-3 | N/A | or 1 rat 225mg/kg |
|-----------------------------|-----|---------|------|----|-----|---------|---------|--------|---------|------------|-----|-------------------|

**Method GC6MSD-1:** Column: Vocol (60m X 0.25mm ID X 1.5µm film thickness), Temp. 1=35°C (10min.), Temp. 2=200°C (8.75 min.), Rate=4°C/min., Injector Temp.=200°C, Detector Temp.=220°C. Analysis performed by Pedro Rentas.



Reagent

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**SVNNITROPYROs\_00015**



**CERTIFIED WEIGHT REPORT**

**Part Number:** 70451  
**Lot Number:** 060514  
**Description:** N-Nitrosopyrrolidine  
**Expiration Date:** 060517  
**Recommended Storage:** Freezer (0 °C)  
**Nominal Concentration (µg/mL):** 1000

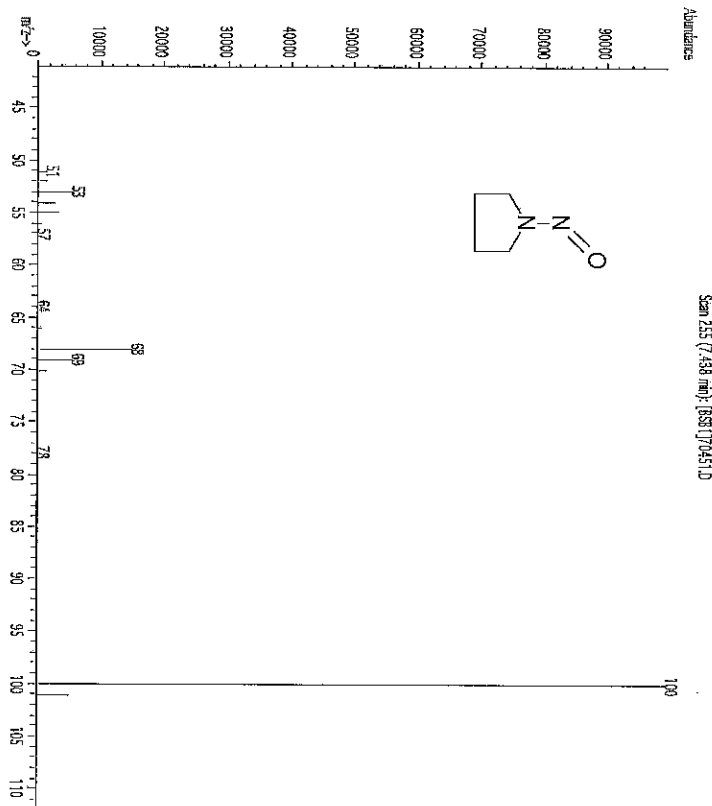
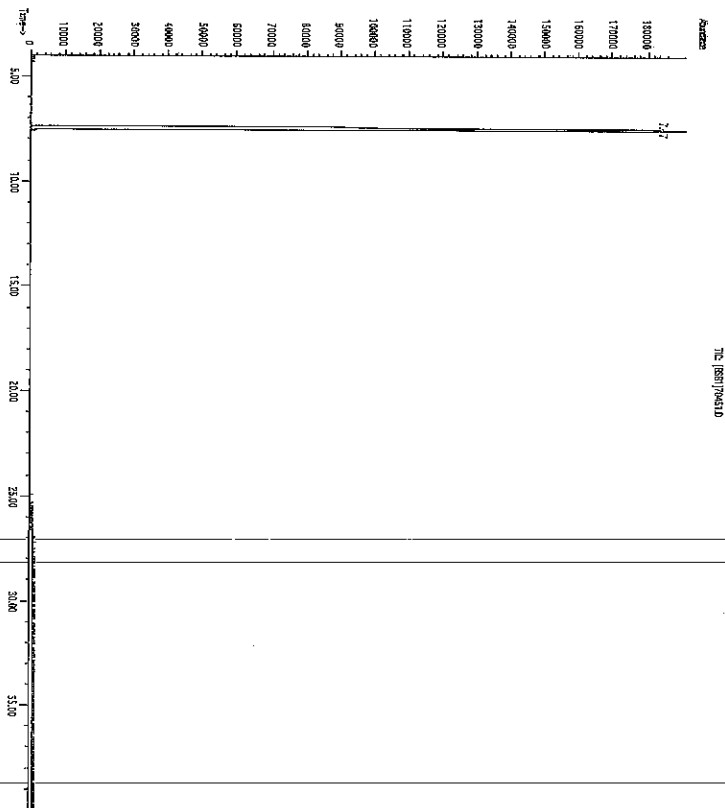
**Solvent(s):** Lot # 62418 Methylene chloride

**Weight(s) shown below were combined and diluted to:** 25.0  
**SE-05 Balance Uncertainty:** 0.001 Flask Uncertainty

|                |                 |        |      |
|----------------|-----------------|--------|------|
| Formulated By: | Paul Barron     | 060514 | DATE |
| Reviewed By:   | Pedro L. Rentas | 060514 | DATE |

| Compound | MSDS Information |                      |            |             |                   |                   |                     |                      |                                        |                |
|----------|------------------|----------------------|------------|-------------|-------------------|-------------------|---------------------|----------------------|----------------------------------------|----------------|
|          | Lot Number       | Nominal Conc (µg/mL) | Purity (%) | Uncertainty | Target Weight (g) | Actual Weight (g) | Actual Conc (µg/mL) | Expanded Uncertainty | (Solvent Safety Info. On Attached pg.) |                |
|          | RM#              |                      |            |             |                   |                   |                     |                      | CAS#                                   | OSHA PEL (TWA) |
|          |                  |                      |            |             |                   |                   |                     |                      |                                        | LD50           |

**Method GC8MSD-3.M:** Column:SPB-5 (30m X 0.25mm ID X 0.25µm film thickness) Temp 1 = 50°C (1min.), Temp 2 = 300°C (9min.), Rate = 10°C/min., Injector B= 200°C, Detector B = 275°C, Split Ratio = 100:1, Scan Rate = 2. Analysis performed by: Candice Warren.



Reagent

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**VOA8260GAS1ST\_00110**



# CERTIFIED REFERENCE MATERIAL

110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

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## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

Catalog No. : 569722 Lot No.: A0110070  
Description : 8260 List 1 / Std #3 Gases (2015)  
8260 List 1 / Std #3 Gases (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul  
Container Size : 2 mL Pkg Amt: > 1 mL  
Expiration Date : April 30, 2018 Storage: 0°C or colder

### CERTIFIED VALUES

| Elution Order | Compound                         | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) |         |       |             |
|---------------|----------------------------------|-----------------------------|--------------------------------------|---------|-------|-------------|
| 1             | Dichlorodifluoromethane (CFC-12) | 2,499.9 µg/mL               | +/-                                  | 17.9502 | µg/mL | Gravimetric |
|               | CAS # 75-71-8 (Lot Q167-08)      |                             | +/-                                  | 30.0934 | µg/mL | Unstressed  |
|               | Purity 99%                       |                             | +/-                                  | 34.1055 | µg/mL | Stressed    |
|               |                                  |                             |                                      |         |       |             |
| 2             | Chloromethane (methyl chloride)  | 2,500.1 µg/mL               | +/-                                  | 17.2963 | µg/mL | Gravimetric |
|               | CAS # 74-87-3 (Lot SHBC8470V)    |                             | +/-                                  | 29.7101 | µg/mL | Unstressed  |
|               | Purity 99%                       |                             | +/-                                  | 33.7686 | µg/mL | Stressed    |
|               |                                  |                             |                                      |         |       |             |
| 3             | Vinyl chloride                   | 2,500.2 µg/mL               | +/-                                  | 16.5642 | µg/mL | Gravimetric |
|               | CAS # 75-01-4 (Lot 17542)        |                             | +/-                                  | 29.2906 | µg/mL | Unstressed  |
|               | Purity 99%                       |                             | +/-                                  | 33.4004 | µg/mL | Stressed    |
|               |                                  |                             |                                      |         |       |             |
| 4             | 1,3-Butadiene                    | 2,500.0 µg/mL               | +/-                                  | 17.0072 | µg/mL | Gravimetric |
|               | CAS # 106-99-0 (Lot SHBF3387V)   |                             | +/-                                  | 29.5416 | µg/mL | Unstressed  |
|               | Purity 99%                       |                             | +/-                                  | 33.6200 | µg/mL | Stressed    |
|               |                                  |                             |                                      |         |       |             |
| 5             | Bromomethane (methyl bromide)    | 2,499.8 µg/mL               | +/-                                  | 18.9451 | µg/mL | Gravimetric |
|               | CAS # 74-83-9 (Lot 101604)       |                             | +/-                                  | 30.6969 | µg/mL | Unstressed  |
|               | Purity 99%                       |                             | +/-                                  | 34.6391 | µg/mL | Stressed    |
|               |                                  |                             |                                      |         |       |             |
| 6             | Chloroethane (ethyl chloride)    | 2,500.3 µg/mL               | +/-                                  | 17.6395 | µg/mL | Gravimetric |
|               | CAS # 75-00-3 (Lot SHBD1717V)    |                             | +/-                                  | 29.9122 | µg/mL | Unstressed  |
|               | Purity 99%                       |                             | +/-                                  | 33.9470 | µg/mL | Stressed    |
|               |                                  |                             |                                      |         |       |             |
| 7             | Dichlorofluoromethane (CFC-21)   | 2,500.2 µg/mL               | +/-                                  | 16.7318 | µg/mL | Gravimetric |
|               | CAS # 75-43-4 (Lot Q9B-58)       |                             | +/-                                  | 29.3854 | µg/mL | Unstressed  |
|               | Purity 99%                       |                             | +/-                                  | 33.4835 | µg/mL | Stressed    |
|               |                                  |                             |                                      |         |       |             |

|   |                                 |         |       |     |         |       |             |
|---|---------------------------------|---------|-------|-----|---------|-------|-------------|
| 8 | Trichlorofluoromethane (CFC-11) | 2,500.3 | µg/mL | +/- | 16.5866 | µg/mL | Gravimetric |
|   | CAS # 75-69-4 (Lot SHBD5121V)   |         |       | +/- | 29.3037 | µg/mL | Unstressed  |
|   | Purity 99%                      |         |       | +/- | 33.4120 | µg/mL | Stressed    |

**Solvent:** P&T Methanol  
**CAS #** 67-56-1  
**Purity** 99%

**Column:**  
60m x 0.25mm x 1.4µm  
Rtx-502.2 (cat.#10916)

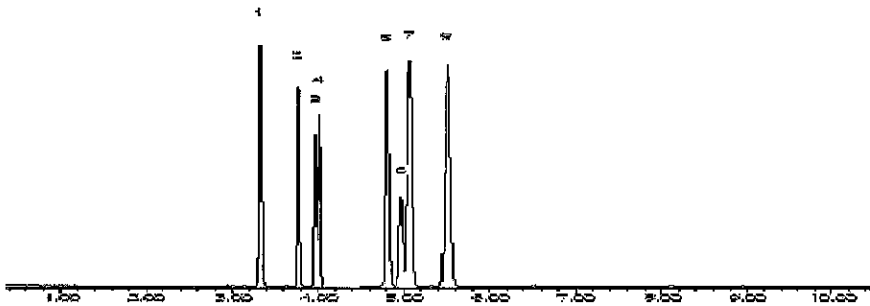
**Carrier Gas:**  
helium-constant flow 2.0 mL/min.

**Temp. Program:**  
40°C (hold 6 min.) to 100°C  
@ 6°C/min.

**Inj. Temp:**  
200°C

**Det. Temp:**  
250°C

**Det. Type:**  
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

*[Signature]*  
F. Joseph Tallon - Mix Technician

**Date Mixed:** 02-Apr-2015      **Balance:** B251644995

*[Signature]*  
Tyler Brown - QA Analyst

**Date Passed:** 08-Apr-2015

Manufactured under Restek's ISO 9001:2008  
Registered Quality System  
Certificate #FM 80397

Reagent

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**VOA8260GAS1ST\_00113**



# CERTIFIED REFERENCE MATERIAL

110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

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## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 569722 **Lot No.:** A0110070

**Description :** 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** April 30, 2018 **Storage:** 0°C or colder

### CERTIFIED VALUES

| Elution Order | Compound                         | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) |         |       |             |
|---------------|----------------------------------|-----------------------------|--------------------------------------|---------|-------|-------------|
| 1             | Dichlorodifluoromethane (CFC-12) | 2,499.9 µg/mL               | +/-                                  | 17.9502 | µg/mL | Gravimetric |
|               | CAS # 75-71-8 (Lot Q167-08)      |                             | +/-                                  | 30.0934 | µg/mL | Unstressed  |
|               | Purity 99%                       |                             | +/-                                  | 34.1055 | µg/mL | Stressed    |
| 2             | Chloromethane (methyl chloride)  | 2,500.1 µg/mL               | +/-                                  | 17.2963 | µg/mL | Gravimetric |
|               | CAS # 74-87-3 (Lot SHBC8470V)    |                             | +/-                                  | 29.7101 | µg/mL | Unstressed  |
|               | Purity 99%                       |                             | +/-                                  | 33.7686 | µg/mL | Stressed    |
| 3             | Vinyl chloride                   | 2,500.2 µg/mL               | +/-                                  | 16.5642 | µg/mL | Gravimetric |
|               | CAS # 75-01-4 (Lot 17542)        |                             | +/-                                  | 29.2906 | µg/mL | Unstressed  |
|               | Purity 99%                       |                             | +/-                                  | 33.4004 | µg/mL | Stressed    |
| 4             | 1,3-Butadiene                    | 2,500.0 µg/mL               | +/-                                  | 17.0072 | µg/mL | Gravimetric |
|               | CAS # 106-99-0 (Lot SHBF3387V)   |                             | +/-                                  | 29.5416 | µg/mL | Unstressed  |
|               | Purity 99%                       |                             | +/-                                  | 33.6200 | µg/mL | Stressed    |
| 5             | Bromomethane (methyl bromide)    | 2,499.8 µg/mL               | +/-                                  | 18.9451 | µg/mL | Gravimetric |
|               | CAS # 74-83-9 (Lot 101604)       |                             | +/-                                  | 30.6969 | µg/mL | Unstressed  |
|               | Purity 99%                       |                             | +/-                                  | 34.6391 | µg/mL | Stressed    |
| 6             | Chloroethane (ethyl chloride)    | 2,500.3 µg/mL               | +/-                                  | 17.6395 | µg/mL | Gravimetric |
|               | CAS # 75-00-3 (Lot SHBD1717V)    |                             | +/-                                  | 29.9122 | µg/mL | Unstressed  |
|               | Purity 99%                       |                             | +/-                                  | 33.9470 | µg/mL | Stressed    |
| 7             | Dichlorofluoromethane (CFC-21)   | 2,500.2 µg/mL               | +/-                                  | 16.7318 | µg/mL | Gravimetric |
|               | CAS # 75-43-4 (Lot Q9B-58)       |                             | +/-                                  | 29.3854 | µg/mL | Unstressed  |
|               | Purity 99%                       |                             | +/-                                  | 33.4835 | µg/mL | Stressed    |



|   |                                 |         |       |     |         |       |             |
|---|---------------------------------|---------|-------|-----|---------|-------|-------------|
| 8 | Trichlorofluoromethane (CFC-11) | 2,500.3 | µg/mL | +/- | 16.5866 | µg/mL | Gravimetric |
|   | CAS # 75-69-4 (Lot SHBD5121V)   |         |       | +/- | 29.3037 | µg/mL | Unstressed  |
|   | Purity 99%                      |         |       | +/- | 33.4120 | µg/mL | Stressed    |

**Solvent:** P&T Methanol  
**CAS #** 67-56-1  
**Purity** 99%

**Column:**  
60m x 0.25mm x 1.4µm  
Rtx-502.2 (cat.#10916)

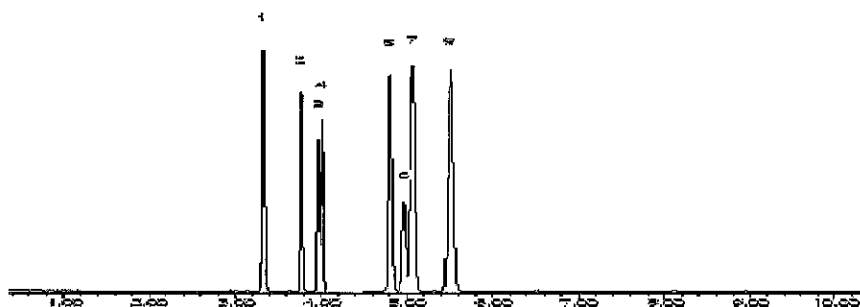
**Carrier Gas:**  
helium-constant flow 2.0 mL/min.

**Temp. Program:**  
40°C (hold 6 min.) to 100°C  
@ 6°C/min.

**Inj. Temp:**  
200°C

**Det. Temp:**  
250°C

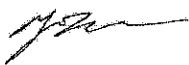
**Det. Type:**  
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

  
F. Joseph Tallon - Mix Technician

**Date Mixed:** 02-Apr-2015 **Balance:** B251644995

  
Tyler Brown - QA Analyst

**Date Passed:** 08-Apr-2015

Manufactured under Restek's ISO 9001:2008  
Registered Quality System  
Certificate #FM 80397

Reagent

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**VOA8260GAS1ST\_00118**



# CERTIFIED REFERENCE MATERIAL

110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

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## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

Catalog No.: 569722 Lot No.: A0110070  
Description: 8260 List 1 / Std #3 Gases (2015)  
8260 List 1 / Std #3 Gases (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul  
Container Size: 2 mL Pkg Amt: > 1 mL  
Expiration Date: April 30, 2018 Storage: 0°C or colder

### CERTIFIED VALUES

| Elution Order | Compound                                                                       | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) |         |       |             |
|---------------|--------------------------------------------------------------------------------|-----------------------------|--------------------------------------|---------|-------|-------------|
| 1             | Dichlorodifluoromethane (CFC-12)<br>CAS # 75-71-8 (Lot Q167-08)<br>Purity 99%  | 2,499.9 µg/mL               | +/-                                  | 17.9502 | µg/mL | Gravimetric |
|               |                                                                                |                             | +/-                                  | 30.0934 | µg/mL | Unstressed  |
|               |                                                                                |                             | +/-                                  | 34.1055 | µg/mL | Stressed    |
|               |                                                                                |                             |                                      |         |       |             |
| 2             | Chloromethane (methyl chloride)<br>CAS # 74-87-3 (Lot SHBC8470V)<br>Purity 99% | 2,500.1 µg/mL               | +/-                                  | 17.2963 | µg/mL | Gravimetric |
|               |                                                                                |                             | +/-                                  | 29.7101 | µg/mL | Unstressed  |
|               |                                                                                |                             | +/-                                  | 33.7686 | µg/mL | Stressed    |
|               |                                                                                |                             |                                      |         |       |             |
| 3             | Vinyl chloride<br>CAS # 75-01-4 (Lot 17542)<br>Purity 99%                      | 2,500.2 µg/mL               | +/-                                  | 16.5642 | µg/mL | Gravimetric |
|               |                                                                                |                             | +/-                                  | 29.2906 | µg/mL | Unstressed  |
|               |                                                                                |                             | +/-                                  | 33.4004 | µg/mL | Stressed    |
|               |                                                                                |                             |                                      |         |       |             |
| 4             | 1,3-Butadiene<br>CAS # 106-99-0 (Lot SHBF3387V)<br>Purity 99%                  | 2,500.0 µg/mL               | +/-                                  | 17.0072 | µg/mL | Gravimetric |
|               |                                                                                |                             | +/-                                  | 29.5416 | µg/mL | Unstressed  |
|               |                                                                                |                             | +/-                                  | 33.6200 | µg/mL | Stressed    |
|               |                                                                                |                             |                                      |         |       |             |
| 5             | Bromomethane (methyl bromide)<br>CAS # 74-83-9 (Lot 101604)<br>Purity 99%      | 2,499.8 µg/mL               | +/-                                  | 18.9451 | µg/mL | Gravimetric |
|               |                                                                                |                             | +/-                                  | 30.6969 | µg/mL | Unstressed  |
|               |                                                                                |                             | +/-                                  | 34.6391 | µg/mL | Stressed    |
|               |                                                                                |                             |                                      |         |       |             |
| 6             | Chloroethane (ethyl chloride)<br>CAS # 75-00-3 (Lot SHBD1717V)<br>Purity 99%   | 2,500.3 µg/mL               | +/-                                  | 17.6395 | µg/mL | Gravimetric |
|               |                                                                                |                             | +/-                                  | 29.9122 | µg/mL | Unstressed  |
|               |                                                                                |                             | +/-                                  | 33.9470 | µg/mL | Stressed    |
|               |                                                                                |                             |                                      |         |       |             |
| 7             | Dichlorofluoromethane (CFC-21)<br>CAS # 75-43-4 (Lot Q9B-58)<br>Purity 99%     | 2,500.2 µg/mL               | +/-                                  | 16.7318 | µg/mL | Gravimetric |
|               |                                                                                |                             | +/-                                  | 29.3854 | µg/mL | Unstressed  |
|               |                                                                                |                             | +/-                                  | 33.4835 | µg/mL | Stressed    |
|               |                                                                                |                             |                                      |         |       |             |

|   |                                 |               |             |       |             |
|---|---------------------------------|---------------|-------------|-------|-------------|
| 8 | Trichlorofluoromethane (CFC-11) | 2,500.3 µg/mL | +/- 16.5866 | µg/mL | Gravimetric |
|   | CAS # 75-69-4 (Lot SHBD5121V)   |               | +/- 29.3037 | µg/mL | Unstressed  |
|   | Purity 99%                      |               | +/- 33.4120 | µg/mL | Stressed    |

Solvent: P&T Methanol  
CAS # 67-56-1  
Purity 99%

Column:  
60m x 0.25mm x 1.4µm  
Rtx-502.2 (cat.#10916)

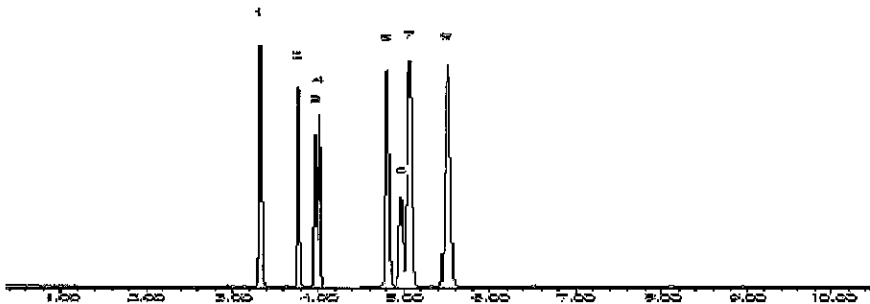
Carrier Gas:  
helium-constant flow 2.0 mL/min.

Temp. Program:  
40°C (hold 6 min.) to 100°C  
@ 6°C/min.

Inj. Temp:  
200°C

Det. Temp:  
250°C

Det. Type:  
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

*[Signature]*  
F. Joseph Tallon - Mix Technician

Date Mixed: 02-Apr-2015      Balance: B251644995

*[Signature]*  
Tyler Brown - QA Analyst

Date Passed: 08-Apr-2015

Manufactured under Restek's ISO 9001:2008  
Registered Quality System  
Certificate #FM 80397

Reagent

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**VOA8260GAS2ND\_00115**



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### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

Catalog No. : 569722.SEC Lot No.: A0111273

Description : 8260 List 1 / Std #3 Gases (2015)

8260 List 1 / Std #3 Gases (2015) 2,500 ug/ml, P&T Methanol, 1 ml/ampul

Container Size : 2 mL Pkg Amt: > 1 mL

Expiration Date : May 31, 2018 Storage: 0°C or colder

### CERTIFIED VALUES

| Elution Order | Compound                          | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L., K=2) |         |       |             |
|---------------|-----------------------------------|-----------------------------|--------------------------------------|---------|-------|-------------|
| 1             | Dichlorodifluoromethane (CFC-12)  | 2,497.6 µg/mL               | +/-                                  | 24.0984 | µg/mL | Gravimetric |
|               | CAS # 75-71-8.SEC (Lot 21773)     |                             | +/-                                  | 34.1039 | µg/mL | Unstressed  |
|               | Purity 99%                        |                             | +/-                                  | 37.6853 | µg/mL | Stressed    |
| 2             | Chloromethane (methyl chloride)   | 2,503.8 µg/mL               | +/-                                  | 21.5368 | µg/mL | Gravimetric |
|               | CAS # 74-87-3.SEC (Lot 18343)     |                             | +/-                                  | 32.3897 | µg/mL | Unstressed  |
|               | Purity 99%                        |                             | +/-                                  | 36.1592 | µg/mL | Stressed    |
| 3             | Vinyl chloride                    | 2,492.0 µg/mL               | +/-                                  | 23.1023 | µg/mL | Gravimetric |
|               | CAS # 75-01-4.SEC (Lot MKBK6872V) |                             | +/-                                  | 33.3685 | µg/mL | Unstressed  |
|               | Purity 99%                        |                             | +/-                                  | 37.0056 | µg/mL | Stressed    |
| 4             | 1,3-Butadiene                     | 2,488.6 µg/mL               | +/-                                  | 19.2643 | µg/mL | Gravimetric |
|               | CAS # 106-99-0.SEC (Lot 18349)    |                             | +/-                                  | 30.8102 | µg/mL | Unstressed  |
|               | Purity 99%                        |                             | +/-                                  | 34.7063 | µg/mL | Stressed    |
| 5             | Bromomethane (methyl bromide)     | 2,491.9 µg/mL               | +/-                                  | 20.7776 | µg/mL | Gravimetric |
|               | CAS # 74-83-9.SEC (Lot Q119-46)   |                             | +/-                                  | 31.8022 | µg/mL | Unstressed  |
|               | Purity 99%                        |                             | +/-                                  | 35.5993 | µg/mL | Stressed    |
| 6             | Chloroethane (ethyl chloride)     | 2,516.0 µg/mL               | +/-                                  | 19.4764 | µg/mL | Gravimetric |
|               | CAS # 75-00-3.SEC (Lot 00004202)  |                             | +/-                                  | 31.1495 | µg/mL | Unstressed  |
|               | Purity 99%                        |                             | +/-                                  | 35.0885 | µg/mL | Stressed    |
| 7             | Dichlorofluoromethane (CFC-21)    | 2,503.3 µg/mL               | +/-                                  | 18.8823 | µg/mL | Gravimetric |
|               | CAS # 75-43-4.SEC (Lot SHBC0858V) |                             | +/-                                  | 30.6846 | µg/mL | Unstressed  |
|               | Purity 99%                        |                             | +/-                                  | 34.6386 | µg/mL | Stressed    |

Reagent

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**VOA8260INTRES\_00067**



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## Certificate of Analysis

### FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

Catalog No.: 567649 Lot No.: A093504  
Description: 8260 Internal Standard  
8260 Internal Standard 250-5,000 ug/ml, P&T Methanol, 5 ml/ampul  
Container Size: 5 mL Pkg Amt: > 5 mL  
Expiration Date: February 2018 Storage: 0°C or colder

### CERTIFIED VALUES

| Elution Order | Compound               | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) |          |                   |
|---------------|------------------------|-----------------------------|--------------------------------------|----------|-------------------|
| 1             | tert-Butyl-d9-alcohol  | 5,000.0 µg/mL               | +/-                                  | 29.0689  | µg/mL Gravimetric |
|               | CAS # 25725-11-5       |                             | +/-                                  | 110.6323 | µg/mL Unstressed  |
|               | Purity 99%             |                             | +/-                                  | 111.0833 | µg/mL Stressed    |
| 2             | Fluorobenzene          | 250.0 µg/mL                 | +/-                                  | 1.4535   | µg/mL Gravimetric |
|               | CAS # 462-06-6         |                             | +/-                                  | 5.5316   | µg/mL Unstressed  |
|               | Purity 99%             |                             | +/-                                  | 5.5542   | µg/mL Stressed    |
| 3             | 1,4-Dioxane-d8         | 5,000.0 µg/mL               | +/-                                  | 29.0689  | µg/mL Gravimetric |
|               | CAS # 17647-74-4       |                             | +/-                                  | 110.6323 | µg/mL Unstressed  |
|               | Purity 99%             |                             | +/-                                  | 111.0833 | µg/mL Stressed    |
| 4             | Chlorobenzene-d5       | 250.0 µg/mL                 | +/-                                  | 1.4535   | µg/mL Gravimetric |
|               | CAS # 3114-55-4        |                             | +/-                                  | 5.5316   | µg/mL Unstressed  |
|               | Purity 99%             |                             | +/-                                  | 5.5542   | µg/mL Stressed    |
| 5             | 1,4-Dichlorobenzene-d4 | 250.0 µg/mL                 | +/-                                  | 1.4535   | µg/mL Gravimetric |
|               | CAS # 3855-82-1        |                             | +/-                                  | 5.5316   | µg/mL Unstressed  |
|               | Purity 99%             |                             | +/-                                  | 5.5542   | µg/mL Stressed    |

Solvent: P&T Methanol  
CAS # 67-56-1  
Purity 99%



Reagent

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**VOA8260INTRES\_00068**



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## Certificate of Analysis

### FOR LABORATORY USE ONLY-READ MSDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

Catalog No.: 567649 Lot No.: A093504  
Description: 8260 Internal Standard  
8260 Internal Standard 250-5,000 ug/ml, P&T Methanol, 5 ml/ampul  
Container Size: 5 mL Pkg Amt: > 5 mL  
Expiration Date: February 2018 Storage: 0°C or colder

### CERTIFIED VALUES

| Elution Order | Compound               | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) |          |                   |
|---------------|------------------------|-----------------------------|--------------------------------------|----------|-------------------|
| 1             | tert-Butyl-d9-alcohol  | 5,000.0 µg/mL               | +/-                                  | 29.0689  | µg/mL Gravimetric |
|               | CAS # 25725-11-5       |                             | +/-                                  | 110.6323 | µg/mL Unstressed  |
|               | Purity 99%             |                             | +/-                                  | 111.0833 | µg/mL Stressed    |
| 2             | Fluorobenzene          | 250.0 µg/mL                 | +/-                                  | 1.4535   | µg/mL Gravimetric |
|               | CAS # 462-06-6         |                             | +/-                                  | 5.5316   | µg/mL Unstressed  |
|               | Purity 99%             |                             | +/-                                  | 5.5542   | µg/mL Stressed    |
| 3             | 1,4-Dioxane-d8         | 5,000.0 µg/mL               | +/-                                  | 29.0689  | µg/mL Gravimetric |
|               | CAS # 17647-74-4       |                             | +/-                                  | 110.6323 | µg/mL Unstressed  |
|               | Purity 99%             |                             | +/-                                  | 111.0833 | µg/mL Stressed    |
| 4             | Chlorobenzene-d5       | 250.0 µg/mL                 | +/-                                  | 1.4535   | µg/mL Gravimetric |
|               | CAS # 3114-55-4        |                             | +/-                                  | 5.5316   | µg/mL Unstressed  |
|               | Purity 99%             |                             | +/-                                  | 5.5542   | µg/mL Stressed    |
| 5             | 1,4-Dichlorobenzene-d4 | 250.0 µg/mL                 | +/-                                  | 1.4535   | µg/mL Gravimetric |
|               | CAS # 3855-82-1        |                             | +/-                                  | 5.5316   | µg/mL Unstressed  |
|               | Purity 99%             |                             | +/-                                  | 5.5542   | µg/mL Stressed    |

Solvent: P&T Methanol  
CAS # 67-56-1  
Purity 99%

Reagent

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**VOA8260INTRES\_00088**



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## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 567649 **Lot No.:** A0104742  
**Description :** 8260 Internal Standard  
8260 Internal Standard 250-5,000 ug/ml, P&T Methanol, 5 ml/ampul  
**Container Size :** 5 mL **Pkg Amt:** > 5 mL  
**Expiration Date :** July 31, 2019 **Storage:** 0°C or colder

### CERTIFIED VALUES

| Elution Order   | Compound                                                                  | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2)                          |                                       |
|-----------------|---------------------------------------------------------------------------|-----------------------------|---------------------------------------------------------------|---------------------------------------|
| 1               | tert-Butyl-d9-alcohol<br>CAS # 25725-11-5<br>Purity 99%<br>(Lot I201P5)   | 5,003.0 µg/mL               | +/- 29.0879 µg/mL<br>+/- 106.1005 µg/mL<br>+/- 106.5713 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 2               | Fluorobenzene<br>CAS # 462-06-6<br>Purity 99%<br>(Lot I380033)            | 250.8 µg/mL                 | +/- 1.4795 µg/mL<br>+/- 5.3247 µg/mL<br>+/- 5.3483 µg/mL      | Gravimetric<br>Unstressed<br>Stressed |
| 3               | 1,4-Dioxane-d8<br>CAS # 17647-74-4<br>Purity 99%<br>(Lot I11C-596)        | 5,009.6 µg/mL               | +/- 29.1262 µg/mL<br>+/- 106.2405 µg/mL<br>+/- 106.7119 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 4               | Chlorobenzene-d5<br>CAS # 3114-55-4<br>Purity 99%<br>(Lot PR-22736)       | 250.8 µg/mL                 | +/- 1.4795 µg/mL<br>+/- 5.3247 µg/mL<br>+/- 5.3483 µg/mL      | Gravimetric<br>Unstressed<br>Stressed |
| 5               | 1,4-Dichlorobenzene-d4<br>CAS # 3855-82-1<br>Purity 99%<br>(Lot PR-18488) | 250.8 µg/mL                 | +/- 1.4795 µg/mL<br>+/- 5.3247 µg/mL<br>+/- 5.3483 µg/mL      | Gravimetric<br>Unstressed<br>Stressed |
| <b>Solvent:</b> | P&T Methanol<br>CAS # 67-56-1<br>Purity 99%                               |                             |                                                               |                                       |

Reagent

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**VOA8260KET1ST\_00046**



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## FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 569721 **Lot No.:** A0110400

**Description :** 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** April 30, 2018 **Storage:** 0°C or colder

## CERTIFIED VALUES

| Elution Order | Compound                                                                    | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2)                                                          |
|---------------|-----------------------------------------------------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------|
| 1             | Acetone<br>CAS # 67-64-1 (Lot 07196AK)<br>Purity 99%                        | 12,506.8 µg/mL              | +/- 73.2301 µg/mL Gravimetric<br>+/- 665.6407 µg/mL Unstressed<br>+/- 666.3747 µg/mL Stressed |
| 2             | 2-Butanone (MEK)<br>CAS # 78-93-3 (Lot BCBH7802V)<br>Purity 99%             | 12,504.8 µg/mL              | +/- 73.2184 µg/mL Gravimetric<br>+/- 665.5343 µg/mL Unstressed<br>+/- 666.2681 µg/mL Stressed |
| 3             | 4-Methyl-2-pentanone (MIBK)<br>CAS # 108-10-1 (Lot SHBF5332V)<br>Purity 99% | 12,509.2 µg/mL              | +/- 73.2441 µg/mL Gravimetric<br>+/- 665.7684 µg/mL Unstressed<br>+/- 666.5025 µg/mL Stressed |
| 4             | 2-Hexanone<br>CAS # 591-78-6 (Lot MKBN7380V)<br>Purity 99%                  | 12,501.6 µg/mL              | +/- 73.1996 µg/mL Gravimetric<br>+/- 665.3640 µg/mL Unstressed<br>+/- 666.0976 µg/mL Stressed |

**Solvent:** P&T Methanol/Water (90:10)  
CAS # 67-56-1/7732-18-5  
Purity 99%

Reagent

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**VOA8260KET1ST\_00047**



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*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 569721 **Lot No.:** A0110400

**Description :** 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** April 30, 2018 **Storage:** 0°C or colder

### CERTIFIED VALUES

| Elution Order                              | Compound                       | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) |          |       |             |
|--------------------------------------------|--------------------------------|-----------------------------|--------------------------------------|----------|-------|-------------|
| 1                                          | Acetone                        | 12,506.8 µg/mL              | +/-                                  | 73.2301  | µg/mL | Gravimetric |
|                                            | CAS # 67-64-1 (Lot 07196AK)    |                             | +/-                                  | 665.6407 | µg/mL | Unstressed  |
|                                            | Purity 99%                     |                             | +/-                                  | 666.3747 | µg/mL | Stressed    |
|                                            |                                |                             |                                      |          |       |             |
| 2                                          | 2-Butanone (MEK)               | 12,504.8 µg/mL              | +/-                                  | 73.2184  | µg/mL | Gravimetric |
|                                            | CAS # 78-93-3 (Lot BCBH7802V)  |                             | +/-                                  | 665.5343 | µg/mL | Unstressed  |
|                                            | Purity 99%                     |                             | +/-                                  | 666.2681 | µg/mL | Stressed    |
|                                            |                                |                             |                                      |          |       |             |
| 3                                          | 4-Methyl-2-pentanone (MIBK)    | 12,509.2 µg/mL              | +/-                                  | 73.2441  | µg/mL | Gravimetric |
|                                            | CAS # 108-10-1 (Lot SHBF5332V) |                             | +/-                                  | 665.7684 | µg/mL | Unstressed  |
|                                            | Purity 99%                     |                             | +/-                                  | 666.5025 | µg/mL | Stressed    |
|                                            |                                |                             |                                      |          |       |             |
| 4                                          | 2-Hexanone                     | 12,501.6 µg/mL              | +/-                                  | 73.1996  | µg/mL | Gravimetric |
|                                            | CAS # 591-78-6 (Lot MKBN7380V) |                             | +/-                                  | 665.3640 | µg/mL | Unstressed  |
|                                            | Purity 99%                     |                             | +/-                                  | 666.0976 | µg/mL | Stressed    |
|                                            |                                |                             |                                      |          |       |             |
| <b>Solvent:</b> P&T Methanol/Water (90:10) |                                |                             |                                      |          |       |             |
| CAS # 67-56-1/7732-18-5                    |                                |                             |                                      |          |       |             |
| Purity 99%                                 |                                |                             |                                      |          |       |             |



Reagent

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**VOA8260KET1ST\_00048**



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## Certificate of Analysis



**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 569721 **Lot No.:** A0110400

**Description :** 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** April 30, 2018 **Storage:** 0°C or colder

### CERTIFIED VALUES

| Elution Order                              | Compound                       | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) |          |       |             |
|--------------------------------------------|--------------------------------|-----------------------------|--------------------------------------|----------|-------|-------------|
| 1                                          | Acetone                        | 12,506.8 µg/mL              | +/-                                  | 73.2301  | µg/mL | Gravimetric |
|                                            | CAS # 67-64-1 (Lot 07196AK)    |                             | +/-                                  | 665.6407 | µg/mL | Unstressed  |
|                                            | Purity 99%                     |                             | +/-                                  | 666.3747 | µg/mL | Stressed    |
|                                            |                                |                             |                                      |          |       |             |
| 2                                          | 2-Butanone (MEK)               | 12,504.8 µg/mL              | +/-                                  | 73.2184  | µg/mL | Gravimetric |
|                                            | CAS # 78-93-3 (Lot BCBH7802V)  |                             | +/-                                  | 665.5343 | µg/mL | Unstressed  |
|                                            | Purity 99%                     |                             | +/-                                  | 666.2681 | µg/mL | Stressed    |
|                                            |                                |                             |                                      |          |       |             |
| 3                                          | 4-Methyl-2-pentanone (MIBK)    | 12,509.2 µg/mL              | +/-                                  | 73.2441  | µg/mL | Gravimetric |
|                                            | CAS # 108-10-1 (Lot SHBF5332V) |                             | +/-                                  | 665.7684 | µg/mL | Unstressed  |
|                                            | Purity 99%                     |                             | +/-                                  | 666.5025 | µg/mL | Stressed    |
|                                            |                                |                             |                                      |          |       |             |
| 4                                          | 2-Hexanone                     | 12,501.6 µg/mL              | +/-                                  | 73.1996  | µg/mL | Gravimetric |
|                                            | CAS # 591-78-6 (Lot MKBN7380V) |                             | +/-                                  | 665.3640 | µg/mL | Unstressed  |
|                                            | Purity 99%                     |                             | +/-                                  | 666.0976 | µg/mL | Stressed    |
|                                            |                                |                             |                                      |          |       |             |
| <b>Solvent:</b> P&T Methanol/Water (90:10) |                                |                             |                                      |          |       |             |
| CAS # 67-56-1/7732-18-5                    |                                |                             |                                      |          |       |             |
| Purity 99%                                 |                                |                             |                                      |          |       |             |

Reagent

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**VOA8260KET1ST\_00049**



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## Certificate of Analysis



**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 569721 **Lot No.:** A0110400

**Description :** 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** April 30, 2018 **Storage:** 0°C or colder

### CERTIFIED VALUES

| Elution Order                              | Compound                       | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) |          |       |             |
|--------------------------------------------|--------------------------------|-----------------------------|--------------------------------------|----------|-------|-------------|
| 1                                          | Acetone                        | 12,506.8 µg/mL              | +/-                                  | 73.2301  | µg/mL | Gravimetric |
|                                            | CAS # 67-64-1 (Lot 07196AK)    |                             | +/-                                  | 665.6407 | µg/mL | Unstressed  |
|                                            | Purity 99%                     |                             | +/-                                  | 666.3747 | µg/mL | Stressed    |
|                                            |                                |                             |                                      |          |       |             |
| 2                                          | 2-Butanone (MEK)               | 12,504.8 µg/mL              | +/-                                  | 73.2184  | µg/mL | Gravimetric |
|                                            | CAS # 78-93-3 (Lot BCBH7802V)  |                             | +/-                                  | 665.5343 | µg/mL | Unstressed  |
|                                            | Purity 99%                     |                             | +/-                                  | 666.2681 | µg/mL | Stressed    |
|                                            |                                |                             |                                      |          |       |             |
| 3                                          | 4-Methyl-2-pentanone (MIBK)    | 12,509.2 µg/mL              | +/-                                  | 73.2441  | µg/mL | Gravimetric |
|                                            | CAS # 108-10-1 (Lot SHBF5332V) |                             | +/-                                  | 665.7684 | µg/mL | Unstressed  |
|                                            | Purity 99%                     |                             | +/-                                  | 666.5025 | µg/mL | Stressed    |
|                                            |                                |                             |                                      |          |       |             |
| 4                                          | 2-Hexanone                     | 12,501.6 µg/mL              | +/-                                  | 73.1996  | µg/mL | Gravimetric |
|                                            | CAS # 591-78-6 (Lot MKBN7380V) |                             | +/-                                  | 665.3640 | µg/mL | Unstressed  |
|                                            | Purity 99%                     |                             | +/-                                  | 666.0976 | µg/mL | Stressed    |
|                                            |                                |                             |                                      |          |       |             |
| <b>Solvent:</b> P&T Methanol/Water (90:10) |                                |                             |                                      |          |       |             |
| CAS # 67-56-1/7732-18-5                    |                                |                             |                                      |          |       |             |
| Purity 99%                                 |                                |                             |                                      |          |       |             |

Reagent

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**VOA8260KET1ST\_00051**



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**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 569721 **Lot No.:** A0110400

**Description :** 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** April 30, 2018 **Storage:** 0°C or colder

### CERTIFIED VALUES

| Elution Order                              | Compound                       | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) |          |       |             |
|--------------------------------------------|--------------------------------|-----------------------------|--------------------------------------|----------|-------|-------------|
| 1                                          | Acetone                        | 12,506.8 µg/mL              | +/-                                  | 73.2301  | µg/mL | Gravimetric |
|                                            | CAS # 67-64-1 (Lot 07196AK)    |                             | +/-                                  | 665.6407 | µg/mL | Unstressed  |
|                                            | Purity 99%                     |                             | +/-                                  | 666.3747 | µg/mL | Stressed    |
|                                            |                                |                             |                                      |          |       |             |
| 2                                          | 2-Butanone (MEK)               | 12,504.8 µg/mL              | +/-                                  | 73.2184  | µg/mL | Gravimetric |
|                                            | CAS # 78-93-3 (Lot BCBH7802V)  |                             | +/-                                  | 665.5343 | µg/mL | Unstressed  |
|                                            | Purity 99%                     |                             | +/-                                  | 666.2681 | µg/mL | Stressed    |
|                                            |                                |                             |                                      |          |       |             |
| 3                                          | 4-Methyl-2-pentanone (MIBK)    | 12,509.2 µg/mL              | +/-                                  | 73.2441  | µg/mL | Gravimetric |
|                                            | CAS # 108-10-1 (Lot SHBF5332V) |                             | +/-                                  | 665.7684 | µg/mL | Unstressed  |
|                                            | Purity 99%                     |                             | +/-                                  | 666.5025 | µg/mL | Stressed    |
|                                            |                                |                             |                                      |          |       |             |
| 4                                          | 2-Hexanone                     | 12,501.6 µg/mL              | +/-                                  | 73.1996  | µg/mL | Gravimetric |
|                                            | CAS # 591-78-6 (Lot MKBN7380V) |                             | +/-                                  | 665.3640 | µg/mL | Unstressed  |
|                                            | Purity 99%                     |                             | +/-                                  | 666.0976 | µg/mL | Stressed    |
|                                            |                                |                             |                                      |          |       |             |
| <b>Solvent:</b> P&T Methanol/Water (90:10) |                                |                             |                                      |          |       |             |
| CAS # 67-56-1/7732-18-5                    |                                |                             |                                      |          |       |             |
| Purity 99%                                 |                                |                             |                                      |          |       |             |

Reagent

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**VOA8260KET2ND\_00054**



**CERTIFIED REFERENCE MATERIAL**

110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

www.restek.com

## Certificate of Analysis



**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 569721.sec **Lot No.:** A0110970

**Description :** 8260 List 1/ Std #2 Ketones (2015)

8260 List 1/ Std #2 Ketones (2015) 12,500 µg/ml, P&T Methanol/Water (90:10), 1 ml/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** May 31, 2018 **Storage:** 0°C or colder

### CERTIFIED VALUES

| Elution Order | Compound                    |                | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L., K=2) |          |                   |
|---------------|-----------------------------|----------------|-----------------------------|--------------------------------------|----------|-------------------|
| 1             | Acetone                     |                | 12,528.0 µg/mL              | +/-                                  | 73.3542  | µg/mL Gravimetric |
|               | CAS # 67-64-1.SEC           | (Lot P14A572)  |                             | +/-                                  | 666.7690 | µg/mL Unstressed  |
|               | Purity 99%                  |                |                             | +/-                                  | 667.5042 | µg/mL Stressed    |
| 2             | 2-Butanone (MEK)            |                | 12,530.0 µg/mL              | +/-                                  | 73.3659  | µg/mL Gravimetric |
|               | CAS # 78-93-3.SEC           | (Lot RA58J)    |                             | +/-                                  | 666.8755 | µg/mL Unstressed  |
|               | Purity 99%                  |                |                             | +/-                                  | 667.6108 | µg/mL Stressed    |
| 3             | 4-Methyl-2-pentanone (MIBK) |                | 12,585.0 µg/mL              | +/-                                  | 73.6879  | µg/mL Gravimetric |
|               | CAS # 108-10-1.SEC          | (Lot E29T040)  |                             | +/-                                  | 669.8027 | µg/mL Unstressed  |
|               | Purity 99%                  |                |                             | +/-                                  | 670.5412 | µg/mL Stressed    |
| 4             | 2-Hexanone                  |                | 12,516.0 µg/mL              | +/-                                  | 73.2839  | µg/mL Gravimetric |
|               | CAS # 591-78-6.SEC          | (Lot ZSVCD-FF) |                             | +/-                                  | 666.1304 | µg/mL Unstressed  |
|               | Purity 99%                  |                |                             | +/-                                  | 666.8648 | µg/mL Stressed    |

**Solvent:** P&T Methanol/Water (90:10)

**CAS #** 67-56-1/7732-18-5

**Purity** 99%



Reagent

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**VOA8260MEGA1\_00030**



CERTIFIED REFERENCE MATERIAL

110 Benner Circle  
Bellefonte, PA 16823-8812  
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# Certificate of Analysis



## FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

Catalog No. : 569720 Lot No.: A0108166  
Description : 8260 List 1 / Std #1 MegaMix (2015)  
8260 List 1 / Std #1 MegaMix (2015) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul  
Container Size : 2 mL Pkg Amt: > 1 mL  
Expiration Date : January 31, 2017 Storage: 0°C or colder

## CERTIFIED VALUES

| Elution Order | Compound                                                                               | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2)                               |                                       |
|---------------|----------------------------------------------------------------------------------------|-----------------------------|--------------------------------------------------------------------|---------------------------------------|
| 1             | Diethyl ether (ethyl ether)<br>CAS # 60-29-7 (Lot SHBF3466V)<br>Purity 99%             | 2,521.3 µg/mL               | +/- 14.6588 µg/mL<br>+/- 134.1754 µg/mL<br>+/- 134.3233 µg/mL      | Gravimetric<br>Unstressed<br>Stressed |
| 2             | 1,1,2-Trichlorotrifluoroethane (CFC-113)<br>CAS # 76-13-1 (Lot 00001135)<br>Purity 99% | 2,522.5 µg/mL               | +/- 14.6660 µg/mL<br>+/- 134.2419 µg/mL<br>+/- 134.3899 µg/mL      | Gravimetric<br>Unstressed<br>Stressed |
| 3             | 1,1-Dichloroethane<br>CAS # 75-34-3 (Lot Q179-33)<br>Purity 98%                        | 2,499.5 µg/mL               | +/- 14.5323 µg/mL<br>+/- 133.0173 µg/mL<br>+/- 133.1640 µg/mL      | Gravimetric<br>Unstressed<br>Stressed |
| 4             | tert-Butanol (TBA)<br>CAS # 75-65-0 (Lot SHBC6893V)<br>Purity 99%                      | 25,002.4 µg/mL              | +/- 145.3584 µg/mL<br>+/- 1,330.5704 µg/mL<br>+/- 1,332.0378 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 5             | Iodomethane (methyl iodide)<br>CAS # 74-88-4 (Lot SHBC7288V)<br>Purity 99%             | 2,510.0 µg/mL               | +/- 14.5934 µg/mL<br>+/- 133.5767 µg/mL<br>+/- 133.7240 µg/mL      | Gravimetric<br>Unstressed<br>Stressed |
| 6             | Methyl acetate<br>CAS # 79-20-9 (Lot SHBD7134V)<br>Purity 98%                          | 12,505.4 µg/mL              | +/- 72.7037 µg/mL<br>+/- 665.5101 µg/mL<br>+/- 666.2440 µg/mL      | Gravimetric<br>Unstressed<br>Stressed |
| 7             | Allyl chloride (3-chloropropene)<br>CAS # 107-05-1 (Lot MKBG5777V)<br>Purity 99%       | 2,500.0 µg/mL               | +/- 19.2743 µg/mL<br>+/- 133.6453 µg/mL<br>+/- 133.7914 µg/mL      | Gravimetric<br>Unstressed<br>Stressed |

|    |                                                                                     |                |     |                  |             |
|----|-------------------------------------------------------------------------------------|----------------|-----|------------------|-------------|
| 8  | Methylene chloride (dichloromethane)<br>CAS # 75-09-2 (Lot SHBD4974V)<br>Purity 99% | 2,511.3 µg/mL  | +/- | 14.6006 µg/mL    | Gravimetric |
|    |                                                                                     |                | +/- | 133.6432 µg/mL   | Unstressed  |
|    |                                                                                     |                | +/- | 133.7906 µg/mL   | Stressed    |
| 9  | Carbon disulfide<br>CAS # 75-15-0 (Lot C30Y997)<br>Purity 98%                       | 2,511.7 µg/mL  | +/- | 14.6035 µg/mL    | Gravimetric |
|    |                                                                                     |                | +/- | 133.6693 µg/mL   | Unstressed  |
|    |                                                                                     |                | +/- | 133.8167 µg/mL   | Stressed    |
| 10 | Acrylonitrile<br>CAS # 107-13-1 (Lot 10172706)<br>Purity 99%                        | 25,017.1 µg/mL | +/- | 145.4441 µg/mL   | Gravimetric |
|    |                                                                                     |                | +/- | 1,331.3554 µg/mL | Unstressed  |
|    |                                                                                     |                | +/- | 1,332.8236 µg/mL | Stressed    |
| 11 | cis-1,2-Dichloroethene<br>CAS # 156-59-2 (Lot MKBG8424V)<br>Purity 99%              | 2,503.9 µg/mL  | +/- | 14.5577 µg/mL    | Gravimetric |
|    |                                                                                     |                | +/- | 133.2507 µg/mL   | Unstressed  |
|    |                                                                                     |                | +/- | 133.3977 µg/mL   | Stressed    |
| 12 | n-Hexane (C6)<br>CAS # 110-54-3 (Lot SHBF0293V)<br>Purity 99%                       | 2,511.9 µg/mL  | +/- | 14.6043 µg/mL    | Gravimetric |
|    |                                                                                     |                | +/- | 133.6764 µg/mL   | Unstressed  |
|    |                                                                                     |                | +/- | 133.8239 µg/mL   | Stressed    |
| 13 | 1,1-dichloroethene<br>CAS # 75-35-4 (Lot SHBD6170V)<br>Purity 99%                   | 2,521.3 µg/mL  | +/- | 14.6588 µg/mL    | Gravimetric |
|    |                                                                                     |                | +/- | 134.1754 µg/mL   | Unstressed  |
|    |                                                                                     |                | +/- | 134.3233 µg/mL   | Stressed    |
| 14 | 2,2-Dichloropropane<br>CAS # 594-20-7 (Lot BCBH9246V)<br>Purity 98%                 | 2,500.0 µg/mL  | +/- | 14.5351 µg/mL    | Gravimetric |
|    |                                                                                     |                | +/- | 133.0434 µg/mL   | Unstressed  |
|    |                                                                                     |                | +/- | 133.1901 µg/mL   | Stressed    |
| 15 | trans-1,2-Dichloroethene<br>CAS # 156-60-5 (Lot MKBH9850V)<br>Purity 99%            | 2,505.0 µg/mL  | +/- | 14.5643 µg/mL    | Gravimetric |
|    |                                                                                     |                | +/- | 133.3106 µg/mL   | Unstressed  |
|    |                                                                                     |                | +/- | 133.4576 µg/mL   | Stressed    |
| 16 | Isobutanol (2-Methyl-1-propanol)<br>CAS # 78-83-1 (Lot SHBF2852V)<br>Purity 99%     | 62,553.8 µg/mL | +/- | 363.6739 µg/mL   | Gravimetric |
|    |                                                                                     |                | +/- | 3,328.9705 µg/mL | Unstressed  |
|    |                                                                                     |                | +/- | 3,332.6417 µg/mL | Stressed    |
| 17 | Methyl-tert-butyl ether ( MTBE )<br>CAS # 1634-04-4 (Lot SHBF1193V)<br>Purity 99%   | 2,504.6 µg/mL  | +/- | 14.5621 µg/mL    | Gravimetric |
|    |                                                                                     |                | +/- | 133.2906 µg/mL   | Unstressed  |
|    |                                                                                     |                | +/- | 133.4376 µg/mL   | Stressed    |
| 18 | Bromochloromethane<br>CAS # 74-97-5 (Lot 00004559)<br>Purity 99%                    | 2,505.1 µg/mL  | +/- | 14.5650 µg/mL    | Gravimetric |
|    |                                                                                     |                | +/- | 133.3172 µg/mL   | Unstressed  |
|    |                                                                                     |                | +/- | 133.4642 µg/mL   | Stressed    |
| 19 | Tetrahydrofuran<br>CAS # 109-99-9 (Lot SHBF2660V)<br>Purity 97%                     | 5,000.7 µg/mL  | +/- | 29.0746 µg/mL    | Gravimetric |
|    |                                                                                     |                | +/- | 266.1270 µg/mL   | Unstressed  |
|    |                                                                                     |                | +/- | 266.4204 µg/mL   | Stressed    |
| 20 | 1,1,1-trichloroethane<br>CAS # 71-55-6 (Lot B14Z1114)<br>Purity 99%                 | 2,508.1 µg/mL  | +/- | 14.5825 µg/mL    | Gravimetric |
|    |                                                                                     |                | +/- | 133.4769 µg/mL   | Unstressed  |
|    |                                                                                     |                | +/- | 133.6241 µg/mL   | Stressed    |
| 21 | Cyclohexane<br>CAS # 110-82-7 (Lot SHBD7873V)<br>Purity 99%                         | 2,504.0 µg/mL  | +/- | 14.5585 µg/mL    | Gravimetric |
|    |                                                                                     |                | +/- | 133.2574 µg/mL   | Unstressed  |
|    |                                                                                     |                | +/- | 133.4043 µg/mL   | Stressed    |
| 22 | 1,1-Dichloropropene<br>CAS # 563-58-6 (Lot PR09161302)<br>Purity 98%                | 2,502.4 µg/mL  | +/- | 14.5493 µg/mL    | Gravimetric |
|    |                                                                                     |                | +/- | 133.1738 µg/mL   | Unstressed  |
|    |                                                                                     |                | +/- | 133.3207 µg/mL   | Stressed    |
| 23 | carbon tetrachloride<br>CAS # 56-23-5 (Lot SHBC1410V)<br>Purity 99%                 | 2,505.3 µg/mL  | +/- | 14.5657 µg/mL    | Gravimetric |
|    |                                                                                     |                | +/- | 133.3239 µg/mL   | Unstressed  |
|    |                                                                                     |                | +/- | 133.4709 µg/mL   | Stressed    |

|    |                                                             |                 |                |                                                  |                         |                                       |
|----|-------------------------------------------------------------|-----------------|----------------|--------------------------------------------------|-------------------------|---------------------------------------|
| 24 | n-Heptane (C7)<br>CAS # 142-82-5<br>Purity 99%              | (Lot SHBF2321V) | 2,501.4 µg/mL  | +/- 14.5432<br>+/- 133.1177<br>+/- 133.2645      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 25 | 1,2-Dichloroethane<br>CAS # 107-06-2<br>Purity 99%          | (Lot SHBC6595V) | 2,501.6 µg/mL  | +/- 14.5447<br>+/- 133.1310<br>+/- 133.2778      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 26 | Benzene<br>CAS # 71-43-2<br>Purity 99%                      | (Lot SHBD4617V) | 2,509.1 µg/mL  | +/- 14.5883<br>+/- 133.5301<br>+/- 133.6774      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 27 | Trichloroethene<br>CAS # 79-01-6<br>Purity 99%              | (Lot SHBF0943V) | 2,504.8 µg/mL  | +/- 14.5628<br>+/- 133.2973<br>+/- 133.4443      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 28 | Methylcyclohexane<br>CAS # 108-87-2<br>Purity 99%           | (Lot 50996APV)  | 2,502.5 µg/mL  | +/- 14.5498<br>+/- 133.1775<br>+/- 133.3244      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 29 | 1,2-Dichloropropane<br>CAS # 78-87-5<br>Purity 99%          | (Lot 01113D0V)  | 2,502.4 µg/mL  | +/- 14.5490<br>+/- 133.1709<br>+/- 133.3177      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 30 | bromodichloromethane<br>CAS # 75-27-4<br>Purity 98%         | (Lot MKBL1617V) | 2,507.9 µg/mL  | +/- 14.5814<br>+/- 133.4672<br>+/- 133.6144      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 31 | 1,4-Dioxane<br>CAS # 123-91-1<br>Purity 99%                 | (Lot SHBF2002V) | 50,001.4 µg/mL | +/- 290.6971<br>+/- 2,660.9612<br>+/- 2,663.8957 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 32 | Dibromomethane<br>CAS # 74-95-3<br>Purity 99%               | (Lot 10169264)  | 2,508.1 µg/mL  | +/- 14.5825<br>+/- 133.4769<br>+/- 133.6241      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 33 | cis-1,3-Dichloropropene<br>CAS # 10061-01-5<br>Purity 99%   | (Lot 20936)     | 2,507.0 µg/mL  | +/- 14.5759<br>+/- 133.4170<br>+/- 133.5641      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 34 | Toluene<br>CAS # 108-88-3<br>Purity 99%                     | (Lot SHBF2730V) | 2,502.4 µg/mL  | +/- 14.5490<br>+/- 133.1709<br>+/- 133.3177      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 35 | Ethyl methacrylate<br>CAS # 97-63-2<br>Purity 99%           | (Lot 69796APV)  | 2,500.9 µg/mL  | +/- 14.5403<br>+/- 133.0911<br>+/- 133.2378      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 36 | trans-1,3-Dichloropropene<br>CAS # 10061-02-6<br>Purity 99% | (Lot C363110)   | 2,502.1 µg/mL  | +/- 14.5476<br>+/- 133.1576<br>+/- 133.3044      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 37 | 1,1,2-Trichloroethane<br>CAS # 79-00-5<br>Purity 99%        | (Lot FGB01)     | 2,507.5 µg/mL  | +/- 14.5788<br>+/- 133.4436<br>+/- 133.5908      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 38 | 1,3-Dichloropropane<br>CAS # 142-28-9<br>Purity 99%         | (Lot BCBG2162V) | 2,505.3 µg/mL  | +/- 14.5657<br>+/- 133.3239<br>+/- 133.4709      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 39 | Tetrachloroethene<br>CAS # 127-18-4<br>Purity 99%           | (Lot SHBD2073V) | 2,506.5 µg/mL  | +/- 14.5730<br>+/- 133.3904<br>+/- 133.5375      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |

|    |                                                             |                 |         |       |     |          |       |             |
|----|-------------------------------------------------------------|-----------------|---------|-------|-----|----------|-------|-------------|
| 40 | dibromochloromethane<br>CAS # 124-48-1<br>Purity 98%        | (Lot MKBP0459V) | 2,503.2 | µg/mL | +/- | 14.5536  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.2129 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.3598 | µg/mL | Stressed    |
| 41 | 1,2-Dibromoethane (EDB)<br>CAS # 106-93-4<br>Purity 99%     | (Lot BCBH3877V) | 2,504.3 | µg/mL | +/- | 14.5599  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.2707 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.4176 | µg/mL | Stressed    |
| 42 | Chlorobenzene<br>CAS # 108-90-7<br>Purity 99%               | (Lot SHBD3200V) | 2,510.8 | µg/mL | +/- | 14.5977  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.6166 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.7639 | µg/mL | Stressed    |
| 43 | 1,1,2,2-Tetrachloroethane<br>CAS # 79-34-5<br>Purity 99%    | (Lot CFA4D)     | 2,502.9 | µg/mL | +/- | 14.5519  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.1975 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.3444 | µg/mL | Stressed    |
| 44 | Ethylbenzene<br>CAS # 100-41-4<br>Purity 99%                | (Lot SHBC9001V) | 2,509.6 | µg/mL | +/- | 14.5912  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.5567 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.7040 | µg/mL | Stressed    |
| 45 | m-Xylene<br>CAS # 108-38-3<br>Purity 99%                    | (Lot SHBF1720V) | 1,252.6 | µg/mL | +/- | 7.2829   | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 66.6619  | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 66.7355  | µg/mL | Stressed    |
| 46 | o-Xylene<br>CAS # 95-47-6<br>Purity 98%                     | (Lot SHBC8668V) | 2,503.7 | µg/mL | +/- | 14.5565  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.2390 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.3859 | µg/mL | Stressed    |
| 47 | p-Xylene<br>CAS # 106-42-3<br>Purity 99%                    | (Lot SHBF3427V) | 1,253.3 | µg/mL | +/- | 7.2865   | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 66.6952  | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 66.7688  | µg/mL | Stressed    |
| 48 | Styrene<br>CAS # 100-42-5<br>Purity 99%                     | (Lot 10182421)  | 2,503.5 | µg/mL | +/- | 14.5556  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.2307 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.3777 | µg/mL | Stressed    |
| 49 | Isopropylbenzene (cumene)<br>CAS # 98-82-8<br>Purity 99%    | (Lot 10169400)  | 2,502.5 | µg/mL | +/- | 14.5498  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.1775 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.3244 | µg/mL | Stressed    |
| 50 | bromoform<br>CAS # 75-25-2<br>Purity 99%                    | (Lot SHBC3410V) | 2,507.8 | µg/mL | +/- | 14.5803  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.4569 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.6041 | µg/mL | Stressed    |
| 51 | 1,1,1,2-Tetrachloroethane<br>CAS # 630-20-6<br>Purity 99%   | (Lot MKBS3769V) | 2,510.3 | µg/mL | +/- | 14.5948  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.5900 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.7373 | µg/mL | Stressed    |
| 52 | chloroform<br>CAS # 67-66-3<br>Purity 99%                   | (Lot SHBB7498V) | 2,501.3 | µg/mL | +/- | 14.5425  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.1110 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.2578 | µg/mL | Stressed    |
| 53 | 1,2,3-Trichloropropane<br>CAS # 96-18-4<br>Purity 99%       | (Lot 1428739V)  | 2,502.5 | µg/mL | +/- | 14.5498  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.1775 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.3244 | µg/mL | Stressed    |
| 54 | trans-1,4-dichloro-2-butene<br>CAS # 110-57-6<br>Purity 96% | (Lot MKBP5371V) | 2,499.5 | µg/mL | +/- | 14.5322  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.0168 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.1635 | µg/mL | Stressed    |
| 55 | n-Propylbenzene<br>CAS # 103-65-1<br>Purity 99%             | (Lot MKBQ8049V) | 2,500.3 | µg/mL | +/- | 14.5367  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.0578 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.2045 | µg/mL | Stressed    |

|    |                                                              |                 |               |     |          |       |             |
|----|--------------------------------------------------------------|-----------------|---------------|-----|----------|-------|-------------|
| 56 | Bromobenzene<br>CAS # 108-86-1<br>Purity 99%                 | (Lot MKBD4032V) | 2,501.1 µg/mL | +/- | 14.5418  | µg/mL | Gravimetric |
|    |                                                              |                 |               | +/- | 133.1044 | µg/mL | Unstressed  |
|    |                                                              |                 |               | +/- | 133.2511 | µg/mL | Stressed    |
| 57 | 1,2,4-Trimethylbenzene<br>CAS # 95-63-6<br>Purity 98%        | (Lot MKBJ1732V) | 2,501.6 µg/mL | +/- | 14.5444  | µg/mL | Gravimetric |
|    |                                                              |                 |               | +/- | 133.1282 | µg/mL | Unstressed  |
|    |                                                              |                 |               | +/- | 133.2750 | µg/mL | Stressed    |
| 58 | 2-Chlorotoluene<br>CAS # 95-49-8<br>Purity 99%               | (Lot MKBH8892V) | 2,500.3 µg/mL | +/- | 14.5367  | µg/mL | Gravimetric |
|    |                                                              |                 |               | +/- | 133.0578 | µg/mL | Unstressed  |
|    |                                                              |                 |               | +/- | 133.2045 | µg/mL | Stressed    |
| 59 | 4-Chlorotoluene<br>CAS # 106-43-4<br>Purity 99%              | (Lot MKBB7205V) | 2,506.4 µg/mL | +/- | 14.5723  | µg/mL | Gravimetric |
|    |                                                              |                 |               | +/- | 133.3837 | µg/mL | Unstressed  |
|    |                                                              |                 |               | +/- | 133.5308 | µg/mL | Stressed    |
| 60 | tert-Butylbenzene<br>CAS # 98-06-6<br>Purity 99%             | (Lot S52237V)   | 2,500.1 µg/mL | +/- | 14.5359  | µg/mL | Gravimetric |
|    |                                                              |                 |               | +/- | 133.0511 | µg/mL | Unstressed  |
|    |                                                              |                 |               | +/- | 133.1979 | µg/mL | Stressed    |
| 61 | 1,3,5-Trimethylbenzene<br>CAS # 108-67-8<br>Purity 99%       | (Lot BCBJ3305V) | 2,503.1 µg/mL | +/- | 14.5534  | µg/mL | Gravimetric |
|    |                                                              |                 |               | +/- | 133.2108 | µg/mL | Unstressed  |
|    |                                                              |                 |               | +/- | 133.3577 | µg/mL | Stressed    |
| 62 | sec-Butylbenzene<br>CAS # 135-98-8<br>Purity 99%             | (Lot MKBK3151V) | 2,504.0 µg/mL | +/- | 14.5585  | µg/mL | Gravimetric |
|    |                                                              |                 |               | +/- | 133.2574 | µg/mL | Unstressed  |
|    |                                                              |                 |               | +/- | 133.4043 | µg/mL | Stressed    |
| 63 | p-Isopropyltoluene (p-Cymene)<br>CAS # 99-87-6<br>Purity 99% | (Lot MKBK4439V) | 2,501.1 µg/mL | +/- | 14.5418  | µg/mL | Gravimetric |
|    |                                                              |                 |               | +/- | 133.1044 | µg/mL | Unstressed  |
|    |                                                              |                 |               | +/- | 133.2511 | µg/mL | Stressed    |
| 64 | 1,3-Dichlorobenzene<br>CAS # 541-73-1<br>Purity 99%          | (Lot BCBC1891V) | 2,506.1 µg/mL | +/- | 14.5708  | µg/mL | Gravimetric |
|    |                                                              |                 |               | +/- | 133.3704 | µg/mL | Unstressed  |
|    |                                                              |                 |               | +/- | 133.5175 | µg/mL | Stressed    |
| 65 | 1,4-Dichlorobenzene<br>CAS # 106-46-7<br>Purity 99%          | (Lot MKBL3891V) | 2,507.0 µg/mL | +/- | 14.5759  | µg/mL | Gravimetric |
|    |                                                              |                 |               | +/- | 133.4170 | µg/mL | Unstressed  |
|    |                                                              |                 |               | +/- | 133.5641 | µg/mL | Stressed    |
| 66 | n-Butylbenzene<br>CAS # 104-51-8<br>Purity 99%               | (Lot 09418JIV)  | 2,502.6 µg/mL | +/- | 14.5505  | µg/mL | Gravimetric |
|    |                                                              |                 |               | +/- | 133.1842 | µg/mL | Unstressed  |
|    |                                                              |                 |               | +/- | 133.3311 | µg/mL | Stressed    |
| 67 | 1,2-Dichlorobenzene<br>CAS # 95-50-1<br>Purity 99%           | (Lot 68996CMV)  | 2,501.6 µg/mL | +/- | 14.5447  | µg/mL | Gravimetric |
|    |                                                              |                 |               | +/- | 133.1310 | µg/mL | Unstressed  |
|    |                                                              |                 |               | +/- | 133.2778 | µg/mL | Stressed    |
| 68 | 1,2-Dibromo-3-chloropropane<br>CAS # 96-12-8<br>Purity 99%   | (Lot FBL01)     | 2,505.9 µg/mL | +/- | 14.5694  | µg/mL | Gravimetric |
|    |                                                              |                 |               | +/- | 133.3571 | µg/mL | Unstressed  |
|    |                                                              |                 |               | +/- | 133.5042 | µg/mL | Stressed    |
| 69 | 1,2,4-Trichlorobenzene<br>CAS # 120-82-1<br>Purity 99%       | (Lot 26896BM)   | 2,501.5 µg/mL | +/- | 14.5439  | µg/mL | Gravimetric |
|    |                                                              |                 |               | +/- | 133.1243 | µg/mL | Unstressed  |
|    |                                                              |                 |               | +/- | 133.2711 | µg/mL | Stressed    |
| 70 | Hexachlorobutadiene<br>CAS # 87-68-3<br>Purity 98%           | (Lot K22W009)   | 2,501.6 µg/mL | +/- | 14.5444  | µg/mL | Gravimetric |
|    |                                                              |                 |               | +/- | 133.1282 | µg/mL | Unstressed  |
|    |                                                              |                 |               | +/- | 133.2750 | µg/mL | Stressed    |
| 71 | Naphthalene<br>CAS # 91-20-3<br>Purity 99%                   | (Lot MKBH4351V) | 2,502.6 µg/mL | +/- | 14.5505  | µg/mL | Gravimetric |
|    |                                                              |                 |               | +/- | 133.1842 | µg/mL | Unstressed  |
|    |                                                              |                 |               | +/- | 133.3311 | µg/mL | Stressed    |

|    |                        |                |              |       |             |
|----|------------------------|----------------|--------------|-------|-------------|
| 72 | 1,2,3-Trichlorobenzene | 2,503.4 µg/mL  | +/- 14.5548  | µg/mL | Gravimetric |
|    | CAS # 87-61-6          | (Lot 12912PFV) | +/- 133.2241 | µg/mL | Unstressed  |
|    | Purity 99%             |                | +/- 133.3710 | µg/mL | Stressed    |

**Solvent:** P&T Methanol  
**CAS #** 67-56-1  
**Purity** 99%

**Column:**  
60m x 0.25mm x 1.4µm  
Rtx-502.2 (cat.#10916)

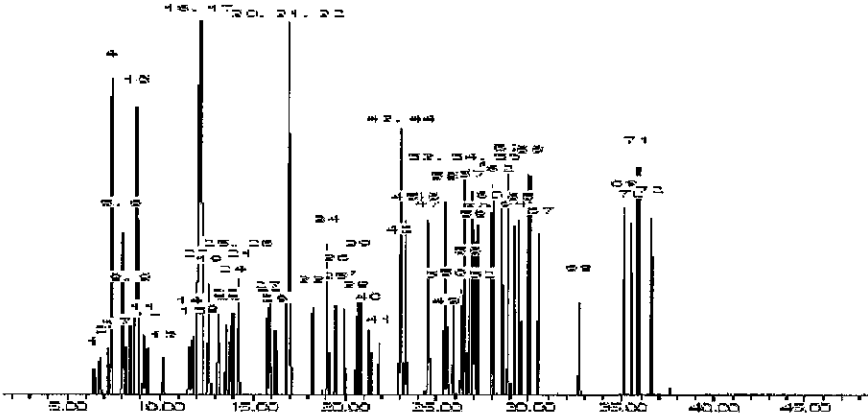
**Carrier Gas:**  
helium-constant pressure 30 psi

**Temp. Program:**  
40°C (hold 6 min.) to 240°C  
@ 6°C/min. (hold 10 min.)

**Inj. Temp:**  
200°C

**Det. Temp:**  
250°C

**Det. Type:**  
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Kendra Swope - Mix Technician

**Date Mixed:** 07-Jan-2015      **Balance:** 1125113331

Tyler Brown - QA Analyst

**Date Passed:** 14-Jan-2015

Manufactured under Restek's ISO 9001:2008  
Registered Quality System  
Certificate #FM 80397

Reagent

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**VOA8260MEGA1\_00032**





110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

www.restek.com

# CERTIFIED REFERENCE MATERIAL

## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 569720 **Lot No.:** A0108166

**Description :** 8260 List 1 / Std #1 MegaMix (2015)

8260 List 1 / Std #1 MegaMix (2015) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul

**Container Size :** 2 mL **Pkg Amt:** > 1 mL

**Expiration Date :** January 31, 2017 **Storage:** 0°C or colder

### CERTIFIED VALUES

| Elution Order | Compound                                 | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) |             |
|---------------|------------------------------------------|-----------------------------|--------------------------------------|-------------|
| 1             | Diethyl ether (ethyl ether)              | 2,521.3 µg/mL               | +/- 14.6588 µg/mL                    | Gravimetric |
|               | CAS # 60-29-7 (Lot SHBF3466V)            |                             | +/- 134.1754 µg/mL                   | Unstressed  |
|               | Purity 99%                               |                             | +/- 134.3233 µg/mL                   | Stressed    |
| 2             | 1,1,2-Trichlorotrifluoroethane (CFC-113) | 2,522.5 µg/mL               | +/- 14.6660 µg/mL                    | Gravimetric |
|               | CAS # 76-13-1 (Lot 00001135)             |                             | +/- 134.2419 µg/mL                   | Unstressed  |
|               | Purity 99%                               |                             | +/- 134.3899 µg/mL                   | Stressed    |
| 3             | 1,1-Dichloroethane                       | 2,499.5 µg/mL               | +/- 14.5323 µg/mL                    | Gravimetric |
|               | CAS # 75-34-3 (Lot Q179-33)              |                             | +/- 133.0173 µg/mL                   | Unstressed  |
|               | Purity 98%                               |                             | +/- 133.1640 µg/mL                   | Stressed    |
| 4             | tert-Butanol (TBA)                       | 25,002.4 µg/mL              | +/- 145.3584 µg/mL                   | Gravimetric |
|               | CAS # 75-65-0 (Lot SHBC6893V)            |                             | +/- 1,330.5704 µg/mL                 | Unstressed  |
|               | Purity 99%                               |                             | +/- 1,332.0378 µg/mL                 | Stressed    |
| 5             | Iodomethane (methyl iodide)              | 2,510.0 µg/mL               | +/- 14.5934 µg/mL                    | Gravimetric |
|               | CAS # 74-88-4 (Lot SHBC7288V)            |                             | +/- 133.5767 µg/mL                   | Unstressed  |
|               | Purity 99%                               |                             | +/- 133.7240 µg/mL                   | Stressed    |
| 6             | Methyl acetate                           | 12,505.4 µg/mL              | +/- 72.7037 µg/mL                    | Gravimetric |
|               | CAS # 79-20-9 (Lot SHBD7134V)            |                             | +/- 665.5101 µg/mL                   | Unstressed  |
|               | Purity 98%                               |                             | +/- 666.2440 µg/mL                   | Stressed    |
| 7             | Allyl chloride (3-chloropropene)         | 2,500.0 µg/mL               | +/- 19.2743 µg/mL                    | Gravimetric |
|               | CAS # 107-05-1 (Lot MKBG5777V)           |                             | +/- 133.6453 µg/mL                   | Unstressed  |
|               | Purity 99%                               |                             | +/- 133.7914 µg/mL                   | Stressed    |

|    |                                      |                  |          |       |     |            |       |             |
|----|--------------------------------------|------------------|----------|-------|-----|------------|-------|-------------|
| 8  | Methylene chloride (dichloromethane) |                  | 2,511.3  | µg/mL | +/- | 14.6006    | µg/mL | Gravimetric |
|    | CAS # 75-09-2                        | (Lot SHBD4974V)  |          |       | +/- | 133.6432   | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 133.7906   | µg/mL | Stressed    |
| 9  | Carbon disulfide                     |                  | 2,511.7  | µg/mL | +/- | 14.6035    | µg/mL | Gravimetric |
|    | CAS # 75-15-0                        | (Lot C30Y997)    |          |       | +/- | 133.6693   | µg/mL | Unstressed  |
|    | Purity 98%                           |                  |          |       | +/- | 133.8167   | µg/mL | Stressed    |
| 10 | Acrylonitrile                        |                  | 25,017.1 | µg/mL | +/- | 145.4441   | µg/mL | Gravimetric |
|    | CAS # 107-13-1                       | (Lot 10172706)   |          |       | +/- | 1,331.3554 | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 1,332.8236 | µg/mL | Stressed    |
| 11 | cis-1,2-Dichloroethene               |                  | 2,503.9  | µg/mL | +/- | 14.5577    | µg/mL | Gravimetric |
|    | CAS # 156-59-2                       | (Lot MKBG8424V)  |          |       | +/- | 133.2507   | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 133.3977   | µg/mL | Stressed    |
| 12 | n-Hexane (C6)                        |                  | 2,511.9  | µg/mL | +/- | 14.6043    | µg/mL | Gravimetric |
|    | CAS # 110-54-3                       | (Lot SHBF0293V)  |          |       | +/- | 133.6764   | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 133.8239   | µg/mL | Stressed    |
| 13 | 1,1-dichloroethene                   |                  | 2,521.3  | µg/mL | +/- | 14.6588    | µg/mL | Gravimetric |
|    | CAS # 75-35-4                        | (Lot SHBD6170V)  |          |       | +/- | 134.1754   | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 134.3233   | µg/mL | Stressed    |
| 14 | 2,2-Dichloropropane                  |                  | 2,500.0  | µg/mL | +/- | 14.5351    | µg/mL | Gravimetric |
|    | CAS # 594-20-7                       | (Lot BCBH9246V)  |          |       | +/- | 133.0434   | µg/mL | Unstressed  |
|    | Purity 98%                           |                  |          |       | +/- | 133.1901   | µg/mL | Stressed    |
| 15 | trans-1,2-Dichloroethene             |                  | 2,505.0  | µg/mL | +/- | 14.5643    | µg/mL | Gravimetric |
|    | CAS # 156-60-5                       | (Lot MKBH9850V)  |          |       | +/- | 133.3106   | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 133.4576   | µg/mL | Stressed    |
| 16 | Isobutanol (2-Methyl-1-propanol)     |                  | 62,553.8 | µg/mL | +/- | 363.6739   | µg/mL | Gravimetric |
|    | CAS # 78-83-1                        | (Lot SHBF2852V)  |          |       | +/- | 3,328.9705 | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 3,332.6417 | µg/mL | Stressed    |
| 17 | Methyl-tert-butyl ether ( MTBE )     |                  | 2,504.6  | µg/mL | +/- | 14.5621    | µg/mL | Gravimetric |
|    | CAS # 1634-04-4                      | (Lot SHBF1193V)  |          |       | +/- | 133.2906   | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 133.4376   | µg/mL | Stressed    |
| 18 | Bromochloromethane                   |                  | 2,505.1  | µg/mL | +/- | 14.5650    | µg/mL | Gravimetric |
|    | CAS # 74-97-5                        | (Lot 00004559)   |          |       | +/- | 133.3172   | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 133.4642   | µg/mL | Stressed    |
| 19 | Tetrahydrofuran                      |                  | 5,000.7  | µg/mL | +/- | 29.0746    | µg/mL | Gravimetric |
|    | CAS # 109-99-9                       | (Lot SHBF2660V)  |          |       | +/- | 266.1270   | µg/mL | Unstressed  |
|    | Purity 97%                           |                  |          |       | +/- | 266.4204   | µg/mL | Stressed    |
| 20 | 1,1,1-trichloroethane                |                  | 2,508.1  | µg/mL | +/- | 14.5825    | µg/mL | Gravimetric |
|    | CAS # 71-55-6                        | (Lot B14Z1114)   |          |       | +/- | 133.4769   | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 133.6241   | µg/mL | Stressed    |
| 21 | Cyclohexane                          |                  | 2,504.0  | µg/mL | +/- | 14.5585    | µg/mL | Gravimetric |
|    | CAS # 110-82-7                       | (Lot SHBD7873V)  |          |       | +/- | 133.2574   | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 133.4043   | µg/mL | Stressed    |
| 22 | 1,1-Dichloropropene                  |                  | 2,502.4  | µg/mL | +/- | 14.5493    | µg/mL | Gravimetric |
|    | CAS # 563-58-6                       | (Lot PR09161302) |          |       | +/- | 133.1738   | µg/mL | Unstressed  |
|    | Purity 98%                           |                  |          |       | +/- | 133.3207   | µg/mL | Stressed    |
| 23 | carbon tetrachloride                 |                  | 2,505.3  | µg/mL | +/- | 14.5657    | µg/mL | Gravimetric |
|    | CAS # 56-23-5                        | (Lot SHBC1410V)  |          |       | +/- | 133.3239   | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 133.4709   | µg/mL | Stressed    |

|    |                                                             |                 |                |                                                  |                         |                                       |
|----|-------------------------------------------------------------|-----------------|----------------|--------------------------------------------------|-------------------------|---------------------------------------|
| 24 | n-Heptane (C7)<br>CAS # 142-82-5<br>Purity 99%              | (Lot SHBF2321V) | 2,501.4 µg/mL  | +/- 14.5432<br>+/- 133.1177<br>+/- 133.2645      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 25 | 1,2-Dichloroethane<br>CAS # 107-06-2<br>Purity 99%          | (Lot SHBC6595V) | 2,501.6 µg/mL  | +/- 14.5447<br>+/- 133.1310<br>+/- 133.2778      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 26 | Benzene<br>CAS # 71-43-2<br>Purity 99%                      | (Lot SHBD4617V) | 2,509.1 µg/mL  | +/- 14.5883<br>+/- 133.5301<br>+/- 133.6774      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 27 | Trichloroethene<br>CAS # 79-01-6<br>Purity 99%              | (Lot SHBF0943V) | 2,504.8 µg/mL  | +/- 14.5628<br>+/- 133.2973<br>+/- 133.4443      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 28 | Methylcyclohexane<br>CAS # 108-87-2<br>Purity 99%           | (Lot 50996APV)  | 2,502.5 µg/mL  | +/- 14.5498<br>+/- 133.1775<br>+/- 133.3244      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 29 | 1,2-Dichloropropane<br>CAS # 78-87-5<br>Purity 99%          | (Lot 01113D0V)  | 2,502.4 µg/mL  | +/- 14.5490<br>+/- 133.1709<br>+/- 133.3177      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 30 | bromodichloromethane<br>CAS # 75-27-4<br>Purity 98%         | (Lot MKBL1617V) | 2,507.9 µg/mL  | +/- 14.5814<br>+/- 133.4672<br>+/- 133.6144      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 31 | 1,4-Dioxane<br>CAS # 123-91-1<br>Purity 99%                 | (Lot SHBF2002V) | 50,001.4 µg/mL | +/- 290.6971<br>+/- 2,660.9612<br>+/- 2,663.8957 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 32 | Dibromomethane<br>CAS # 74-95-3<br>Purity 99%               | (Lot 10169264)  | 2,508.1 µg/mL  | +/- 14.5825<br>+/- 133.4769<br>+/- 133.6241      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 33 | cis-1,3-Dichloropropene<br>CAS # 10061-01-5<br>Purity 99%   | (Lot 20936)     | 2,507.0 µg/mL  | +/- 14.5759<br>+/- 133.4170<br>+/- 133.5641      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 34 | Toluene<br>CAS # 108-88-3<br>Purity 99%                     | (Lot SHBF2730V) | 2,502.4 µg/mL  | +/- 14.5490<br>+/- 133.1709<br>+/- 133.3177      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 35 | Ethyl methacrylate<br>CAS # 97-63-2<br>Purity 99%           | (Lot 69796APV)  | 2,500.9 µg/mL  | +/- 14.5403<br>+/- 133.0911<br>+/- 133.2378      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 36 | trans-1,3-Dichloropropene<br>CAS # 10061-02-6<br>Purity 99% | (Lot C363110)   | 2,502.1 µg/mL  | +/- 14.5476<br>+/- 133.1576<br>+/- 133.3044      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 37 | 1,1,2-Trichloroethane<br>CAS # 79-00-5<br>Purity 99%        | (Lot FGB01)     | 2,507.5 µg/mL  | +/- 14.5788<br>+/- 133.4436<br>+/- 133.5908      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 38 | 1,3-Dichloropropane<br>CAS # 142-28-9<br>Purity 99%         | (Lot BCBG2162V) | 2,505.3 µg/mL  | +/- 14.5657<br>+/- 133.3239<br>+/- 133.4709      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 39 | Tetrachloroethene<br>CAS # 127-18-4<br>Purity 99%           | (Lot SHBD2073V) | 2,506.5 µg/mL  | +/- 14.5730<br>+/- 133.3904<br>+/- 133.5375      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |

|    |                                                             |                 |         |       |     |          |       |             |
|----|-------------------------------------------------------------|-----------------|---------|-------|-----|----------|-------|-------------|
| 40 | dibromochloromethane<br>CAS # 124-48-1<br>Purity 98%        | (Lot MKBP0459V) | 2,503.2 | µg/mL | +/- | 14.5536  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.2129 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.3598 | µg/mL | Stressed    |
| 41 | 1,2-Dibromoethane (EDB)<br>CAS # 106-93-4<br>Purity 99%     | (Lot BCBH3877V) | 2,504.3 | µg/mL | +/- | 14.5599  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.2707 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.4176 | µg/mL | Stressed    |
| 42 | Chlorobenzene<br>CAS # 108-90-7<br>Purity 99%               | (Lot SHBD3200V) | 2,510.8 | µg/mL | +/- | 14.5977  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.6166 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.7639 | µg/mL | Stressed    |
| 43 | 1,1,2,2-Tetrachloroethane<br>CAS # 79-34-5<br>Purity 99%    | (Lot CFA4D)     | 2,502.9 | µg/mL | +/- | 14.5519  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.1975 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.3444 | µg/mL | Stressed    |
| 44 | Ethylbenzene<br>CAS # 100-41-4<br>Purity 99%                | (Lot SHBC9001V) | 2,509.6 | µg/mL | +/- | 14.5912  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.5567 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.7040 | µg/mL | Stressed    |
| 45 | m-Xylene<br>CAS # 108-38-3<br>Purity 99%                    | (Lot SHBF1720V) | 1,252.6 | µg/mL | +/- | 7.2829   | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 66.6619  | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 66.7355  | µg/mL | Stressed    |
| 46 | o-Xylene<br>CAS # 95-47-6<br>Purity 98%                     | (Lot SHBC8668V) | 2,503.7 | µg/mL | +/- | 14.5565  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.2390 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.3859 | µg/mL | Stressed    |
| 47 | p-Xylene<br>CAS # 106-42-3<br>Purity 99%                    | (Lot SHBF3427V) | 1,253.3 | µg/mL | +/- | 7.2865   | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 66.6952  | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 66.7688  | µg/mL | Stressed    |
| 48 | Styrene<br>CAS # 100-42-5<br>Purity 99%                     | (Lot 10182421)  | 2,503.5 | µg/mL | +/- | 14.5556  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.2307 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.3777 | µg/mL | Stressed    |
| 49 | Isopropylbenzene (cumene)<br>CAS # 98-82-8<br>Purity 99%    | (Lot 10169400)  | 2,502.5 | µg/mL | +/- | 14.5498  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.1775 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.3244 | µg/mL | Stressed    |
| 50 | bromoform<br>CAS # 75-25-2<br>Purity 99%                    | (Lot SHBC3410V) | 2,507.8 | µg/mL | +/- | 14.5803  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.4569 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.6041 | µg/mL | Stressed    |
| 51 | 1,1,1,2-Tetrachloroethane<br>CAS # 630-20-6<br>Purity 99%   | (Lot MKBS3769V) | 2,510.3 | µg/mL | +/- | 14.5948  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.5900 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.7373 | µg/mL | Stressed    |
| 52 | chloroform<br>CAS # 67-66-3<br>Purity 99%                   | (Lot SHBB7498V) | 2,501.3 | µg/mL | +/- | 14.5425  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.1110 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.2578 | µg/mL | Stressed    |
| 53 | 1,2,3-Trichloropropane<br>CAS # 96-18-4<br>Purity 99%       | (Lot 1428739V)  | 2,502.5 | µg/mL | +/- | 14.5498  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.1775 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.3244 | µg/mL | Stressed    |
| 54 | trans-1,4-dichloro-2-butene<br>CAS # 110-57-6<br>Purity 96% | (Lot MKBP5371V) | 2,499.5 | µg/mL | +/- | 14.5322  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.0168 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.1635 | µg/mL | Stressed    |
| 55 | n-Propylbenzene<br>CAS # 103-65-1<br>Purity 99%             | (Lot MKBQ8049V) | 2,500.3 | µg/mL | +/- | 14.5367  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.0578 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.2045 | µg/mL | Stressed    |

|    |                                                              |                 |               |                   |                                 |                         |                                       |
|----|--------------------------------------------------------------|-----------------|---------------|-------------------|---------------------------------|-------------------------|---------------------------------------|
| 56 | Bromobenzene<br>CAS # 108-86-1<br>Purity 99%                 | (Lot MKBD4032V) | 2,501.1 µg/mL | +/-<br>+/-<br>+/- | 14.5418<br>133.1044<br>133.2511 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 57 | 1,2,4-Trimethylbenzene<br>CAS # 95-63-6<br>Purity 98%        | (Lot MKBJ1732V) | 2,501.6 µg/mL | +/-<br>+/-<br>+/- | 14.5444<br>133.1282<br>133.2750 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 58 | 2-Chlorotoluene<br>CAS # 95-49-8<br>Purity 99%               | (Lot MKBH8892V) | 2,500.3 µg/mL | +/-<br>+/-<br>+/- | 14.5367<br>133.0578<br>133.2045 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 59 | 4-Chlorotoluene<br>CAS # 106-43-4<br>Purity 99%              | (Lot MKBB7205V) | 2,506.4 µg/mL | +/-<br>+/-<br>+/- | 14.5723<br>133.3837<br>133.5308 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 60 | tert-Butylbenzene<br>CAS # 98-06-6<br>Purity 99%             | (Lot S52237V)   | 2,500.1 µg/mL | +/-<br>+/-<br>+/- | 14.5359<br>133.0511<br>133.1979 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 61 | 1,3,5-Trimethylbenzene<br>CAS # 108-67-8<br>Purity 99%       | (Lot BCBJ3305V) | 2,503.1 µg/mL | +/-<br>+/-<br>+/- | 14.5534<br>133.2108<br>133.3577 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 62 | sec-Butylbenzene<br>CAS # 135-98-8<br>Purity 99%             | (Lot MKBK3151V) | 2,504.0 µg/mL | +/-<br>+/-<br>+/- | 14.5585<br>133.2574<br>133.4043 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 63 | p-Isopropyltoluene (p-Cymene)<br>CAS # 99-87-6<br>Purity 99% | (Lot MKBK4439V) | 2,501.1 µg/mL | +/-<br>+/-<br>+/- | 14.5418<br>133.1044<br>133.2511 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 64 | 1,3-Dichlorobenzene<br>CAS # 541-73-1<br>Purity 99%          | (Lot BCBC1891V) | 2,506.1 µg/mL | +/-<br>+/-<br>+/- | 14.5708<br>133.3704<br>133.5175 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 65 | 1,4-Dichlorobenzene<br>CAS # 106-46-7<br>Purity 99%          | (Lot MKBL3891V) | 2,507.0 µg/mL | +/-<br>+/-<br>+/- | 14.5759<br>133.4170<br>133.5641 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 66 | n-Butylbenzene<br>CAS # 104-51-8<br>Purity 99%               | (Lot 09418JIV)  | 2,502.6 µg/mL | +/-<br>+/-<br>+/- | 14.5505<br>133.1842<br>133.3311 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 67 | 1,2-Dichlorobenzene<br>CAS # 95-50-1<br>Purity 99%           | (Lot 68996CMV)  | 2,501.6 µg/mL | +/-<br>+/-<br>+/- | 14.5447<br>133.1310<br>133.2778 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 68 | 1,2-Dibromo-3-chloropropane<br>CAS # 96-12-8<br>Purity 99%   | (Lot FBL01)     | 2,505.9 µg/mL | +/-<br>+/-<br>+/- | 14.5694<br>133.3571<br>133.5042 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 69 | 1,2,4-Trichlorobenzene<br>CAS # 120-82-1<br>Purity 99%       | (Lot 26896BM)   | 2,501.5 µg/mL | +/-<br>+/-<br>+/- | 14.5439<br>133.1243<br>133.2711 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 70 | Hexachlorobutadiene<br>CAS # 87-68-3<br>Purity 98%           | (Lot K22W009)   | 2,501.6 µg/mL | +/-<br>+/-<br>+/- | 14.5444<br>133.1282<br>133.2750 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 71 | Naphthalene<br>CAS # 91-20-3<br>Purity 99%                   | (Lot MKBH4351V) | 2,502.6 µg/mL | +/-<br>+/-<br>+/- | 14.5505<br>133.1842<br>133.3311 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |

|    |                        |                |              |       |             |
|----|------------------------|----------------|--------------|-------|-------------|
| 72 | 1,2,3-Trichlorobenzene | 2,503.4 µg/mL  | +/- 14.5548  | µg/mL | Gravimetric |
|    | CAS # 87-61-6          | (Lot 12912PFV) | +/- 133.2241 | µg/mL | Unstressed  |
|    | Purity 99%             |                | +/- 133.3710 | µg/mL | Stressed    |

**Solvent:** P&T Methanol  
**CAS #** 67-56-1  
**Purity** 99%

**Column:**  
60m x 0.25mm x 1.4µm  
Rtx-502.2 (cat.#10916)

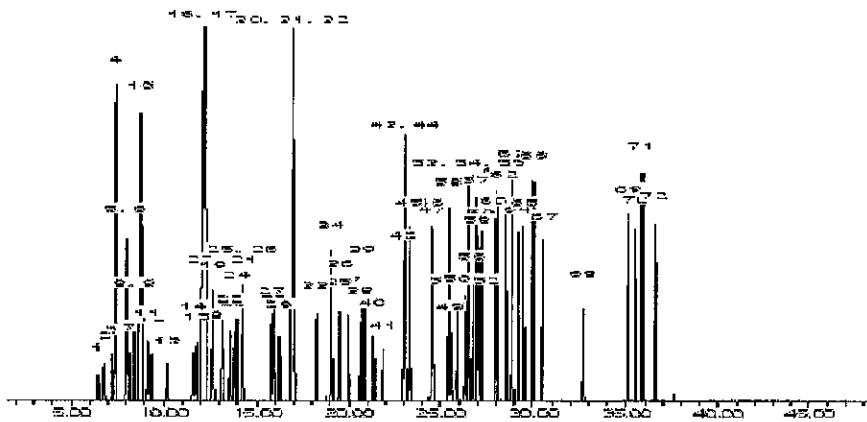
**Carrier Gas:**  
helium-constant pressure 30 psi

**Temp. Program:**  
40°C (hold 6 min.) to 240°C  
@ 6°C/min. (hold 10 min.)

**Inj. Temp:**  
200°C

**Det. Temp:**  
250°C

**Det. Type:**  
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

*[Signature]*  
Kendra Swope - Mix Technician

**Date Mixed:** 07-Jan-2015      **Balance:** 1125113331

*[Signature]*  
Tyler Brown - QA Analyst

**Date Passed:** 14-Jan-2015

|                                                                                                            |
|------------------------------------------------------------------------------------------------------------|
| <p>Manufactured under Restek's ISO 9001:2008<br/> Registered Quality System<br/> Certificate #FM 80397</p> |
|------------------------------------------------------------------------------------------------------------|

Reagent

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**VOA8260MEGA1\_00034**



CERTIFIED REFERENCE MATERIAL

110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

www.restek.com

# Certificate of Analysis



## FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

Catalog No. : 569720 Lot No.: A0108166  
Description : 8260 List 1 / Std #1 MegaMix (2015)  
8260 List 1 / Std #1 MegaMix (2015) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul  
Container Size : 2 mL Pkg Amt: > 1 mL  
Expiration Date : January 31, 2017 Storage: 0°C or colder

## CERTIFIED VALUES

| Elution Order | Compound                                                                               | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2)                               |                                       |
|---------------|----------------------------------------------------------------------------------------|-----------------------------|--------------------------------------------------------------------|---------------------------------------|
| 1             | Diethyl ether (ethyl ether)<br>CAS # 60-29-7 (Lot SHBF3466V)<br>Purity 99%             | 2,521.3 µg/mL               | +/- 14.6588 µg/mL<br>+/- 134.1754 µg/mL<br>+/- 134.3233 µg/mL      | Gravimetric<br>Unstressed<br>Stressed |
| 2             | 1,1,2-Trichlorotrifluoroethane (CFC-113)<br>CAS # 76-13-1 (Lot 00001135)<br>Purity 99% | 2,522.5 µg/mL               | +/- 14.6660 µg/mL<br>+/- 134.2419 µg/mL<br>+/- 134.3899 µg/mL      | Gravimetric<br>Unstressed<br>Stressed |
| 3             | 1,1-Dichloroethane<br>CAS # 75-34-3 (Lot Q179-33)<br>Purity 98%                        | 2,499.5 µg/mL               | +/- 14.5323 µg/mL<br>+/- 133.0173 µg/mL<br>+/- 133.1640 µg/mL      | Gravimetric<br>Unstressed<br>Stressed |
| 4             | tert-Butanol (TBA)<br>CAS # 75-65-0 (Lot SHBC6893V)<br>Purity 99%                      | 25,002.4 µg/mL              | +/- 145.3584 µg/mL<br>+/- 1,330.5704 µg/mL<br>+/- 1,332.0378 µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 5             | Iodomethane (methyl iodide)<br>CAS # 74-88-4 (Lot SHBC7288V)<br>Purity 99%             | 2,510.0 µg/mL               | +/- 14.5934 µg/mL<br>+/- 133.5767 µg/mL<br>+/- 133.7240 µg/mL      | Gravimetric<br>Unstressed<br>Stressed |
| 6             | Methyl acetate<br>CAS # 79-20-9 (Lot SHBD7134V)<br>Purity 98%                          | 12,505.4 µg/mL              | +/- 72.7037 µg/mL<br>+/- 665.5101 µg/mL<br>+/- 666.2440 µg/mL      | Gravimetric<br>Unstressed<br>Stressed |
| 7             | Allyl chloride (3-chloropropene)<br>CAS # 107-05-1 (Lot MKBG5777V)<br>Purity 99%       | 2,500.0 µg/mL               | +/- 19.2743 µg/mL<br>+/- 133.6453 µg/mL<br>+/- 133.7914 µg/mL      | Gravimetric<br>Unstressed<br>Stressed |



|    |                                      |                  |          |       |     |            |       |             |
|----|--------------------------------------|------------------|----------|-------|-----|------------|-------|-------------|
| 8  | Methylene chloride (dichloromethane) |                  | 2,511.3  | µg/mL | +/- | 14.6006    | µg/mL | Gravimetric |
|    | CAS # 75-09-2                        | (Lot SHBD4974V)  |          |       | +/- | 133.6432   | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 133.7906   | µg/mL | Stressed    |
| 9  | Carbon disulfide                     |                  | 2,511.7  | µg/mL | +/- | 14.6035    | µg/mL | Gravimetric |
|    | CAS # 75-15-0                        | (Lot C30Y997)    |          |       | +/- | 133.6693   | µg/mL | Unstressed  |
|    | Purity 98%                           |                  |          |       | +/- | 133.8167   | µg/mL | Stressed    |
| 10 | Acrylonitrile                        |                  | 25,017.1 | µg/mL | +/- | 145.4441   | µg/mL | Gravimetric |
|    | CAS # 107-13-1                       | (Lot 10172706)   |          |       | +/- | 1,331.3554 | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 1,332.8236 | µg/mL | Stressed    |
| 11 | cis-1,2-Dichloroethene               |                  | 2,503.9  | µg/mL | +/- | 14.5577    | µg/mL | Gravimetric |
|    | CAS # 156-59-2                       | (Lot MKBG8424V)  |          |       | +/- | 133.2507   | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 133.3977   | µg/mL | Stressed    |
| 12 | n-Hexane (C6)                        |                  | 2,511.9  | µg/mL | +/- | 14.6043    | µg/mL | Gravimetric |
|    | CAS # 110-54-3                       | (Lot SHBF0293V)  |          |       | +/- | 133.6764   | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 133.8239   | µg/mL | Stressed    |
| 13 | 1,1-dichloroethene                   |                  | 2,521.3  | µg/mL | +/- | 14.6588    | µg/mL | Gravimetric |
|    | CAS # 75-35-4                        | (Lot SHBD6170V)  |          |       | +/- | 134.1754   | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 134.3233   | µg/mL | Stressed    |
| 14 | 2,2-Dichloropropane                  |                  | 2,500.0  | µg/mL | +/- | 14.5351    | µg/mL | Gravimetric |
|    | CAS # 594-20-7                       | (Lot BCBH9246V)  |          |       | +/- | 133.0434   | µg/mL | Unstressed  |
|    | Purity 98%                           |                  |          |       | +/- | 133.1901   | µg/mL | Stressed    |
| 15 | trans-1,2-Dichloroethene             |                  | 2,505.0  | µg/mL | +/- | 14.5643    | µg/mL | Gravimetric |
|    | CAS # 156-60-5                       | (Lot MKBH9850V)  |          |       | +/- | 133.3106   | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 133.4576   | µg/mL | Stressed    |
| 16 | Isobutanol (2-Methyl-1-propanol)     |                  | 62,553.8 | µg/mL | +/- | 363.6739   | µg/mL | Gravimetric |
|    | CAS # 78-83-1                        | (Lot SHBF2852V)  |          |       | +/- | 3,328.9705 | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 3,332.6417 | µg/mL | Stressed    |
| 17 | Methyl-tert-butyl ether ( MTBE )     |                  | 2,504.6  | µg/mL | +/- | 14.5621    | µg/mL | Gravimetric |
|    | CAS # 1634-04-4                      | (Lot SHBF1193V)  |          |       | +/- | 133.2906   | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 133.4376   | µg/mL | Stressed    |
| 18 | Bromochloromethane                   |                  | 2,505.1  | µg/mL | +/- | 14.5650    | µg/mL | Gravimetric |
|    | CAS # 74-97-5                        | (Lot 00004559)   |          |       | +/- | 133.3172   | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 133.4642   | µg/mL | Stressed    |
| 19 | Tetrahydrofuran                      |                  | 5,000.7  | µg/mL | +/- | 29.0746    | µg/mL | Gravimetric |
|    | CAS # 109-99-9                       | (Lot SHBF2660V)  |          |       | +/- | 266.1270   | µg/mL | Unstressed  |
|    | Purity 97%                           |                  |          |       | +/- | 266.4204   | µg/mL | Stressed    |
| 20 | 1,1,1-trichloroethane                |                  | 2,508.1  | µg/mL | +/- | 14.5825    | µg/mL | Gravimetric |
|    | CAS # 71-55-6                        | (Lot B14Z1114)   |          |       | +/- | 133.4769   | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 133.6241   | µg/mL | Stressed    |
| 21 | Cyclohexane                          |                  | 2,504.0  | µg/mL | +/- | 14.5585    | µg/mL | Gravimetric |
|    | CAS # 110-82-7                       | (Lot SHBD7873V)  |          |       | +/- | 133.2574   | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 133.4043   | µg/mL | Stressed    |
| 22 | 1,1-Dichloropropene                  |                  | 2,502.4  | µg/mL | +/- | 14.5493    | µg/mL | Gravimetric |
|    | CAS # 563-58-6                       | (Lot PR09161302) |          |       | +/- | 133.1738   | µg/mL | Unstressed  |
|    | Purity 98%                           |                  |          |       | +/- | 133.3207   | µg/mL | Stressed    |
| 23 | carbon tetrachloride                 |                  | 2,505.3  | µg/mL | +/- | 14.5657    | µg/mL | Gravimetric |
|    | CAS # 56-23-5                        | (Lot SHBC1410V)  |          |       | +/- | 133.3239   | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 133.4709   | µg/mL | Stressed    |

|    |                                                             |                 |                |                                                  |                         |                                       |
|----|-------------------------------------------------------------|-----------------|----------------|--------------------------------------------------|-------------------------|---------------------------------------|
| 24 | n-Heptane (C7)<br>CAS # 142-82-5<br>Purity 99%              | (Lot SHBF2321V) | 2,501.4 µg/mL  | +/- 14.5432<br>+/- 133.1177<br>+/- 133.2645      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 25 | 1,2-Dichloroethane<br>CAS # 107-06-2<br>Purity 99%          | (Lot SHBC6595V) | 2,501.6 µg/mL  | +/- 14.5447<br>+/- 133.1310<br>+/- 133.2778      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 26 | Benzene<br>CAS # 71-43-2<br>Purity 99%                      | (Lot SHBD4617V) | 2,509.1 µg/mL  | +/- 14.5883<br>+/- 133.5301<br>+/- 133.6774      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 27 | Trichloroethene<br>CAS # 79-01-6<br>Purity 99%              | (Lot SHBF0943V) | 2,504.8 µg/mL  | +/- 14.5628<br>+/- 133.2973<br>+/- 133.4443      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 28 | Methylcyclohexane<br>CAS # 108-87-2<br>Purity 99%           | (Lot 50996APV)  | 2,502.5 µg/mL  | +/- 14.5498<br>+/- 133.1775<br>+/- 133.3244      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 29 | 1,2-Dichloropropane<br>CAS # 78-87-5<br>Purity 99%          | (Lot 01113D0V)  | 2,502.4 µg/mL  | +/- 14.5490<br>+/- 133.1709<br>+/- 133.3177      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 30 | bromodichloromethane<br>CAS # 75-27-4<br>Purity 98%         | (Lot MKBL1617V) | 2,507.9 µg/mL  | +/- 14.5814<br>+/- 133.4672<br>+/- 133.6144      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 31 | 1,4-Dioxane<br>CAS # 123-91-1<br>Purity 99%                 | (Lot SHBF2002V) | 50,001.4 µg/mL | +/- 290.6971<br>+/- 2,660.9612<br>+/- 2,663.8957 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 32 | Dibromomethane<br>CAS # 74-95-3<br>Purity 99%               | (Lot 10169264)  | 2,508.1 µg/mL  | +/- 14.5825<br>+/- 133.4769<br>+/- 133.6241      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 33 | cis-1,3-Dichloropropene<br>CAS # 10061-01-5<br>Purity 99%   | (Lot 20936)     | 2,507.0 µg/mL  | +/- 14.5759<br>+/- 133.4170<br>+/- 133.5641      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 34 | Toluene<br>CAS # 108-88-3<br>Purity 99%                     | (Lot SHBF2730V) | 2,502.4 µg/mL  | +/- 14.5490<br>+/- 133.1709<br>+/- 133.3177      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 35 | Ethyl methacrylate<br>CAS # 97-63-2<br>Purity 99%           | (Lot 69796APV)  | 2,500.9 µg/mL  | +/- 14.5403<br>+/- 133.0911<br>+/- 133.2378      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 36 | trans-1,3-Dichloropropene<br>CAS # 10061-02-6<br>Purity 99% | (Lot C363110)   | 2,502.1 µg/mL  | +/- 14.5476<br>+/- 133.1576<br>+/- 133.3044      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 37 | 1,1,2-Trichloroethane<br>CAS # 79-00-5<br>Purity 99%        | (Lot FGB01)     | 2,507.5 µg/mL  | +/- 14.5788<br>+/- 133.4436<br>+/- 133.5908      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 38 | 1,3-Dichloropropane<br>CAS # 142-28-9<br>Purity 99%         | (Lot BCBG2162V) | 2,505.3 µg/mL  | +/- 14.5657<br>+/- 133.3239<br>+/- 133.4709      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 39 | Tetrachloroethene<br>CAS # 127-18-4<br>Purity 99%           | (Lot SHBD2073V) | 2,506.5 µg/mL  | +/- 14.5730<br>+/- 133.3904<br>+/- 133.5375      | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |

|    |                                                             |                 |         |       |     |          |       |             |
|----|-------------------------------------------------------------|-----------------|---------|-------|-----|----------|-------|-------------|
| 40 | dibromochloromethane<br>CAS # 124-48-1<br>Purity 98%        | (Lot MKBP0459V) | 2,503.2 | µg/mL | +/- | 14.5536  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.2129 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.3598 | µg/mL | Stressed    |
| 41 | 1,2-Dibromoethane (EDB)<br>CAS # 106-93-4<br>Purity 99%     | (Lot BCBH3877V) | 2,504.3 | µg/mL | +/- | 14.5599  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.2707 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.4176 | µg/mL | Stressed    |
| 42 | Chlorobenzene<br>CAS # 108-90-7<br>Purity 99%               | (Lot SHBD3200V) | 2,510.8 | µg/mL | +/- | 14.5977  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.6166 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.7639 | µg/mL | Stressed    |
| 43 | 1,1,2,2-Tetrachloroethane<br>CAS # 79-34-5<br>Purity 99%    | (Lot CFA4D)     | 2,502.9 | µg/mL | +/- | 14.5519  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.1975 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.3444 | µg/mL | Stressed    |
| 44 | Ethylbenzene<br>CAS # 100-41-4<br>Purity 99%                | (Lot SHBC9001V) | 2,509.6 | µg/mL | +/- | 14.5912  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.5567 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.7040 | µg/mL | Stressed    |
| 45 | m-Xylene<br>CAS # 108-38-3<br>Purity 99%                    | (Lot SHBF1720V) | 1,252.6 | µg/mL | +/- | 7.2829   | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 66.6619  | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 66.7355  | µg/mL | Stressed    |
| 46 | o-Xylene<br>CAS # 95-47-6<br>Purity 98%                     | (Lot SHBC8668V) | 2,503.7 | µg/mL | +/- | 14.5565  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.2390 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.3859 | µg/mL | Stressed    |
| 47 | p-Xylene<br>CAS # 106-42-3<br>Purity 99%                    | (Lot SHBF3427V) | 1,253.3 | µg/mL | +/- | 7.2865   | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 66.6952  | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 66.7688  | µg/mL | Stressed    |
| 48 | Styrene<br>CAS # 100-42-5<br>Purity 99%                     | (Lot 10182421)  | 2,503.5 | µg/mL | +/- | 14.5556  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.2307 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.3777 | µg/mL | Stressed    |
| 49 | Isopropylbenzene (cumene)<br>CAS # 98-82-8<br>Purity 99%    | (Lot 10169400)  | 2,502.5 | µg/mL | +/- | 14.5498  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.1775 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.3244 | µg/mL | Stressed    |
| 50 | bromoform<br>CAS # 75-25-2<br>Purity 99%                    | (Lot SHBC3410V) | 2,507.8 | µg/mL | +/- | 14.5803  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.4569 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.6041 | µg/mL | Stressed    |
| 51 | 1,1,1,2-Tetrachloroethane<br>CAS # 630-20-6<br>Purity 99%   | (Lot MKBS3769V) | 2,510.3 | µg/mL | +/- | 14.5948  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.5900 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.7373 | µg/mL | Stressed    |
| 52 | chloroform<br>CAS # 67-66-3<br>Purity 99%                   | (Lot SHBB7498V) | 2,501.3 | µg/mL | +/- | 14.5425  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.1110 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.2578 | µg/mL | Stressed    |
| 53 | 1,2,3-Trichloropropane<br>CAS # 96-18-4<br>Purity 99%       | (Lot 1428739V)  | 2,502.5 | µg/mL | +/- | 14.5498  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.1775 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.3244 | µg/mL | Stressed    |
| 54 | trans-1,4-dichloro-2-butene<br>CAS # 110-57-6<br>Purity 96% | (Lot MKBP5371V) | 2,499.5 | µg/mL | +/- | 14.5322  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.0168 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.1635 | µg/mL | Stressed    |
| 55 | n-Propylbenzene<br>CAS # 103-65-1<br>Purity 99%             | (Lot MKBQ8049V) | 2,500.3 | µg/mL | +/- | 14.5367  | µg/mL | Gravimetric |
|    |                                                             |                 |         |       | +/- | 133.0578 | µg/mL | Unstressed  |
|    |                                                             |                 |         |       | +/- | 133.2045 | µg/mL | Stressed    |

|    |                                                              |                 |               |                   |                                 |                         |                                       |
|----|--------------------------------------------------------------|-----------------|---------------|-------------------|---------------------------------|-------------------------|---------------------------------------|
| 56 | Bromobenzene<br>CAS # 108-86-1<br>Purity 99%                 | (Lot MKBD4032V) | 2,501.1 µg/mL | +/-<br>+/-<br>+/- | 14.5418<br>133.1044<br>133.2511 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 57 | 1,2,4-Trimethylbenzene<br>CAS # 95-63-6<br>Purity 98%        | (Lot MKBJ1732V) | 2,501.6 µg/mL | +/-<br>+/-<br>+/- | 14.5444<br>133.1282<br>133.2750 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 58 | 2-Chlorotoluene<br>CAS # 95-49-8<br>Purity 99%               | (Lot MKBH8892V) | 2,500.3 µg/mL | +/-<br>+/-<br>+/- | 14.5367<br>133.0578<br>133.2045 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 59 | 4-Chlorotoluene<br>CAS # 106-43-4<br>Purity 99%              | (Lot MKBB7205V) | 2,506.4 µg/mL | +/-<br>+/-<br>+/- | 14.5723<br>133.3837<br>133.5308 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 60 | tert-Butylbenzene<br>CAS # 98-06-6<br>Purity 99%             | (Lot S52237V)   | 2,500.1 µg/mL | +/-<br>+/-<br>+/- | 14.5359<br>133.0511<br>133.1979 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 61 | 1,3,5-Trimethylbenzene<br>CAS # 108-67-8<br>Purity 99%       | (Lot BCBJ3305V) | 2,503.1 µg/mL | +/-<br>+/-<br>+/- | 14.5534<br>133.2108<br>133.3577 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 62 | sec-Butylbenzene<br>CAS # 135-98-8<br>Purity 99%             | (Lot MKBK3151V) | 2,504.0 µg/mL | +/-<br>+/-<br>+/- | 14.5585<br>133.2574<br>133.4043 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 63 | p-Isopropyltoluene (p-Cymene)<br>CAS # 99-87-6<br>Purity 99% | (Lot MKBK4439V) | 2,501.1 µg/mL | +/-<br>+/-<br>+/- | 14.5418<br>133.1044<br>133.2511 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 64 | 1,3-Dichlorobenzene<br>CAS # 541-73-1<br>Purity 99%          | (Lot BCBC1891V) | 2,506.1 µg/mL | +/-<br>+/-<br>+/- | 14.5708<br>133.3704<br>133.5175 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 65 | 1,4-Dichlorobenzene<br>CAS # 106-46-7<br>Purity 99%          | (Lot MKBL3891V) | 2,507.0 µg/mL | +/-<br>+/-<br>+/- | 14.5759<br>133.4170<br>133.5641 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 66 | n-Butylbenzene<br>CAS # 104-51-8<br>Purity 99%               | (Lot 09418JIV)  | 2,502.6 µg/mL | +/-<br>+/-<br>+/- | 14.5505<br>133.1842<br>133.3311 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 67 | 1,2-Dichlorobenzene<br>CAS # 95-50-1<br>Purity 99%           | (Lot 68996CMV)  | 2,501.6 µg/mL | +/-<br>+/-<br>+/- | 14.5447<br>133.1310<br>133.2778 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 68 | 1,2-Dibromo-3-chloropropane<br>CAS # 96-12-8<br>Purity 99%   | (Lot FBL01)     | 2,505.9 µg/mL | +/-<br>+/-<br>+/- | 14.5694<br>133.3571<br>133.5042 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 69 | 1,2,4-Trichlorobenzene<br>CAS # 120-82-1<br>Purity 99%       | (Lot 26896BM)   | 2,501.5 µg/mL | +/-<br>+/-<br>+/- | 14.5439<br>133.1243<br>133.2711 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 70 | Hexachlorobutadiene<br>CAS # 87-68-3<br>Purity 98%           | (Lot K22W009)   | 2,501.6 µg/mL | +/-<br>+/-<br>+/- | 14.5444<br>133.1282<br>133.2750 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 71 | Naphthalene<br>CAS # 91-20-3<br>Purity 99%                   | (Lot MKBH4351V) | 2,502.6 µg/mL | +/-<br>+/-<br>+/- | 14.5505<br>133.1842<br>133.3311 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |

|    |                        |                |              |       |             |
|----|------------------------|----------------|--------------|-------|-------------|
| 72 | 1,2,3-Trichlorobenzene | 2,503.4 µg/mL  | +/- 14.5548  | µg/mL | Gravimetric |
|    | CAS # 87-61-6          | (Lot 12912PFV) | +/- 133.2241 | µg/mL | Unstressed  |
|    | Purity 99%             |                | +/- 133.3710 | µg/mL | Stressed    |

**Solvent:** P&T Methanol  
**CAS #** 67-56-1  
**Purity** 99%

**Column:**  
60m x 0.25mm x 1.4µm  
Rtx-502.2 (cat.#10916)

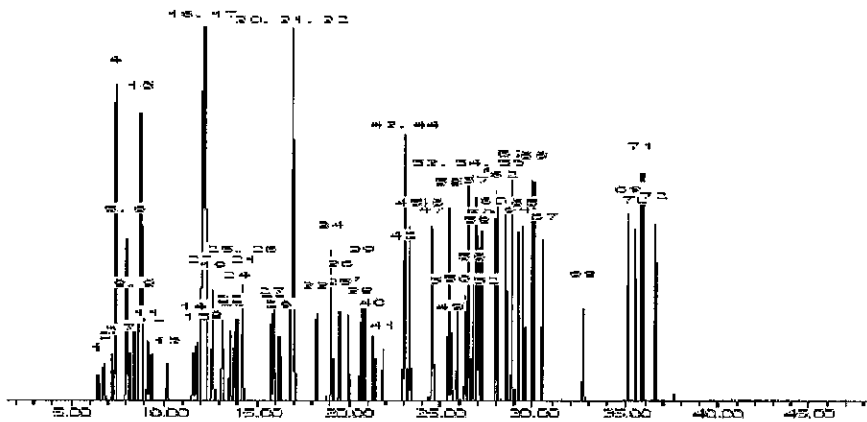
**Carrier Gas:**  
helium-constant pressure 30 psi

**Temp. Program:**  
40°C (hold 6 min.) to 240°C  
@ 6°C/min. (hold 10 min.)

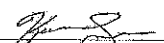
**Inj. Temp:**  
200°C

**Det. Temp:**  
250°C

**Det. Type:**  
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

  
Kendra Swope - Mix Technician

**Date Mixed:** 07-Jan-2015      **Balance:** 1125113331

  
Tyler Brown - QA Analyst

**Date Passed:** 14-Jan-2015

Manufactured under Restek's ISO 9001:2008  
Registered Quality System  
Certificate #FM 80397

Reagent

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**VOA8260MEGA2\_00037**



CERTIFIED REFERENCE MATERIAL

110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

www.restek.com

## Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No.: 569720.sec Lot No.: A0108163

Description: 8260 List 1 / Std #1 MegaMix (2015)

8260 List 1 / Std #1 MegaMix (2015) 1250-62500 µg/ml, P&T Methanol, 1 ml/ampul

Container Size: 2 mL Pkg Amt: > 1 mL

Expiration Date: January 31, 2017 Storage: 0°C or colder

### CERTIFIED VALUES

| Elution Order | Compound                                                                                | Grav. Conc.<br>(weight/volume) | Expanded Uncertainty<br>(95% C.L., K=2) |             |
|---------------|-----------------------------------------------------------------------------------------|--------------------------------|-----------------------------------------|-------------|
| 1             | Diethyl ether (ethyl ether)<br>CAS # 60-29-7.SEC (Lot F23X068)<br>Purity 99%            | 2,501.1 µg/mL                  | +/- 14.5418 µg/mL                       | Gravimetric |
|               |                                                                                         |                                | +/- 133.1044 µg/mL                      | Unstressed  |
|               |                                                                                         |                                | +/- 133.2511 µg/mL                      | Stressed    |
| 2             | 1,1,2-Trichlorotrifluoroethane (CFC-113)<br>CAS # 76-13-1.SEC (Lot 18342)<br>Purity 99% | 2,501.1 µg/mL                  | +/- 14.5418 µg/mL                       | Gravimetric |
|               |                                                                                         |                                | +/- 133.1044 µg/mL                      | Unstressed  |
|               |                                                                                         |                                | +/- 133.2511 µg/mL                      | Stressed    |
| 3             | 1,1-Dichloroethene<br>CAS # 75-35-4.SEC (Lot 903000)<br>Purity 99%                      | 2,502.8 µg/mL                  | +/- 14.5512 µg/mL                       | Gravimetric |
|               |                                                                                         |                                | +/- 133.1908 µg/mL                      | Unstressed  |
|               |                                                                                         |                                | +/- 133.3377 µg/mL                      | Stressed    |
| 4             | tert-Butanol (TBA)<br>CAS # 75-65-0.SEC (Lot XYXDO)<br>Purity 98%                       | 25,000.5 µg/mL                 | +/- 145.3477 µg/mL                      | Gravimetric |
|               |                                                                                         |                                | +/- 1,330.4725 µg/mL                    | Unstressed  |
|               |                                                                                         |                                | +/- 1,331.9397 µg/mL                    | Stressed    |
| 5             | Iodomethane (methyl iodide)<br>CAS # 74-88-4.SEC (Lot A13Y016)<br>Purity 97%            | 2,500.5 µg/mL                  | +/- 14.5383 µg/mL                       | Gravimetric |
|               |                                                                                         |                                | +/- 133.0732 µg/mL                      | Unstressed  |
|               |                                                                                         |                                | +/- 133.2199 µg/mL                      | Stressed    |
| 6             | Methyl acetate<br>CAS # 79-20-9.SEC (Lot YDGVD)<br>Purity 99%                           | 12,500.6 µg/mL                 | +/- 72.6759 µg/mL                       | Gravimetric |
|               |                                                                                         |                                | +/- 665.2553 µg/mL                      | Unstressed  |
|               |                                                                                         |                                | +/- 665.9889 µg/mL                      | Stressed    |
| 7             | Allyl chloride (3-chloropropene)<br>CAS # 107-05-1.SEC (Lot 5MNOA-DQ)<br>Purity 99%     | 2,501.3 µg/mL                  | +/- 14.5425 µg/mL                       | Gravimetric |
|               |                                                                                         |                                | +/- 133.1110 µg/mL                      | Unstressed  |
|               |                                                                                         |                                | +/- 133.2578 µg/mL                      | Stressed    |

|    |                                      |                  |          |       |     |            |       |             |
|----|--------------------------------------|------------------|----------|-------|-----|------------|-------|-------------|
| 8  | Methylene chloride (dichloromethane) |                  | 2,501.4  | µg/mL | +/- | 14.5432    | µg/mL | Gravimetric |
|    | CAS # 75-09-2.SEC                    | (Lot FGM02)      |          |       | +/- | 133.1177   | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 133.2645   | µg/mL | Stressed    |
| 9  | Carbon disulfide                     |                  | 2,501.2  | µg/mL | +/- | 14.5422    | µg/mL | Gravimetric |
|    | CAS # 75-15-0.SEC                    | (Lot MKBL1376V)  |          |       | +/- | 133.1086   | µg/mL | Unstressed  |
|    | Purity 98%                           |                  |          |       | +/- | 133.2554   | µg/mL | Stressed    |
| 10 | Acrylonitrile                        |                  | 25,002.1 | µg/mL | +/- | 145.3569   | µg/mL | Gravimetric |
|    | CAS # 107-13-1.SEC                   | (Lot CCFKL)      |          |       | +/- | 1,330.5571 | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 1,332.0244 | µg/mL | Stressed    |
| 11 | cis-1,2-Dichloroethene               |                  | 2,500.3  | µg/mL | +/- | 14.5367    | µg/mL | Gravimetric |
|    | CAS # 156-59-2.SEC                   | (Lot HGC01-BLKT) |          |       | +/- | 133.0578   | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 133.2045   | µg/mL | Stressed    |
| 12 | n-Hexane (C6)                        |                  | 2,500.1  | µg/mL | +/- | 14.5358    | µg/mL | Gravimetric |
|    | CAS # 110-54-3.SEC                   | (Lot K24W001)    |          |       | +/- | 133.0499   | µg/mL | Unstressed  |
|    | Purity 98%                           |                  |          |       | +/- | 133.1967   | µg/mL | Stressed    |
| 13 | 1,1-Dichloroethane                   |                  | 2,503.0  | µg/mL | +/- | 14.5527    | µg/mL | Gravimetric |
|    | CAS # 75-34-3.SEC                    | (Lot 2663100)    |          |       | +/- | 133.2041   | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 133.3510   | µg/mL | Stressed    |
| 14 | 2,2-Dichloropropane                  |                  | 2,500.8  | µg/mL | +/- | 14.5396    | µg/mL | Gravimetric |
|    | CAS # 594-20-7.SEC                   | (Lot GI01)       |          |       | +/- | 133.0844   | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 133.2312   | µg/mL | Stressed    |
| 15 | trans-1,2-Dichloroethene             |                  | 2,500.2  | µg/mL | +/- | 14.5362    | µg/mL | Gravimetric |
|    | CAS # 156-60-5.SEC                   | (Lot TS5UB)      |          |       | +/- | 133.0538   | µg/mL | Unstressed  |
|    | Purity 97%                           |                  |          |       | +/- | 133.2005   | µg/mL | Stressed    |
| 16 | Isobutanol (2-Methyl-1-propanol)     |                  | 62,501.3 | µg/mL | +/- | 363.3687   | µg/mL | Gravimetric |
|    | CAS # 78-83-1.SEC                    | (Lot PH2XK)      |          |       | +/- | 3,326.1766 | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 3,329.8447 | µg/mL | Stressed    |
| 17 | Methyl-tert-butyl ether ( MTBE )     |                  | 2,500.5  | µg/mL | +/- | 14.5381    | µg/mL | Gravimetric |
|    | CAS # 1634-04-4.SEC                  | (Lot ZAQT-MS)    |          |       | +/- | 133.0711   | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 133.2178   | µg/mL | Stressed    |
| 18 | Bromochloromethane                   |                  | 2,500.6  | µg/mL | +/- | 14.5388    | µg/mL | Gravimetric |
|    | CAS # 74-97-5.SEC                    | (Lot 345600)     |          |       | +/- | 133.0777   | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 133.2245   | µg/mL | Stressed    |
| 19 | Tetrahydrofuran                      |                  | 5,002.3  | µg/mL | +/- | 29.0835    | µg/mL | Gravimetric |
|    | CAS # 109-99-9.SEC                   | (Lot XWFLA)      |          |       | +/- | 266.2087   | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 266.5023   | µg/mL | Stressed    |
| 20 | 1,1,1-Trichloroethane                |                  | 2,501.9  | µg/mL | +/- | 14.5461    | µg/mL | Gravimetric |
|    | CAS # 71-55-6.SEC                    | (Lot 1103200)    |          |       | +/- | 133.1443   | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 133.2911   | µg/mL | Stressed    |
| 21 | Cyclohexane                          |                  | 2,501.5  | µg/mL | +/- | 14.5439    | µg/mL | Gravimetric |
|    | CAS # 110-82-7.SEC                   | (Lot YADRA)      |          |       | +/- | 133.1243   | µg/mL | Unstressed  |
|    | Purity 99%                           |                  |          |       | +/- | 133.2711   | µg/mL | Stressed    |
| 22 | 1,1-Dichloropropene                  |                  | 2,501.1  | µg/mL | +/- | 14.5419    | µg/mL | Gravimetric |
|    | CAS # 563-58-6.SEC                   | (Lot 2028500)    |          |       | +/- | 133.1054   | µg/mL | Unstressed  |
|    | Purity 97%                           |                  |          |       | +/- | 133.2522   | µg/mL | Stressed    |
| 23 | Carbon tetrachloride                 |                  | 2,501.9  | µg/mL | +/- | 14.5465    | µg/mL | Gravimetric |
|    | CAS # 56-23-5.SEC                    | (Lot 11466)      |          |       | +/- | 133.1477   | µg/mL | Unstressed  |
|    | Purity 98%                           |                  |          |       | +/- | 133.2946   | µg/mL | Stressed    |



|    |                                                                 |                  |          |       |     |            |       |             |
|----|-----------------------------------------------------------------|------------------|----------|-------|-----|------------|-------|-------------|
| 24 | n-Heptane (C7)<br>CAS # 142-82-5.SEC<br>Purity 99%              | (Lot OGM01)      | 2,500.4  | µg/mL | +/- | 14.5374    | µg/mL | Gravimetric |
|    |                                                                 |                  |          |       | +/- | 133.0644   | µg/mL | Unstressed  |
|    |                                                                 |                  |          |       | +/- | 133.2112   | µg/mL | Stressed    |
| 25 | 1,2-Dichloroethane<br>CAS # 107-06-2.SEC<br>Purity 99%          | (Lot FO6PK)      | 2,501.9  | µg/mL | +/- | 14.5461    | µg/mL | Gravimetric |
|    |                                                                 |                  |          |       | +/- | 133.1443   | µg/mL | Unstressed  |
|    |                                                                 |                  |          |       | +/- | 133.2911   | µg/mL | Stressed    |
| 26 | Benzene<br>CAS # 71-43-2.SEC<br>Purity 99%                      | (Lot B28Y008)    | 2,500.9  | µg/mL | +/- | 14.5403    | µg/mL | Gravimetric |
|    |                                                                 |                  |          |       | +/- | 133.0911   | µg/mL | Unstressed  |
|    |                                                                 |                  |          |       | +/- | 133.2378   | µg/mL | Stressed    |
| 27 | Trichloroethene<br>CAS # 79-01-6.SEC<br>Purity 98%              | (Lot H04X050)    | 2,500.6  | µg/mL | +/- | 14.5387    | µg/mL | Gravimetric |
|    |                                                                 |                  |          |       | +/- | 133.0760   | µg/mL | Unstressed  |
|    |                                                                 |                  |          |       | +/- | 133.2228   | µg/mL | Stressed    |
| 28 | Methylcyclohexane<br>CAS # 108-87-2.SEC<br>Purity 99%           | (Lot 24MSD-CD)   | 2,500.5  | µg/mL | +/- | 14.5381    | µg/mL | Gravimetric |
|    |                                                                 |                  |          |       | +/- | 133.0711   | µg/mL | Unstressed  |
|    |                                                                 |                  |          |       | +/- | 133.2178   | µg/mL | Stressed    |
| 29 | 1,2-Dichloropropane<br>CAS # 78-87-5.SEC<br>Purity 99%          | (Lot OGG01)      | 2,500.0  | µg/mL | +/- | 14.5352    | µg/mL | Gravimetric |
|    |                                                                 |                  |          |       | +/- | 133.0445   | µg/mL | Unstressed  |
|    |                                                                 |                  |          |       | +/- | 133.1912   | µg/mL | Stressed    |
| 30 | Bromodichloromethane<br>CAS # 75-27-4.SEC<br>Purity 99%         | (Lot 10171168)   | 2,501.5  | µg/mL | +/- | 14.5439    | µg/mL | Gravimetric |
|    |                                                                 |                  |          |       | +/- | 133.1243   | µg/mL | Unstressed  |
|    |                                                                 |                  |          |       | +/- | 133.2711   | µg/mL | Stressed    |
| 31 | 1,4-Dioxane<br>CAS # 123-91-1.SEC<br>Purity 99%                 | (Lot CHA4A)      | 50,000.8 | µg/mL | +/- | 290.6935   | µg/mL | Gravimetric |
|    |                                                                 |                  |          |       | +/- | 2,660.9280 | µg/mL | Unstressed  |
|    |                                                                 |                  |          |       | +/- | 2,663.8624 | µg/mL | Stressed    |
| 32 | Dibromomethane<br>CAS # 74-95-3.SEC<br>Purity 99%               | (Lot FGI01-OICH) | 2,500.6  | µg/mL | +/- | 14.5388    | µg/mL | Gravimetric |
|    |                                                                 |                  |          |       | +/- | 133.0777   | µg/mL | Unstressed  |
|    |                                                                 |                  |          |       | +/- | 133.2245   | µg/mL | Stressed    |
| 33 | cis-1,3-Dichloropropene<br>CAS # 10061-01-5.SEC<br>Purity 99%   | (Lot 7ZLXI-TJ)   | 2,501.0  | µg/mL | +/- | 14.5410    | µg/mL | Gravimetric |
|    |                                                                 |                  |          |       | +/- | 133.0977   | µg/mL | Unstressed  |
|    |                                                                 |                  |          |       | +/- | 133.2445   | µg/mL | Stressed    |
| 34 | Toluene<br>CAS # 108-88-3.SEC<br>Purity 99%                     | (Lot YND2B-BD)   | 2,500.1  | µg/mL | +/- | 14.5359    | µg/mL | Gravimetric |
|    |                                                                 |                  |          |       | +/- | 133.0511   | µg/mL | Unstressed  |
|    |                                                                 |                  |          |       | +/- | 133.1979   | µg/mL | Stressed    |
| 35 | Ethyl methacrylate<br>CAS # 97-63-2.SEC<br>Purity 99%           | (Lot MLWYK-LS)   | 2,500.8  | µg/mL | +/- | 14.5396    | µg/mL | Gravimetric |
|    |                                                                 |                  |          |       | +/- | 133.0844   | µg/mL | Unstressed  |
|    |                                                                 |                  |          |       | +/- | 133.2312   | µg/mL | Stressed    |
| 36 | trans-1,3-Dichloropropene<br>CAS # 10061-02-6.SEC<br>Purity 98% | (Lot 2ECIC-NM)   | 2,501.6  | µg/mL | +/- | 14.5444    | µg/mL | Gravimetric |
|    |                                                                 |                  |          |       | +/- | 133.1282   | µg/mL | Unstressed  |
|    |                                                                 |                  |          |       | +/- | 133.2750   | µg/mL | Stressed    |
| 37 | 1,1,2-Trichloroethane<br>CAS # 79-00-5.SEC<br>Purity 99%        | (Lot 732700)     | 2,501.0  | µg/mL | +/- | 14.5410    | µg/mL | Gravimetric |
|    |                                                                 |                  |          |       | +/- | 133.0977   | µg/mL | Unstressed  |
|    |                                                                 |                  |          |       | +/- | 133.2445   | µg/mL | Stressed    |
| 38 | 1,3-Dichloropropane<br>CAS # 142-28-9.SEC<br>Purity 99%         | (Lot AGN01-EFPC) | 2,500.8  | µg/mL | +/- | 14.5396    | µg/mL | Gravimetric |
|    |                                                                 |                  |          |       | +/- | 133.0844   | µg/mL | Unstressed  |
|    |                                                                 |                  |          |       | +/- | 133.2312   | µg/mL | Stressed    |
| 39 | Tetrachloroethene<br>CAS # 127-18-4.SEC<br>Purity 99%           | (Lot F09W014)    | 2,500.0  | µg/mL | +/- | 14.5352    | µg/mL | Gravimetric |
|    |                                                                 |                  |          |       | +/- | 133.0445   | µg/mL | Unstressed  |
|    |                                                                 |                  |          |       | +/- | 133.1912   | µg/mL | Stressed    |

|    |                                                                 |                  |               |     |                |             |
|----|-----------------------------------------------------------------|------------------|---------------|-----|----------------|-------------|
| 40 | Dibromochloromethane<br>CAS # 124-48-1.SEC<br>Purity 97%        | (Lot I13W021)    | 2,501.8 µg/mL | +/- | 14.5454 µg/mL  | Gravimetric |
|    |                                                                 |                  |               | +/- | 133.1377 µg/mL | Unstressed  |
|    |                                                                 |                  |               | +/- | 133.2845 µg/mL | Stressed    |
| 41 | 1,2-Dibromoethane (EDB)<br>CAS # 106-93-4.SEC<br>Purity 98%     | (Lot 1368400)    | 2,502.1 µg/mL | +/- | 14.5472 µg/mL  | Gravimetric |
|    |                                                                 |                  |               | +/- | 133.1542 µg/mL | Unstressed  |
|    |                                                                 |                  |               | +/- | 133.3011 µg/mL | Stressed    |
| 42 | Chlorobenzene<br>CAS # 108-90-7.SEC<br>Purity 99%               | (Lot 1161936)    | 2,501.6 µg/mL | +/- | 14.5447 µg/mL  | Gravimetric |
|    |                                                                 |                  |               | +/- | 133.1310 µg/mL | Unstressed  |
|    |                                                                 |                  |               | +/- | 133.2778 µg/mL | Stressed    |
| 43 | 1,1,1,2-Tetrachloroethane<br>CAS # 630-20-6.SEC<br>Purity 99%   | (Lot GC01-QSHR)  | 2,500.8 µg/mL | +/- | 14.5396 µg/mL  | Gravimetric |
|    |                                                                 |                  |               | +/- | 133.0844 µg/mL | Unstressed  |
|    |                                                                 |                  |               | +/- | 133.2312 µg/mL | Stressed    |
| 44 | Ethylbenzene<br>CAS # 100-41-4.SEC<br>Purity 99%                | (Lot PI4SE-GR)   | 2,500.3 µg/mL | +/- | 14.5367 µg/mL  | Gravimetric |
|    |                                                                 |                  |               | +/- | 133.0578 µg/mL | Unstressed  |
|    |                                                                 |                  |               | +/- | 133.2045 µg/mL | Stressed    |
| 45 | m-Xylene<br>CAS # 108-38-3.SEC<br>Purity 99%                    | (Lot OUKMG-GB)   | 1,250.4 µg/mL | +/- | 7.2698 µg/mL   | Gravimetric |
|    |                                                                 |                  |               | +/- | 66.5422 µg/mL  | Unstressed  |
|    |                                                                 |                  |               | +/- | 66.6156 µg/mL  | Stressed    |
| 46 | o-Xylene<br>CAS # 95-47-6.SEC<br>Purity 99%                     | (Lot FGL01-KTPK) | 2,501.3 µg/mL | +/- | 14.5425 µg/mL  | Gravimetric |
|    |                                                                 |                  |               | +/- | 133.1110 µg/mL | Unstressed  |
|    |                                                                 |                  |               | +/- | 133.2578 µg/mL | Stressed    |
| 47 | p-Xylene<br>CAS # 106-42-3.SEC<br>Purity 99%                    | (Lot GM01)       | 1,251.6 µg/mL | +/- | 7.2771 µg/mL   | Gravimetric |
|    |                                                                 |                  |               | +/- | 66.6087 µg/mL  | Unstressed  |
|    |                                                                 |                  |               | +/- | 66.6822 µg/mL  | Stressed    |
| 48 | Styrene<br>CAS # 100-42-5.SEC<br>Purity 99%                     | (Lot OFIOL-IA)   | 2,500.9 µg/mL | +/- | 14.5403 µg/mL  | Gravimetric |
|    |                                                                 |                  |               | +/- | 133.0911 µg/mL | Unstressed  |
|    |                                                                 |                  |               | +/- | 133.2378 µg/mL | Stressed    |
| 49 | Isopropylbenzene (cumene)<br>CAS # 98-82-8.SEC<br>Purity 99%    | (Lot 2PHXG-IH)   | 2,501.3 µg/mL | +/- | 14.5425 µg/mL  | Gravimetric |
|    |                                                                 |                  |               | +/- | 133.1110 µg/mL | Unstressed  |
|    |                                                                 |                  |               | +/- | 133.2578 µg/mL | Stressed    |
| 50 | Bromoform<br>CAS # 75-25-2.SEC<br>Purity 99%                    | (Lot 1039300)    | 2,501.5 µg/mL | +/- | 14.5439 µg/mL  | Gravimetric |
|    |                                                                 |                  |               | +/- | 133.1243 µg/mL | Unstressed  |
|    |                                                                 |                  |               | +/- | 133.2711 µg/mL | Stressed    |
| 51 | 1,1,2,2-Tetrachloroethane<br>CAS # 79-34-5.SEC<br>Purity 99%    | (Lot CFA4D-AQ)   | 2,502.9 µg/mL | +/- | 14.5519 µg/mL  | Gravimetric |
|    |                                                                 |                  |               | +/- | 133.1975 µg/mL | Unstressed  |
|    |                                                                 |                  |               | +/- | 133.3444 µg/mL | Stressed    |
| 52 | Chloroform<br>CAS # 67-66-3.SEC<br>Purity 99%                   | (Lot 1297547)    | 2,501.6 µg/mL | +/- | 14.5447 µg/mL  | Gravimetric |
|    |                                                                 |                  |               | +/- | 133.1310 µg/mL | Unstressed  |
|    |                                                                 |                  |               | +/- | 133.2778 µg/mL | Stressed    |
| 53 | 1,2,3-Trichloropropane<br>CAS # 96-18-4.SEC<br>Purity 98%       | (Lot OGI01)      | 2,501.9 µg/mL | +/- | 14.5465 µg/mL  | Gravimetric |
|    |                                                                 |                  |               | +/- | 133.1477 µg/mL | Unstressed  |
|    |                                                                 |                  |               | +/- | 133.2946 µg/mL | Stressed    |
| 54 | trans-1,4-Dichloro-2-butene<br>CAS # 110-57-6.SEC<br>Purity 97% | (Lot 100700-2)   | 2,502.7 µg/mL | +/- | 14.5510 µg/mL  | Gravimetric |
|    |                                                                 |                  |               | +/- | 133.1893 µg/mL | Unstressed  |
|    |                                                                 |                  |               | +/- | 133.3362 µg/mL | Stressed    |
| 55 | n-Propylbenzene<br>CAS # 103-65-1.SEC<br>Purity 99%             | (Lot T2HFC-IT)   | 2,500.0 µg/mL | +/- | 14.5352 µg/mL  | Gravimetric |
|    |                                                                 |                  |               | +/- | 133.0445 µg/mL | Unstressed  |
|    |                                                                 |                  |               | +/- | 133.1912 µg/mL | Stressed    |

|    |                                                                  |                  |               |                   |                                 |                         |                                       |
|----|------------------------------------------------------------------|------------------|---------------|-------------------|---------------------------------|-------------------------|---------------------------------------|
| 56 | Bromobenzene<br>CAS # 108-86-1.SEC<br>Purity 99%                 | (Lot 2FUHG-EM)   | 2,501.6 µg/mL | +/-<br>+/-<br>+/- | 14.5447<br>133.1310<br>133.2778 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 57 | 1,2,4-Trimethylbenzene<br>CAS # 95-63-6.SEC<br>Purity 99%        | (Lot SC7LO-QA)   | 2,502.4 µg/mL | +/-<br>+/-<br>+/- | 14.5490<br>133.1709<br>133.3177 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 58 | 2-Chlorotoluene<br>CAS # 95-49-8.SEC<br>Purity 99%               | (Lot SW8QG-AO)   | 2,500.5 µg/mL | +/-<br>+/-<br>+/- | 14.5381<br>133.0711<br>133.2178 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 59 | 4-Chlorotoluene<br>CAS # 106-43-4.SEC<br>Purity 99%              | (Lot P4XHJ-AO)   | 2,500.3 µg/mL | +/-<br>+/-<br>+/- | 14.5367<br>133.0578<br>133.2045 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 60 | tert-Butylbenzene<br>CAS # 98-06-6.SEC<br>Purity 99%             | (Lot OGN01)      | 2,501.6 µg/mL | +/-<br>+/-<br>+/- | 14.5447<br>133.1310<br>133.2778 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 61 | 1,3,5-Trimethylbenzene<br>CAS # 108-67-8.SEC<br>Purity 99%       | (Lot FGH02-CMLN) | 2,500.3 µg/mL | +/-<br>+/-<br>+/- | 14.5367<br>133.0578<br>133.2045 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 62 | sec-Butylbenzene<br>CAS # 135-98-8.SEC<br>Purity 99%             | (Lot OGN01)      | 2,500.1 µg/mL | +/-<br>+/-<br>+/- | 14.5359<br>133.0511<br>133.1979 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 63 | 4-Isopropyltoluene (p-cymene)<br>CAS # 99-87-6.SEC<br>Purity 99% | (Lot 1721700)    | 2,501.6 µg/mL | +/-<br>+/-<br>+/- | 14.5447<br>133.1310<br>133.2778 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 64 | 1,3-Dichlorobenzene<br>CAS # 541-73-1.SEC<br>Purity 99%          | (Lot FMDFD-KA)   | 2,501.5 µg/mL | +/-<br>+/-<br>+/- | 14.5439<br>133.1243<br>133.2711 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 65 | 1,4-Dichlorobenzene<br>CAS # 106-46-7.SEC<br>Purity 99%          | (Lot YWKDC-MK)   | 2,500.3 µg/mL | +/-<br>+/-<br>+/- | 14.5367<br>133.0578<br>133.2045 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 66 | n-Butylbenzene<br>CAS # 104-51-8.SEC<br>Purity 99%               | (Lot OGN01)      | 2,500.6 µg/mL | +/-<br>+/-<br>+/- | 14.5388<br>133.0777<br>133.2245 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 67 | 1,2-Dichlorobenzene<br>CAS # 95-50-1.SEC<br>Purity 99%           | (Lot 4NRGF-OT)   | 2,500.0 µg/mL | +/-<br>+/-<br>+/- | 14.5352<br>133.0445<br>133.1912 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 68 | 1,2-Dibromo-3-chloropropane<br>CAS # 96-12-8.SEC<br>Purity 97%   | (Lot LC00408V)   | 2,500.5 µg/mL | +/-<br>+/-<br>+/- | 14.5383<br>133.0732<br>133.2199 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 69 | 1,2,4-Trichlorobenzene<br>CAS # 120-82-1.SEC<br>Purity 99%       | (Lot OGO01)      | 2,501.0 µg/mL | +/-<br>+/-<br>+/- | 14.5410<br>133.0977<br>133.2445 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 70 | Hexachlorobutadiene<br>CAS # 87-68-3.SEC<br>Purity 97%           | (Lot 2009400)    | 2,501.0 µg/mL | +/-<br>+/-<br>+/- | 14.5412<br>133.0990<br>133.2458 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |
| 71 | Naphthalene<br>CAS # 91-20-3.SEC<br>Purity 99%                   | (Lot 4KW3H-OO)   | 2,500.5 µg/mL | +/-<br>+/-<br>+/- | 14.5381<br>133.0711<br>133.2178 | µg/mL<br>µg/mL<br>µg/mL | Gravimetric<br>Unstressed<br>Stressed |

|    |                        |                |       |     |          |       |             |
|----|------------------------|----------------|-------|-----|----------|-------|-------------|
| 72 | 1,2,3-Trichlorobenzene | 2,502.4        | µg/mL | +/- | 14.5490  | µg/mL | Gravimetric |
|    | CAS # 87-61-6.SEC      | (Lot A0043055) |       | +/- | 133.1709 | µg/mL | Unstressed  |
|    | Purity 99%             |                |       | +/- | 133.3177 | µg/mL | Stressed    |

**Solvent:** P&T Methanol  
**CAS #** 67-56-1  
**Purity** 99%

**Column:**  
60m x 0.25mm x 1.4µm  
Rtx-502.2 (cat.#10916)

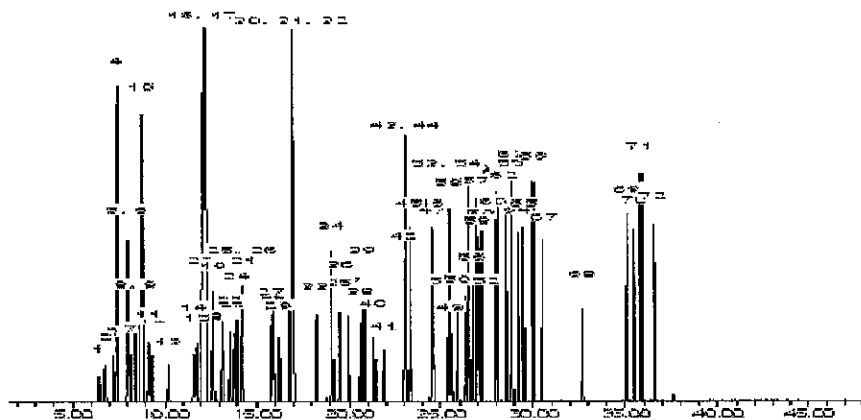
**Carrier Gas:**  
helium-constant pressure 30 psi

**Temp. Program:**  
40°C (hold 6 min.) to 240°C  
@ 6°C/min. (hold 10 min.)

**Inj. Temp:**  
200°C

**Det. Temp:**  
250°C

**Det. Type:**  
MSD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

*Michael Mage*

**Date Mixed:** 07-Jan-2015 **Balance:** 1127510105

*Tyler Brown*

Tyler Brown - QA Analyst

**Date Passed:** 14-Jan-2015

Manufactured under Restek's ISO 9001:2008  
Registered Quality System  
Certificate #FM 80397

Reagent

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**VOA8260SURRES\_00066**



**CERTIFIED REFERENCE MATERIAL**

110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

www.restek.com

## Certificate of Analysis



**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 567650 **Lot No.:** A0100424  
**Description :** 8260 Surrogate Standard  
8260 Surrogate Standard 2,500 ug/ml, P&T Methanol, 5 ml/ampul  
**Container Size :** 5 mL **Pkg Amt:** > 5 mL  
**Expiration Date :** January 31, 2019 **Storage:** 0°C or colder

### CERTIFIED VALUES

| Elution Order | Compound                       | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) |         |                   |
|---------------|--------------------------------|-----------------------------|--------------------------------------|---------|-------------------|
| 1             | Dibromofluoromethane           | 2,502.2 µg/mL               | +/-                                  | 14.5480 | µg/mL Gravimetric |
|               | CAS # 1868-53-7 (Lot 022012)   |                             | +/-                                  | 28.2159 | µg/mL Unstressed  |
|               | Purity 99%                     |                             | +/-                                  | 32.4683 | µg/mL Stressed    |
| 2             | 1,2-Dichloroethane-d4          | 2,501.2 µg/mL               | +/-                                  | 14.5422 | µg/mL Gravimetric |
|               | CAS # 17060-07-0 (Lot 12K-027) |                             | +/-                                  | 28.2046 | µg/mL Unstressed  |
|               | Purity 99%                     |                             | +/-                                  | 32.4554 | µg/mL Stressed    |
| 3             | Toluene-d8                     | 2,500.8 µg/mL               | +/-                                  | 14.5399 | µg/mL Gravimetric |
|               | CAS # 2037-26-5 (Lot 13I-050)  |                             | +/-                                  | 28.2001 | µg/mL Unstressed  |
|               | Purity 99%                     |                             | +/-                                  | 32.4502 | µg/mL Stressed    |
| 4             | 1-Bromo-4-fluorobenzene (BFB)  | 2,501.4 µg/mL               | +/-                                  | 14.5434 | µg/mL Gravimetric |
|               | CAS # 460-00-4 (Lot 01127COV)  |                             | +/-                                  | 28.2069 | µg/mL Unstressed  |
|               | Purity 99%                     |                             | +/-                                  | 32.4580 | µg/mL Stressed    |

**Solvent:** P&T Methanol  
**CAS #** 67-56-1  
**Purity** 99%

Reagent

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**VOA8260SURRES\_00067**



**CERTIFIED REFERENCE MATERIAL**

110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

www.restek.com

## Certificate of Analysis



**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 567650 **Lot No.:** A0100424  
**Description :** 8260 Surrogate Standard  
8260 Surrogate Standard 2,500 ug/ml, P&T Methanol, 5 ml/ampul  
**Container Size :** 5 mL **Pkg Amt:** > 5 mL  
**Expiration Date :** January 31, 2019 **Storage:** 0°C or colder

### CERTIFIED VALUES

| Elution Order | Compound                                                                     | Grav. Conc.<br>(weight/volume) | Expanded Uncertainty<br>(95% C.L.; K=2)                     |                                       |  |
|---------------|------------------------------------------------------------------------------|--------------------------------|-------------------------------------------------------------|---------------------------------------|--|
| 1             | Dibromofluoromethane<br>CAS # 1868-53-7 (Lot 022012)<br>Purity 99%           | 2,502.2 µg/mL                  | +/- 14.5480 µg/mL<br>+/- 28.2159 µg/mL<br>+/- 32.4683 µg/mL | Gravimetric<br>Unstressed<br>Stressed |  |
| 2             | 1,2-Dichloroethane-d4<br>CAS # 17060-07-0 (Lot 12K-027)<br>Purity 99%        | 2,501.2 µg/mL                  | +/- 14.5422 µg/mL<br>+/- 28.2046 µg/mL<br>+/- 32.4554 µg/mL | Gravimetric<br>Unstressed<br>Stressed |  |
| 3             | Toluene-d8<br>CAS # 2037-26-5 (Lot 13I-050)<br>Purity 99%                    | 2,500.8 µg/mL                  | +/- 14.5399 µg/mL<br>+/- 28.2001 µg/mL<br>+/- 32.4502 µg/mL | Gravimetric<br>Unstressed<br>Stressed |  |
| 4             | 1-Bromo-4-fluorobenzene (BFB)<br>CAS # 460-00-4 (Lot 01127COV)<br>Purity 99% | 2,501.4 µg/mL                  | +/- 14.5434 µg/mL<br>+/- 28.2069 µg/mL<br>+/- 32.4580 µg/mL | Gravimetric<br>Unstressed<br>Stressed |  |

**Solvent:** P&T Methanol  
**CAS #** 67-56-1  
**Purity** 99%



Reagent

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**VOA8260SURRES\_00077**



**CERTIFIED REFERENCE MATERIAL**

110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

www.restek.com

## Certificate of Analysis



**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 567650 **Lot No.:** A0101000  
**Description :** 8260 Surrogate Standard  
8260 Surrogate Standard 2,500 ug/ml, P&T Methanol, 5 ml/ampul  
**Container Size :** 5 mL **Pkg Amt:** > 5 mL  
**Expiration Date :** January 31, 2019 **Storage:** 0°C or colder

### CERTIFIED VALUES

| Elution Order | Compound                       | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) |         |       |             |
|---------------|--------------------------------|-----------------------------|--------------------------------------|---------|-------|-------------|
| 1             | Dibromofluoromethane           | 2,509.6 µg/mL               | +/-                                  | 14.5910 | µg/mL | Gravimetric |
|               | CAS # 1868-53-7 (Lot 022012)   |                             | +/-                                  | 28.2993 | µg/mL | Unstressed  |
|               | Purity 99%                     |                             | +/-                                  | 32.5644 | µg/mL | Stressed    |
| 2             | 1,2-Dichloroethane-d4          | 2,508.2 µg/mL               | +/-                                  | 14.5829 | µg/mL | Gravimetric |
|               | CAS # 17060-07-0 (Lot 12K-027) |                             | +/-                                  | 28.2836 | µg/mL | Unstressed  |
|               | Purity 99%                     |                             | +/-                                  | 32.5462 | µg/mL | Stressed    |
| 3             | Toluene-d8                     | 2,508.8 µg/mL               | +/-                                  | 14.5864 | µg/mL | Gravimetric |
|               | CAS # 2037-26-5 (Lot 13I-050)  |                             | +/-                                  | 28.2903 | µg/mL | Unstressed  |
|               | Purity 99%                     |                             | +/-                                  | 32.5540 | µg/mL | Stressed    |
| 4             | 1-Bromo-4-fluorobenzene (BFB)  | 2,509.8 µg/mL               | +/-                                  | 14.5922 | µg/mL | Gravimetric |
|               | CAS # 460-00-4 (Lot 01127COV)  |                             | +/-                                  | 28.3016 | µg/mL | Unstressed  |
|               | Purity 99%                     |                             | +/-                                  | 32.5670 | µg/mL | Stressed    |

**Solvent:** P&T Methanol  
**CAS #** 67-56-1  
**Purity** 99%

Reagent

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**VOA8260VARES\_00054**



CERTIFIED REFERENCE MATERIAL

110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

www.restek.com

## Certificate of Analysis



**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

Catalog No. : 569724 Lot No.: A0109190  
Description : 8260 List 1 / Std #6 Vinyl Acetate (2015)  
8260 List 1 / Std #6 Vinyl Acetate (2015) 5000 ug/ml, P&T Methanol, 1 ml/ampul  
Container Size : 2 mL Pkg Amt: > 1 mL  
Expiration Date : August 31, 2015 Storage: 0°C or colder

### CERTIFIED VALUES

| Elution Order | Compound                                                         | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2)                                                          |
|---------------|------------------------------------------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------|
| 1             | Vinyl acetate<br>CAS # 108-05-4<br>Purity 99%<br>(Lot STBC8935V) | 5,023.0 µg/mL               | +/- 29.4778 µg/mL Gravimetric<br>+/- 267.3430 µg/mL Unstressed<br>+/- 267.6378 µg/mL Stressed |

Solvent: P&T Methanol  
CAS # 67-56-1  
Purity 99%

**Tech Tips:**

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Reagent

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**VOA8260VARES\_00055**



CERTIFIED REFERENCE MATERIAL

110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

www.restek.com

## Certificate of Analysis



**FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.**

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 569724 **Lot No.:** A0109190  
**Description :** 8260 List 1 / Std #6 Vinyl Acetate (2015)  
8260 List 1 / Std #6 Vinyl Acetate (2015) 5000 ug/ml, P&T Methanol, 1 ml/ampul  
**Container Size :** 2 mL **Pkg Amt:** > 1 mL  
**Expiration Date :** August 31, 2015 **Storage:** 0°C or colder

### CERTIFIED VALUES

| Elution Order | Compound                                                         | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2)                                                          |
|---------------|------------------------------------------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------|
| 1             | Vinyl acetate<br>CAS # 108-05-4<br>Purity 99%<br>(Lot STBC8935V) | 5,023.0 µg/mL               | +/- 29.4778 µg/mL Gravimetric<br>+/- 267.3430 µg/mL Unstressed<br>+/- 267.6378 µg/mL Stressed |

**Solvent:** P&T Methanol  
CAS # 67-56-1  
Purity 99%

**Tech Tips:**

Vinyl acetate is a volatile organic ester included in the target lists of several US EPA and other methods. Under acidic conditions, esters react with alcohols to form new esters (transesterification). Methanol-based mixes containing halogenated compounds are slightly acidic, so it is important to minimize exposure of vinyl acetate to mixes of halogenated compounds in methanol. For this reason, we offer vinyl acetate in individual solution, and suggest that it be introduced into the working level calibration solution immediately before use. This will minimize problems and ensure more consistent results.

Reagent

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**VOAACRORES\_00077**



CERTIFIED REFERENCE MATERIAL

110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

www.restek.com

## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

Catalog No. : 568720 Lot No.: A0111006  
Description : 8260 List 1/Std #5 Acrolein High  
8260 List 1/Std #5 Acrolein High 19,750 µg/mL, Water, 1 mL/ampul  
Container Size : 2 mL Pkg Amt: > 1 mL  
Expiration Date : September 30, 2015 Storage: 10°C or colder  
Handling: This product is photosensitive.

### CERTIFIED VALUES

| Elution Order | Compound                       | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) |
|---------------|--------------------------------|-----------------------------|--------------------------------------|
| 1             | Acrolein                       | 19,748.0 µg/mL              | +/- 115.8923 µg/mL Gravimetric       |
|               | CAS # 107-02-8 (Lot 150115JLM) |                             | +/- 633.2311 µg/mL Unstressed        |
|               | Purity 99%                     |                             | +/- 736.0474 µg/mL Stressed          |

Solvent: Water  
CAS # 7732-18-5  
Purity 99%



Reagent

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**VOAACRRES2ND\_00065**



CERTIFIED REFERENCE MATERIAL

110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

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## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

Catalog No. : 568720.sec Lot No.: A0111005  
Description : 8260 List 1/Std #5 Acrolein High  
8260 List 1/Std #5 Acrolein High 19,750 µg/ml, Water, 1 ml/ampul  
Container Size : 2 mL Pkg Amt: > 1 mL  
Expiration Date : September 30, 2015 Storage: 10°C or colder  
Handling: This product is photosensitive.

### CERTIFIED VALUES

| Elution Order | Compound                         | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2) |
|---------------|----------------------------------|-----------------------------|--------------------------------------|
| I             | Acrolein                         | 19,749.2 µg/mL              | +/- 115.6359 µg/mL Gravimetric       |
|               | CAS # 107-02-8.SEC (Lot 3593700) |                             | +/- 633.2214 µg/mL Unstressed        |
|               | Purity 97%                       |                             | +/- 736.0506 µg/mL Stressed          |

Solvent: Water  
CAS # 7732-18-5  
Purity 99%

Reagent

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**VOARESEE1ST\_00021**



**CERTIFIED REFERENCE MATERIAL**

110 Benner Circle  
Bellefonte, PA 16823-8812

Tel: (800)356-1688

Fax: (814)353-1309

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## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

Catalog No.: 568363-FL Lot No.: A0109701

Description: Custom EE Standard

Custom EE Standard 5,000µg/mL, P&T Methanol, 1mL/ampul

Container Size: 2 mL Pkg Amt: > 1 mL

Expiration Date: September 30, 2016 Storage: 0°C or colder

### CERTIFIED VALUES

| Elution Order | Compound                                                                        | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2)      |                                                |
|---------------|---------------------------------------------------------------------------------|-----------------------------|-------------------------------------------|------------------------------------------------|
| 1             | 3-Chlorobenzotrifluoride<br>CAS # 98-15-7<br>Purity 99%<br>(Lot 21324DO)        | 5,000.0 µg/mL               | +/- 29.3428<br>+/- 56.5231<br>+/- 65.0021 | µg/mL<br>Gravimetric<br>Unstressed<br>Stressed |
| 2             | 4-Chlorobenzotrifluoride<br>CAS # 98-56-6<br>Purity 99%<br>(Lot 08507BO)        | 5,003.0 µg/mL               | +/- 29.3604<br>+/- 56.5570<br>+/- 65.0411 | µg/mL<br>Gravimetric<br>Unstressed<br>Stressed |
| 3             | 2-Chlorobenzotrifluoride<br>CAS # 88-16-4<br>Purity 99%<br>(Lot I0316DQ)        | 5,009.0 µg/mL               | +/- 29.3956<br>+/- 56.6248<br>+/- 65.1191 | µg/mL<br>Gravimetric<br>Unstressed<br>Stressed |
| 4             | 3-Chlorotoluene<br>CAS # 108-41-8<br>Purity 99%<br>(Lot 13528LX)                | 5,012.0 µg/mL               | +/- 29.4132<br>+/- 56.6587<br>+/- 65.1581 | µg/mL<br>Gravimetric<br>Unstressed<br>Stressed |
| 5             | 2,4-Dichlorobenzotrifluoride<br>CAS # 320-60-5<br>Purity 99%<br>(Lot MKBL3552V) | 5,013.0 µg/mL               | +/- 29.4191<br>+/- 56.6701<br>+/- 65.1711 | µg/mL<br>Gravimetric<br>Unstressed<br>Stressed |
| 6             | 3,4-Dichlorobenzotrifluoride<br>CAS # 328-84-7<br>Purity 99%<br>(Lot 11105EJV)  | 5,018.0 µg/mL               | +/- 29.4484<br>+/- 56.7266<br>+/- 65.2361 | µg/mL<br>Gravimetric<br>Unstressed<br>Stressed |
| 7             | 2,5-Dichlorobenzotrifluoride<br>CAS # 320-50-3<br>Purity 99%<br>(Lot 04415DSV)  | 5,015.0 µg/mL               | +/- 29.4308<br>+/- 56.6927<br>+/- 65.1971 | µg/mL<br>Gravimetric<br>Unstressed<br>Stressed |

|                              |                                                         |                |               |     |         |       |             |
|------------------------------|---------------------------------------------------------|----------------|---------------|-----|---------|-------|-------------|
| 8                            | 2,4-Dichlorotoluene<br>CAS # 95-73-8<br>Purity 99%      | (Lot 07715JS)  | 5,021.0 µg/mL | +/- | 29.4660 | µg/mL | Gravimetric |
|                              |                                                         |                |               | +/- | 56.7605 | µg/mL | Unstressed  |
|                              |                                                         |                |               | +/- | 65.2751 | µg/mL | Stressed    |
| 9                            | 2,5-Dichlorotoluene<br>CAS # 19398-61-9<br>Purity 99%   | (Lot 1381346V) | 5,005.0 µg/mL | +/- | 29.3721 | µg/mL | Gravimetric |
|                              |                                                         |                |               | +/- | 56.5796 | µg/mL | Unstressed  |
|                              |                                                         |                |               | +/- | 65.0671 | µg/mL | Stressed    |
| 10                           | 2,6-Dichlorotoluene<br>CAS # 118-69-4<br>Purity 99%     | (Lot 16921JS)  | 5,014.0 µg/mL | +/- | 29.4250 | µg/mL | Gravimetric |
|                              |                                                         |                |               | +/- | 56.6814 | µg/mL | Unstressed  |
|                              |                                                         |                |               | +/- | 65.1841 | µg/mL | Stressed    |
| 11                           | 3,4-Dichlorotoluene<br>CAS # 95-75-0<br>Purity 99%      | (Lot 09419AS)  | 5,011.0 µg/mL | +/- | 29.4074 | µg/mL | Gravimetric |
|                              |                                                         |                |               | +/- | 56.6474 | µg/mL | Unstressed  |
|                              |                                                         |                |               | +/- | 65.1451 | µg/mL | Stressed    |
| 12                           | 2,3-Dichlorotoluene<br>CAS # 32768-54-0<br>Purity 99%   | (Lot 00317)    | 5,016.0 µg/mL | +/- | 29.4367 | µg/mL | Gravimetric |
|                              |                                                         |                |               | +/- | 56.7040 | µg/mL | Unstressed  |
|                              |                                                         |                |               | +/- | 65.2101 | µg/mL | Stressed    |
| 13                           | 2,4,5-Trichlorotoluene<br>CAS # 6639-30-1<br>Purity 99% | (Lot 2490300)  | 5,000.0 µg/mL | +/- | 29.3428 | µg/mL | Gravimetric |
|                              |                                                         |                |               | +/- | 56.5231 | µg/mL | Unstressed  |
|                              |                                                         |                |               | +/- | 65.0021 | µg/mL | Stressed    |
| 14                           | 2,3,6-Trichlorotoluene<br>CAS # 2077-46-5<br>Purity 99% | (Lot NT050444) | 5,005.0 µg/mL | +/- | 29.3721 | µg/mL | Gravimetric |
|                              |                                                         |                |               | +/- | 56.5796 | µg/mL | Unstressed  |
|                              |                                                         |                |               | +/- | 65.0671 | µg/mL | Stressed    |
| <b>Solvent:</b> P&T Methanol |                                                         |                |               |     |         |       |             |
|                              | CAS # 67-56-1                                           |                |               |     |         |       |             |
|                              | Purity 99%                                              |                |               |     |         |       |             |

Reagent

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**VOARESEE1ST\_00025**



**CERTIFIED REFERENCE MATERIAL**

110 Benner Circle  
Bellefonte, PA 16823-8812

Tel: (800)356-1688

Fax: (814)353-1309

www.restek.com

## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

Catalog No.: 568363-FL Lot No.: A0109701  
Description: Custom EE Standard  
Custom EE Standard 5,000µg/mL, P&T Methanol, 1mL/ampul  
Container Size: 2 mL Pkg Amt: > 1 mL  
Expiration Date: September 30, 2016 Storage: 0°C or colder

### CERTIFIED VALUES

| Elution Order | Compound                                                                        | Grav. Conc. (weight/volume) | Expanded Uncertainty (95% C.L.; K=2)      |                                                |
|---------------|---------------------------------------------------------------------------------|-----------------------------|-------------------------------------------|------------------------------------------------|
| 1             | 3-Chlorobenzotrifluoride<br>CAS # 98-15-7<br>Purity 99%<br>(Lot 21324DO)        | 5,000.0 µg/mL               | +/- 29.3428<br>+/- 56.5231<br>+/- 65.0021 | µg/mL<br>Gravimetric<br>Unstressed<br>Stressed |
| 2             | 4-Chlorobenzotrifluoride<br>CAS # 98-56-6<br>Purity 99%<br>(Lot 08507BO)        | 5,003.0 µg/mL               | +/- 29.3604<br>+/- 56.5570<br>+/- 65.0411 | µg/mL<br>Gravimetric<br>Unstressed<br>Stressed |
| 3             | 2-Chlorobenzotrifluoride<br>CAS # 88-16-4<br>Purity 99%<br>(Lot I0316DQ)        | 5,009.0 µg/mL               | +/- 29.3956<br>+/- 56.6248<br>+/- 65.1191 | µg/mL<br>Gravimetric<br>Unstressed<br>Stressed |
| 4             | 3-Chlorotoluene<br>CAS # 108-41-8<br>Purity 99%<br>(Lot 13528LX)                | 5,012.0 µg/mL               | +/- 29.4132<br>+/- 56.6587<br>+/- 65.1581 | µg/mL<br>Gravimetric<br>Unstressed<br>Stressed |
| 5             | 2,4-Dichlorobenzotrifluoride<br>CAS # 320-60-5<br>Purity 99%<br>(Lot MKBL3552V) | 5,013.0 µg/mL               | +/- 29.4191<br>+/- 56.6701<br>+/- 65.1711 | µg/mL<br>Gravimetric<br>Unstressed<br>Stressed |
| 6             | 3,4-Dichlorobenzotrifluoride<br>CAS # 328-84-7<br>Purity 99%<br>(Lot 11105EJV)  | 5,018.0 µg/mL               | +/- 29.4484<br>+/- 56.7266<br>+/- 65.2361 | µg/mL<br>Gravimetric<br>Unstressed<br>Stressed |
| 7             | 2,5-Dichlorobenzotrifluoride<br>CAS # 320-50-3<br>Purity 99%<br>(Lot 04415DSV)  | 5,015.0 µg/mL               | +/- 29.4308<br>+/- 56.6927<br>+/- 65.1971 | µg/mL<br>Gravimetric<br>Unstressed<br>Stressed |

|          |                        |                |         |       |     |         |       |             |       |            |
|----------|------------------------|----------------|---------|-------|-----|---------|-------|-------------|-------|------------|
| 8        | 2,4-Dichlorotoluene    | (Lot 07715JS)  | 5,021.0 | µg/mL | +/- | 29.4660 | µg/mL | Gravimetric |       |            |
|          | CAS # 95-73-8          |                |         |       | +/- | 56.7605 |       |             | µg/mL | Unstressed |
|          | Purity 99%             |                |         |       | +/- | 65.2751 |       |             |       |            |
| 9        | 2,5-Dichlorotoluene    | (Lot 1381346V) | 5,005.0 | µg/mL | +/- | 29.3721 | µg/mL | Gravimetric |       |            |
|          | CAS # 19398-61-9       |                |         |       | +/- | 56.5796 |       |             | µg/mL | Unstressed |
|          | Purity 99%             |                |         |       | +/- | 65.0671 |       |             |       |            |
| 10       | 2,6-Dichlorotoluene    | (Lot 16921JS)  | 5,014.0 | µg/mL | +/- | 29.4250 | µg/mL | Gravimetric |       |            |
|          | CAS # 118-69-4         |                |         |       | +/- | 56.6814 |       |             | µg/mL | Unstressed |
|          | Purity 99%             |                |         |       | +/- | 65.1841 |       |             |       |            |
| 11       | 3,4-Dichlorotoluene    | (Lot 09419AS)  | 5,011.0 | µg/mL | +/- | 29.4074 | µg/mL | Gravimetric |       |            |
|          | CAS # 95-75-0          |                |         |       | +/- | 56.6474 |       |             | µg/mL | Unstressed |
|          | Purity 99%             |                |         |       | +/- | 65.1451 |       |             |       |            |
| 12       | 2,3-Dichlorotoluene    | (Lot 00317)    | 5,016.0 | µg/mL | +/- | 29.4367 | µg/mL | Gravimetric |       |            |
|          | CAS # 32768-54-0       |                |         |       | +/- | 56.7040 |       |             | µg/mL | Unstressed |
|          | Purity 99%             |                |         |       | +/- | 65.2101 |       |             |       |            |
| 13       | 2,4,5-Trichlorotoluene | (Lot 2490300)  | 5,000.0 | µg/mL | +/- | 29.3428 | µg/mL | Gravimetric |       |            |
|          | CAS # 6639-30-1        |                |         |       | +/- | 56.5231 |       |             | µg/mL | Unstressed |
|          | Purity 99%             |                |         |       | +/- | 65.0021 |       |             |       |            |
| 14       | 2,3,6-Trichlorotoluene | (Lot NT050444) | 5,005.0 | µg/mL | +/- | 29.3721 | µg/mL | Gravimetric |       |            |
|          | CAS # 2077-46-5        |                |         |       | +/- | 56.5796 |       |             | µg/mL | Unstressed |
|          | Purity 99%             |                |         |       | +/- | 65.0671 |       |             |       |            |
| Solvent: | P&T Methanol           |                |         |       |     |         |       |             |       |            |
|          | CAS # 67-56-1          |                |         |       |     |         |       |             |       |            |
|          | Purity 99%             |                |         |       |     |         |       |             |       |            |



# Method 8260C Low Level

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

FORM II  
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Matrix: Water Level: Low  
 GC Column (1): DB-624 ID: 0.18 (mm)

| Client Sample ID   | Lab Sample ID    | DBFM # | DCA # | TOL # | BFB # |
|--------------------|------------------|--------|-------|-------|-------|
| HD-MW-87-0/1-0     | 180-48309-1      | 102    | 91    | 93    | 91    |
| HD-MW-143S-0/1-0   | 180-48309-2      | 107    | 104   | 104   | 87    |
| HD-MW-143D-0/1-0   | 180-48309-3      | 104    | 106   | 101   | 86    |
| HD-MW-20M-0/1-0    | 180-48309-4      | 106    | 108   | 108   | 91    |
| HD-MW-92-0/1-0     | 180-48309-5      | 111    | 104   | 103   | 85    |
| HD-MW-92-0/1-0 DL  | 180-48309-5 DL   | 101    | 95    | 89    | 88    |
| HD-MW-64D-0/1-0    | 180-48309-6      | 112    | 100   | 87    | 86    |
| HD-MW-64D-0/1-0 DL | 180-48309-6 DL   | 110    | 106   | 98    | 83    |
| HD-QC12-0/1-2      | 180-48309-7      | 106    | 105   | 109   | 91    |
|                    | MB 180-156189/5  | 101    | 101   | 102   | 86    |
|                    | MB 180-156309/6  | 100    | 90    | 91    | 92    |
|                    | LCS 180-156189/8 | 98     | 98    | 106   | 91    |
|                    | LCS 180-156309/9 | 103    | 90    | 102   | 96    |

|                                    |                  |
|------------------------------------|------------------|
|                                    | <u>QC LIMITS</u> |
| DBFM = Dibromofluoromethane (Surr) | 70-128           |
| DCA = 1,2-Dichloroethane-d4 (Surr) | 64-135           |
| TOL = Toluene-d8 (Surr)            | 71-118           |
| BFB = 4-Bromofluorobenzene (Surr)  | 70-118           |

# Column to be used to flag recovery values

FORM III  
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Matrix: Water Level: Low Lab File ID: 61007008.D  
 Lab ID: LCS 180-156189/8 Client ID: \_\_\_\_\_

| COMPOUND                    | SPIKE<br>ADDED<br>(ug/L) | LCS<br>CONCENTRATION<br>(ug/L) | LCS<br>%<br>REC | QC<br>LIMITS<br>REC | # |
|-----------------------------|--------------------------|--------------------------------|-----------------|---------------------|---|
| Chloromethane               | 10.0                     | 11.3                           | 113             | 50-139              |   |
| Vinyl chloride              | 10.0                     | 9.97                           | 100             | 53-138              |   |
| Bromomethane                | 10.0                     | 8.04                           | 80              | 33-150              |   |
| Chloroethane                | 10.0                     | 8.97                           | 90              | 36-142              |   |
| 1,1-Dichloroethene          | 10.0                     | 8.60                           | 86              | 65-136              |   |
| Acetone                     | 20.0                     | 20.8                           | 104             | 22-150              |   |
| Carbon disulfide            | 10.0                     | 8.38                           | 84              | 54-132              |   |
| Methylene Chloride          | 10.0                     | 8.72                           | 87              | 63-129              |   |
| trans-1,2-Dichloroethene    | 10.0                     | 8.87                           | 89              | 73-126              |   |
| Methyl tert-butyl ether     | 10.0                     | 8.96                           | 90              | 64-123              |   |
| 1,1-Dichloroethane          | 10.0                     | 9.57                           | 96              | 73-126              |   |
| cis-1,2-Dichloroethene      | 10.0                     | 8.99                           | 90              | 70-120              |   |
| Bromochloromethane          | 10.0                     | 10.0                           | 100             | 70-127              |   |
| 2-Butanone (MEK)            | 20.0                     | 24.0                           | 120             | 39-138              |   |
| Chloroform                  | 10.0                     | 8.87                           | 89              | 72-127              |   |
| 1,1,1-Trichloroethane       | 10.0                     | 8.02                           | 80              | 63-133              |   |
| Carbon tetrachloride        | 10.0                     | 8.84                           | 88              | 55-150              |   |
| Benzene                     | 10.0                     | 9.97                           | 100             | 80-120              |   |
| 1,2-Dichloroethane          | 10.0                     | 9.18                           | 92              | 68-132              |   |
| Trichloroethene             | 10.0                     | 10.4                           | 104             | 73-120              |   |
| 1,2-Dichloropropane         | 10.0                     | 10.7                           | 107             | 76-124              |   |
| Bromodichloromethane        | 10.0                     | 9.15                           | 92              | 66-130              |   |
| cis-1,3-Dichloropropene     | 10.0                     | 9.63                           | 96              | 66-120              |   |
| 4-Methyl-2-pentanone (MIBK) | 20.0                     | 20.8                           | 104             | 45-145              |   |
| Toluene                     | 10.0                     | 10.1                           | 101             | 80-123              |   |
| trans-1,3-Dichloropropene   | 10.0                     | 8.94                           | 89              | 65-125              |   |
| 1,1,2-Trichloroethane       | 10.0                     | 9.90                           | 99              | 77-127              |   |
| Tetrachloroethene           | 10.0                     | 10.2                           | 102             | 70-135              |   |
| 2-Hexanone                  | 20.0                     | 20.7                           | 103             | 25-132              |   |
| Dibromochloromethane        | 10.0                     | 9.99                           | 100             | 60-140              |   |
| 1,2-Dibromoethane (EDB)     | 10.0                     | 10.2                           | 102             | 74-123              |   |
| Chlorobenzene               | 10.0                     | 10.2                           | 102             | 80-120              |   |
| 1,1,1,2-Tetrachloroethane   | 10.0                     | 10.2                           | 102             | 63-140              |   |
| Ethylbenzene                | 10.0                     | 9.50                           | 95              | 72-126              |   |
| Xylenes, Total              | 20.0                     | 19.1                           | 95              | 76-128              |   |
| Styrene                     | 10.0                     | 10.5                           | 105             | 71-127              |   |
| Bromoform                   | 10.0                     | 10.8                           | 108             | 46-150              |   |
| 1,1,2,2-Tetrachloroethane   | 10.0                     | 9.90                           | 99              | 62-125              |   |
| Acrylonitrile               | 100                      | 125                            | 125             | 30-140              |   |
| 1,4-Dioxane                 | 200                      | 223                            | 111             | 10-160              |   |

# Column to be used to flag recovery and RPD values

FORM III  
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Matrix: Water Level: Low Lab File ID: 51008009.D  
 Lab ID: LCS 180-156309/9 Client ID: \_\_\_\_\_

| COMPOUND                    | SPIKE<br>ADDED<br>(ug/L) | LCS<br>CONCENTRATION<br>(ug/L) | LCS<br>%<br>REC | QC<br>LIMITS<br>REC | # |
|-----------------------------|--------------------------|--------------------------------|-----------------|---------------------|---|
| Chloromethane               | 10.0                     | 9.02                           | 90              | 50-139              |   |
| Vinyl chloride              | 10.0                     | 7.57                           | 76              | 53-138              |   |
| Bromomethane                | 10.0                     | 8.60                           | 86              | 33-150              |   |
| Chloroethane                | 10.0                     | 6.91                           | 69              | 36-142              |   |
| 1,1-Dichloroethene          | 10.0                     | 9.25                           | 92              | 65-136              |   |
| Acetone                     | 20.0                     | 20.6                           | 103             | 22-150              |   |
| Carbon disulfide            | 10.0                     | 8.90                           | 89              | 54-132              |   |
| Methylene Chloride          | 10.0                     | 9.77                           | 98              | 63-129              |   |
| trans-1,2-Dichloroethene    | 10.0                     | 9.37                           | 94              | 73-126              |   |
| Methyl tert-butyl ether     | 10.0                     | 9.47                           | 95              | 64-123              |   |
| 1,1-Dichloroethane          | 10.0                     | 8.74                           | 87              | 73-126              |   |
| cis-1,2-Dichloroethene      | 10.0                     | 9.22                           | 92              | 70-120              |   |
| Bromochloromethane          | 10.0                     | 10.7                           | 107             | 70-127              |   |
| 2-Butanone (MEK)            | 20.0                     | 21.8                           | 109             | 39-138              |   |
| Chloroform                  | 10.0                     | 9.19                           | 92              | 72-127              |   |
| 1,1,1-Trichloroethane       | 10.0                     | 9.09                           | 91              | 63-133              |   |
| Carbon tetrachloride        | 10.0                     | 9.75                           | 97              | 55-150              |   |
| Benzene                     | 10.0                     | 9.47                           | 95              | 80-120              |   |
| 1,2-Dichloroethane          | 10.0                     | 8.97                           | 90              | 68-132              |   |
| Trichloroethene             | 10.0                     | 10.3                           | 103             | 73-120              |   |
| 1,2-Dichloropropane         | 10.0                     | 9.63                           | 96              | 76-124              |   |
| Bromodichloromethane        | 10.0                     | 9.29                           | 93              | 66-130              |   |
| cis-1,3-Dichloropropene     | 10.0                     | 8.92                           | 89              | 66-120              |   |
| 4-Methyl-2-pentanone (MIBK) | 20.0                     | 19.5                           | 98              | 45-145              |   |
| Toluene                     | 10.0                     | 10.0                           | 100             | 80-123              |   |
| trans-1,3-Dichloropropene   | 10.0                     | 8.85                           | 89              | 65-125              |   |
| 1,1,2-Trichloroethane       | 10.0                     | 10.1                           | 101             | 77-127              |   |
| Tetrachloroethene           | 10.0                     | 10.7                           | 107             | 70-135              |   |
| 2-Hexanone                  | 20.0                     | 18.9                           | 95              | 25-132              |   |
| Dibromochloromethane        | 10.0                     | 10.7                           | 107             | 60-140              |   |
| 1,2-Dibromoethane (EDB)     | 10.0                     | 10.5                           | 105             | 74-123              |   |
| Chlorobenzene               | 10.0                     | 10.4                           | 104             | 80-120              |   |
| 1,1,1,2-Tetrachloroethane   | 10.0                     | 10.2                           | 102             | 63-140              |   |
| Ethylbenzene                | 10.0                     | 10.2                           | 102             | 72-126              |   |
| Xylenes, Total              | 20.0                     | 21.0                           | 105             | 76-128              |   |
| Styrene                     | 10.0                     | 11.1                           | 111             | 71-127              |   |
| Bromoform                   | 10.0                     | 11.0                           | 110             | 46-150              |   |
| 1,1,2,2-Tetrachloroethane   | 10.0                     | 10.2                           | 102             | 62-125              |   |
| Acrylonitrile               | 100                      | 102                            | 102             | 30-140              |   |
| 1,4-Dioxane                 | 200                      | 258                            | 129             | 10-160              |   |

# Column to be used to flag recovery and RPD values

FORM IV  
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
SDG No.: \_\_\_\_\_  
Lab File ID: 61007005.D Lab Sample ID: MB 180-156189/5  
Matrix: Water Heated Purge: (Y/N) N  
Instrument ID: CHHP6 Date Analyzed: 10/07/2015 14:07  
GC Column: DB-624 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

| CLIENT SAMPLE ID   | LAB SAMPLE ID    | LAB<br>FILE ID | DATE ANALYZED    |
|--------------------|------------------|----------------|------------------|
|                    | LCS 180-156189/8 | 61007008.D     | 10/07/2015 15:36 |
| HD-QC12-0/1-2      | 180-48309-7      | 61007018.D     | 10/07/2015 19:39 |
| HD-MW-143S-0/1-0   | 180-48309-2      | 61007019.D     | 10/07/2015 20:03 |
| HD-MW-143D-0/1-0   | 180-48309-3      | 61007020.D     | 10/07/2015 20:27 |
| HD-MW-20M-0/1-0    | 180-48309-4      | 61007021.D     | 10/07/2015 20:51 |
| HD-MW-64D-0/1-0 DL | 180-48309-6 DL   | 61007022.D     | 10/07/2015 21:15 |
| HD-MW-92-0/1-0     | 180-48309-5      | 61007028.D     | 10/07/2015 23:42 |

FORM IV  
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
SDG No.: \_\_\_\_\_  
Lab File ID: 51008006.D Lab Sample ID: MB 180-156309/6  
Matrix: Water Heated Purge: (Y/N) N  
Instrument ID: CHHP5 Date Analyzed: 10/08/2015 13:21  
GC Column: DB-624 ID: 0.18 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

| CLIENT SAMPLE ID  | LAB SAMPLE ID    | LAB<br>FILE ID | DATE ANALYZED    |
|-------------------|------------------|----------------|------------------|
|                   | LCS 180-156309/9 | 51008009.D     | 10/08/2015 14:48 |
| HD-MW-87-0/1-0    | 180-48309-1      | 51008013.D     | 10/08/2015 16:24 |
| HD-MW-92-0/1-0 DL | 180-48309-5 DL   | 51008014.D     | 10/08/2015 16:48 |
| HD-MW-64D-0/1-0   | 180-48309-6      | 51008029.D     | 10/08/2015 22:50 |

FORM V  
GC/MS VOA INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Lab File ID: 50826007.D BFB Injection Date: 08/26/2015  
 Instrument ID: CHHP5 BFB Injection Time: 14:01  
 Analysis Batch No.: 151868

| M/E | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 50  | 15.0 - 40.0 % of mass 95           | 23.5                 |
| 75  | 30.0 - 60.0 % of mass 95           | 49.7                 |
| 95  | Base Peak, 100% relative abundance | 100.0                |
| 96  | 5.0 - 9.0 % of mass 95             | 6.6                  |
| 173 | Less than 2.0 % of mass 174        | 0.4 (0.5)1           |
| 174 | 50.0 - 120.00 % of mass 95         | 77.9                 |
| 175 | 5.0 - 9.0 % of mass 174            | 6.1 (7.9)1           |
| 176 | 95.0 - 101.0 % of mass 174         | 75.2 (96.6)1         |
| 177 | 5.0 - 9.0 % of mass 176            | 4.9 (6.6)2           |

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

| CLIENT SAMPLE ID | LAB SAMPLE ID     | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|------------------|-------------------|-------------|---------------|---------------|
|                  | IC 180-151868/6   | 50826006.D  | 08/26/2015    | 15:04         |
|                  | IC 180-151868/8   | 50826008.D  | 08/26/2015    | 15:28         |
|                  | ICIS 180-151868/9 | 50826009.D  | 08/26/2015    | 15:52         |
|                  | IC 180-151868/10  | 50826010.D  | 08/26/2015    | 16:16         |
|                  | IC 180-151868/11  | 50826011.D  | 08/26/2015    | 16:40         |
|                  | IC 180-151868/12  | 50826012.D  | 08/26/2015    | 17:04         |
|                  | IC 180-151868/13  | 50826013.D  | 08/26/2015    | 17:28         |
|                  | IC 180-151868/14  | 50826014.D  | 08/26/2015    | 17:52         |

FORM V  
GC/MS VOA INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Lab File ID: 51008004.D BFB Injection Date: 10/08/2015  
 Instrument ID: CHHP5 BFB Injection Time: 11:00  
 Analysis Batch No.: 156309

| M/E | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 50  | 15.0 - 40.0 % of mass 95           | 22.8                 |
| 75  | 30.0 - 60.0 % of mass 95           | 45.7                 |
| 95  | Base Peak, 100% relative abundance | 100.0                |
| 96  | 5.0 - 9.0 % of mass 95             | 7.7                  |
| 173 | Less than 2.0 % of mass 174        | 0.8 (1.0)1           |
| 174 | 50.0 - 120.00 % of mass 95         | 80.6                 |
| 175 | 5.0 - 9.0 % of mass 174            | 7.3 (9.0)1           |
| 176 | 95.0 - 101.0 % of mass 174         | 76.8 (95.3)1         |
| 177 | 5.0 - 9.0 % of mass 176            | 5.2 (6.7)2           |

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

| CLIENT SAMPLE ID  | LAB SAMPLE ID      | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|-------------------|--------------------|-------------|---------------|---------------|
|                   | CCVIS 180-156309/5 | 51008005.D  | 10/08/2015    | 12:33         |
|                   | MB 180-156309/6    | 51008006.D  | 10/08/2015    | 13:21         |
|                   | LCS 180-156309/9   | 51008009.D  | 10/08/2015    | 14:48         |
| HD-MW-87-0/1-0    | 180-48309-1        | 51008013.D  | 10/08/2015    | 16:24         |
| HD-MW-92-0/1-0 DL | 180-48309-5 DL     | 51008014.D  | 10/08/2015    | 16:48         |
| HD-MW-64D-0/1-0   | 180-48309-6        | 51008029.D  | 10/08/2015    | 22:50         |



FORM V  
GC/MS VOA INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Lab File ID: 60731001.D BFB Injection Date: 07/31/2015  
 Instrument ID: CHHP6 BFB Injection Time: 12:10  
 Analysis Batch No.: 149469

| M/E | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 50  | 15.0 - 40.0 % of mass 95           | 21.4                 |
| 75  | 30.0 - 60.0 % of mass 95           | 56.4                 |
| 95  | Base Peak, 100% relative abundance | 100.0                |
| 96  | 5.0 - 9.0 % of mass 95             | 7.8                  |
| 173 | Less than 2.0 % of mass 174        | 0.2 (0.3)1           |
| 174 | 50.0 - 120.00 % of mass 95         | 62.3                 |
| 175 | 5.0 - 9.0 % of mass 174            | 4.7 (7.5)1           |
| 176 | 95.0 - 101.0 % of mass 174         | 62.6 (100.6)1        |
| 177 | 5.0 - 9.0 % of mass 176            | 4.2 (6.7)2           |

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

| CLIENT SAMPLE ID | LAB SAMPLE ID     | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|------------------|-------------------|-------------|---------------|---------------|
|                  | IC 180-149469/4   | 60731004.D  | 07/31/2015    | 14:00         |
|                  | ICIS 180-149469/5 | 60731005.D  | 07/31/2015    | 14:24         |
|                  | IC 180-149469/6   | 60731006.D  | 07/31/2015    | 14:49         |
|                  | IC 180-149469/7   | 60731007.D  | 07/31/2015    | 15:13         |
|                  | IC 180-149469/8   | 60731008.D  | 07/31/2015    | 15:37         |
|                  | IC 180-149469/9   | 60731009.D  | 07/31/2015    | 16:01         |
|                  | IC 180-149469/10  | 60731010.D  | 07/31/2015    | 16:25         |
|                  | IC 180-149469/14  | 60731014.D  | 07/31/2015    | 18:02         |

FORM V  
GC/MS VOA INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Lab File ID: 61007004.D BFB Injection Date: 10/07/2015  
 Instrument ID: CHHP6 BFB Injection Time: 11:51  
 Analysis Batch No.: 156189

| M/E | ION ABUNDANCE CRITERIA             | % RELATIVE ABUNDANCE |
|-----|------------------------------------|----------------------|
| 50  | 15.0 - 40.0 % of mass 95           | 22.4                 |
| 75  | 30.0 - 60.0 % of mass 95           | 58.7                 |
| 95  | Base Peak, 100% relative abundance | 100.0                |
| 96  | 5.0 - 9.0 % of mass 95             | 7.9                  |
| 173 | Less than 2.0 % of mass 174        | 0.4 (0.5)1           |
| 174 | 50.0 - 120.00 % of mass 95         | 77.0                 |
| 175 | 5.0 - 9.0 % of mass 174            | 5.9 (7.6)1           |
| 176 | 95.0 - 101.0 % of mass 174         | 73.6 (95.6)1         |
| 177 | 5.0 - 9.0 % of mass 176            | 5.6 (7.7)2           |

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

| CLIENT SAMPLE ID   | LAB SAMPLE ID      | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|--------------------|--------------------|-------------|---------------|---------------|
|                    | CCVIS 180-156189/2 | 61007002.D  | 10/07/2015    | 12:51         |
|                    | MB 180-156189/5    | 61007005.D  | 10/07/2015    | 14:07         |
|                    | LCS 180-156189/8   | 61007008.D  | 10/07/2015    | 15:36         |
| HD-QC12-0/1-2      | 180-48309-7        | 61007018.D  | 10/07/2015    | 19:39         |
| HD-MW-143S-0/1-0   | 180-48309-2        | 61007019.D  | 10/07/2015    | 20:03         |
| HD-MW-143D-0/1-0   | 180-48309-3        | 61007020.D  | 10/07/2015    | 20:27         |
| HD-MW-20M-0/1-0    | 180-48309-4        | 61007021.D  | 10/07/2015    | 20:51         |
| HD-MW-64D-0/1-0 DL | 180-48309-6 DL     | 61007022.D  | 10/07/2015    | 21:15         |
| HD-MW-92-0/1-0     | 180-48309-5        | 61007028.D  | 10/07/2015    | 23:42         |

FORM VIII  
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: CCVIS 180-156309/5 Date Analyzed: 10/08/2015 12:33  
 Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm)  
 Lab File ID (Standard): 51008005.D Heated Purge: (Y/N) N  
 Calibration ID: 25113

|                  | TBA               |        | FB     |        | CBZ    |       |       |
|------------------|-------------------|--------|--------|--------|--------|-------|-------|
|                  | AREA #            | RT #   | AREA # | RT #   | AREA # | RT #  |       |
| 12/24 HOUR STD   | 123647            | 4.27   | 342398 | 7.29   | 85766  | 10.39 |       |
| UPPER LIMIT      | 247294            | 4.77   | 684796 | 7.79   | 171532 | 10.89 |       |
| LOWER LIMIT      | 61824             | 3.77   | 171199 | 6.79   | 42883  | 9.89  |       |
| LAB SAMPLE ID    | CLIENT SAMPLE ID  |        |        |        |        |       |       |
| MB 180-156309/6  |                   | 152547 | 4.27   | 310216 | 7.29   | 82365 | 10.39 |
| LCS 180-156309/9 |                   | 127184 | 4.28   | 319307 | 7.29   | 80373 | 10.39 |
| 180-48309-1      | HD-MW-87-0/1-0    | 137267 | 4.27   | 293773 | 7.29   | 76350 | 10.39 |
| 180-48309-5 DL   | HD-MW-92-0/1-0 DL | 148224 | 4.27   | 289635 | 7.30   | 77004 | 10.39 |
| 180-48309-6      | HD-MW-64D-0/1-0   | 137187 | 4.26   | 256752 | 7.29   | 73999 | 10.39 |

TBA = TBA-d9 (IS)

FB = Fluorobenzene (IS)

CBZ = Chlorobenzene-d5

Area Limit = 50%-200% of internal standard area

RT Limit =  $\pm$  0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: CCVIS 180-156309/5 Date Analyzed: 10/08/2015 12:33  
 Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm)  
 Lab File ID (Standard): 51008005.D Heated Purge: (Y/N) N  
 Calibration ID: 25113

|                  |                   | DCB    |       |        |      |        |      |
|------------------|-------------------|--------|-------|--------|------|--------|------|
|                  |                   | AREA # | RT #  | AREA # | RT # | AREA # | RT # |
| 12/24 HOUR STD   |                   | 125555 | 12.73 |        |      |        |      |
| UPPER LIMIT      |                   | 251110 | 13.23 |        |      |        |      |
| LOWER LIMIT      |                   | 62778  | 12.23 |        |      |        |      |
| LAB SAMPLE ID    | CLIENT SAMPLE ID  |        |       |        |      |        |      |
| MB 180-156309/6  |                   | 126878 | 12.73 |        |      |        |      |
| LCS 180-156309/9 |                   | 122270 | 12.73 |        |      |        |      |
| 180-48309-1      | HD-MW-87-0/1-0    | 114000 | 12.73 |        |      |        |      |
| 180-48309-5 DL   | HD-MW-92-0/1-0 DL | 114152 | 12.73 |        |      |        |      |
| 180-48309-6      | HD-MW-64D-0/1-0   | 104311 | 12.73 |        |      |        |      |

DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area  
 RT Limit =  $\pm$  0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: CCVIS 180-156189/2 Date Analyzed: 10/07/2015 12:51  
 Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm)  
 Lab File ID (Standard): 61007002.D Heated Purge: (Y/N) N  
 Calibration ID: 25315

|                  | TBA                |        | FB     |        | CBZ    |        |       |
|------------------|--------------------|--------|--------|--------|--------|--------|-------|
|                  | AREA #             | RT #   | AREA # | RT #   | AREA # | RT #   |       |
| 12/24 HOUR STD   | 168577             | 4.25   | 430181 | 7.28   | 101182 | 10.40  |       |
| UPPER LIMIT      | 337154             | 4.75   | 860362 | 7.78   | 202364 | 10.90  |       |
| LOWER LIMIT      | 84289              | 3.75   | 215091 | 6.78   | 50591  | 9.90   |       |
| LAB SAMPLE ID    | CLIENT SAMPLE ID   |        |        |        |        |        |       |
| MB 180-156189/5  |                    | 185013 | 4.22   | 465495 | 7.29   | 112798 | 10.40 |
| LCS 180-156189/8 |                    | 207975 | 4.25   | 460649 | 7.29   | 105123 | 10.40 |
| 180-48309-7      | HD-QC12-0/1-2      | 191745 | 4.23   | 452546 | 7.29   | 101366 | 10.40 |
| 180-48309-2      | HD-MW-143S-0/1-0   | 174732 | 4.24   | 434002 | 7.29   | 105329 | 10.40 |
| 180-48309-3      | HD-MW-143D-0/1-0   | 173795 | 4.25   | 454572 | 7.29   | 106101 | 10.40 |
| 180-48309-4      | HD-MW-20M-0/1-0    | 173701 | 4.24   | 441634 | 7.29   | 100924 | 10.40 |
| 180-48309-6 DL   | HD-MW-64D-0/1-0 DL | 188512 | 4.23   | 440516 | 7.29   | 109386 | 10.39 |
| 180-48309-5      | HD-MW-92-0/1-0     | 173107 | 4.24   | 427278 | 7.29   | 104084 | 10.40 |

TBA = TBA-d9 (IS)

FB = Fluorobenzene (IS)

CBZ = Chlorobenzene-d5

Area Limit = 50%-200% of internal standard area

RT Limit =  $\pm$  0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: CCVIS 180-156189/2 Date Analyzed: 10/07/2015 12:51  
 Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm)  
 Lab File ID (Standard): 61007002.D Heated Purge: (Y/N) N  
 Calibration ID: 25315

|                  |                    | DCB    |       |        |      |        |      |
|------------------|--------------------|--------|-------|--------|------|--------|------|
|                  |                    | AREA # | RT #  | AREA # | RT # | AREA # | RT # |
| 12/24 HOUR STD   |                    | 190331 | 12.75 |        |      |        |      |
| UPPER LIMIT      |                    | 380662 | 13.25 |        |      |        |      |
| LOWER LIMIT      |                    | 95166  | 12.25 |        |      |        |      |
| LAB SAMPLE ID    | CLIENT SAMPLE ID   |        |       |        |      |        |      |
| MB 180-156189/5  |                    | 182602 | 12.75 |        |      |        |      |
| LCS 180-156189/8 |                    | 187985 | 12.75 |        |      |        |      |
| 180-48309-7      | HD-QC12-0/1-2      | 173799 | 12.75 |        |      |        |      |
| 180-48309-2      | HD-MW-143S-0/1-0   | 168898 | 12.75 |        |      |        |      |
| 180-48309-3      | HD-MW-143D-0/1-0   | 172179 | 12.75 |        |      |        |      |
| 180-48309-4      | HD-MW-20M-0/1-0    | 172151 | 12.75 |        |      |        |      |
| 180-48309-6 DL   | HD-MW-64D-0/1-0 DL | 169650 | 12.75 |        |      |        |      |
| 180-48309-5      | HD-MW-92-0/1-0     | 164814 | 12.75 |        |      |        |      |

DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area  
 RT Limit =  $\pm$  0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

|                                         |                                               |
|-----------------------------------------|-----------------------------------------------|
| Lab Name: <u>TestAmerica Pittsburgh</u> | Job No.: <u>180-48309-1</u>                   |
| SDG No.: _____                          |                                               |
| Client Sample ID: <u>HD-MW-87-0/1-0</u> | Lab Sample ID: <u>180-48309-1</u>             |
| Matrix: <u>Water</u>                    | Lab File ID: <u>51008013.D</u>                |
| Analysis Method: <u>8260C</u>           | Date Collected: <u>09/30/2015 10:37</u>       |
| Sample wt/vol: <u>5(mL)</u>             | Date Analyzed: <u>10/08/2015 16:24</u>        |
| Soil Aliquot Vol: _____                 | Dilution Factor: <u>12.5</u>                  |
| Soil Extract Vol.: _____                | GC Column: <u>DB-624</u> ID: <u>0.18 (mm)</u> |
| % Moisture: _____                       | Level: (low/med) <u>Low</u>                   |
| Analysis Batch No.: <u>156309</u>       | Units: <u>ug/L</u>                            |

| CAS NO.    | COMPOUND NAME               | RESULT | Q  | RL | MDL |
|------------|-----------------------------|--------|----|----|-----|
| 74-87-3    | Chloromethane               | ND     |    | 13 | 3.5 |
| 75-01-4    | Vinyl chloride              | ND     | ^c | 13 | 2.8 |
| 74-83-9    | Bromomethane                | ND     | ^c | 13 | 3.9 |
| 75-00-3    | Chloroethane                | ND     | ^c | 13 | 2.7 |
| 75-35-4    | 1,1-Dichloroethene          | 11     | J  | 13 | 3.7 |
| 67-64-1    | Acetone                     | ND     |    | 63 | 31  |
| 75-15-0    | Carbon disulfide            | ND     |    | 13 | 2.7 |
| 75-09-2    | Methylene Chloride          | ND     |    | 13 | 1.6 |
| 156-60-5   | trans-1,2-Dichloroethene    | ND     |    | 13 | 2.1 |
| 1634-04-4  | Methyl tert-butyl ether     | ND     |    | 13 | 2.3 |
| 75-34-3    | 1,1-Dichloroethane          | 4.6    | J  | 13 | 1.5 |
| 156-59-2   | cis-1,2-Dichloroethene      | 460    |    | 13 | 3.0 |
| 74-97-5    | Bromochloromethane          | ND     |    | 13 | 2.3 |
| 78-93-3    | 2-Butanone (MEK)            | ND     |    | 63 | 6.8 |
| 67-66-3    | Chloroform                  | ND     |    | 13 | 2.1 |
| 71-55-6    | 1,1,1-Trichloroethane       | 9.8    | J  | 13 | 3.6 |
| 56-23-5    | Carbon tetrachloride        | 2.0    | J  | 13 | 1.7 |
| 71-43-2    | Benzene                     | ND     |    | 13 | 1.3 |
| 107-06-2   | 1,2-Dichloroethane          | ND     |    | 13 | 2.6 |
| 79-01-6    | Trichloroethene             | 390    |    | 13 | 1.8 |
| 78-87-5    | 1,2-Dichloropropane         | ND     |    | 13 | 1.2 |
| 75-27-4    | Bromodichloromethane        | ND     |    | 13 | 1.6 |
| 10061-01-5 | cis-1,3-Dichloropropene     | ND     |    | 13 | 2.3 |
| 108-10-1   | 4-Methyl-2-pentanone (MIBK) | ND     |    | 63 | 6.6 |
| 108-88-3   | Toluene                     | ND     |    | 13 | 1.9 |
| 10061-02-6 | trans-1,3-Dichloropropene   | ND     |    | 13 | 1.9 |
| 79-00-5    | 1,1,2-Trichloroethane       | ND     |    | 13 | 2.5 |
| 127-18-4   | Tetrachloroethene           | 28     |    | 13 | 1.9 |
| 591-78-6   | 2-Hexanone                  | ND     |    | 63 | 2.0 |
| 124-48-1   | Dibromochloromethane        | ND     |    | 13 | 1.7 |
| 106-93-4   | 1,2-Dibromoethane (EDB)     | ND     |    | 13 | 2.3 |
| 108-90-7   | Chlorobenzene               | ND     |    | 13 | 1.7 |
| 630-20-6   | 1,1,1,2-Tetrachloroethane   | ND     |    | 13 | 3.5 |
| 100-41-4   | Ethylbenzene                | ND     |    | 13 | 2.8 |
| 1330-20-7  | Xylenes, Total              | ND     |    | 38 | 6.1 |
| 100-42-5   | Styrene                     | ND     |    | 13 | 1.2 |

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-MW-87-0/1-0 Lab Sample ID: 180-48309-1  
 Matrix: Water Lab File ID: 51008013.D  
 Analysis Method: 8260C Date Collected: 09/30/2015 10:37  
 Sample wt/vol: 5 (mL) Date Analyzed: 10/08/2015 16:24  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 12.5  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 156309 Units: ug/L

| CAS NO.  | COMPOUND NAME             | RESULT | Q  | RL   | MDL |
|----------|---------------------------|--------|----|------|-----|
| 75-25-2  | Bromoform                 | ND     |    | 13   | 2.4 |
| 79-34-5  | 1,1,2,2-Tetrachloroethane | ND     |    | 13   | 2.5 |
| 107-13-1 | Acrylonitrile             | ND     |    | 250  | 6.8 |
| 123-91-1 | 1,4-Dioxane               | ND     | ^c | 2500 | 430 |

| CAS NO.    | SURROGATE                    | %REC | Q | LIMITS |
|------------|------------------------------|------|---|--------|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 91   |   | 64-135 |
| 2037-26-5  | Toluene-d8 (Surr)            | 93   |   | 71-118 |
| 460-00-4   | 4-Bromofluorobenzene (Surr)  | 91   |   | 70-118 |
| 1868-53-7  | Dibromofluoromethane (Surr)  | 102  |   | 70-128 |



TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\51008013.D  
 Lims ID: 180-48309-C-1 Lab Sample ID: 180-48309-1  
 Client ID: HD-MW-87-0/1-0  
 Sample Type: Client  
 Inject. Date: 08-Oct-2015 16:24:30 ALS Bottle#: 12 Worklist Smp#: 13  
 Purge Vol: 5.000 mL Dil. Factor: 12.5000  
 Sample Info: 180-48309-C-1, 12.5x  
 Misc. Info.: 180-0008892-013  
 Operator ID: 001562 Instrument ID: CHHP5  
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C ICAL  
 Last Update: 09-Oct-2015 08:29:17 Calib Date: 26-Aug-2015 17:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: XAWRK037

First Level Reviewer: fergusond

Date: 09-Oct-2015 08:29:17

| Compound                        | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | OnCol Amt ng | Flags |
|---------------------------------|-----|-----------|---------------|---------------|----|----------|--------------|-------|
| * 1 TBA-d9 (IS)                 | 65  | 4.274     | 4.269         | 0.005         | 0  | 137267   | 1000.0       |       |
| * 2 Fluorobenzene (IS)          | 96  | 7.291     | 7.286         | 0.005         | 98 | 293773   | 50.0         |       |
| * 3 Chlorobenzene-d5            | 119 | 10.388    | 10.389        | -0.001        | 86 | 76350    | 50.0         |       |
| * 4 1,4-Dichlorobenzene-d4      | 152 | 12.730    | 12.731        | -0.001        | 95 | 114000   | 50.0         |       |
| \$ 5 Dibromofluoromethane (Surr | 113 | 6.561     | 6.562         | -0.001        | 94 | 73784    | 51.1         |       |
| \$ 6 1,2-Dichloroethane-d4 (Sur | 65  | 6.939     | 6.934         | 0.005         | 0  | 90018    | 45.4         |       |
| \$ 7 Toluene-d8 (Surr)          | 98  | 8.940     | 8.935         | 0.005         | 94 | 275344   | 46.7         |       |
| \$ 8 4-Bromofluorobenzene (Surr | 95  | 11.574    | 11.569        | 0.005         | 93 | 101259   | 45.6         |       |
| 12 Chloromethane                | 50  |           | 1.769         |               |    |          | ND           |       |
| 13 Vinyl chloride               | 62  |           | 1.909         |               |    |          | ND           |       |
| 15 Bromomethane                 | 94  |           | 2.255         |               |    |          | ND           |       |
| 16 Chloroethane                 | 64  |           | 2.395         |               |    |          | ND           |       |
| 22 1,1-Dichloroethene           | 96  | 3.349     | 3.338         | 0.011         | 93 | 7222     | 4.41         |       |
| 24 Acetone                      | 43  |           | 3.448         |               |    |          | ND           |       |
| 26 Carbon disulfide             | 76  |           | 3.630         |               |    |          | ND           |       |
| 31 Methylene Chloride           | 84  |           | 4.135         |               |    |          | ND           |       |
| 33 Acrylonitrile                | 53  |           | 4.525         |               |    |          | ND           |       |
| 34 trans-1,2-Dichloroethene     | 96  | 4.560     | 4.561         | -0.001        | 29 | 1305     | 0.7346       |       |
| 35 Methyl tert-butyl ether      | 73  |           | 4.573         |               |    |          | ND           |       |
| 37 1,1-Dichloroethane           | 63  | 5.199     | 5.200         | -0.001        | 93 | 6396     | 1.83         |       |
| 45 cis-1,2-Dichloroethene       | 96  | 5.959     | 5.954         | 0.005         | 81 | 348217   | 183.5        |       |
| 46 2-Butanone (MEK)             | 43  |           | 5.960         |               |    |          | ND           |       |
| 49 Chlorobromomethane           | 128 |           | 6.234         |               |    |          | ND           |       |
| 52 Chloroform                   | 83  | 6.379     | 6.380         | -0.001        | 1  | 1216     | 0.4022       | M     |
| 53 1,1,1-Trichloroethane        | 97  | 6.549     | 6.538         | 0.011         | 93 | 8736     | 3.91         |       |
| 56 Carbon tetrachloride         | 117 | 6.720     | 6.715         | 0.005         | 21 | 1544     | 0.8109       |       |
| 58 Benzene                      | 78  |           | 6.946         |               |    |          | ND           |       |
| 59 1,2-Dichloroethane           | 62  |           | 7.025         |               |    |          | ND           |       |
| 64 Trichloroethene              | 130 | 7.681     | 7.676         | 0.005         | 96 | 276167   | 155.8        |       |
| 67 1,2-Dichloropropane          | 63  |           | 7.949         |               |    |          | ND           |       |
| 70 1,4-Dioxane                  | 88  |           | 8.029         |               |    |          | ND           |       |

| Compound                       | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | OnCol Amt<br>ng | Flags |
|--------------------------------|-----|--------------|------------------|------------------|----|----------|-----------------|-------|
| 71 Dichlorobromomethane        | 83  |              | 8.235            |                  |    |          | ND              |       |
| 74 cis-1,3-Dichloropropene     | 75  |              | 8.673            |                  |    |          | ND              |       |
| 75 4-Methyl-2-pentanone (MIBK) | 43  |              | 8.826            |                  |    |          | ND              |       |
| 76 Toluene                     | 91  |              | 9.002            |                  |    |          | ND              |       |
| 77 trans-1,3-Dichloropropene   | 75  |              | 9.251            |                  |    |          | ND              |       |
| 79 1,1,2-Trichloroethane       | 97  |              | 9.446            |                  |    |          | ND              |       |
| 80 Tetrachloroethene           | 164 | 9.518        | 9.519            | -0.001           | 96 | 16386    | 11.2            |       |
| 82 2-Hexanone                  | 43  |              | 9.659            |                  |    |          | ND              |       |
| 84 Chlorodibromomethane        | 129 |              | 9.811            |                  |    |          | ND              |       |
| 85 Ethylene Dibromide          | 107 |              | 9.927            |                  |    |          | ND              |       |
| 87 Chlorobenzene               | 112 |              | 10.413           |                  |    |          | ND              |       |
| 89 1,1,1,2-Tetrachloroethane   | 131 |              | 10.511           |                  |    |          | ND              |       |
| 90 Ethylbenzene                | 106 |              | 10.517           |                  |    |          | ND              |       |
| 91 m-Xylene & p-Xylene         | 106 |              | 10.644           |                  |    |          | ND              |       |
| 92 o-Xylene                    | 106 |              | 11.028           |                  |    |          | ND              |       |
| 93 Styrene                     | 104 |              | 11.046           |                  |    |          | ND              |       |
| 94 Bromoform                   | 173 |              | 11.235           |                  |    |          | ND              |       |
| 99 1,1,2,2-Tetrachloroethane   | 83  |              | 11.709           |                  |    |          | ND              |       |
| S 133 Xylenes, Total           | 106 |              | 1.000            |                  |    |          | ND              |       |

**QC Flag Legend**

Review Flags

M - Manually Integrated

**Reagents:**

VOA8260INT\_00042

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR\_00042

Amount Added: 2.00

Units: uL

Run Reagent

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\51008013.D

Injection Date: 08-Oct-2015 16:24:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: 180-48309-C-1

Lab Sample ID: 180-48309-1

Worklist Smp#: 13

Client ID: HD-MW-87-0/1-0

Purge Vol: 5.000 mL

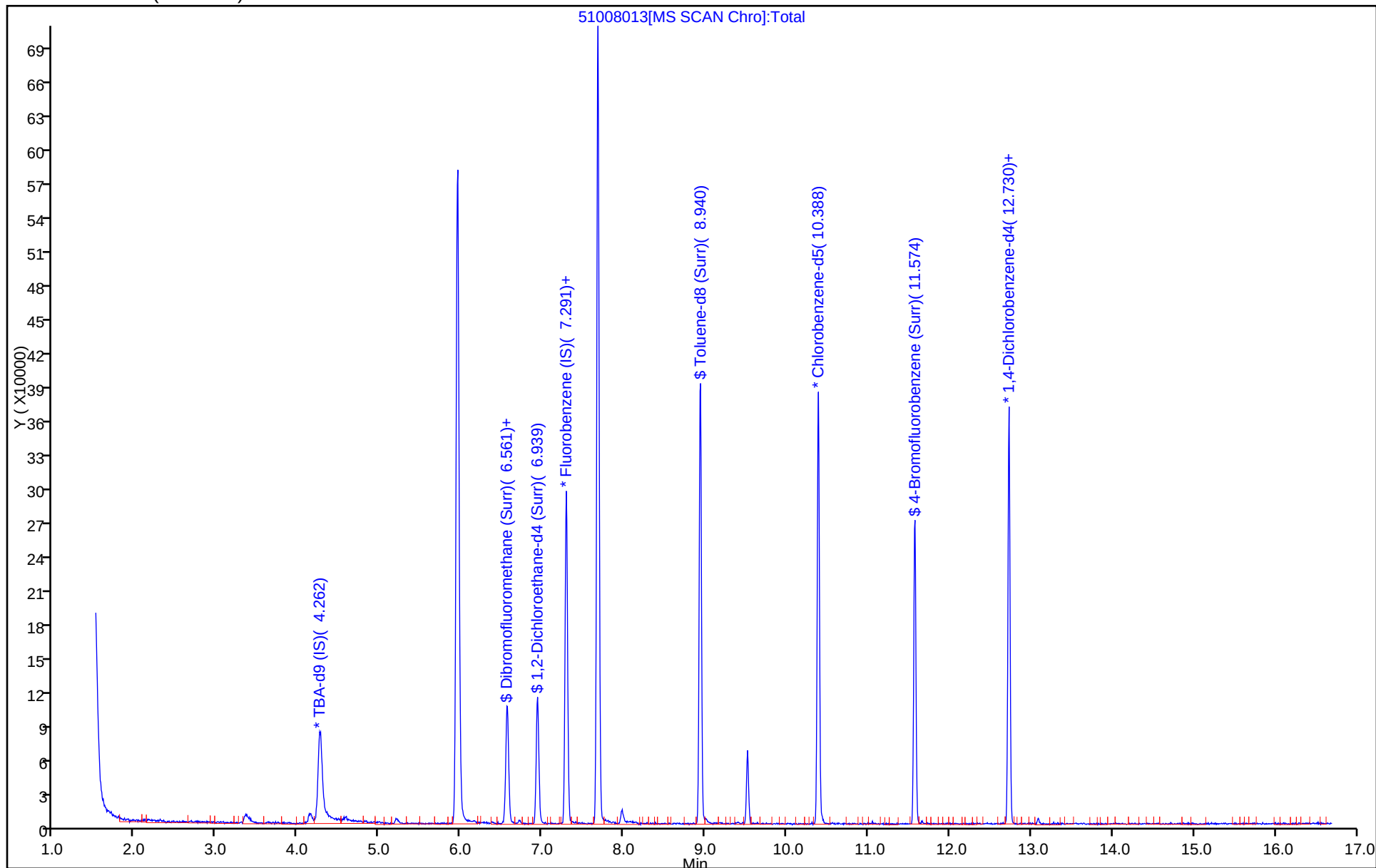
Dil. Factor: 12.5000

ALS Bottle#: 12

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 ( 0.18 mm)



## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\51008013.D

Injection Date: 08-Oct-2015 16:24:30

Instrument ID: CHHP5

Lims ID: 180-48309-C-1

Lab Sample ID: 180-48309-1

Client ID: HD-MW-87-0/1-0

Operator ID: 001562

ALS Bottle#: 12

Worklist Smp#: 13

Purge Vol: 5.000 mL

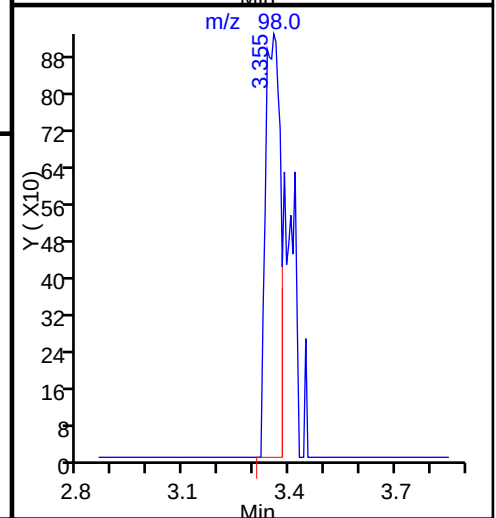
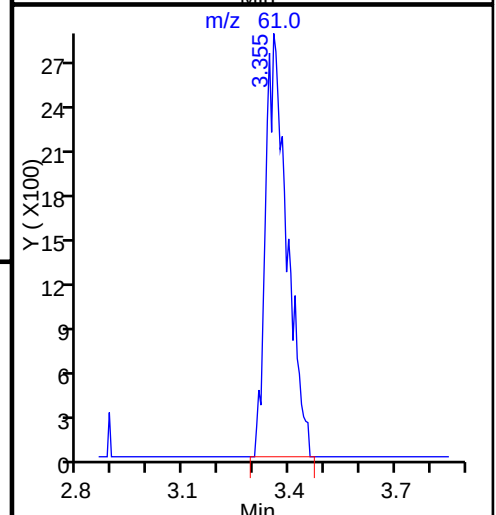
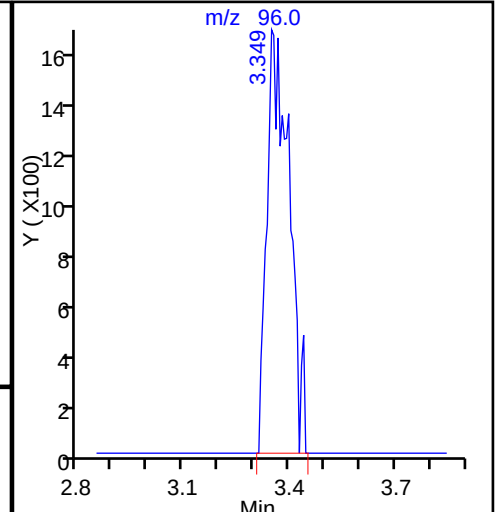
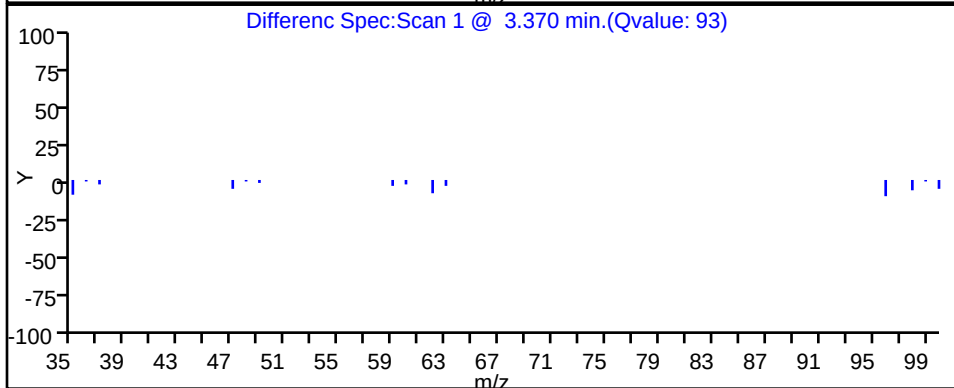
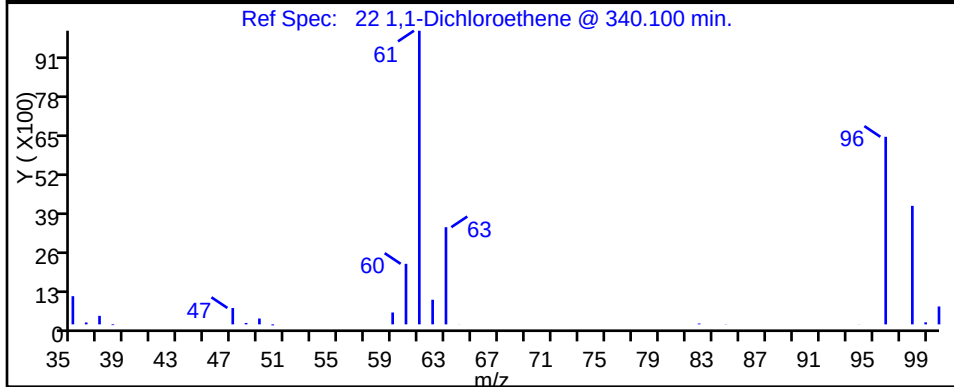
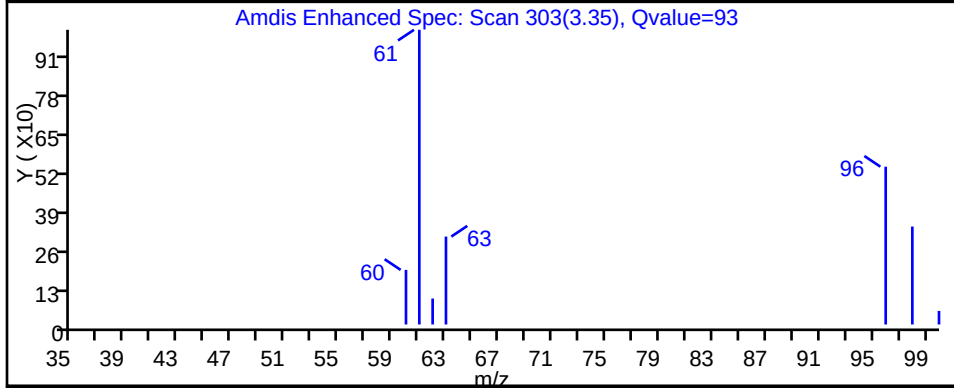
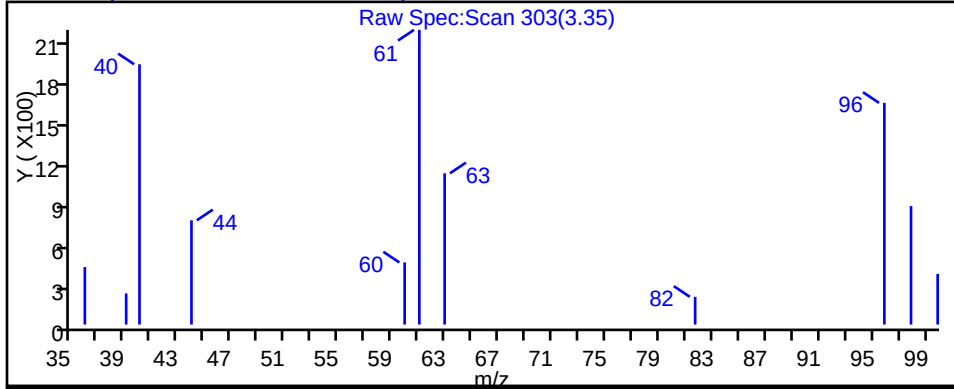
Dil. Factor: 12.5000

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

**22 1,1-Dichloroethene, CAS: 75-35-4**

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\51008013.D

Injection Date: 08-Oct-2015 16:24:30

Instrument ID: CHHP5

Lims ID: 180-48309-C-1

Lab Sample ID: 180-48309-1

Client ID: HD-MW-87-0/1-0

Operator ID: 001562

ALS Bottle#: 12

Worklist Smp#: 13

Purge Vol: 5.000 mL

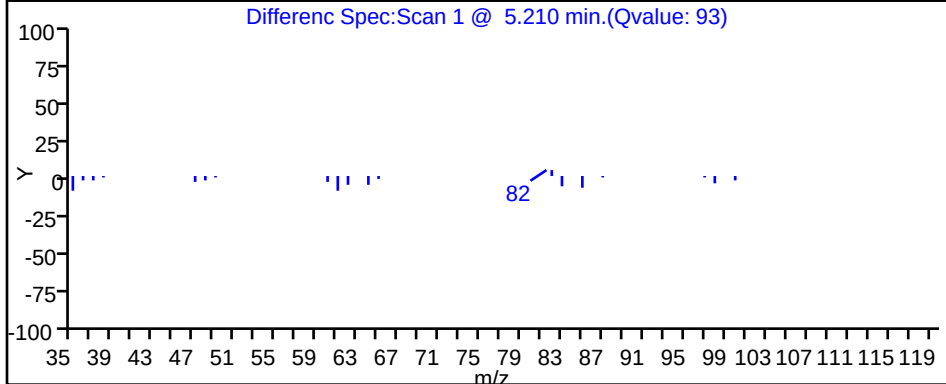
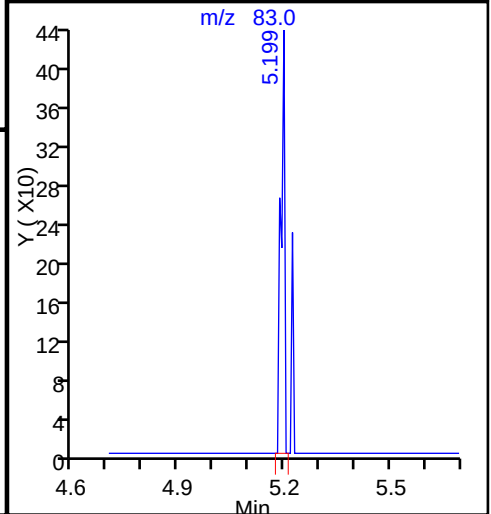
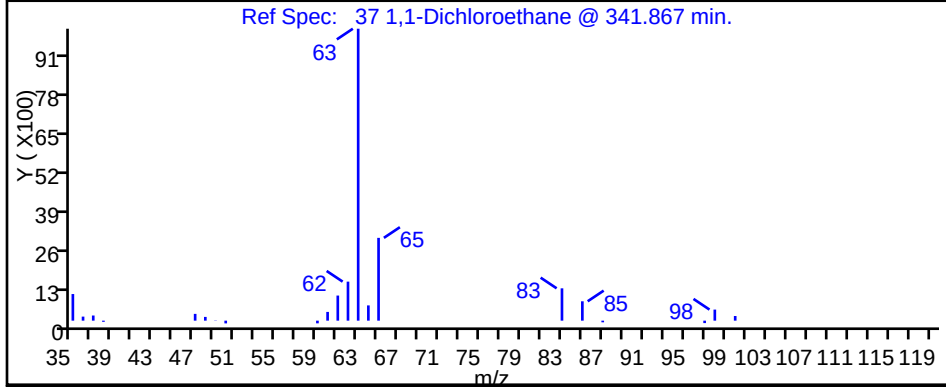
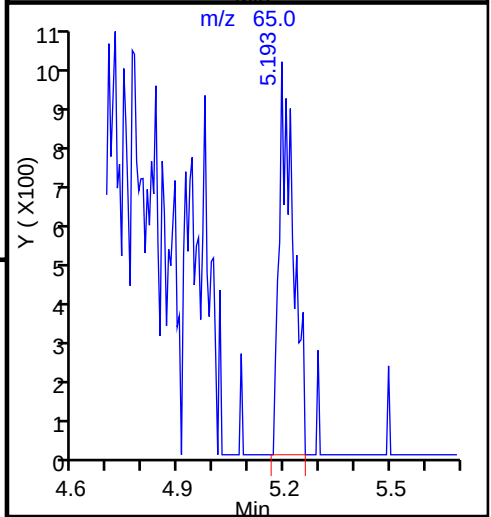
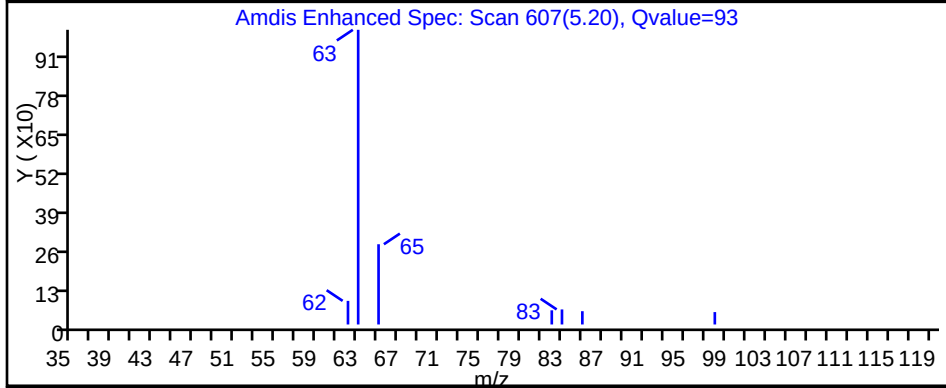
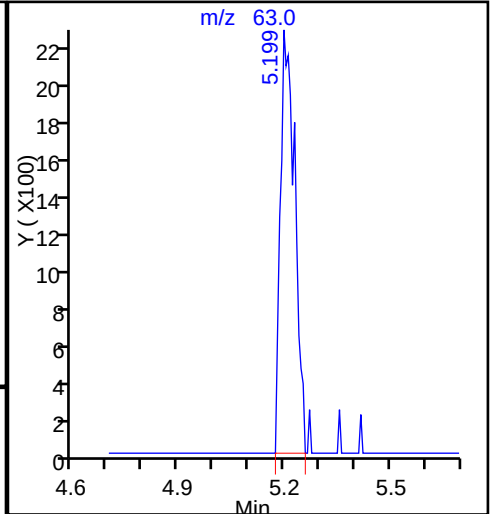
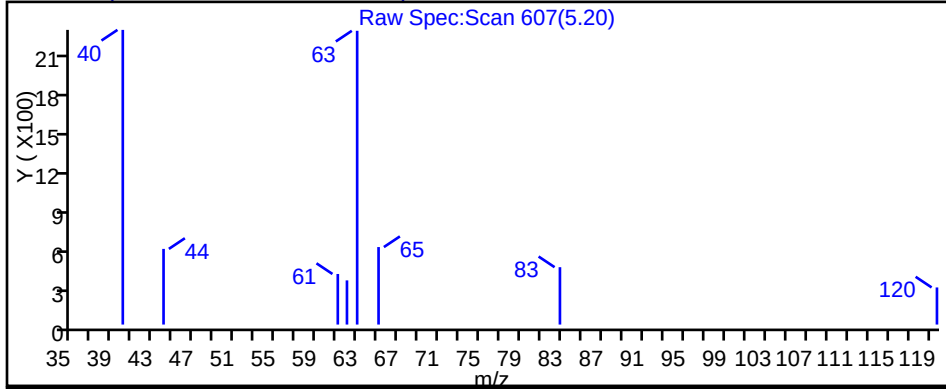
Dil. Factor: 12.5000

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

**37 1,1-Dichloroethane, CAS: 75-34-3**

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\51008013.D

Injection Date: 08-Oct-2015 16:24:30

Instrument ID: CHHP5

Lims ID: 180-48309-C-1

Lab Sample ID: 180-48309-1

Client ID: HD-MW-87-0/1-0

Operator ID: 001562

ALS Bottle#: 12

Worklist Smp#: 13

Purge Vol: 5.000 mL

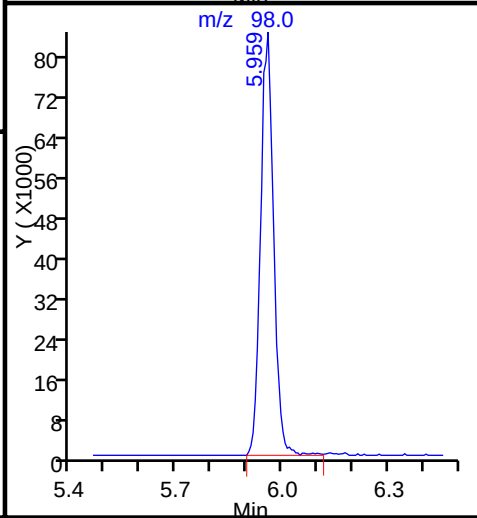
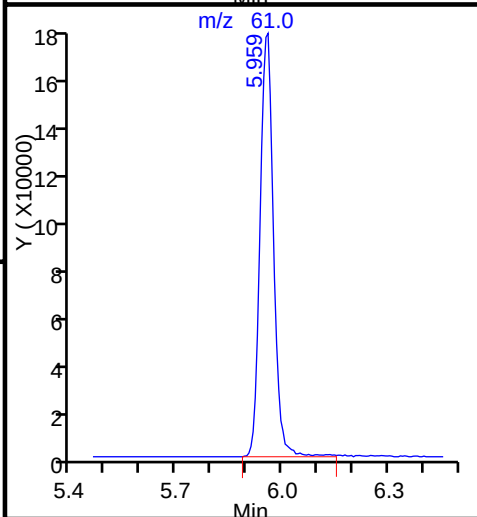
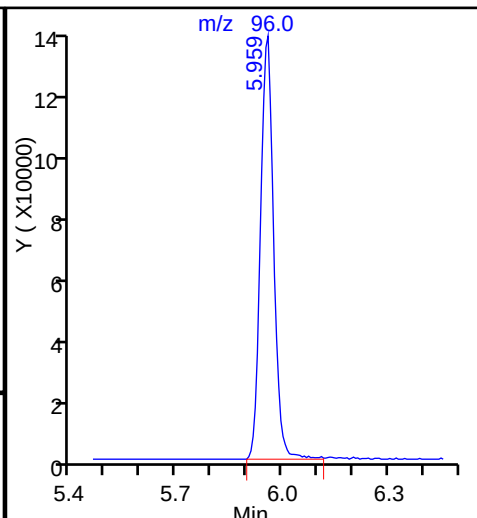
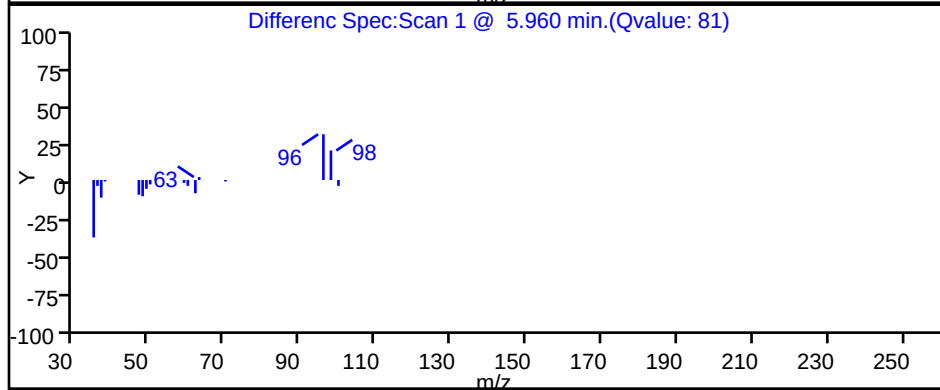
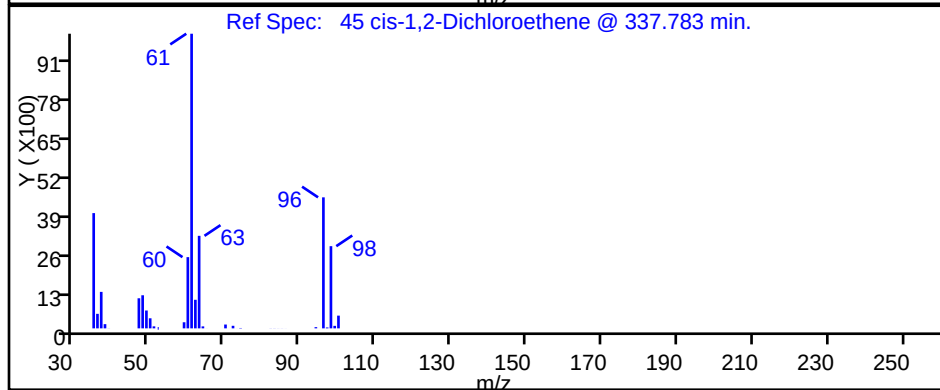
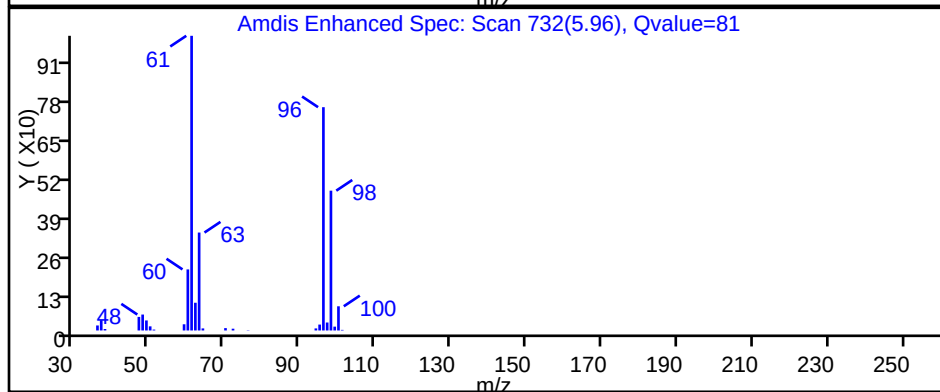
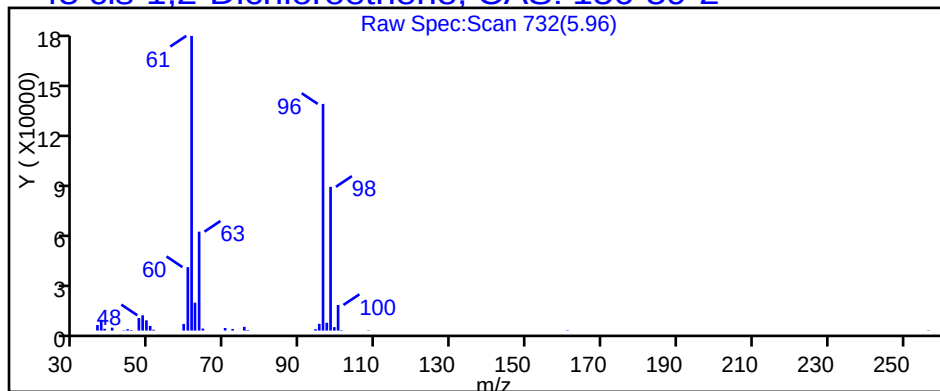
Dil. Factor: 12.5000

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

**45 cis-1,2-Dichloroethene, CAS: 156-59-2**

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\51008013.D

Injection Date: 08-Oct-2015 16:24:30

Instrument ID: CHHP5

Lims ID: 180-48309-C-1

Lab Sample ID: 180-48309-1

Client ID: HD-MW-87-0/1-0

Operator ID: 001562

ALS Bottle#: 12

Worklist Smp#: 13

Purge Vol: 5.000 mL

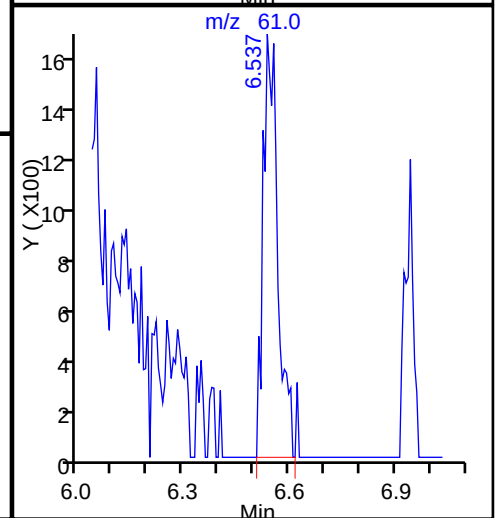
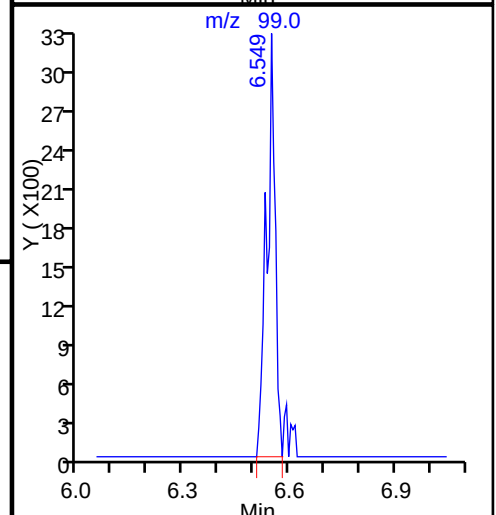
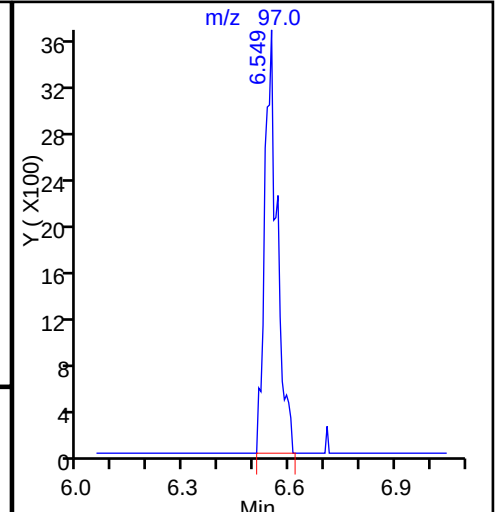
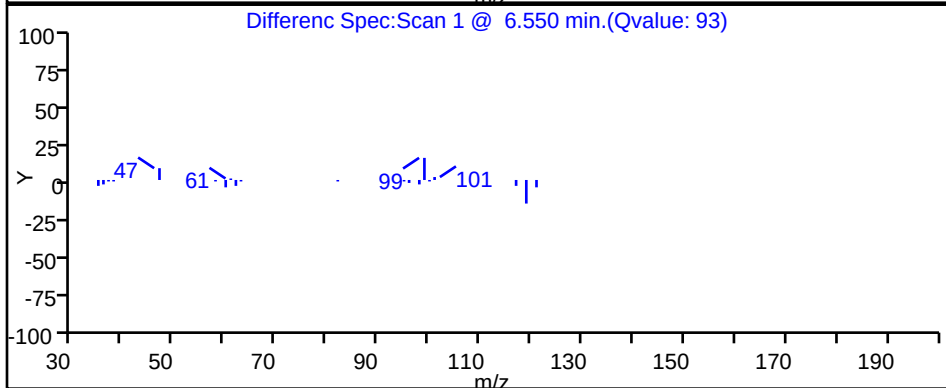
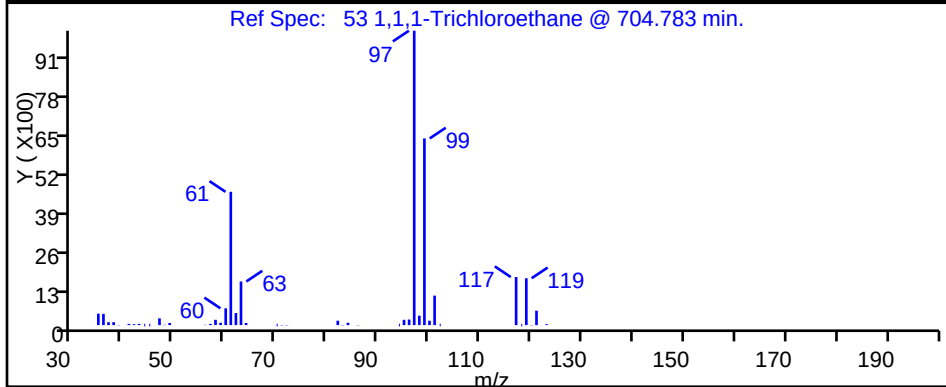
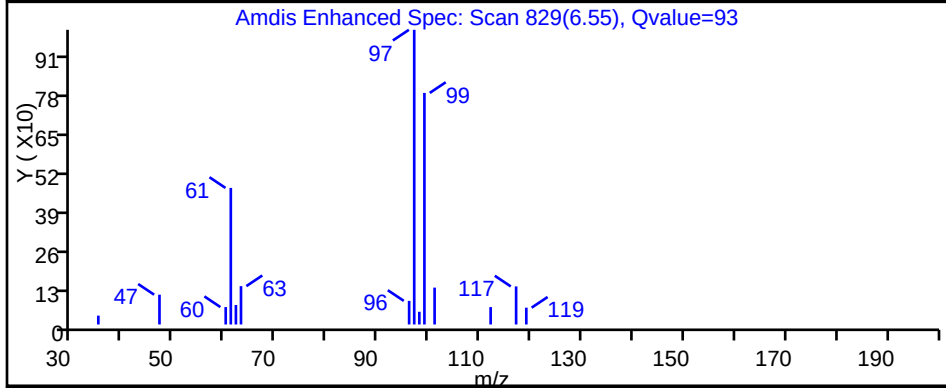
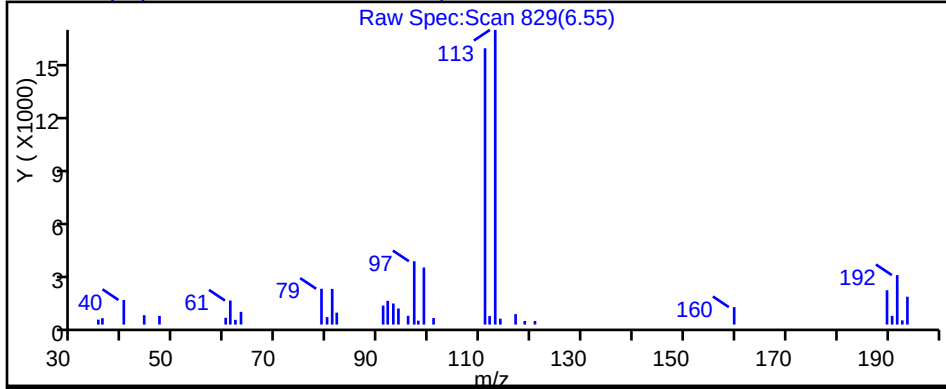
Dil. Factor: 12.5000

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

**53 1,1,1-Trichloroethane, CAS: 71-55-6**

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\51008013.D

Injection Date: 08-Oct-2015 16:24:30

Instrument ID: CHHP5

Lims ID: 180-48309-C-1

Lab Sample ID: 180-48309-1

Client ID: HD-MW-87-0/1-0

Operator ID: 001562

ALS Bottle#: 12

Worklist Smp#: 13

Purge Vol: 5.000 mL

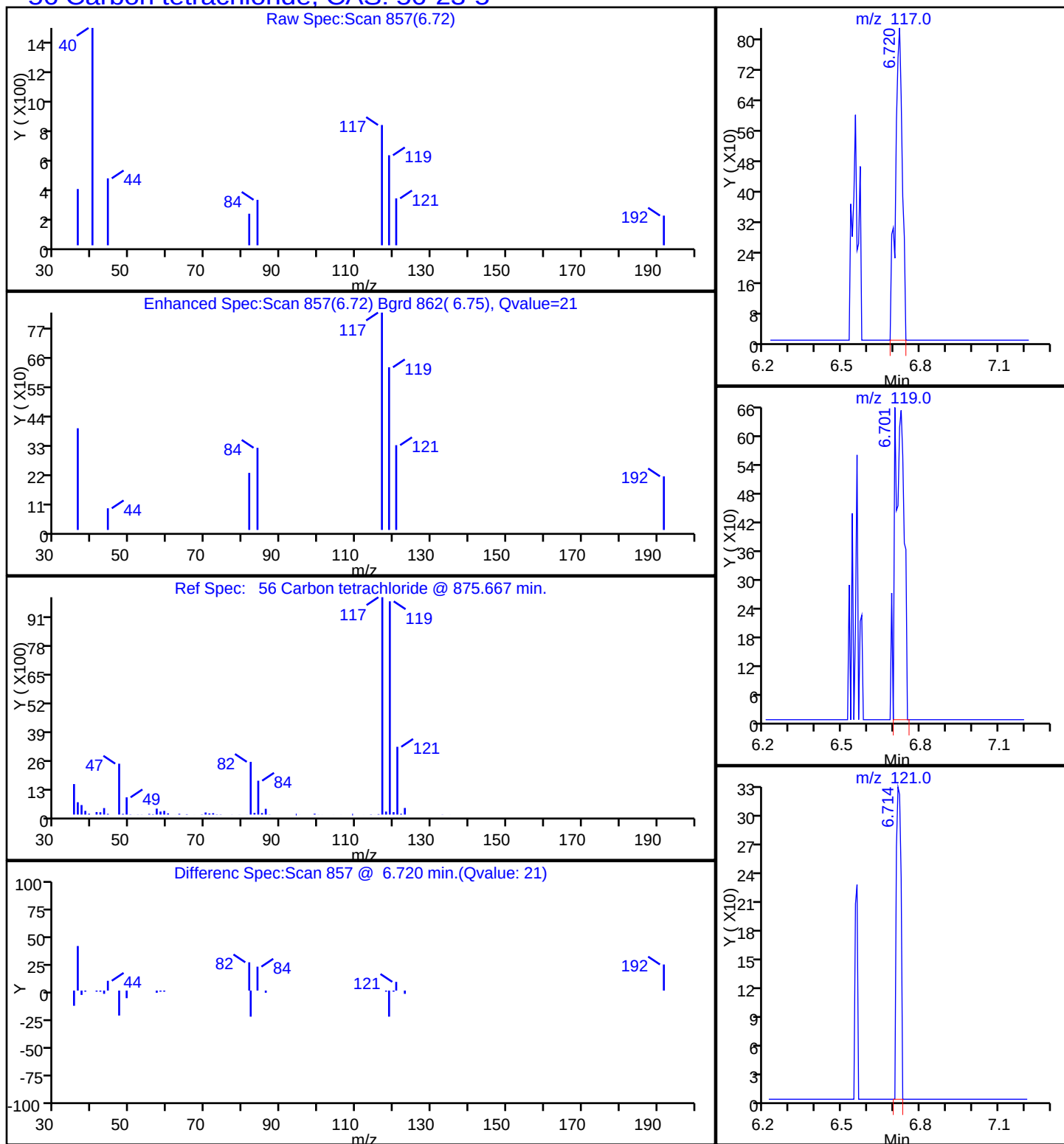
Dil. Factor: 12.5000

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

**56 Carbon tetrachloride, CAS: 56-23-5**



## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\51008013.D

Injection Date: 08-Oct-2015 16:24:30

Instrument ID: CHHP5

Lims ID: 180-48309-C-1

Lab Sample ID: 180-48309-1

Client ID: HD-MW-87-0/1-0

Operator ID: 001562

ALS Bottle#: 12

Worklist Smp#: 13

Purge Vol: 5.000 mL

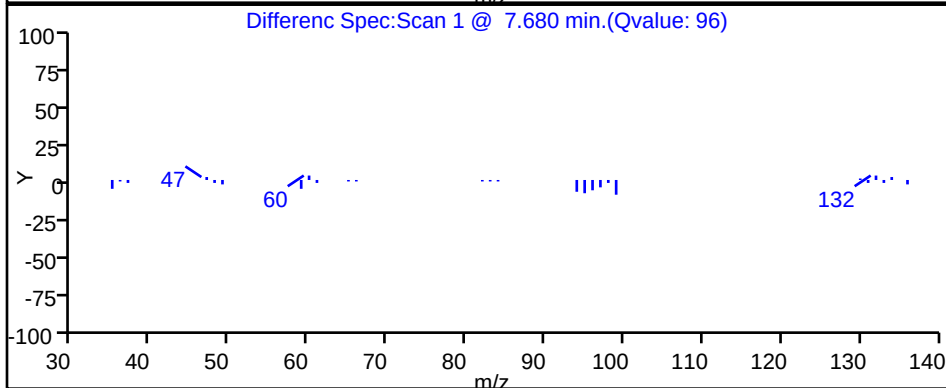
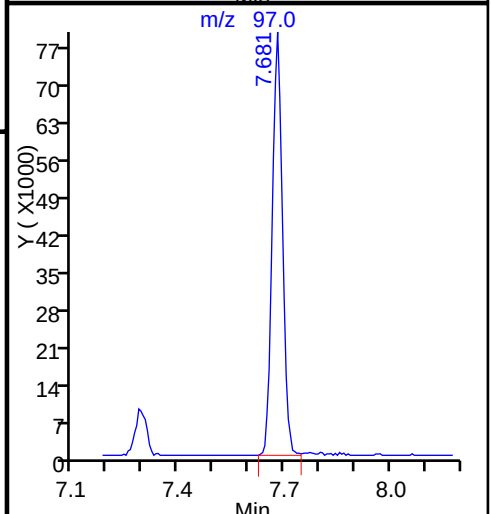
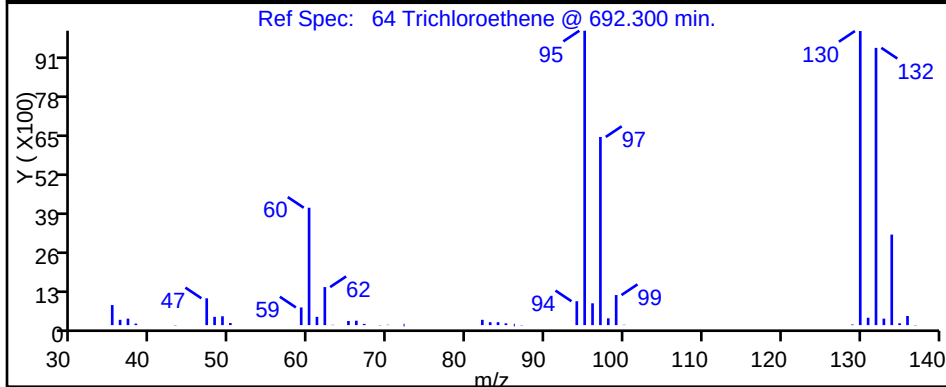
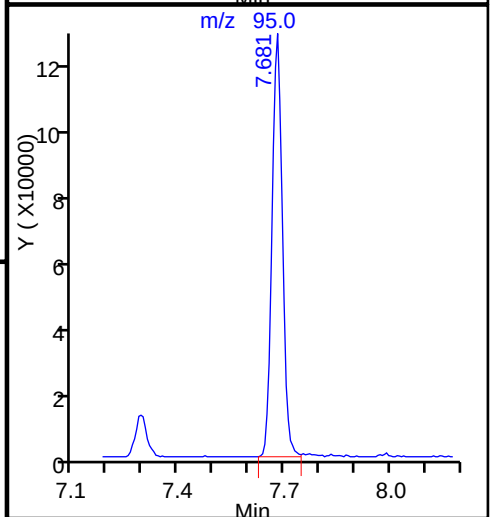
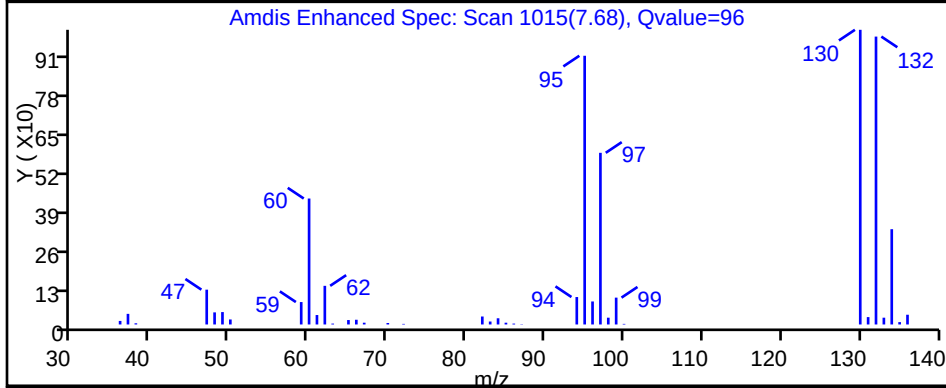
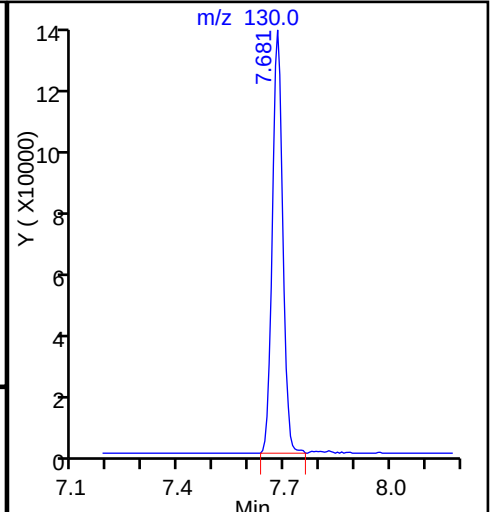
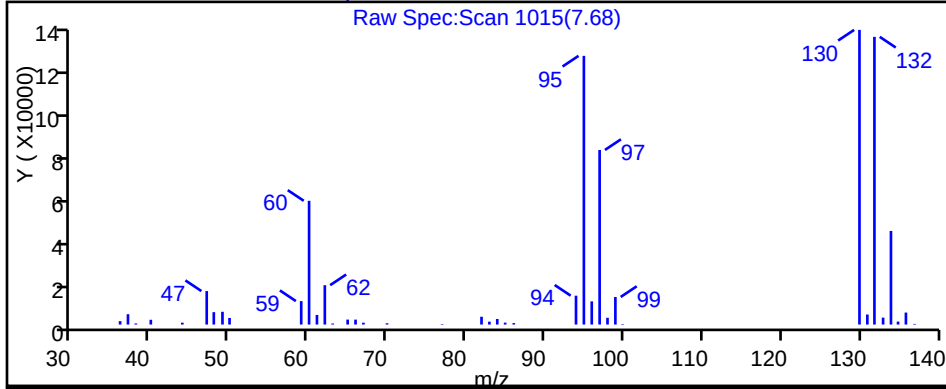
Dil. Factor: 12.5000

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

**64 Trichloroethene, CAS: 79-01-6**

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\51008013.D

Injection Date: 08-Oct-2015 16:24:30

Instrument ID: CHHP5

Lims ID: 180-48309-C-1

Lab Sample ID: 180-48309-1

Client ID: HD-MW-87-0/1-0

Operator ID: 001562

ALS Bottle#: 12

Worklist Smp#: 13

Purge Vol: 5.000 mL

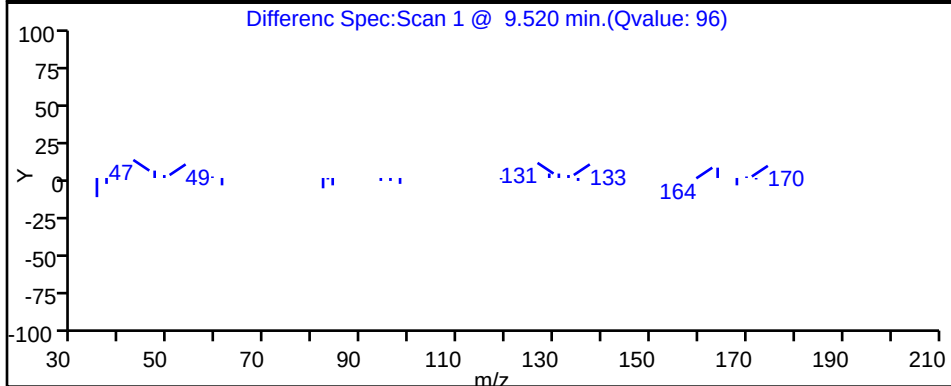
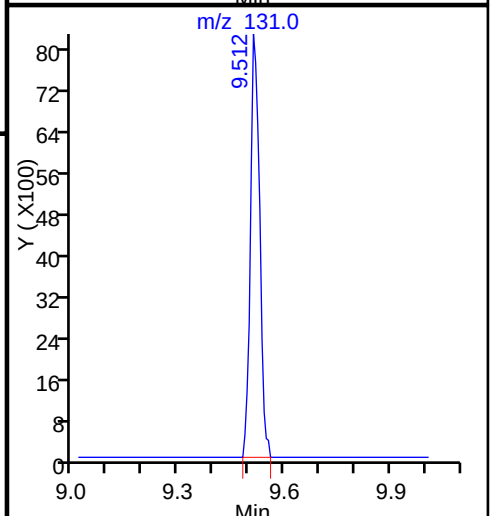
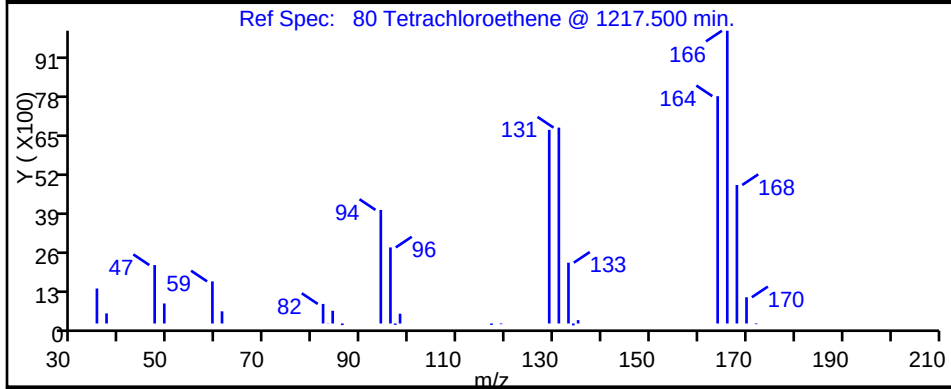
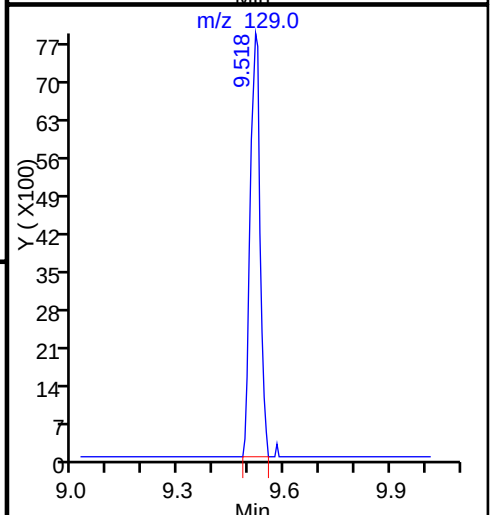
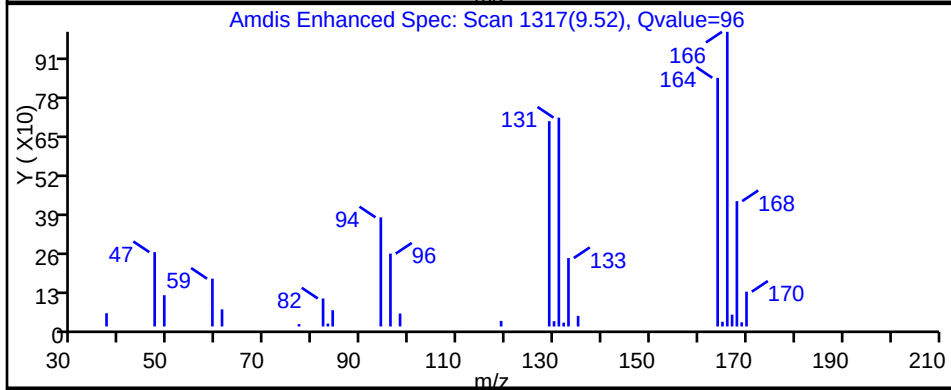
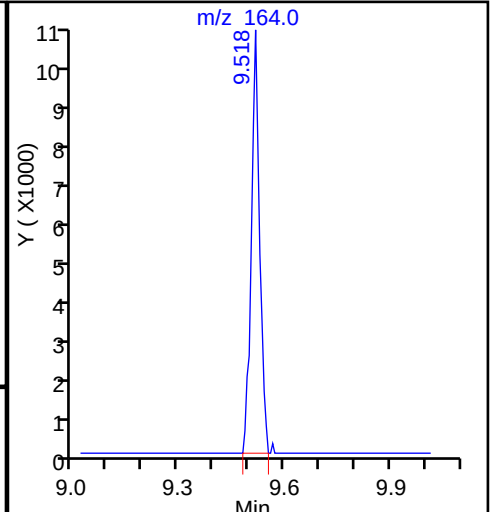
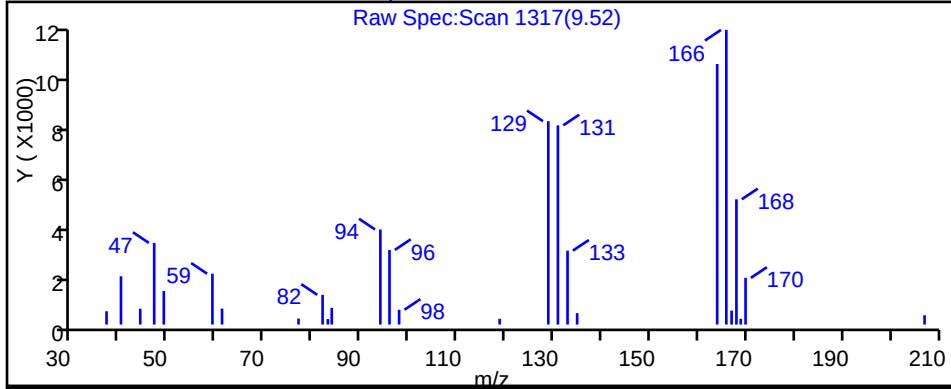
Dil. Factor: 12.5000

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

**80 Tetrachloroethene, CAS: 127-18-4**

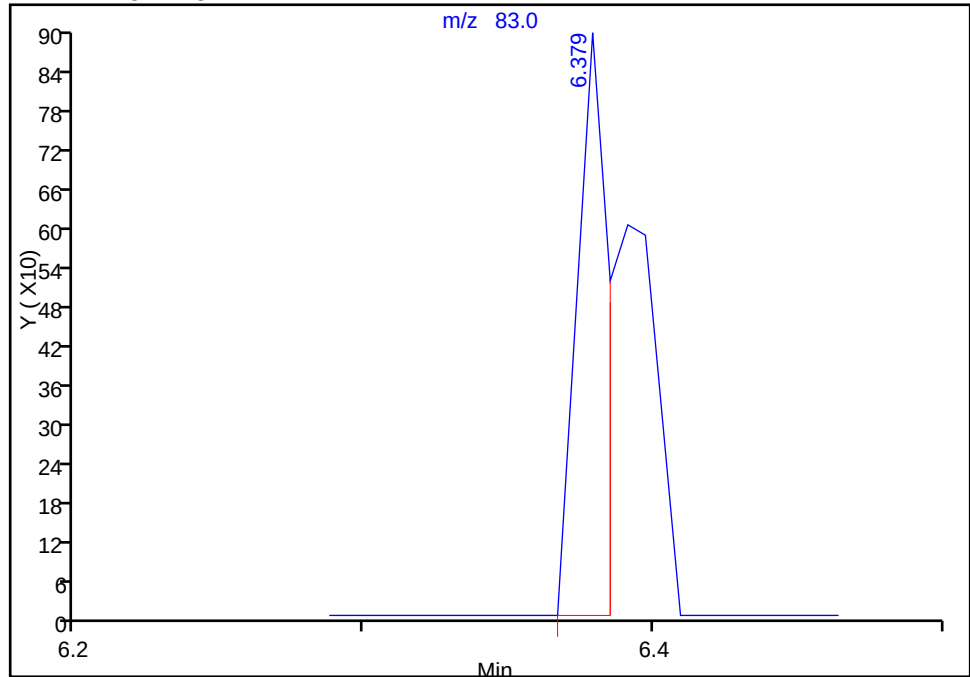
## TestAmerica Pittsburgh

|                 |                                                                 |                |                |                |    |
|-----------------|-----------------------------------------------------------------|----------------|----------------|----------------|----|
| Data File:      | \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\51008013.D |                |                |                |    |
| Injection Date: | 08-Oct-2015 16:24:30                                            | Instrument ID: | CHHP5          |                |    |
| Lims ID:        | 180-48309-C-1                                                   | Lab Sample ID: | 180-48309-1    |                |    |
| Client ID:      | HD-MW-87-0/1-0                                                  |                |                |                |    |
| Operator ID:    | 001562                                                          | ALS Bottle#:   | 12             | Worklist Smp#: | 13 |
| Purge Vol:      | 5.000 mL                                                        | Dil. Factor:   | 12.5000        |                |    |
| Method:         | MSVOA_LL_CHHP5                                                  | Limit Group:   | VOA 8260C ICAL |                |    |
| Column:         | DB-624 ( 0.18 mm)                                               | Detector       | MS SCAN        |                |    |

**52 Chloroform, CAS: 67-66-3**

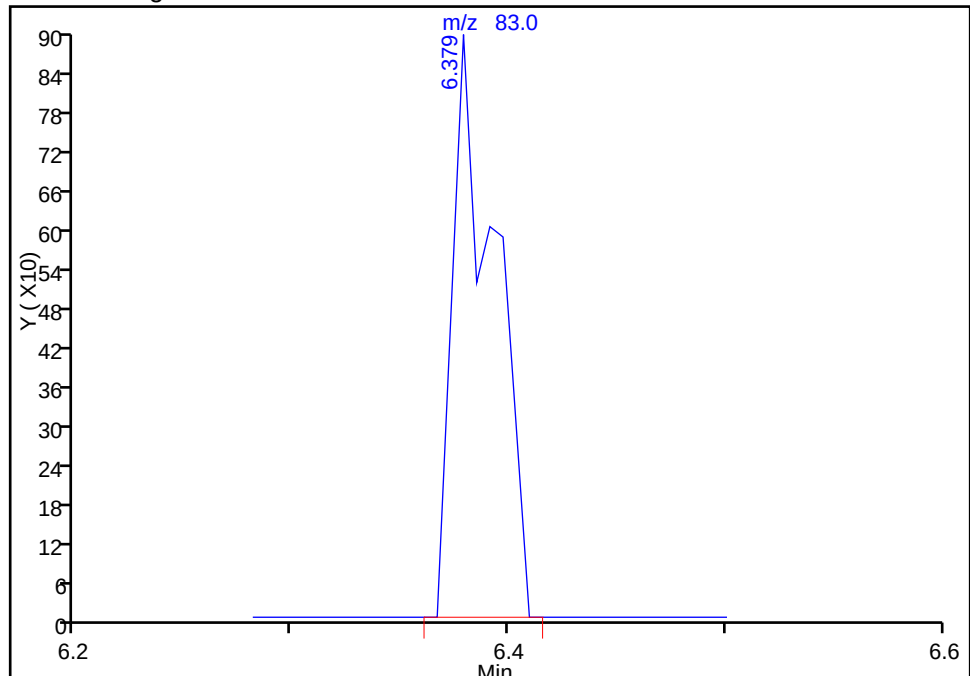
RT: 6.38  
Area: 676  
Amount: 0.223572  
Amount Units: ng

## Processing Integration Results



RT: 6.38  
Area: 1216  
Amount: 0.402165  
Amount Units: ng

## Manual Integration Results



Reviewer: fergusond, 09-Oct-2015 08:29:17  
Audit Action: Manually Integrated  
Audit Reason: Incomplete Integration

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

|                                           |                                               |
|-------------------------------------------|-----------------------------------------------|
| Lab Name: <u>TestAmerica Pittsburgh</u>   | Job No.: <u>180-48309-1</u>                   |
| SDG No.: _____                            |                                               |
| Client Sample ID: <u>HD-MW-143S-0/1-0</u> | Lab Sample ID: <u>180-48309-2</u>             |
| Matrix: <u>Water</u>                      | Lab File ID: <u>61007019.D</u>                |
| Analysis Method: <u>8260C</u>             | Date Collected: <u>09/30/2015 14:02</u>       |
| Sample wt/vol: <u>5(mL)</u>               | Date Analyzed: <u>10/07/2015 20:03</u>        |
| Soil Aliquot Vol: _____                   | Dilution Factor: <u>1</u>                     |
| Soil Extract Vol.: _____                  | GC Column: <u>DB-624</u> ID: <u>0.18 (mm)</u> |
| % Moisture: _____                         | Level: (low/med) <u>Low</u>                   |
| Analysis Batch No.: <u>156189</u>         | Units: <u>ug/L</u>                            |

| CAS NO.    | COMPOUND NAME               | RESULT | Q  | RL  | MDL   |
|------------|-----------------------------|--------|----|-----|-------|
| 74-87-3    | Chloromethane               | ND     |    | 1.0 | 0.28  |
| 75-01-4    | Vinyl chloride              | ND     |    | 1.0 | 0.23  |
| 74-83-9    | Bromomethane                | ND     | ^c | 1.0 | 0.31  |
| 75-00-3    | Chloroethane                | ND     |    | 1.0 | 0.21  |
| 75-35-4    | 1,1-Dichloroethene          | ND     |    | 1.0 | 0.30  |
| 67-64-1    | Acetone                     | ND     |    | 5.0 | 2.5   |
| 75-15-0    | Carbon disulfide            | ND     |    | 1.0 | 0.21  |
| 75-09-2    | Methylene Chloride          | ND     |    | 1.0 | 0.13  |
| 156-60-5   | trans-1,2-Dichloroethene    | ND     |    | 1.0 | 0.17  |
| 1634-04-4  | Methyl tert-butyl ether     | ND     |    | 1.0 | 0.18  |
| 75-34-3    | 1,1-Dichloroethane          | ND     |    | 1.0 | 0.12  |
| 156-59-2   | cis-1,2-Dichloroethene      | ND     |    | 1.0 | 0.24  |
| 74-97-5    | Bromochloromethane          | ND     |    | 1.0 | 0.18  |
| 78-93-3    | 2-Butanone (MEK)            | ND     |    | 5.0 | 0.55  |
| 67-66-3    | Chloroform                  | ND     |    | 1.0 | 0.17  |
| 71-55-6    | 1,1,1-Trichloroethane       | ND     |    | 1.0 | 0.29  |
| 56-23-5    | Carbon tetrachloride        | ND     |    | 1.0 | 0.14  |
| 71-43-2    | Benzene                     | ND     |    | 1.0 | 0.11  |
| 107-06-2   | 1,2-Dichloroethane          | ND     |    | 1.0 | 0.21  |
| 79-01-6    | Trichloroethene             | 2.2    |    | 1.0 | 0.14  |
| 78-87-5    | 1,2-Dichloropropane         | ND     |    | 1.0 | 0.095 |
| 75-27-4    | Bromodichloromethane        | ND     |    | 1.0 | 0.13  |
| 10061-01-5 | cis-1,3-Dichloropropene     | ND     |    | 1.0 | 0.19  |
| 108-10-1   | 4-Methyl-2-pentanone (MIBK) | ND     |    | 5.0 | 0.53  |
| 108-88-3   | Toluene                     | ND     |    | 1.0 | 0.15  |
| 10061-02-6 | trans-1,3-Dichloropropene   | ND     |    | 1.0 | 0.15  |
| 79-00-5    | 1,1,2-Trichloroethane       | ND     |    | 1.0 | 0.20  |
| 127-18-4   | Tetrachloroethene           | ND     |    | 1.0 | 0.15  |
| 591-78-6   | 2-Hexanone                  | ND     | ^c | 5.0 | 0.16  |
| 124-48-1   | Dibromochloromethane        | ND     |    | 1.0 | 0.14  |
| 106-93-4   | 1,2-Dibromoethane (EDB)     | ND     |    | 1.0 | 0.18  |
| 108-90-7   | Chlorobenzene               | ND     |    | 1.0 | 0.14  |
| 630-20-6   | 1,1,1,2-Tetrachloroethane   | ND     | ^c | 1.0 | 0.28  |
| 100-41-4   | Ethylbenzene                | ND     |    | 1.0 | 0.23  |
| 1330-20-7  | Xylenes, Total              | ND     |    | 3.0 | 0.49  |
| 100-42-5   | Styrene                     | ND     | ^c | 1.0 | 0.097 |

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-MW-143S-0/1-0 Lab Sample ID: 180-48309-2  
 Matrix: Water Lab File ID: 61007019.D  
 Analysis Method: 8260C Date Collected: 09/30/2015 14:02  
 Sample wt/vol: 5 (mL) Date Analyzed: 10/07/2015 20:03  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 156189 Units: ug/L

| CAS NO.  | COMPOUND NAME             | RESULT | Q  | RL  | MDL  |
|----------|---------------------------|--------|----|-----|------|
| 75-25-2  | Bromoform                 | ND     | ^c | 1.0 | 0.19 |
| 79-34-5  | 1,1,2,2-Tetrachloroethane | ND     |    | 1.0 | 0.20 |
| 107-13-1 | Acrylonitrile             | ND     | ^c | 20  | 0.55 |
| 123-91-1 | 1,4-Dioxane               | ND     | ^c | 200 | 34   |

| CAS NO.    | SURROGATE                    | %REC | Q | LIMITS |
|------------|------------------------------|------|---|--------|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 104  |   | 64-135 |
| 2037-26-5  | Toluene-d8 (Surr)            | 104  |   | 71-118 |
| 460-00-4   | 4-Bromofluorobenzene (Surr)  | 87   |   | 70-118 |
| 1868-53-7  | Dibromofluoromethane (Surr)  | 107  |   | 70-128 |

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007019.D  
 Lims ID: 180-48309-C-2 Lab Sample ID: 180-48309-2  
 Client ID: HD-MW-143S-0/1-0  
 Sample Type: Client  
 Inject. Date: 07-Oct-2015 20:03:30 ALS Bottle#: 19 Worklist Smp#: 19  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-48309-C-2  
 Misc. Info.: 180-0008874-019  
 Operator ID: 001562 Instrument ID: CHHP6  
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\MSVOA\_LL\_CHHP6.m  
 Limit Group: VOA 8260C ICAL  
 Last Update: 08-Oct-2015 08:53:41 Calib Date: 14-Sep-2015 16:03:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150914-8521.b\60914006.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: XAWRK015

First Level Reviewer: fergusond

Date: 08-Oct-2015 08:53:41

| Compound                        | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | OnCol Amt<br>ng | Flags |
|---------------------------------|-----|--------------|------------------|------------------|----|----------|-----------------|-------|
| * 1 TBA-d9 (IS)                 | 65  | 4.242        | 4.245            | -0.003           | 88 | 174732   | 1000.0          |       |
| * 2 Fluorobenzene (IS)          | 96  | 7.290        | 7.281            | 0.009            | 97 | 434002   | 50.0            |       |
| * 3 Chlorobenzene-d5            | 119 | 10.398       | 10.396           | 0.002            | 90 | 105329   | 50.0            |       |
| * 4 1,4-Dichlorobenzene-d4      | 152 | 12.747       | 12.750           | -0.003           | 97 | 168898   | 50.0            |       |
| \$ 5 Dibromofluoromethane (Surr | 113 | 6.554        | 6.551            | 0.003            | 94 | 106549   | 53.3            |       |
| \$ 6 1,2-Dichloroethane-d4 (Sur | 65  | 6.931        | 6.928            | 0.003            | 70 | 168139   | 52.1            |       |
| \$ 7 Toluene-d8 (Surr)          | 98  | 8.945        | 8.942            | 0.003            | 94 | 433228   | 52.1            |       |
| \$ 8 4-Bromofluorobenzene (Surr | 95  | 11.585       | 11.588           | -0.003           | 85 | 160293   | 43.5            |       |
| 12 Chloromethane                | 50  | 1.760        | 1.757            | 0.003            | 1  | 2519     | 0.9725          | M     |
| 13 Vinyl chloride               | 62  |              | 1.903            |                  |    |          | ND              |       |
| 15 Bromomethane                 | 94  |              | 2.232            |                  |    |          | ND              |       |
| 16 Chloroethane                 | 64  |              | 2.371            |                  |    |          | ND              |       |
| 22 1,1-Dichloroethene           | 96  |              | 3.339            |                  |    |          | ND              |       |
| 24 Acetone                      | 43  |              | 3.418            |                  |    |          | ND              |       |
| 26 Carbon disulfide             | 76  |              | 3.625            |                  |    |          | ND              |       |
| 31 Methylene Chloride           | 84  |              | 4.124            |                  |    |          | ND              |       |
| 33 Acrylonitrile                | 53  |              | 4.501            |                  |    |          | ND              |       |
| 34 trans-1,2-Dichloroethene     | 96  |              | 4.568            |                  |    |          | ND              |       |
| 35 Methyl tert-butyl ether      | 73  |              | 4.574            |                  |    |          | ND              |       |
| 37 1,1-Dichloroethane           | 63  |              | 5.188            |                  |    |          | ND              |       |
| 43 cis-1,2-Dichloroethene       | 96  |              | 5.936            |                  |    |          | ND              |       |
| 44 2-Butanone (MEK)             | 43  |              | 5.949            |                  |    |          | ND              |       |
| 48 Chlorobromomethane           | 128 |              | 6.222            |                  |    |          | ND              |       |
| 50 Chloroform                   | 83  |              | 6.368            |                  |    |          | ND              |       |
| 51 1,1,1-Trichloroethane        | 97  |              | 6.539            |                  |    |          | ND              |       |
| 53 Carbon tetrachloride         | 117 |              | 6.709            |                  |    |          | ND              |       |
| 56 Benzene                      | 78  |              | 6.940            |                  |    |          | ND              |       |
| 57 1,2-Dichloroethane           | 62  |              | 7.013            |                  |    |          | ND              |       |
| 61 Trichloroethene              | 130 | 7.679        | 7.676            | 0.003            | 95 | 23189    | 11.0            |       |
| 64 1,2-Dichloropropane          | 63  |              | 7.950            |                  |    |          | ND              |       |
| 65 1,4-Dioxane                  | 88  |              | 8.029            |                  |    |          | ND              |       |

| Compound                       | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q | Response | OnCol Amt<br>ng | Flags |
|--------------------------------|-----|--------------|------------------|------------------|---|----------|-----------------|-------|
| 68 Dichlorobromomethane        | 83  |              | 8.230            |                  |   |          | ND              |       |
| 71 cis-1,3-Dichloropropene     | 75  |              | 8.674            |                  |   |          | ND              |       |
| 72 4-Methyl-2-pentanone (MIBK) | 43  |              | 8.826            |                  |   |          | ND              |       |
| 73 Toluene                     | 91  |              | 9.009            |                  |   |          | ND              |       |
| 74 trans-1,3-Dichloropropene   | 75  |              | 9.252            |                  |   |          | ND              |       |
| 76 1,1,2-Trichloroethane       | 97  |              | 9.447            |                  |   |          | ND              |       |
| 77 Tetrachloroethene           | 164 |              | 9.526            |                  |   |          | ND              |       |
| 79 2-Hexanone                  | 43  |              | 9.659            |                  |   |          | ND              |       |
| 81 Chlorodibromomethane        | 129 |              | 9.824            |                  |   |          | ND              |       |
| 82 Ethylene Dibromide          | 107 |              | 9.939            |                  |   |          | ND              |       |
| 84 Chlorobenzene               | 112 |              | 10.426           |                  |   |          | ND              |       |
| 86 1,1,1,2-Tetrachloroethane   | 131 |              | 10.523           |                  |   |          | ND              |       |
| 87 Ethylbenzene                | 106 |              | 10.523           |                  |   |          | ND              |       |
| 88 m-Xylene & p-Xylene         | 106 |              | 10.657           |                  |   |          | ND              |       |
| 89 o-Xylene                    | 106 |              | 11.040           |                  |   |          | ND              |       |
| 90 Styrene                     | 104 |              | 11.059           |                  |   |          | ND              |       |
| 91 Bromoform                   | 173 |              | 11.241           |                  |   |          | ND              |       |
| 96 1,1,2,2-Tetrachloroethane   | 83  |              | 11.716           |                  |   |          | ND              |       |
| S 131 Xylenes, Total           | 106 |              | 1.000            |                  |   |          | ND              |       |

### QC Flag Legend

Review Flags

M - Manually Integrated

### Reagents:

VOA8260INT\_00042

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR\_00042

Amount Added: 2.00

Units: uL

Run Reagent

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007019.D

Injection Date: 07-Oct-2015 20:03:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: 180-48309-C-2

Lab Sample ID: 180-48309-2

Worklist Smp#: 19

Client ID: HD-MW-143S-0/1-0

Purge Vol: 5.000 mL

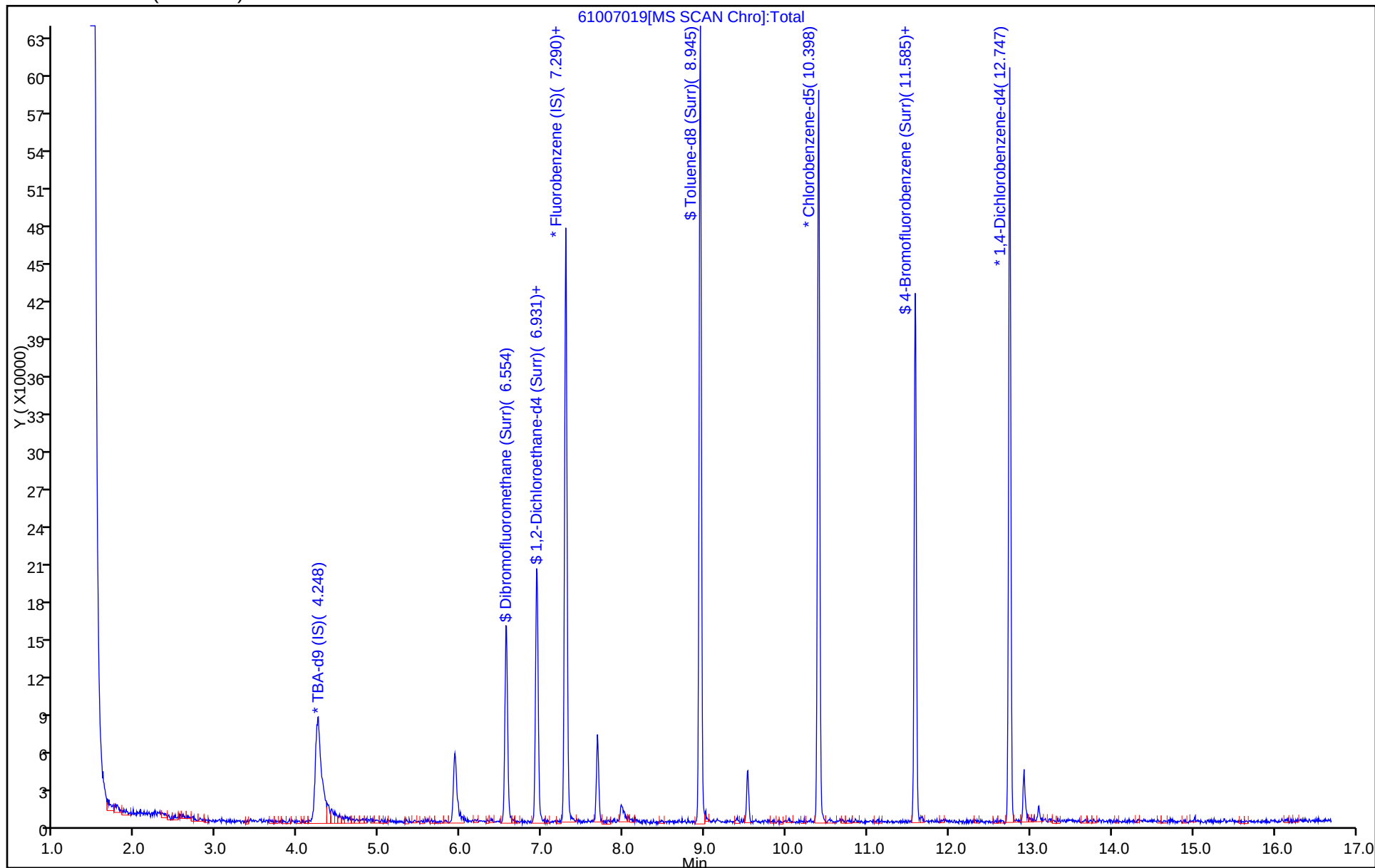
Dil. Factor: 1.0000

ALS Bottle#: 19

Method: MSVOA\_LL\_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)





## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007019.D

Injection Date: 07-Oct-2015 20:03:30

Instrument ID: CHHP6

Lims ID: 180-48309-C-2

Lab Sample ID: 180-48309-2

Client ID: HD-MW-143S-0/1-0

Operator ID: 001562

ALS Bottle#: 19

Worklist Smp#: 19

Purge Vol: 5.000 mL

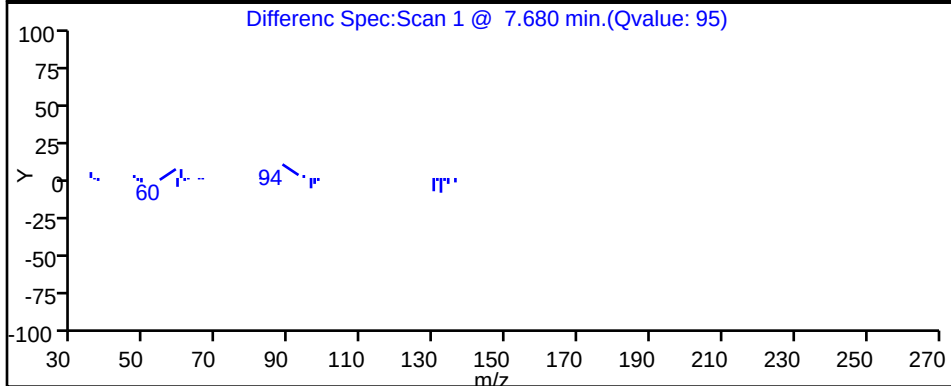
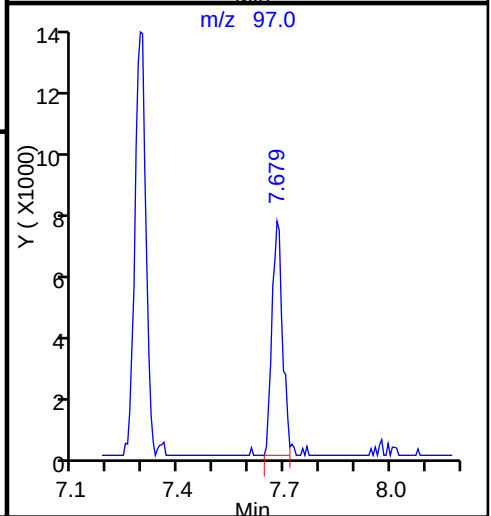
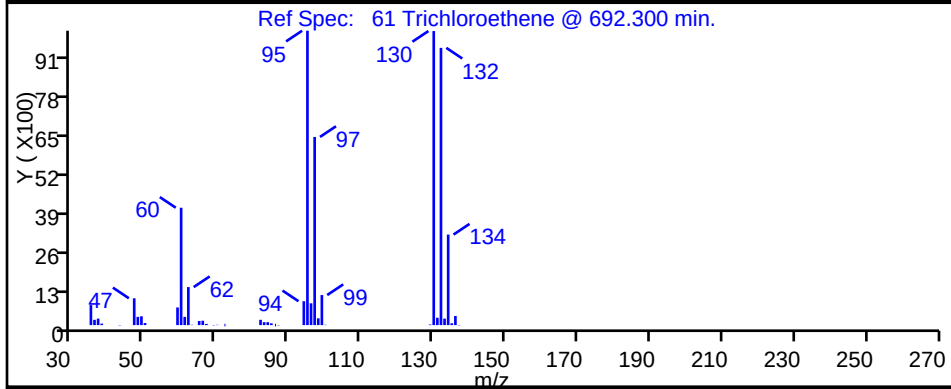
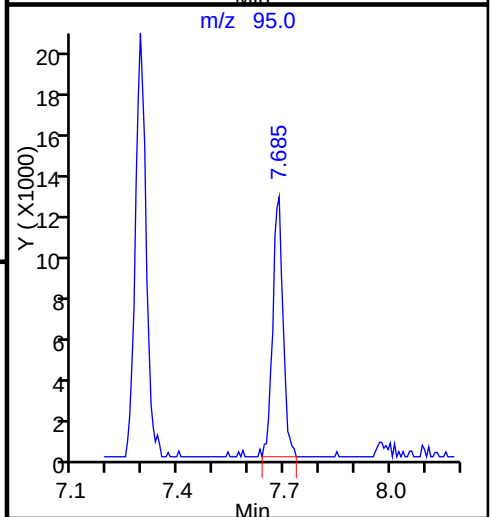
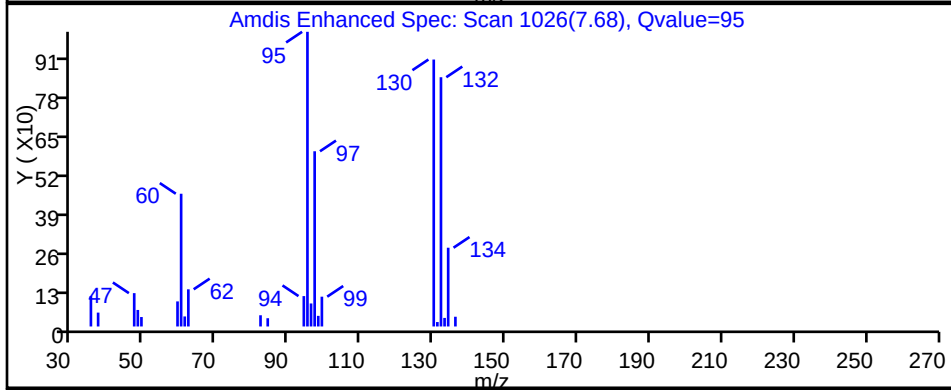
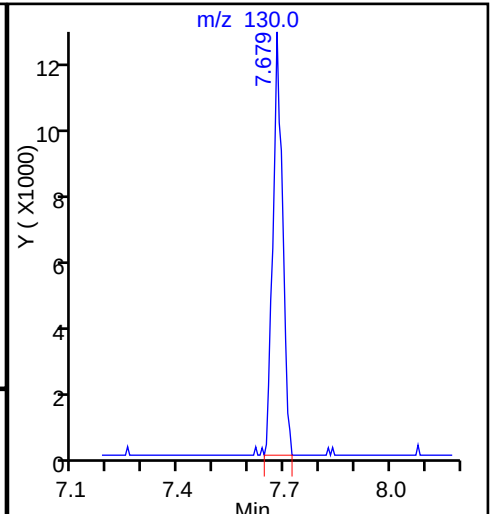
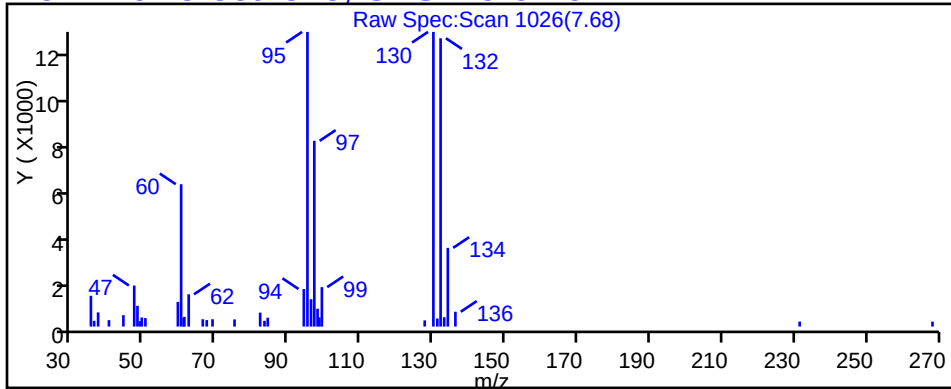
Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

**61 Trichloroethene, CAS: 79-01-6**

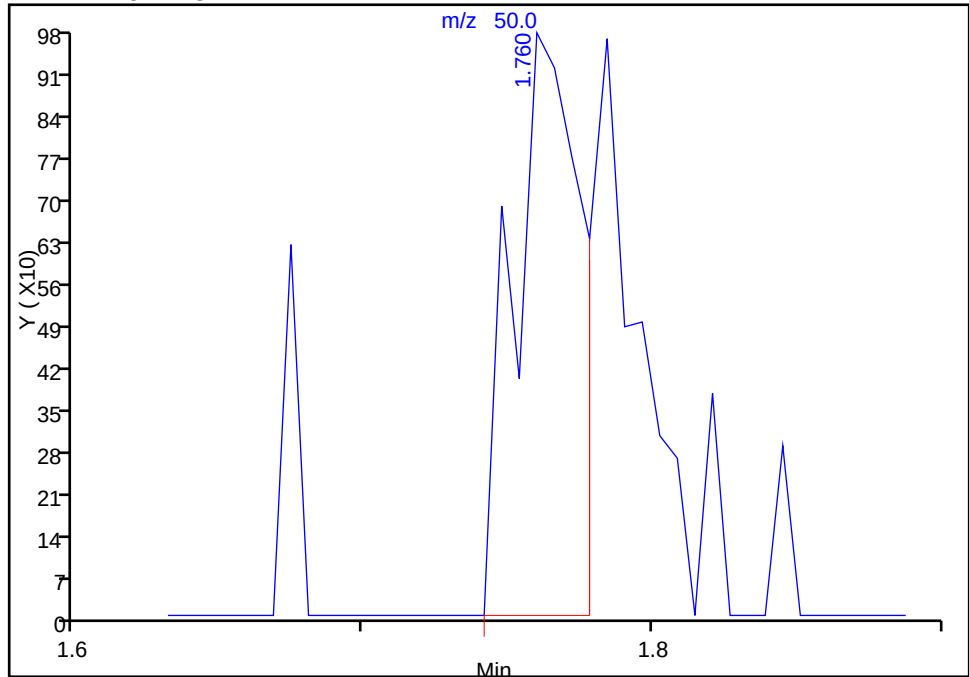
## TestAmerica Pittsburgh

|                 |                                                                 |                |                |
|-----------------|-----------------------------------------------------------------|----------------|----------------|
| Data File:      | \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007019.D |                |                |
| Injection Date: | 07-Oct-2015 20:03:30                                            | Instrument ID: | CHHP6          |
| Lims ID:        | 180-48309-C-2                                                   | Lab Sample ID: | 180-48309-2    |
| Client ID:      | HD-MW-143S-0/1-0                                                |                |                |
| Operator ID:    | 001562                                                          | ALS Bottle#:   | 19             |
| Purge Vol:      | 5.000 mL                                                        | Dil. Factor:   | 1.0000         |
| Method:         | MSVOA_LL_CHHP6                                                  | Limit Group:   | VOA 8260C ICAL |
| Column:         | DB-624 ( 0.18 mm)                                               | Detector:      | MS SCAN        |
|                 |                                                                 | Worklist Smp#: | 19             |

**12 Chloromethane, CAS: 74-87-3**

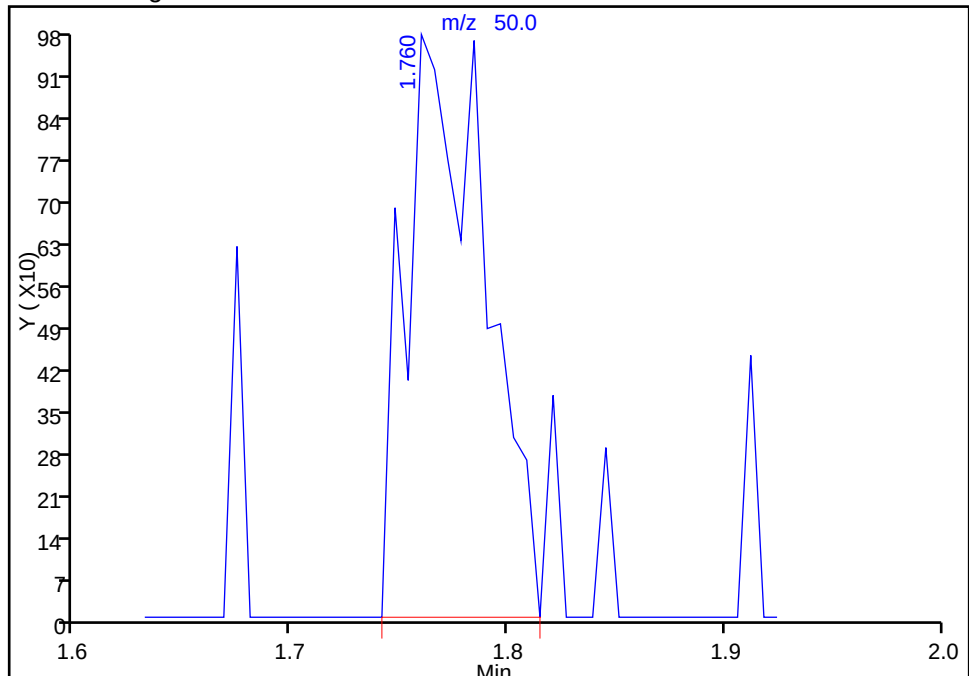
RT: 1.76  
Area: 1602  
Amount: 0.618496  
Amount Units: ng

## Processing Integration Results



RT: 1.76  
Area: 2519  
Amount: 0.972529  
Amount Units: ng

## Manual Integration Results



Reviewer: fergusond, 08-Oct-2015 08:53:41  
Audit Action: Manually Integrated  
Audit Reason: Incomplete Integration

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

|                                           |                                               |
|-------------------------------------------|-----------------------------------------------|
| Lab Name: <u>TestAmerica Pittsburgh</u>   | Job No.: <u>180-48309-1</u>                   |
| SDG No.: _____                            |                                               |
| Client Sample ID: <u>HD-MW-143D-0/1-0</u> | Lab Sample ID: <u>180-48309-3</u>             |
| Matrix: <u>Water</u>                      | Lab File ID: <u>61007020.D</u>                |
| Analysis Method: <u>8260C</u>             | Date Collected: <u>09/30/2015 12:42</u>       |
| Sample wt/vol: <u>5(mL)</u>               | Date Analyzed: <u>10/07/2015 20:27</u>        |
| Soil Aliquot Vol: _____                   | Dilution Factor: <u>1</u>                     |
| Soil Extract Vol.: _____                  | GC Column: <u>DB-624</u> ID: <u>0.18 (mm)</u> |
| % Moisture: _____                         | Level: (low/med) <u>Low</u>                   |
| Analysis Batch No.: <u>156189</u>         | Units: <u>ug/L</u>                            |

| CAS NO.    | COMPOUND NAME               | RESULT | Q  | RL  | MDL   |
|------------|-----------------------------|--------|----|-----|-------|
| 74-87-3    | Chloromethane               | ND     |    | 1.0 | 0.28  |
| 75-01-4    | Vinyl chloride              | ND     |    | 1.0 | 0.23  |
| 74-83-9    | Bromomethane                | ND     | ^c | 1.0 | 0.31  |
| 75-00-3    | Chloroethane                | ND     |    | 1.0 | 0.21  |
| 75-35-4    | 1,1-Dichloroethene          | ND     |    | 1.0 | 0.30  |
| 67-64-1    | Acetone                     | ND     |    | 5.0 | 2.5   |
| 75-15-0    | Carbon disulfide            | ND     |    | 1.0 | 0.21  |
| 75-09-2    | Methylene Chloride          | ND     |    | 1.0 | 0.13  |
| 156-60-5   | trans-1,2-Dichloroethene    | ND     |    | 1.0 | 0.17  |
| 1634-04-4  | Methyl tert-butyl ether     | ND     |    | 1.0 | 0.18  |
| 75-34-3    | 1,1-Dichloroethane          | ND     |    | 1.0 | 0.12  |
| 156-59-2   | cis-1,2-Dichloroethene      | 0.39   | J  | 1.0 | 0.24  |
| 74-97-5    | Bromochloromethane          | ND     |    | 1.0 | 0.18  |
| 78-93-3    | 2-Butanone (MEK)            | ND     |    | 5.0 | 0.55  |
| 67-66-3    | Chloroform                  | ND     |    | 1.0 | 0.17  |
| 71-55-6    | 1,1,1-Trichloroethane       | ND     |    | 1.0 | 0.29  |
| 56-23-5    | Carbon tetrachloride        | ND     |    | 1.0 | 0.14  |
| 71-43-2    | Benzene                     | ND     |    | 1.0 | 0.11  |
| 107-06-2   | 1,2-Dichloroethane          | ND     |    | 1.0 | 0.21  |
| 79-01-6    | Trichloroethene             | ND     |    | 1.0 | 0.14  |
| 78-87-5    | 1,2-Dichloropropane         | ND     |    | 1.0 | 0.095 |
| 75-27-4    | Bromodichloromethane        | ND     |    | 1.0 | 0.13  |
| 10061-01-5 | cis-1,3-Dichloropropene     | ND     |    | 1.0 | 0.19  |
| 108-10-1   | 4-Methyl-2-pentanone (MIBK) | ND     |    | 5.0 | 0.53  |
| 108-88-3   | Toluene                     | ND     |    | 1.0 | 0.15  |
| 10061-02-6 | trans-1,3-Dichloropropene   | ND     |    | 1.0 | 0.15  |
| 79-00-5    | 1,1,2-Trichloroethane       | ND     |    | 1.0 | 0.20  |
| 127-18-4   | Tetrachloroethene           | ND     |    | 1.0 | 0.15  |
| 591-78-6   | 2-Hexanone                  | ND     | ^c | 5.0 | 0.16  |
| 124-48-1   | Dibromochloromethane        | ND     |    | 1.0 | 0.14  |
| 106-93-4   | 1,2-Dibromoethane (EDB)     | ND     |    | 1.0 | 0.18  |
| 108-90-7   | Chlorobenzene               | ND     |    | 1.0 | 0.14  |
| 630-20-6   | 1,1,1,2-Tetrachloroethane   | ND     | ^c | 1.0 | 0.28  |
| 100-41-4   | Ethylbenzene                | ND     |    | 1.0 | 0.23  |
| 1330-20-7  | Xylenes, Total              | ND     |    | 3.0 | 0.49  |
| 100-42-5   | Styrene                     | ND     | ^c | 1.0 | 0.097 |

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-MW-143D-0/1-0 Lab Sample ID: 180-48309-3  
 Matrix: Water Lab File ID: 61007020.D  
 Analysis Method: 8260C Date Collected: 09/30/2015 12:42  
 Sample wt/vol: 5 (mL) Date Analyzed: 10/07/2015 20:27  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 156189 Units: ug/L

| CAS NO.  | COMPOUND NAME             | RESULT | Q  | RL  | MDL  |
|----------|---------------------------|--------|----|-----|------|
| 75-25-2  | Bromoform                 | ND     | ^c | 1.0 | 0.19 |
| 79-34-5  | 1,1,2,2-Tetrachloroethane | ND     |    | 1.0 | 0.20 |
| 107-13-1 | Acrylonitrile             | ND     | ^c | 20  | 0.55 |
| 123-91-1 | 1,4-Dioxane               | ND     | ^c | 200 | 34   |

| CAS NO.    | SURROGATE                    | %REC | Q | LIMITS |
|------------|------------------------------|------|---|--------|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 106  |   | 64-135 |
| 2037-26-5  | Toluene-d8 (Surr)            | 101  |   | 71-118 |
| 460-00-4   | 4-Bromofluorobenzene (Surr)  | 86   |   | 70-118 |
| 1868-53-7  | Dibromofluoromethane (Surr)  | 104  |   | 70-128 |

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007020.D  
 Lims ID: 180-48309-A-3 Lab Sample ID: 180-48309-3  
 Client ID: HD-MW-143D-0/1-0  
 Sample Type: Client  
 Inject. Date: 07-Oct-2015 20:27:30 ALS Bottle#: 20 Worklist Smp#: 20  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-48309-A-3  
 Misc. Info.: 180-0008874-020  
 Operator ID: 001562 Instrument ID: CHHP6  
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\MSVOA\_LL\_CHHP6.m  
 Limit Group: VOA 8260C ICAL  
 Last Update: 08-Oct-2015 08:54:39 Calib Date: 14-Sep-2015 16:03:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150914-8521.b\60914006.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: XAWRK015

First Level Reviewer: fergusond

Date: 08-Oct-2015 08:54:39

| Compound                        | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | OnCol Amt<br>ng | Flags |
|---------------------------------|-----|--------------|------------------|------------------|----|----------|-----------------|-------|
| * 1 TBA-d9 (IS)                 | 65  | 4.248        | 4.245            | 0.003            | 88 | 173795   | 1000.0          |       |
| * 2 Fluorobenzene (IS)          | 96  | 7.289        | 7.281            | 0.008            | 98 | 454572   | 50.0            |       |
| * 3 Chlorobenzene-d5            | 119 | 10.398       | 10.396           | 0.002            | 90 | 106101   | 50.0            |       |
| * 4 1,4-Dichlorobenzene-d4      | 152 | 12.746       | 12.750           | -0.004           | 97 | 172179   | 50.0            |       |
| \$ 5 Dibromofluoromethane (Surr | 113 | 6.553        | 6.551            | 0.002            | 93 | 108831   | 52.0            |       |
| \$ 6 1,2-Dichloroethane-d4 (Sur | 65  | 6.930        | 6.928            | 0.002            | 70 | 179570   | 53.2            |       |
| \$ 7 Toluene-d8 (Surr)          | 98  | 8.944        | 8.942            | 0.002            | 94 | 423267   | 50.6            |       |
| \$ 8 4-Bromofluorobenzene (Surr | 95  | 11.584       | 11.588           | -0.004           | 86 | 158920   | 42.8            |       |
| 12 Chloromethane                | 50  |              | 1.757            |                  |    |          | ND              |       |
| 13 Vinyl chloride               | 62  |              | 1.903            |                  |    |          | ND              |       |
| 15 Bromomethane                 | 94  |              | 2.232            |                  |    |          | ND              |       |
| 16 Chloroethane                 | 64  |              | 2.371            |                  |    |          | ND              |       |
| 22 1,1-Dichloroethene           | 96  |              | 3.339            |                  |    |          | ND              |       |
| 24 Acetone                      | 43  |              | 3.418            |                  |    |          | ND              |       |
| 26 Carbon disulfide             | 76  |              | 3.625            |                  |    |          | ND              |       |
| 31 Methylene Chloride           | 84  |              | 4.124            |                  |    |          | ND              |       |
| 33 Acrylonitrile                | 53  |              | 4.501            |                  |    |          | ND              |       |
| 34 trans-1,2-Dichloroethene     | 96  |              | 4.568            |                  |    |          | ND              |       |
| 35 Methyl tert-butyl ether      | 73  |              | 4.574            |                  |    |          | ND              |       |
| 37 1,1-Dichloroethane           | 63  |              | 5.188            |                  |    |          | ND              |       |
| 43 cis-1,2-Dichloroethene       | 96  | 5.945        | 5.936            | 0.009            | 83 | 5570     | 1.94            |       |
| 44 2-Butanone (MEK)             | 43  |              | 5.949            |                  |    |          | ND              |       |
| 48 Chlorobromomethane           | 128 |              | 6.222            |                  |    |          | ND              |       |
| 50 Chloroform                   | 83  |              | 6.368            |                  |    |          | ND              |       |
| 51 1,1,1-Trichloroethane        | 97  |              | 6.539            |                  |    |          | ND              |       |
| 53 Carbon tetrachloride         | 117 |              | 6.709            |                  |    |          | ND              |       |
| 56 Benzene                      | 78  |              | 6.940            |                  |    |          | ND              |       |
| 57 1,2-Dichloroethane           | 62  |              | 7.013            |                  |    |          | ND              |       |
| 61 Trichloroethene              | 130 | 7.666        | 7.676            | -0.010           | 1  | 1365     | 0.6178          | M     |
| 64 1,2-Dichloropropane          | 63  |              | 7.950            |                  |    |          | ND              |       |
| 65 1,4-Dioxane                  | 88  |              | 8.029            |                  |    |          | ND              |       |

| Compound                       | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | OnCol Amt<br>ng | Flags |
|--------------------------------|-----|--------------|------------------|------------------|----|----------|-----------------|-------|
| 68 Dichlorobromomethane        | 83  |              | 8.230            |                  |    |          | ND              |       |
| 71 cis-1,3-Dichloropropene     | 75  |              | 8.674            |                  |    |          | ND              |       |
| 72 4-Methyl-2-pentanone (MIBK) | 43  |              | 8.826            |                  |    |          | ND              |       |
| 73 Toluene                     | 91  | 9.011        | 9.009            | 0.002            | 51 | 3358     | 0.3067          |       |
| 74 trans-1,3-Dichloropropene   | 75  |              | 9.252            |                  |    |          | ND              |       |
| 76 1,1,2-Trichloroethane       | 97  |              | 9.447            |                  |    |          | ND              |       |
| 77 Tetrachloroethene           | 164 |              | 9.526            |                  |    |          | ND              |       |
| 79 2-Hexanone                  | 43  |              | 9.659            |                  |    |          | ND              |       |
| 81 Chlorodibromomethane        | 129 |              | 9.824            |                  |    |          | ND              |       |
| 82 Ethylene Dibromide          | 107 |              | 9.939            |                  |    |          | ND              |       |
| 84 Chlorobenzene               | 112 |              | 10.426           |                  |    |          | ND              |       |
| 86 1,1,1,2-Tetrachloroethane   | 131 |              | 10.523           |                  |    |          | ND              |       |
| 87 Ethylbenzene                | 106 |              | 10.523           |                  |    |          | ND              |       |
| 88 m-Xylene & p-Xylene         | 106 |              | 10.657           |                  |    |          | ND              |       |
| 89 o-Xylene                    | 106 |              | 11.040           |                  |    |          | ND              |       |
| 90 Styrene                     | 104 |              | 11.059           |                  |    |          | ND              |       |
| 91 Bromoform                   | 173 |              | 11.241           |                  |    |          | ND              |       |
| 96 1,1,2,2-Tetrachloroethane   | 83  |              | 11.716           |                  |    |          | ND              |       |
| S 131 Xylenes, Total           | 106 |              | 1.000            |                  |    |          | ND              |       |

**QC Flag Legend**

Review Flags

M - Manually Integrated

**Reagents:**

VOA8260INT\_00042

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR\_00042

Amount Added: 2.00

Units: uL

Run Reagent

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007020.D

Injection Date: 07-Oct-2015 20:27:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: 180-48309-A-3

Lab Sample ID: 180-48309-3

Worklist Smp#: 20

Client ID: HD-MW-143D-0/1-0

Purge Vol: 5.000 mL

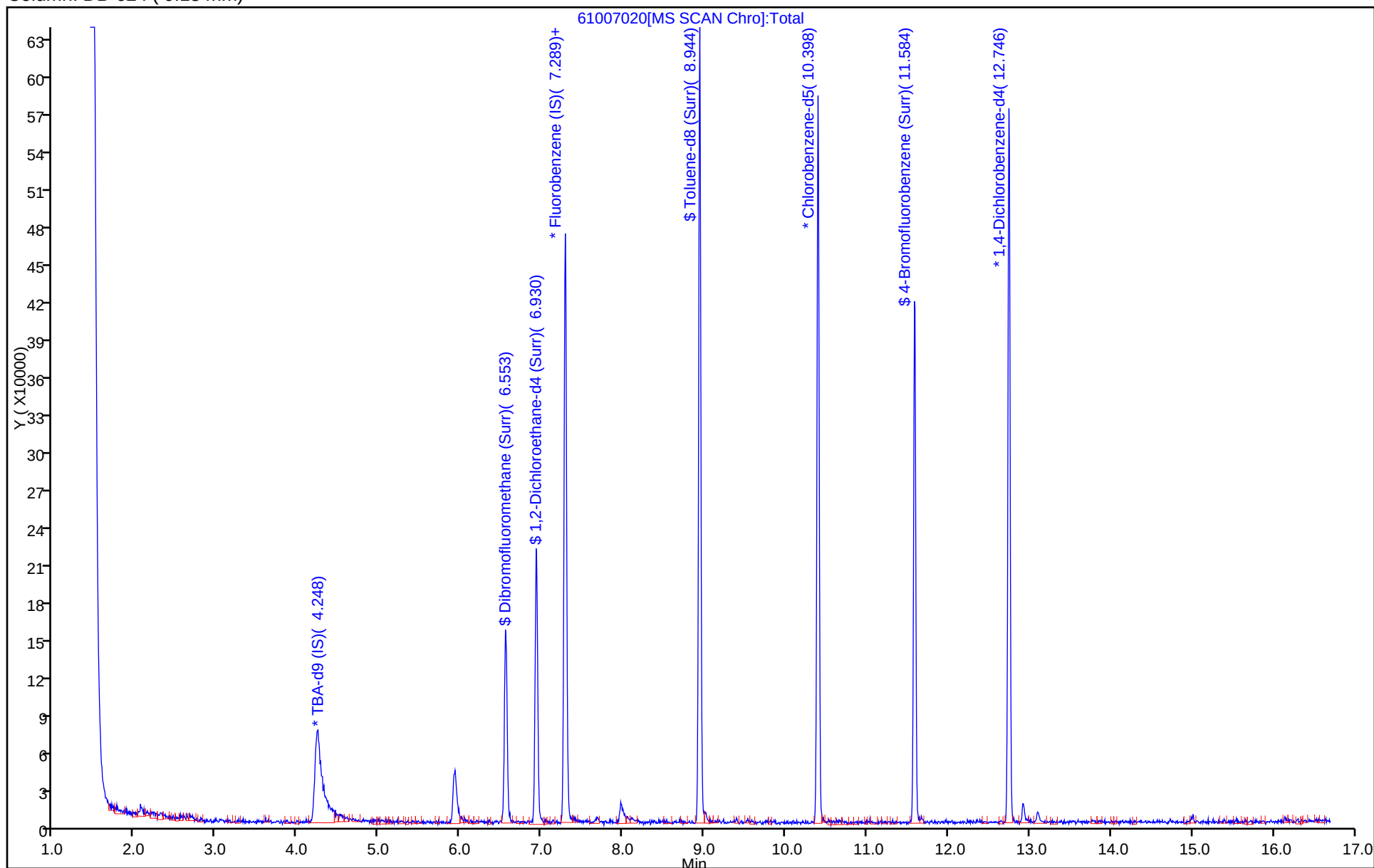
Dil. Factor: 1.0000

ALS Bottle#: 20

Method: MSVOA\_LL\_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007020.D

Injection Date: 07-Oct-2015 20:27:30

Instrument ID: CHHP6

Lims ID: 180-48309-A-3

Lab Sample ID: 180-48309-3

Client ID: HD-MW-143D-0/1-0

Operator ID: 001562

ALS Bottle#: 20

Worklist Smp#: 20

Purge Vol: 5.000 mL

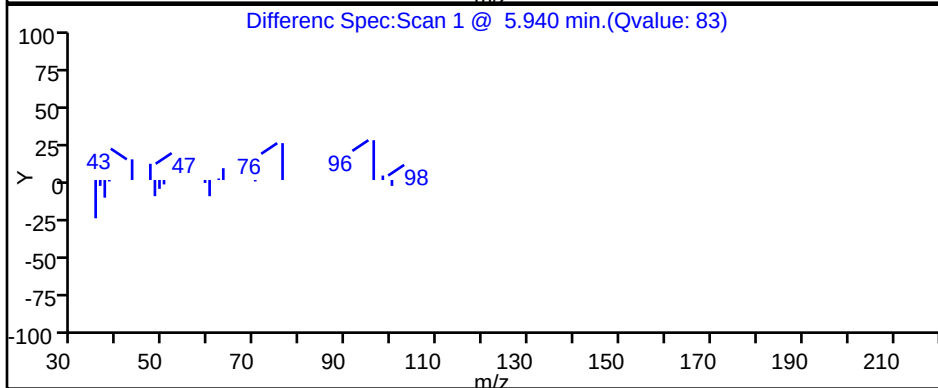
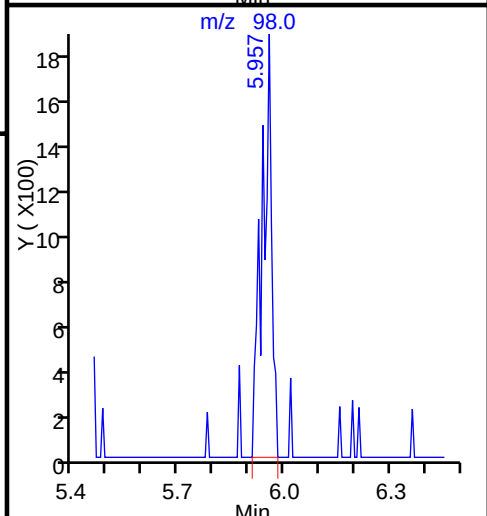
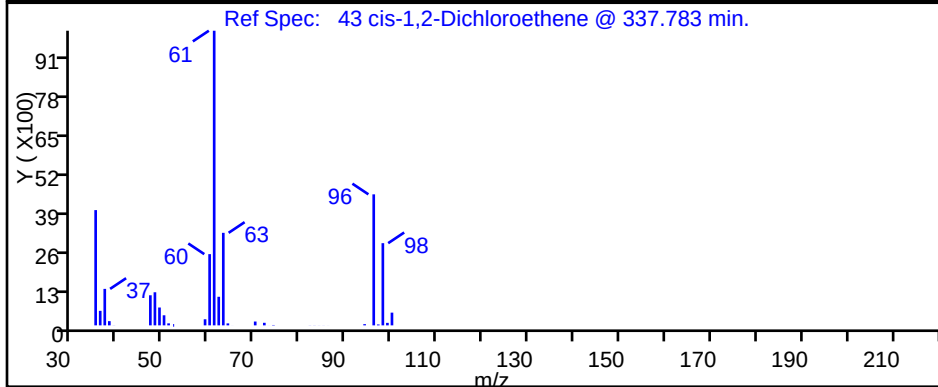
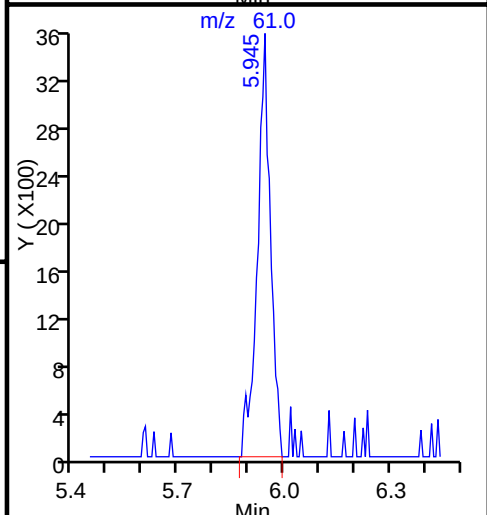
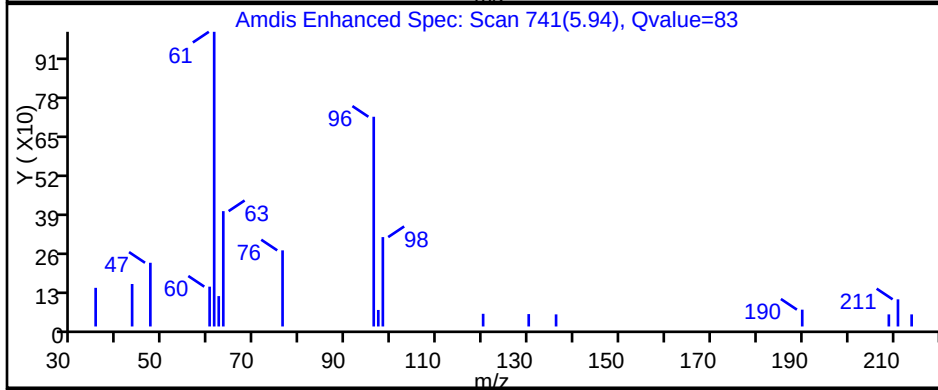
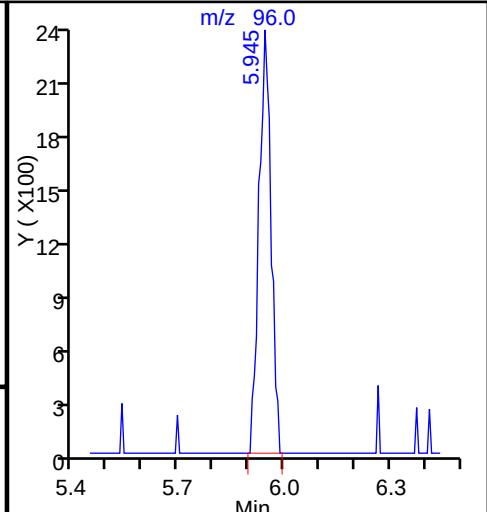
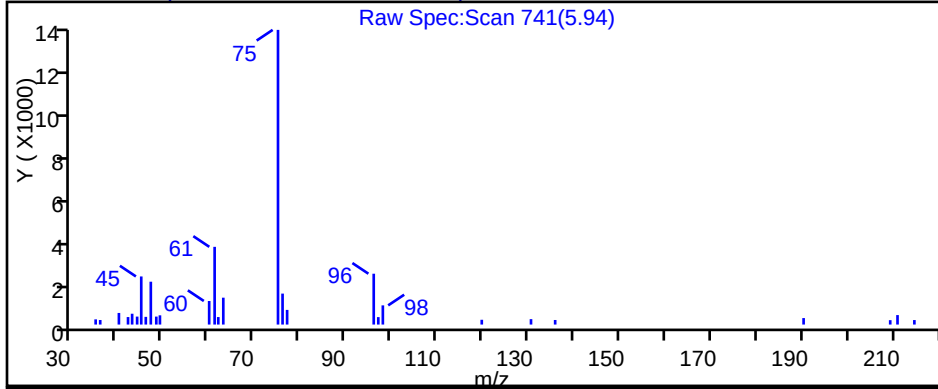
Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

**43 cis-1,2-Dichloroethene, CAS: 156-59-2**



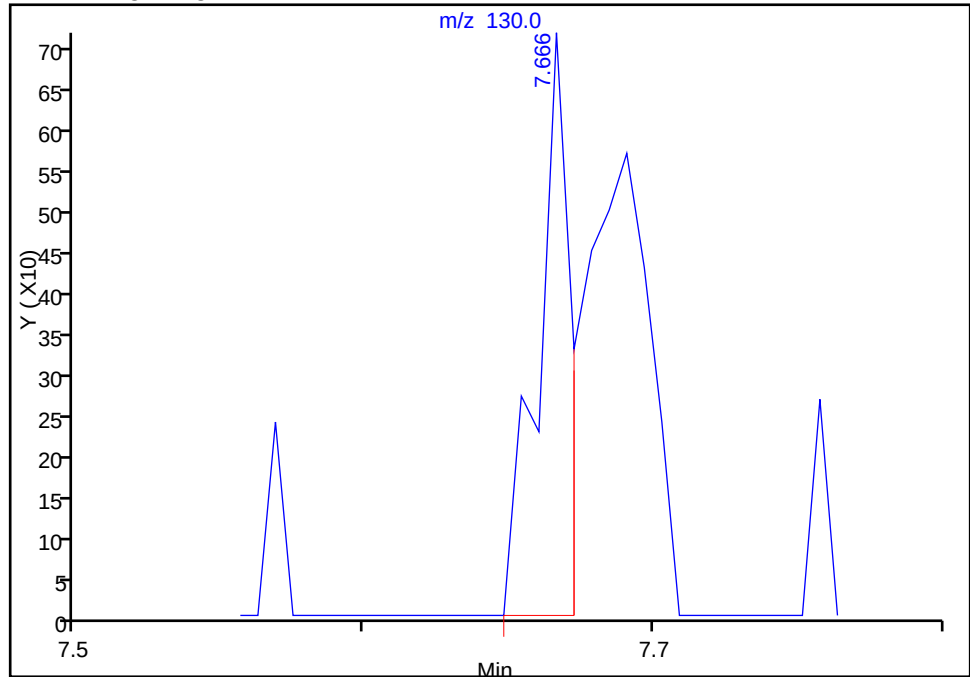
## TestAmerica Pittsburgh

|                 |                                                                 |                |                |
|-----------------|-----------------------------------------------------------------|----------------|----------------|
| Data File:      | \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007020.D |                |                |
| Injection Date: | 07-Oct-2015 20:27:30                                            | Instrument ID: | CHHP6          |
| Lims ID:        | 180-48309-A-3                                                   | Lab Sample ID: | 180-48309-3    |
| Client ID:      | HD-MW-143D-0/1-0                                                |                |                |
| Operator ID:    | 001562                                                          | ALS Bottle#:   | 20             |
| Purge Vol:      | 5.000 mL                                                        | Dil. Factor:   | 1.0000         |
| Method:         | MSVOA_LL_CHHP6                                                  | Limit Group:   | VOA 8260C ICAL |
| Column:         | DB-624 ( 0.18 mm)                                               | Detector:      | MS SCAN        |
|                 |                                                                 | Worklist Smp#: | 20             |

## 61 Trichloroethene, CAS: 79-01-6

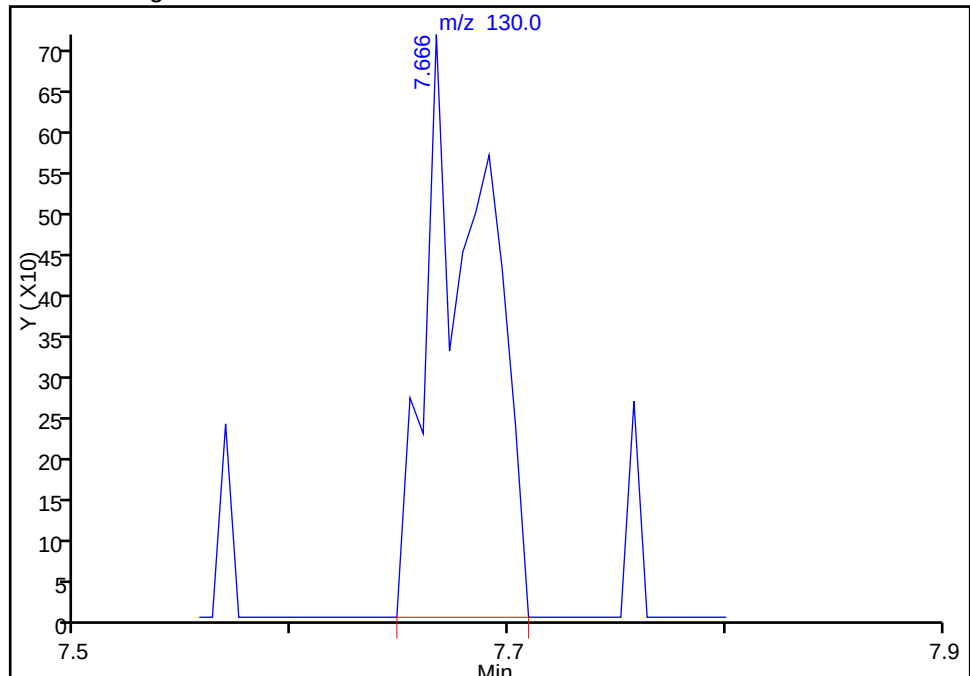
RT: 7.67  
Area: 565  
Amount: 0.255715  
Amount Units: ng

## Processing Integration Results



RT: 7.67  
Area: 1365  
Amount: 0.617789  
Amount Units: ng

## Manual Integration Results



Reviewer: fergusond, 08-Oct-2015 08:54:39  
Audit Action: Manually Integrated  
Audit Reason: Incomplete Integration

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

|                                          |                                               |
|------------------------------------------|-----------------------------------------------|
| Lab Name: <u>TestAmerica Pittsburgh</u>  | Job No.: <u>180-48309-1</u>                   |
| SDG No.: _____                           |                                               |
| Client Sample ID: <u>HD-MW-20M-0/1-0</u> | Lab Sample ID: <u>180-48309-4</u>             |
| Matrix: <u>Water</u>                     | Lab File ID: <u>61007021.D</u>                |
| Analysis Method: <u>8260C</u>            | Date Collected: <u>09/30/2015 08:45</u>       |
| Sample wt/vol: <u>5 (mL)</u>             | Date Analyzed: <u>10/07/2015 20:51</u>        |
| Soil Aliquot Vol: _____                  | Dilution Factor: <u>1</u>                     |
| Soil Extract Vol.: _____                 | GC Column: <u>DB-624</u> ID: <u>0.18 (mm)</u> |
| % Moisture: _____                        | Level: (low/med) <u>Low</u>                   |
| Analysis Batch No.: <u>156189</u>        | Units: <u>ug/L</u>                            |

| CAS NO.    | COMPOUND NAME               | RESULT | Q  | RL  | MDL   |
|------------|-----------------------------|--------|----|-----|-------|
| 74-87-3    | Chloromethane               | ND     |    | 1.0 | 0.28  |
| 75-01-4    | Vinyl chloride              | ND     |    | 1.0 | 0.23  |
| 74-83-9    | Bromomethane                | ND     | ^c | 1.0 | 0.31  |
| 75-00-3    | Chloroethane                | ND     |    | 1.0 | 0.21  |
| 75-35-4    | 1,1-Dichloroethene          | ND     |    | 1.0 | 0.30  |
| 67-64-1    | Acetone                     | ND     |    | 5.0 | 2.5   |
| 75-15-0    | Carbon disulfide            | ND     |    | 1.0 | 0.21  |
| 75-09-2    | Methylene Chloride          | ND     |    | 1.0 | 0.13  |
| 156-60-5   | trans-1,2-Dichloroethene    | ND     |    | 1.0 | 0.17  |
| 1634-04-4  | Methyl tert-butyl ether     | ND     |    | 1.0 | 0.18  |
| 75-34-3    | 1,1-Dichloroethane          | ND     |    | 1.0 | 0.12  |
| 156-59-2   | cis-1,2-Dichloroethene      | ND     |    | 1.0 | 0.24  |
| 74-97-5    | Bromochloromethane          | ND     |    | 1.0 | 0.18  |
| 78-93-3    | 2-Butanone (MEK)            | ND     |    | 5.0 | 0.55  |
| 67-66-3    | Chloroform                  | 1.0    |    | 1.0 | 0.17  |
| 71-55-6    | 1,1,1-Trichloroethane       | ND     |    | 1.0 | 0.29  |
| 56-23-5    | Carbon tetrachloride        | ND     |    | 1.0 | 0.14  |
| 71-43-2    | Benzene                     | ND     |    | 1.0 | 0.11  |
| 107-06-2   | 1,2-Dichloroethane          | ND     |    | 1.0 | 0.21  |
| 79-01-6    | Trichloroethene             | 13     |    | 1.0 | 0.14  |
| 78-87-5    | 1,2-Dichloropropane         | ND     |    | 1.0 | 0.095 |
| 75-27-4    | Bromodichloromethane        | ND     |    | 1.0 | 0.13  |
| 10061-01-5 | cis-1,3-Dichloropropene     | ND     |    | 1.0 | 0.19  |
| 108-10-1   | 4-Methyl-2-pentanone (MIBK) | ND     |    | 5.0 | 0.53  |
| 108-88-3   | Toluene                     | ND     |    | 1.0 | 0.15  |
| 10061-02-6 | trans-1,3-Dichloropropene   | ND     |    | 1.0 | 0.15  |
| 79-00-5    | 1,1,2-Trichloroethane       | ND     |    | 1.0 | 0.20  |
| 127-18-4   | Tetrachloroethene           | 0.30   | J  | 1.0 | 0.15  |
| 591-78-6   | 2-Hexanone                  | ND     | ^c | 5.0 | 0.16  |
| 124-48-1   | Dibromochloromethane        | ND     |    | 1.0 | 0.14  |
| 106-93-4   | 1,2-Dibromoethane (EDB)     | ND     |    | 1.0 | 0.18  |
| 108-90-7   | Chlorobenzene               | ND     |    | 1.0 | 0.14  |
| 630-20-6   | 1,1,1,2-Tetrachloroethane   | ND     | ^c | 1.0 | 0.28  |
| 100-41-4   | Ethylbenzene                | ND     |    | 1.0 | 0.23  |
| 1330-20-7  | Xylenes, Total              | ND     |    | 3.0 | 0.49  |
| 100-42-5   | Styrene                     | ND     | ^c | 1.0 | 0.097 |

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-MW-20M-0/1-0 Lab Sample ID: 180-48309-4  
 Matrix: Water Lab File ID: 61007021.D  
 Analysis Method: 8260C Date Collected: 09/30/2015 08:45  
 Sample wt/vol: 5 (mL) Date Analyzed: 10/07/2015 20:51  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 156189 Units: ug/L

| CAS NO.  | COMPOUND NAME             | RESULT | Q  | RL  | MDL  |
|----------|---------------------------|--------|----|-----|------|
| 75-25-2  | Bromoform                 | ND     | ^c | 1.0 | 0.19 |
| 79-34-5  | 1,1,2,2-Tetrachloroethane | ND     |    | 1.0 | 0.20 |
| 107-13-1 | Acrylonitrile             | ND     | ^c | 20  | 0.55 |
| 123-91-1 | 1,4-Dioxane               | ND     | ^c | 200 | 34   |

| CAS NO.    | SURROGATE                    | %REC | Q | LIMITS |
|------------|------------------------------|------|---|--------|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 108  |   | 64-135 |
| 2037-26-5  | Toluene-d8 (Surr)            | 108  |   | 71-118 |
| 460-00-4   | 4-Bromofluorobenzene (Surr)  | 91   |   | 70-118 |
| 1868-53-7  | Dibromofluoromethane (Surr)  | 106  |   | 70-128 |

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007021.D  
 Lims ID: 180-48309-A-4 Lab Sample ID: 180-48309-4  
 Client ID: HD-MW-20M-0/1-0  
 Sample Type: Client  
 Inject. Date: 07-Oct-2015 20:51:30 ALS Bottle#: 21 Worklist Smp#: 21  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-48309-A-4  
 Misc. Info.: 180-0008874-021  
 Operator ID: 001562 Instrument ID: CHHP6  
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\MSVOA\_LL\_CHHP6.m  
 Limit Group: VOA 8260C ICAL  
 Last Update: 08-Oct-2015 08:55:47 Calib Date: 14-Sep-2015 16:03:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last Ical File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150914-8521.b\60914006.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: XAWRK015

First Level Reviewer: fergusond

Date: 08-Oct-2015 08:55:47

| Compound                        | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | OnCol Amt<br>ng | Flags |
|---------------------------------|-----|--------------|------------------|------------------|----|----------|-----------------|-------|
| * 1 TBA-d9 (IS)                 | 65  | 4.238        | 4.245            | -0.007           | 87 | 173701   | 1000.0          |       |
| * 2 Fluorobenzene (IS)          | 96  | 7.292        | 7.281            | 0.011            | 98 | 441634   | 50.0            |       |
| * 3 Chlorobenzene-d5            | 119 | 10.400       | 10.396           | 0.004            | 91 | 100924   | 50.0            |       |
| * 4 1,4-Dichlorobenzene-d4      | 152 | 12.748       | 12.750           | -0.002           | 97 | 172151   | 50.0            |       |
| \$ 5 Dibromofluoromethane (Surr | 113 | 6.555        | 6.551            | 0.004            | 91 | 108175   | 53.2            |       |
| \$ 6 1,2-Dichloroethane-d4 (Sur | 65  | 6.933        | 6.928            | 0.005            | 70 | 177059   | 54.0            |       |
| \$ 7 Toluene-d8 (Surr)          | 98  | 8.946        | 8.942            | 0.004            | 94 | 429634   | 54.0            |       |
| \$ 8 4-Bromofluorobenzene (Surr | 95  | 11.586       | 11.588           | -0.002           | 85 | 160592   | 45.4            |       |
| 12 Chloromethane                | 50  | 1.762        | 1.757            | 0.005            | 33 | 3554     | 1.35            | M     |
| 13 Vinyl chloride               | 62  |              | 1.903            |                  |    |          | ND              |       |
| 15 Bromomethane                 | 94  |              | 2.232            |                  |    |          | ND              |       |
| 16 Chloroethane                 | 64  |              | 2.371            |                  |    |          | ND              |       |
| 22 1,1-Dichloroethene           | 96  |              | 3.339            |                  |    |          | ND              |       |
| 24 Acetone                      | 43  |              | 3.418            |                  |    |          | ND              |       |
| 26 Carbon disulfide             | 76  |              | 3.625            |                  |    |          | ND              |       |
| 31 Methylene Chloride           | 84  |              | 4.124            |                  |    |          | ND              |       |
| 33 Acrylonitrile                | 53  |              | 4.501            |                  |    |          | ND              |       |
| 34 trans-1,2-Dichloroethene     | 96  |              | 4.568            |                  |    |          | ND              |       |
| 35 Methyl tert-butyl ether      | 73  | 4.578        | 4.574            | 0.004            | 35 | 3188     | 0.4147          |       |
| 37 1,1-Dichloroethane           | 63  |              | 5.188            |                  |    |          | ND              |       |
| 43 cis-1,2-Dichloroethene       | 96  | 5.947        | 5.936            | 0.011            | 41 | 2248     | 0.8058          |       |
| 44 2-Butanone (MEK)             | 43  |              | 5.949            |                  |    |          | ND              |       |
| 48 Chlorobromomethane           | 128 |              | 6.222            |                  |    |          | ND              |       |
| 50 Chloroform                   | 83  | 6.373        | 6.368            | 0.005            | 95 | 22804    | 5.00            |       |
| 51 1,1,1-Trichloroethane        | 97  |              | 6.539            |                  |    |          | ND              |       |
| 53 Carbon tetrachloride         | 117 |              | 6.709            |                  |    |          | ND              |       |
| 56 Benzene                      | 78  |              | 6.940            |                  |    |          | ND              |       |
| 57 1,2-Dichloroethane           | 62  |              | 7.013            |                  |    |          | ND              |       |
| 61 Trichloroethene              | 130 | 7.681        | 7.676            | 0.005            | 96 | 138577   | 64.6            |       |
| 64 1,2-Dichloropropane          | 63  |              | 7.950            |                  |    |          | ND              |       |
| 65 1,4-Dioxane                  | 88  |              | 8.029            |                  |    |          | ND              |       |

| Compound                       | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | OnCol Amt<br>ng | Flags |
|--------------------------------|-----|--------------|------------------|------------------|----|----------|-----------------|-------|
| 68 Dichlorobromomethane        | 83  |              | 8.230            |                  |    |          | ND              |       |
| 71 cis-1,3-Dichloropropene     | 75  |              | 8.674            |                  |    |          | ND              |       |
| 72 4-Methyl-2-pentanone (MIBK) | 43  |              | 8.826            |                  |    |          | ND              |       |
| 73 Toluene                     | 91  |              | 9.009            |                  |    |          | ND              |       |
| 74 trans-1,3-Dichloropropene   | 75  |              | 9.252            |                  |    |          | ND              |       |
| 76 1,1,2-Trichloroethane       | 97  |              | 9.447            |                  |    |          | ND              |       |
| 77 Tetrachloroethene           | 164 | 9.524        | 9.526            | -0.002           | 91 | 2666     | 1.50            |       |
| 79 2-Hexanone                  | 43  |              | 9.659            |                  |    |          | ND              |       |
| 81 Chlorodibromomethane        | 129 |              | 9.824            |                  |    |          | ND              |       |
| 82 Ethylene Dibromide          | 107 |              | 9.939            |                  |    |          | ND              |       |
| 84 Chlorobenzene               | 112 |              | 10.426           |                  |    |          | ND              |       |
| 86 1,1,1,2-Tetrachloroethane   | 131 |              | 10.523           |                  |    |          | ND              |       |
| 87 Ethylbenzene                | 106 |              | 10.523           |                  |    |          | ND              |       |
| 88 m-Xylene & p-Xylene         | 106 |              | 10.657           |                  |    |          | ND              |       |
| 89 o-Xylene                    | 106 |              | 11.040           |                  |    |          | ND              |       |
| 90 Styrene                     | 104 |              | 11.059           |                  |    |          | ND              |       |
| 91 Bromoform                   | 173 |              | 11.241           |                  |    |          | ND              |       |
| 96 1,1,2,2-Tetrachloroethane   | 83  |              | 11.716           |                  |    |          | ND              |       |
| S 131 Xylenes, Total           | 106 |              | 1.000            |                  |    |          | ND              |       |

**QC Flag Legend**

Review Flags

M - Manually Integrated

**Reagents:**

VOA8260INT\_00042

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR\_00042

Amount Added: 2.00

Units: uL

Run Reagent

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007021.D

Injection Date: 07-Oct-2015 20:51:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: 180-48309-A-4

Lab Sample ID: 180-48309-4

Worklist Smp#: 21

Client ID: HD-MW-20M-0/1-0

Purge Vol: 5.000 mL

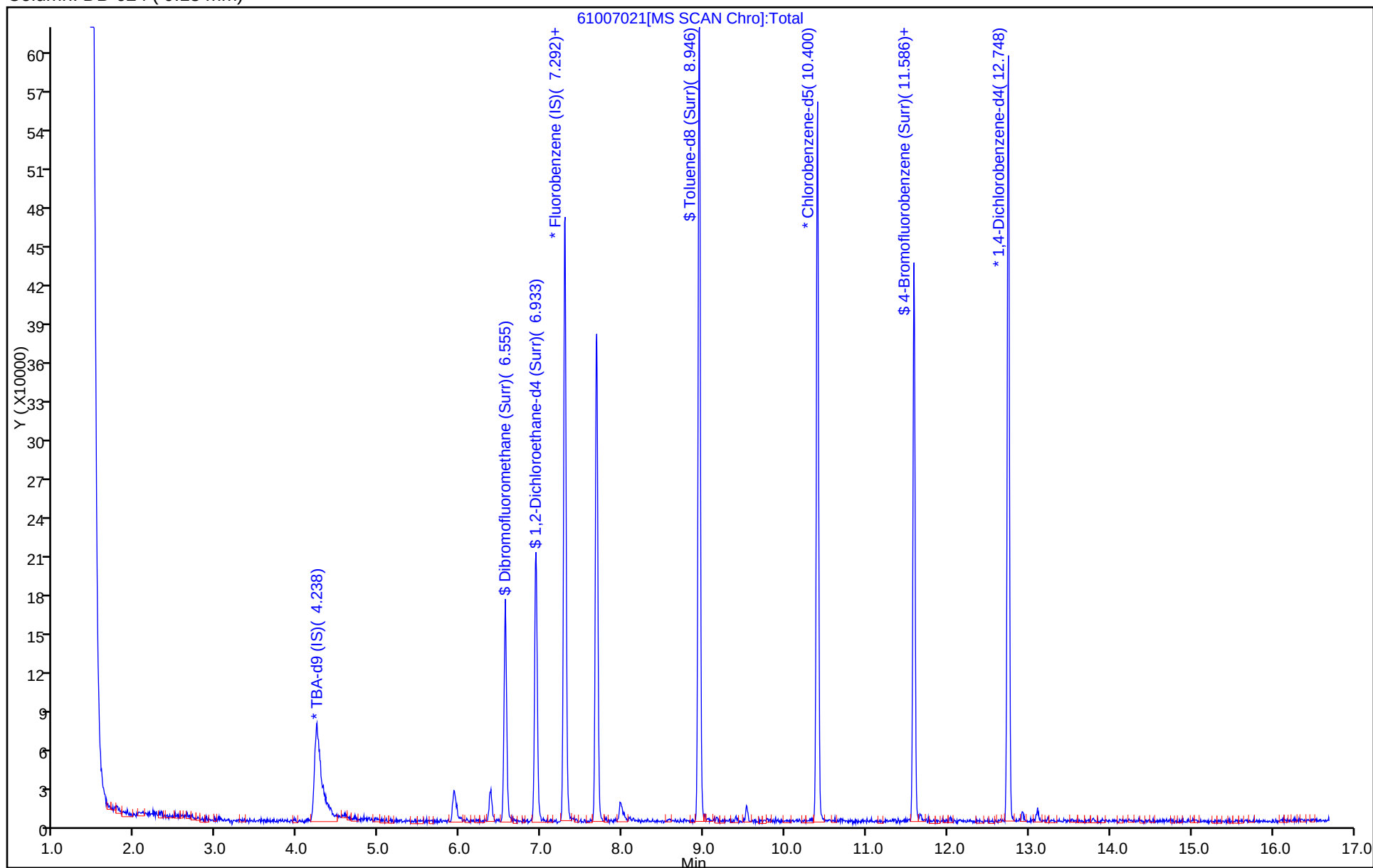
Dil. Factor: 1.0000

ALS Bottle#: 21

Method: MSVOA\_LL\_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007021.D

Injection Date: 07-Oct-2015 20:51:30

Instrument ID: CHHP6

Lims ID: 180-48309-A-4

Lab Sample ID: 180-48309-4

Client ID: HD-MW-20M-0/1-0

Operator ID: 001562

ALS Bottle#: 21

Worklist Smp#: 21

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

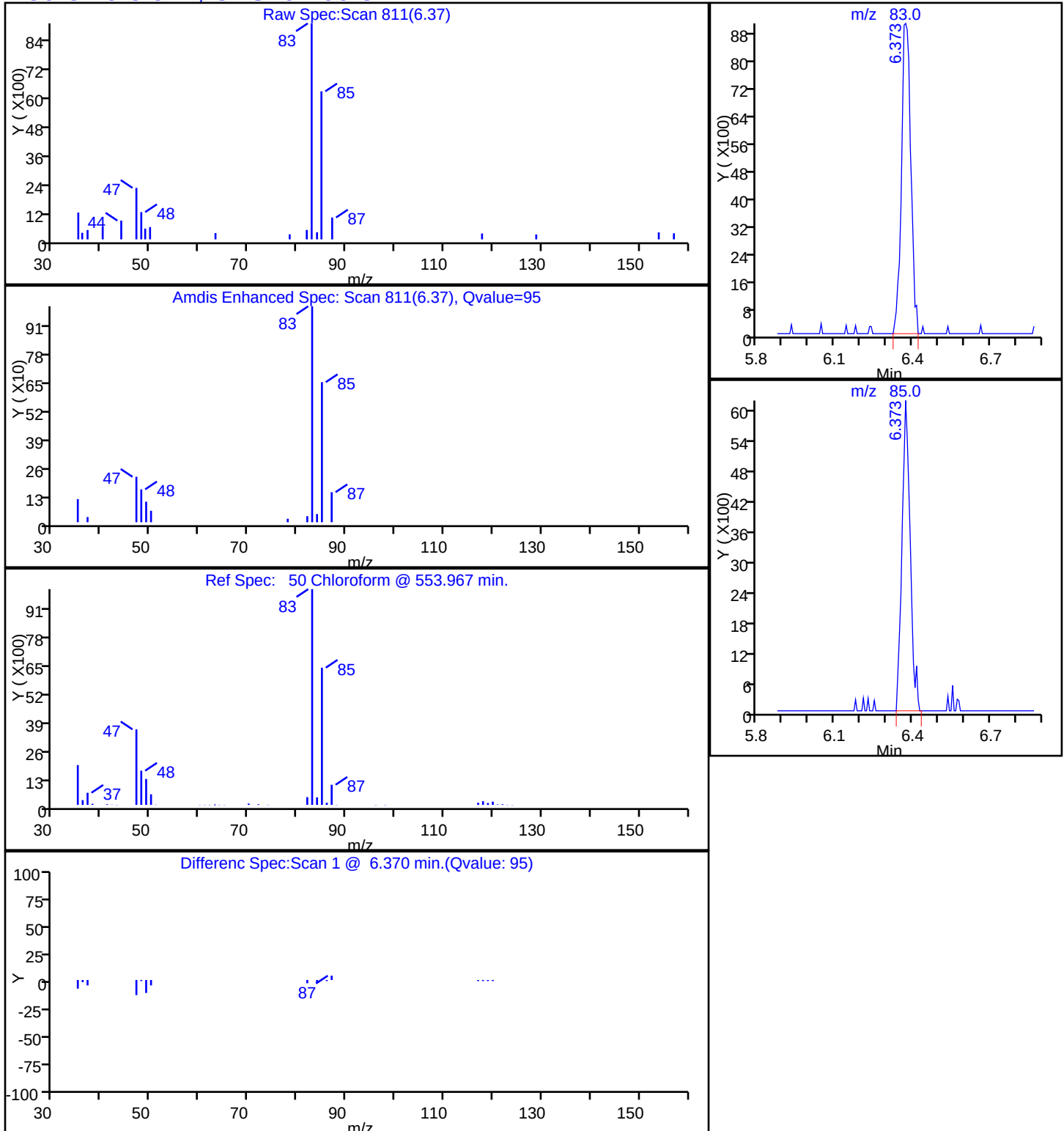
Method: MSVOA\_LL\_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

## 50 Chloroform, CAS: 67-66-3



## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007021.D

Injection Date: 07-Oct-2015 20:51:30

Instrument ID: CHHP6

Lims ID: 180-48309-A-4

Lab Sample ID: 180-48309-4

Client ID: HD-MW-20M-0/1-0

Operator ID: 001562

ALS Bottle#: 21

Worklist Smp#: 21

Purge Vol: 5.000 mL

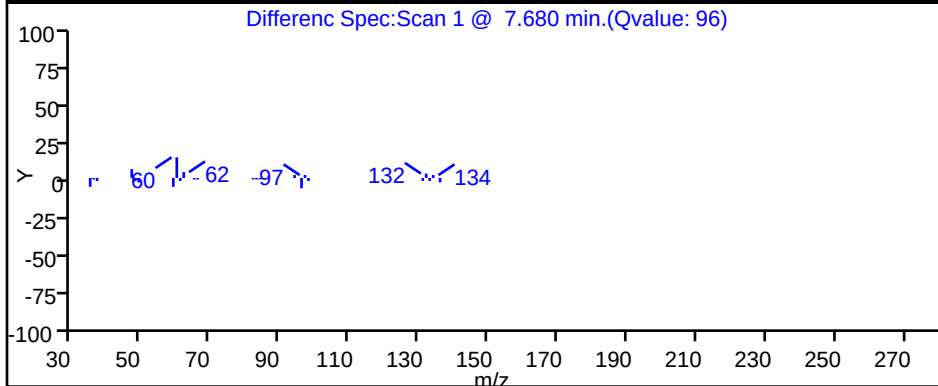
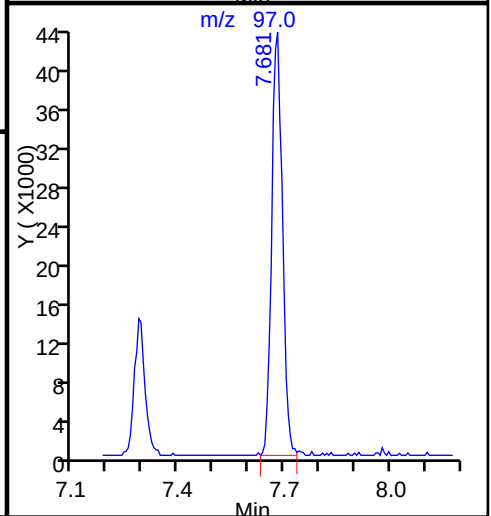
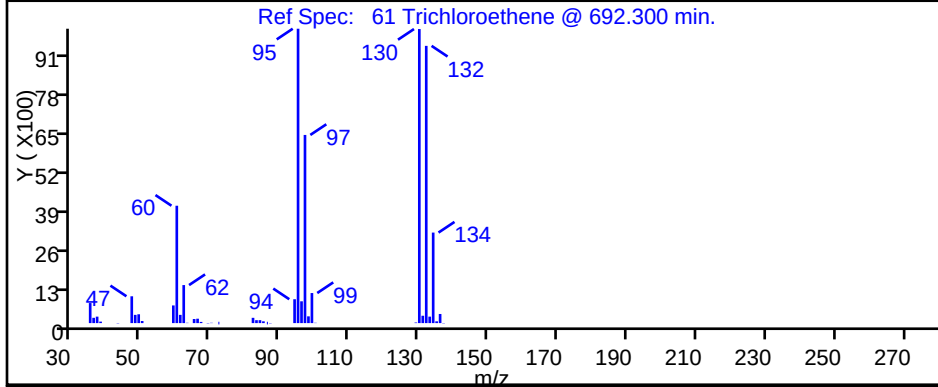
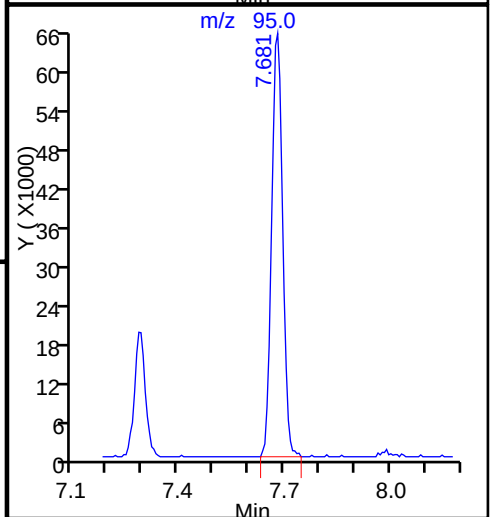
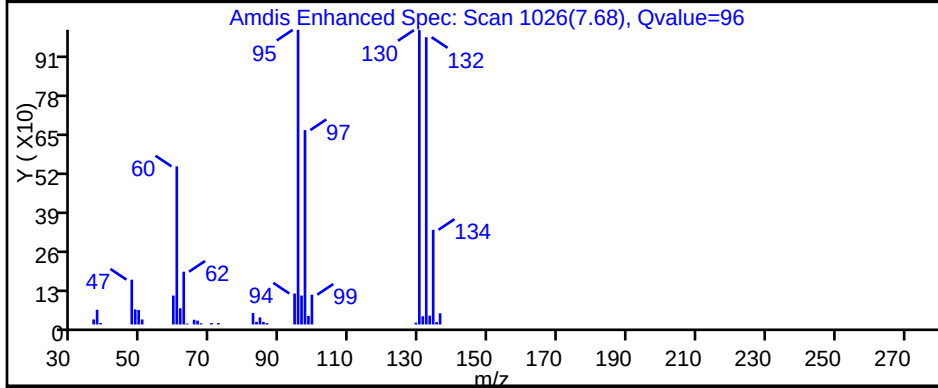
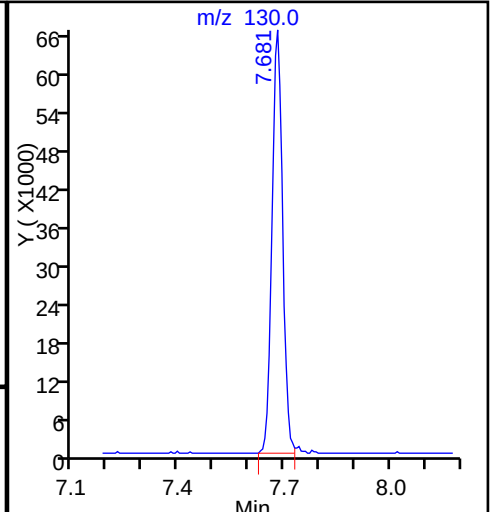
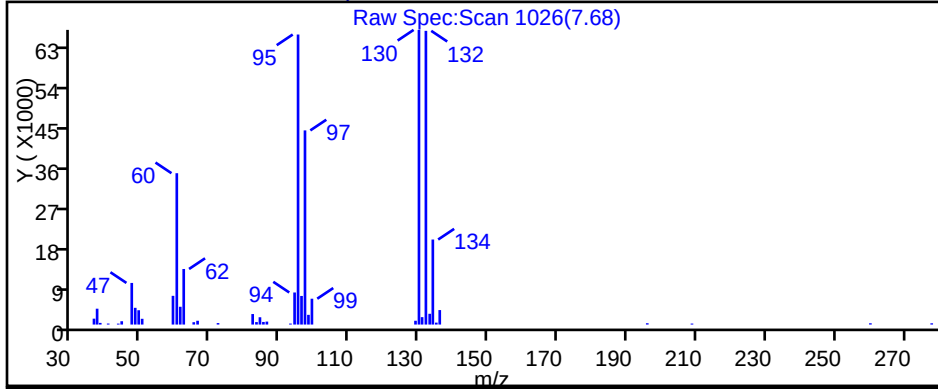
Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

**61 Trichloroethene, CAS: 79-01-6**



## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007021.D

Injection Date: 07-Oct-2015 20:51:30

Instrument ID: CHHP6

Lims ID: 180-48309-A-4

Lab Sample ID: 180-48309-4

Client ID: HD-MW-20M-0/1-0

Operator ID: 001562

ALS Bottle#: 21

Worklist Smp#: 21

Purge Vol: 5.000 mL

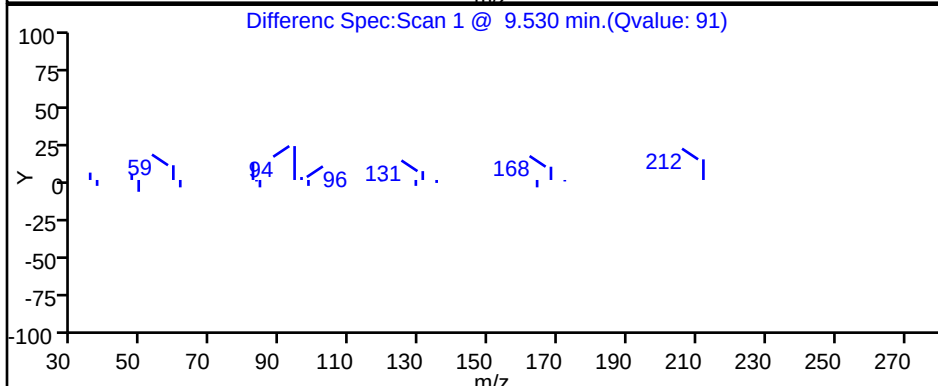
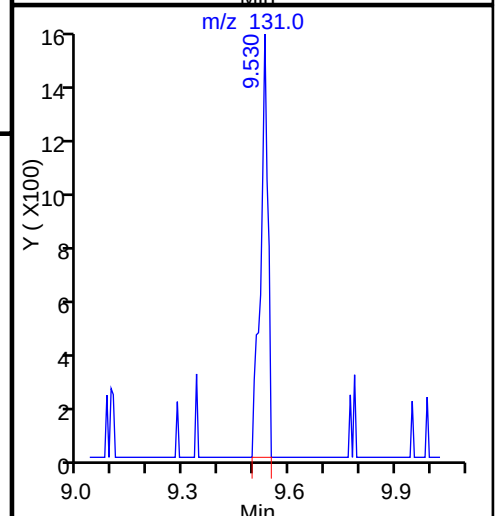
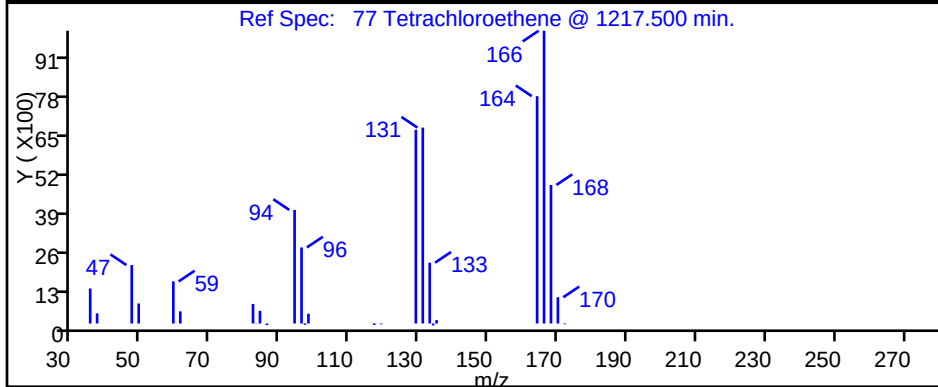
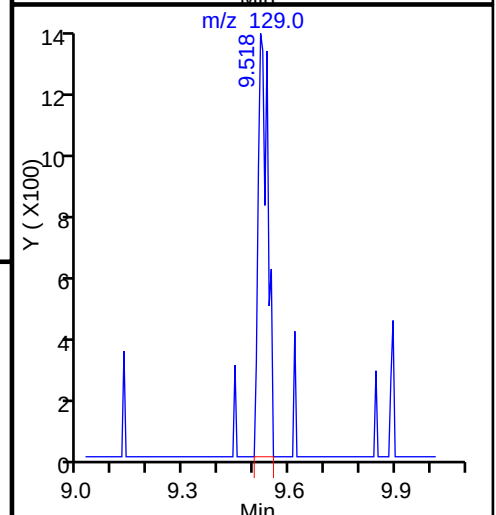
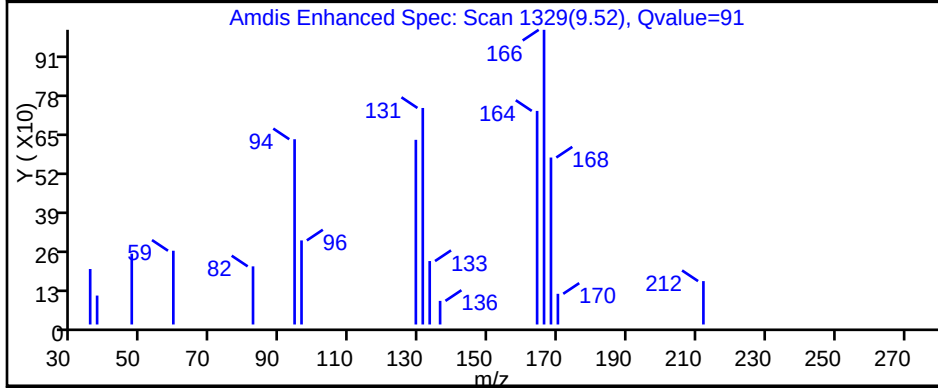
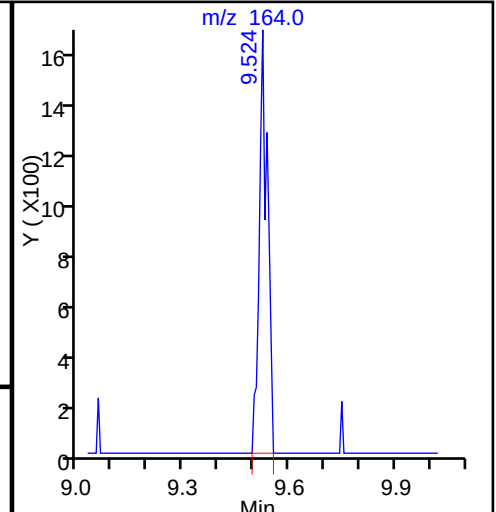
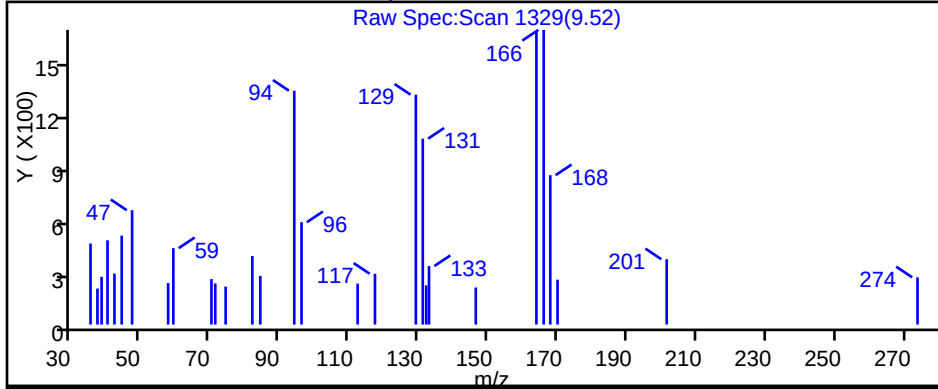
Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

**77 Tetrachloroethene, CAS: 127-18-4**

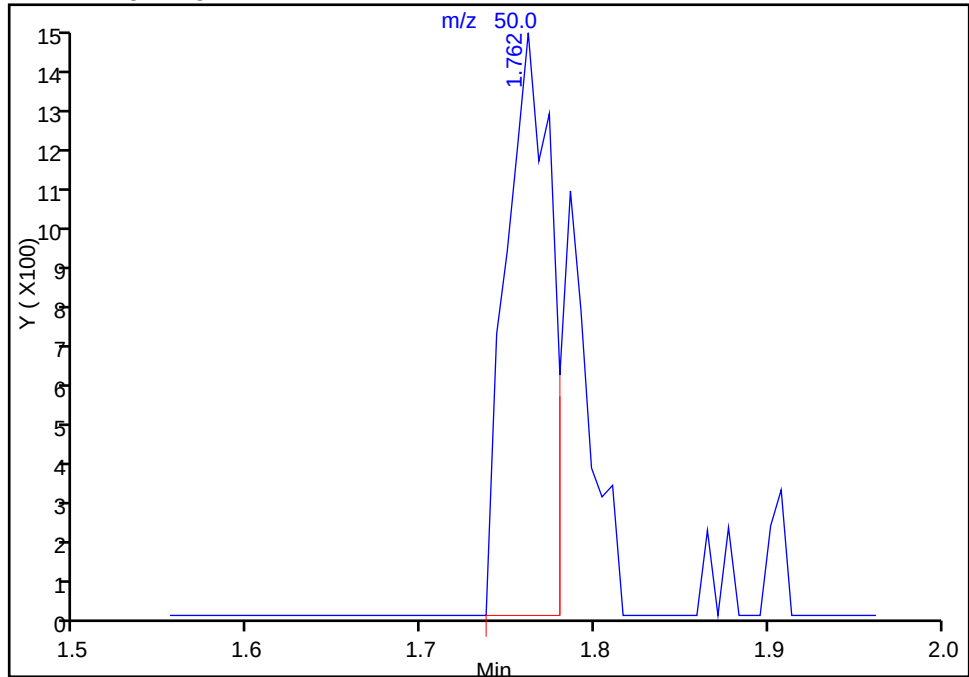
## TestAmerica Pittsburgh

|                 |                                                                 |                |                |
|-----------------|-----------------------------------------------------------------|----------------|----------------|
| Data File:      | \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007021.D |                |                |
| Injection Date: | 07-Oct-2015 20:51:30                                            | Instrument ID: | CHHP6          |
| Lims ID:        | 180-48309-A-4                                                   | Lab Sample ID: | 180-48309-4    |
| Client ID:      | HD-MW-20M-0/1-0                                                 |                |                |
| Operator ID:    | 001562                                                          | ALS Bottle#:   | 21             |
| Purge Vol:      | 5.000 mL                                                        | Dil. Factor:   | 1.0000         |
| Method:         | MSVOA_LL_CHHP6                                                  | Limit Group:   | VOA 8260C ICAL |
| Column:         | DB-624 ( 0.18 mm)                                               | Detector:      | MS SCAN        |
|                 |                                                                 | Worklist Smp#: | 21             |

**12 Chloromethane, CAS: 74-87-3**

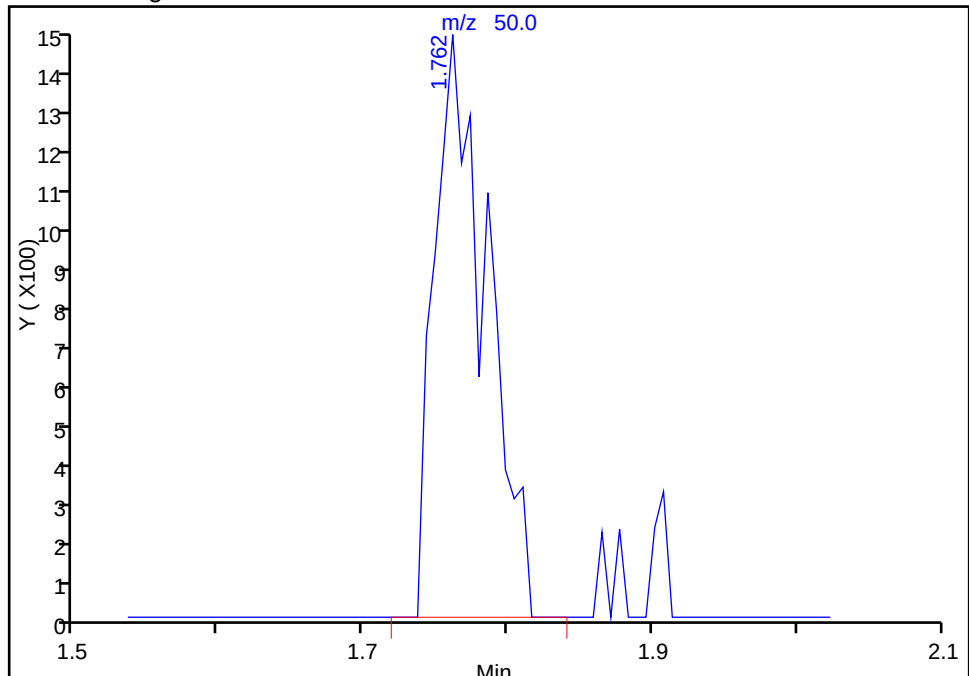
RT: 1.76  
Area: 2559  
Amount: 0.970899  
Amount Units: ng

## Processing Integration Results



RT: 1.76  
Area: 3554  
Amount: 1.348407  
Amount Units: ng

## Manual Integration Results



Reviewer: fergusond, 08-Oct-2015 08:55:47  
Audit Action: Manually Integrated  
Audit Reason: Incomplete Integration

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

|                                         |                                               |
|-----------------------------------------|-----------------------------------------------|
| Lab Name: <u>TestAmerica Pittsburgh</u> | Job No.: <u>180-48309-1</u>                   |
| SDG No.: _____                          |                                               |
| Client Sample ID: <u>HD-MW-92-0/1-0</u> | Lab Sample ID: <u>180-48309-5</u>             |
| Matrix: <u>Water</u>                    | Lab File ID: <u>61007028.D</u>                |
| Analysis Method: <u>8260C</u>           | Date Collected: <u>09/30/2015 08:25</u>       |
| Sample wt/vol: <u>5 (mL)</u>            | Date Analyzed: <u>10/07/2015 23:42</u>        |
| Soil Aliquot Vol: _____                 | Dilution Factor: <u>1</u>                     |
| Soil Extract Vol.: _____                | GC Column: <u>DB-624</u> ID: <u>0.18 (mm)</u> |
| % Moisture: _____                       | Level: (low/med) <u>Low</u>                   |
| Analysis Batch No.: <u>156189</u>       | Units: <u>ug/L</u>                            |

| CAS NO.    | COMPOUND NAME               | RESULT | Q  | RL  | MDL   |
|------------|-----------------------------|--------|----|-----|-------|
| 74-87-3    | Chloromethane               | ND     |    | 1.0 | 0.28  |
| 75-01-4    | Vinyl chloride              | ND     |    | 1.0 | 0.23  |
| 74-83-9    | Bromomethane                | ND     | ^c | 1.0 | 0.31  |
| 75-00-3    | Chloroethane                | ND     |    | 1.0 | 0.21  |
| 75-35-4    | 1,1-Dichloroethene          | ND     |    | 1.0 | 0.30  |
| 67-64-1    | Acetone                     | ND     |    | 5.0 | 2.5   |
| 75-15-0    | Carbon disulfide            | ND     |    | 1.0 | 0.21  |
| 75-09-2    | Methylene Chloride          | ND     |    | 1.0 | 0.13  |
| 156-60-5   | trans-1,2-Dichloroethene    | ND     |    | 1.0 | 0.17  |
| 1634-04-4  | Methyl tert-butyl ether     | ND     |    | 1.0 | 0.18  |
| 75-34-3    | 1,1-Dichloroethane          | ND     |    | 1.0 | 0.12  |
| 156-59-2   | cis-1,2-Dichloroethene      | 0.31   | J  | 1.0 | 0.24  |
| 74-97-5    | Bromochloromethane          | ND     |    | 1.0 | 0.18  |
| 78-93-3    | 2-Butanone (MEK)            | ND     |    | 5.0 | 0.55  |
| 67-66-3    | Chloroform                  | ND     |    | 1.0 | 0.17  |
| 71-55-6    | 1,1,1-Trichloroethane       | ND     |    | 1.0 | 0.29  |
| 56-23-5    | Carbon tetrachloride        | ND     |    | 1.0 | 0.14  |
| 71-43-2    | Benzene                     | ND     |    | 1.0 | 0.11  |
| 107-06-2   | 1,2-Dichloroethane          | ND     |    | 1.0 | 0.21  |
| 79-01-6    | Trichloroethene             | 12     |    | 1.0 | 0.14  |
| 78-87-5    | 1,2-Dichloropropane         | ND     |    | 1.0 | 0.095 |
| 75-27-4    | Bromodichloromethane        | ND     |    | 1.0 | 0.13  |
| 10061-01-5 | cis-1,3-Dichloropropene     | ND     |    | 1.0 | 0.19  |
| 108-10-1   | 4-Methyl-2-pentanone (MIBK) | ND     |    | 5.0 | 0.53  |
| 108-88-3   | Toluene                     | ND     |    | 1.0 | 0.15  |
| 10061-02-6 | trans-1,3-Dichloropropene   | ND     |    | 1.0 | 0.15  |
| 79-00-5    | 1,1,2-Trichloroethane       | ND     |    | 1.0 | 0.20  |
| 127-18-4   | Tetrachloroethene           | 150    | E  | 1.0 | 0.15  |
| 591-78-6   | 2-Hexanone                  | ND     | ^c | 5.0 | 0.16  |
| 124-48-1   | Dibromochloromethane        | ND     |    | 1.0 | 0.14  |
| 106-93-4   | 1,2-Dibromoethane (EDB)     | ND     |    | 1.0 | 0.18  |
| 108-90-7   | Chlorobenzene               | ND     |    | 1.0 | 0.14  |
| 630-20-6   | 1,1,1,2-Tetrachloroethane   | ND     | ^c | 1.0 | 0.28  |
| 100-41-4   | Ethylbenzene                | ND     |    | 1.0 | 0.23  |
| 1330-20-7  | Xylenes, Total              | ND     |    | 3.0 | 0.49  |
| 100-42-5   | Styrene                     | ND     | ^c | 1.0 | 0.097 |

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-MW-92-0/1-0 Lab Sample ID: 180-48309-5  
 Matrix: Water Lab File ID: 61007028.D  
 Analysis Method: 8260C Date Collected: 09/30/2015 08:25  
 Sample wt/vol: 5 (mL) Date Analyzed: 10/07/2015 23:42  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 156189 Units: ug/L

| CAS NO.  | COMPOUND NAME             | RESULT | Q  | RL  | MDL  |
|----------|---------------------------|--------|----|-----|------|
| 75-25-2  | Bromoform                 | ND     | ^c | 1.0 | 0.19 |
| 79-34-5  | 1,1,2,2-Tetrachloroethane | ND     |    | 1.0 | 0.20 |
| 107-13-1 | Acrylonitrile             | ND     | ^c | 20  | 0.55 |
| 123-91-1 | 1,4-Dioxane               | ND     | ^c | 200 | 34   |

| CAS NO.    | SURROGATE                    | %REC | Q | LIMITS |
|------------|------------------------------|------|---|--------|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 104  |   | 64-135 |
| 2037-26-5  | Toluene-d8 (Surr)            | 103  |   | 71-118 |
| 460-00-4   | 4-Bromofluorobenzene (Surr)  | 85   |   | 70-118 |
| 1868-53-7  | Dibromofluoromethane (Surr)  | 111  |   | 70-128 |

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007028.D  
 Lims ID: 180-48309-C-5 Lab Sample ID: 180-48309-5  
 Client ID: HD-MW-92-0/1-0  
 Sample Type: Client  
 Inject. Date: 07-Oct-2015 23:42:30 ALS Bottle#: 28 Worklist Smp#: 28  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-48309-C-5  
 Misc. Info.: 180-0008874-028  
 Operator ID: 001562 Instrument ID: CHHP6  
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\MSVOA\_LL\_CHHP6.m  
 Limit Group: VOA 8260C ICAL  
 Last Update: 08-Oct-2015 09:01:50 Calib Date: 14-Sep-2015 16:03:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150914-8521.b\60914006.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: XAWRK015

First Level Reviewer: fergusond

Date: 08-Oct-2015 09:01:49

| Compound                        | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | OnCol Amt ng | Flags |
|---------------------------------|-----|-----------|---------------|---------------|----|----------|--------------|-------|
| * 1 TBA-d9 (IS)                 | 65  | 4.239     | 4.245         | -0.006        | 86 | 173107   | 1000.0       |       |
| * 2 Fluorobenzene (IS)          | 96  | 7.287     | 7.281         | 0.006         | 98 | 427278   | 50.0         |       |
| * 3 Chlorobenzene-d5            | 119 | 10.395    | 10.396        | -0.001        | 90 | 104084   | 50.0         |       |
| * 4 1,4-Dichlorobenzene-d4      | 152 | 12.750    | 12.750        | 0.000         | 97 | 164814   | 50.0         |       |
| \$ 5 Dibromofluoromethane (Surr | 113 | 6.557     | 6.551         | 0.006         | 93 | 108887   | 55.3         |       |
| \$ 6 1,2-Dichloroethane-d4 (Sur | 65  | 6.928     | 6.928         | 0.000         | 71 | 165822   | 52.2         |       |
| \$ 7 Toluene-d8 (Surr)          | 98  | 8.941     | 8.942         | -0.001        | 94 | 422174   | 51.4         |       |
| \$ 8 4-Bromofluorobenzene (Surr | 95  | 11.588    | 11.588        | 0.000         | 88 | 155222   | 42.6         |       |
| 12 Chloromethane                | 50  | 1.757     | 1.757         | 0.000         | 1  | 2533     | 0.99         | M     |
| 13 Vinyl chloride               | 62  |           | 1.903         |               |    |          | ND           |       |
| 15 Bromomethane                 | 94  |           | 2.232         |               |    |          | ND           |       |
| 16 Chloroethane                 | 64  |           | 2.371         |               |    |          | ND           |       |
| 22 1,1-Dichloroethene           | 96  |           | 3.339         |               |    |          | ND           |       |
| 24 Acetone                      | 43  |           | 3.418         |               |    |          | ND           |       |
| 26 Carbon disulfide             | 76  |           | 3.625         |               |    |          | ND           |       |
| 31 Methylene Chloride           | 84  |           | 4.124         |               |    |          | ND           |       |
| 33 Acrylonitrile                | 53  |           | 4.501         |               |    |          | ND           |       |
| 34 trans-1,2-Dichloroethene     | 96  |           | 4.568         |               |    |          | ND           |       |
| 35 Methyl tert-butyl ether      | 73  |           | 4.574         |               |    |          | ND           |       |
| 37 1,1-Dichloroethane           | 63  |           | 5.188         |               |    |          | ND           |       |
| 43 cis-1,2-Dichloroethene       | 96  | 5.936     | 5.936         | 0.000         | 44 | 4119     | 1.53         | M     |
| 44 2-Butanone (MEK)             | 43  |           | 5.949         |               |    |          | ND           |       |
| 48 Chlorobromomethane           | 128 |           | 6.222         |               |    |          | ND           |       |
| 50 Chloroform                   | 83  | 6.380     | 6.368         | 0.012         | 31 | 3552     | 0.8053       |       |
| 51 1,1,1-Trichloroethane        | 97  |           | 6.539         |               |    |          | ND           |       |
| 53 Carbon tetrachloride         | 117 |           | 6.709         |               |    |          | ND           |       |
| 56 Benzene                      | 78  |           | 6.940         |               |    |          | ND           |       |
| 57 1,2-Dichloroethane           | 62  |           | 7.013         |               |    |          | ND           |       |
| 61 Trichloroethene              | 130 | 7.676     | 7.676         | 0.000         | 96 | 125465   | 60.4         |       |
| 64 1,2-Dichloropropane          | 63  |           | 7.950         |               |    |          | ND           |       |
| 65 1,4-Dioxane                  | 88  |           | 8.029         |               |    |          | ND           |       |

| Compound                       | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | OnCol Amt<br>ng | Flags |
|--------------------------------|-----|--------------|------------------|------------------|----|----------|-----------------|-------|
| 68 Dichlorobromomethane        | 83  |              | 8.230            |                  |    |          | ND              |       |
| 71 cis-1,3-Dichloropropene     | 75  |              | 8.674            |                  |    |          | ND              |       |
| 72 4-Methyl-2-pentanone (MIBK) | 43  |              | 8.826            |                  |    |          | ND              |       |
| 73 Toluene                     | 91  |              | 9.009            |                  |    |          | ND              |       |
| 74 trans-1,3-Dichloropropene   | 75  |              | 9.252            |                  |    |          | ND              |       |
| 76 1,1,2-Trichloroethane       | 97  |              | 9.447            |                  |    |          | ND              |       |
| 77 Tetrachloroethene           | 164 | 9.525        | 9.526            | -0.001           | 93 | 1341632  | 732.4           | E     |
| 79 2-Hexanone                  | 43  |              | 9.659            |                  |    |          | ND              |       |
| 81 Chlorodibromomethane        | 129 |              | 9.824            |                  |    |          | ND              |       |
| 82 Ethylene Dibromide          | 107 |              | 9.939            |                  |    |          | ND              |       |
| 84 Chlorobenzene               | 112 |              | 10.426           |                  |    |          | ND              |       |
| 86 1,1,1,2-Tetrachloroethane   | 131 |              | 10.523           |                  |    |          | ND              |       |
| 87 Ethylbenzene                | 106 |              | 10.523           |                  |    |          | ND              |       |
| 88 m-Xylene & p-Xylene         | 106 |              | 10.657           |                  |    |          | ND              |       |
| 89 o-Xylene                    | 106 |              | 11.040           |                  |    |          | ND              |       |
| 90 Styrene                     | 104 |              | 11.059           |                  |    |          | ND              |       |
| 91 Bromoform                   | 173 |              | 11.241           |                  |    |          | ND              |       |
| 96 1,1,2,2-Tetrachloroethane   | 83  |              | 11.716           |                  |    |          | ND              |       |
| S 131 Xylenes, Total           | 106 |              | 1.000            |                  |    |          | ND              |       |

**QC Flag Legend**

Processing Flags

E - Exceeded Maximum Amount

Review Flags

M - Manually Integrated

**Reagents:**

VOA8260INT\_00042

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR\_00042

Amount Added: 2.00

Units: uL

Run Reagent

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007028.D

Injection Date: 07-Oct-2015 23:42:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: 180-48309-C-5

Lab Sample ID: 180-48309-5

Worklist Smp#: 28

Client ID: HD-MW-92-0/1-0

Purge Vol: 5.000 mL

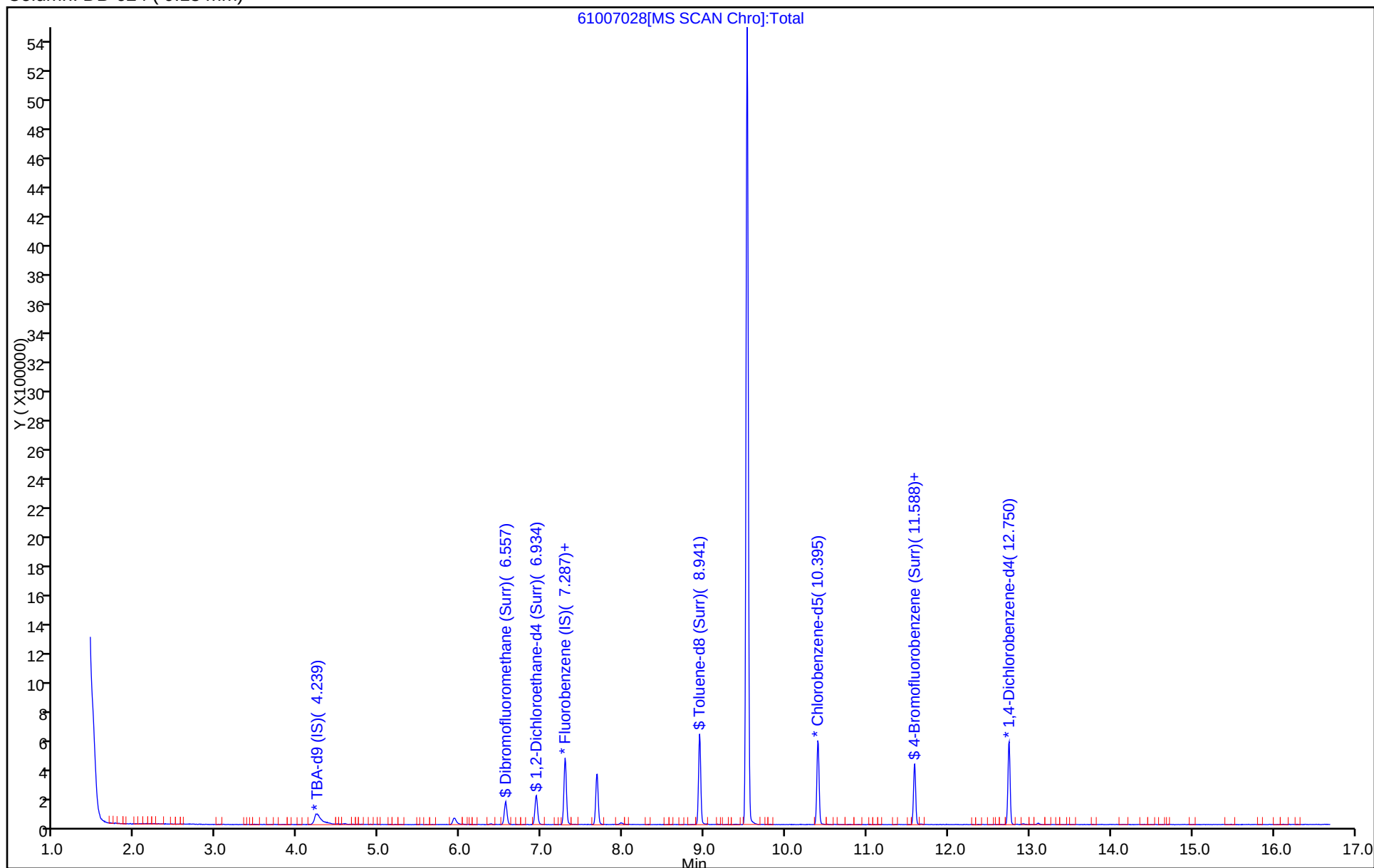
Dil. Factor: 1.0000

ALS Bottle#: 28

Method: MSVOA\_LL\_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 ( 0.18 mm)



## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007028.D

Injection Date: 07-Oct-2015 23:42:30

Instrument ID: CHHP6

Lims ID: 180-48309-C-5

Lab Sample ID: 180-48309-5

Client ID: HD-MW-92-0/1-0

Operator ID: 001562

ALS Bottle#: 28

Worklist Smp#: 28

Purge Vol: 5.000 mL

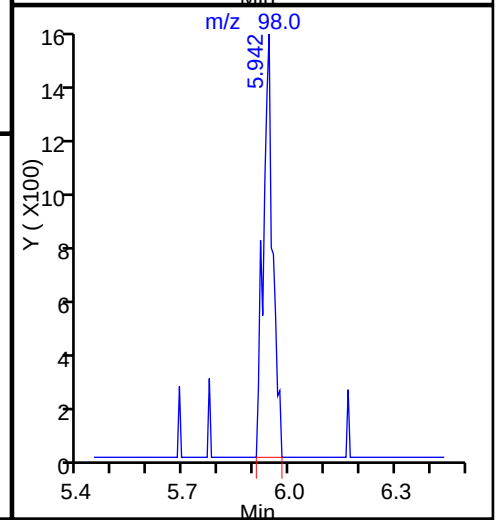
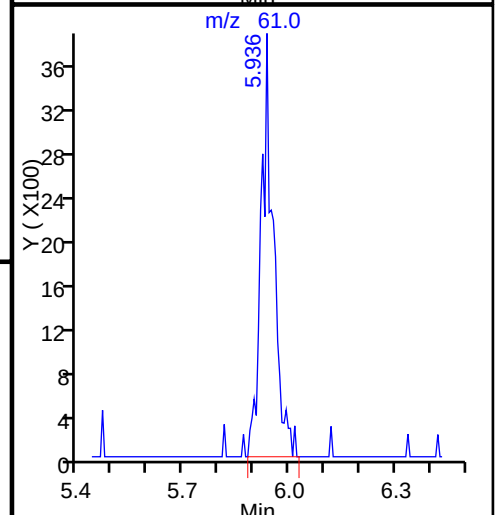
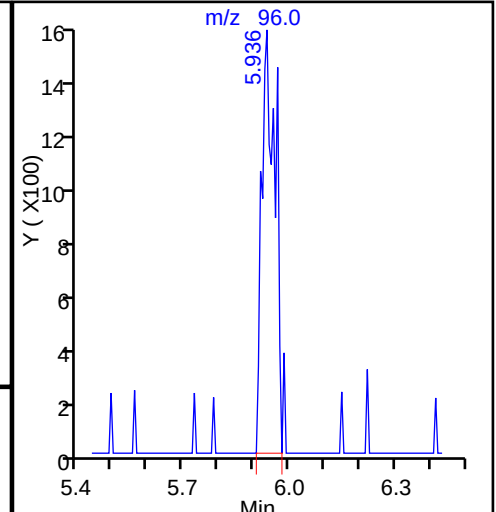
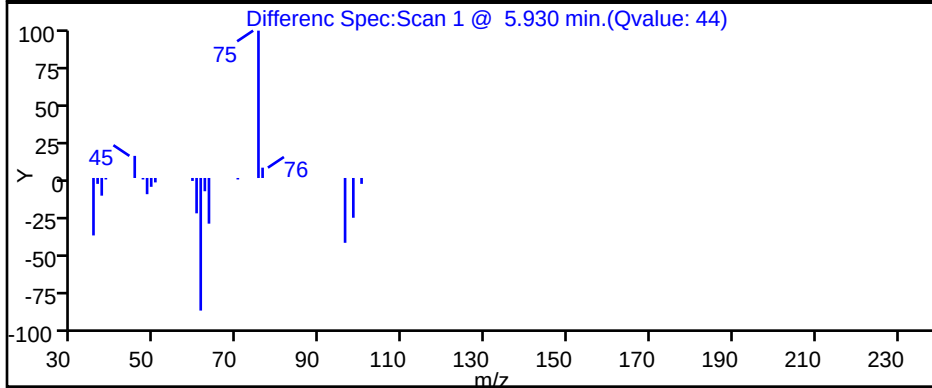
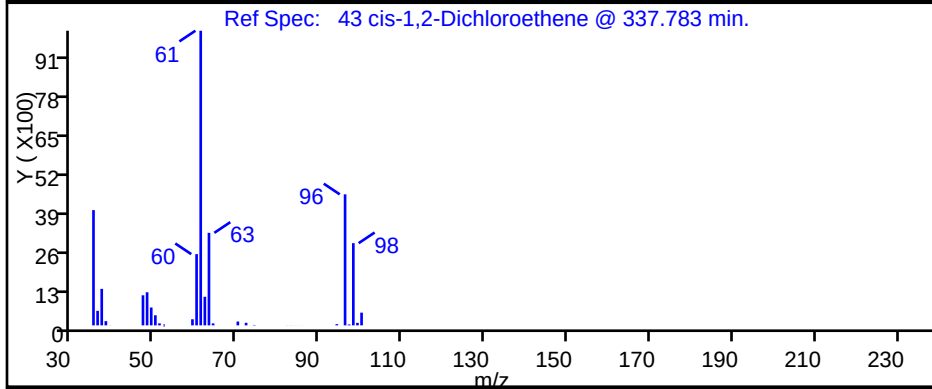
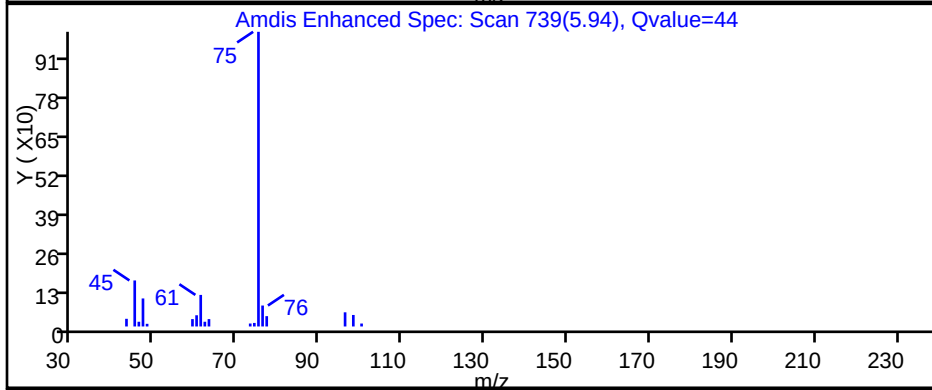
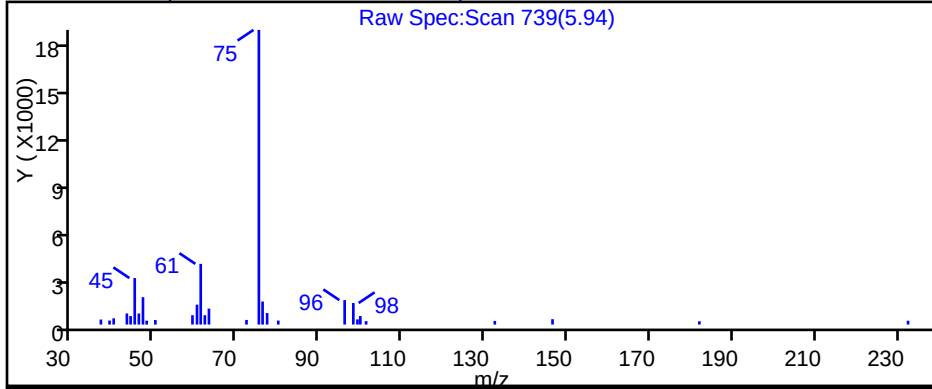
Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

**43 cis-1,2-Dichloroethene, CAS: 156-59-2**



## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007028.D

Injection Date: 07-Oct-2015 23:42:30

Instrument ID: CHHP6

Lims ID: 180-48309-C-5

Lab Sample ID: 180-48309-5

Client ID: HD-MW-92-0/1-0

Operator ID: 001562

ALS Bottle#: 28

Worklist Smp#: 28

Purge Vol: 5.000 mL

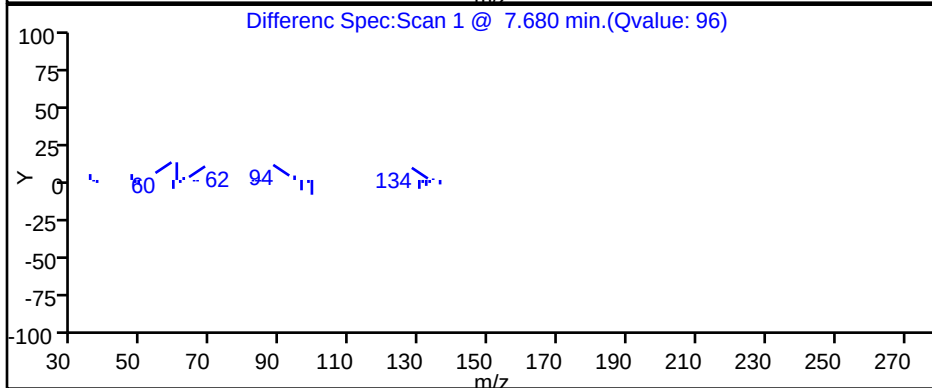
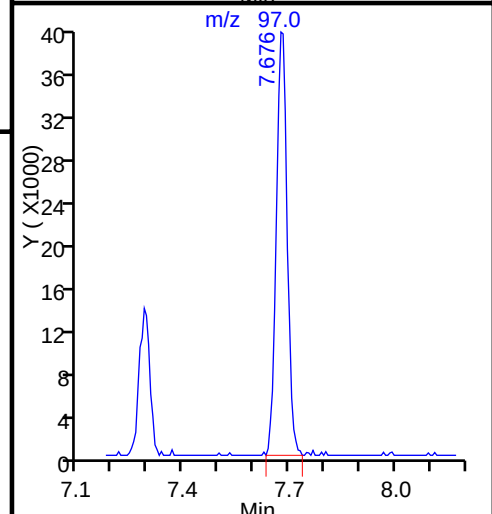
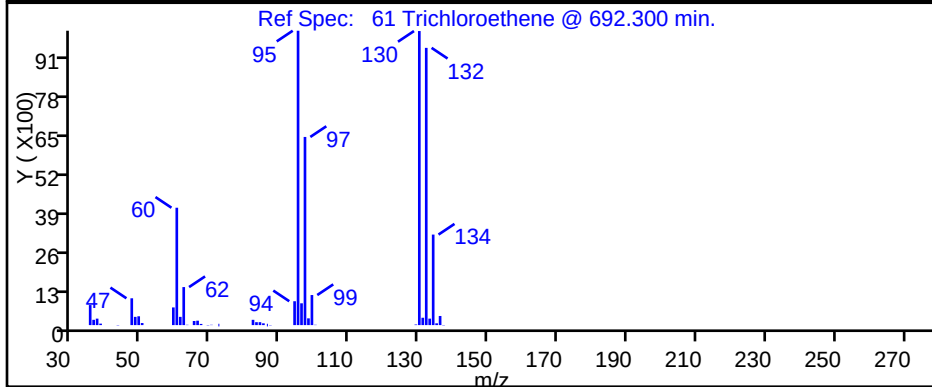
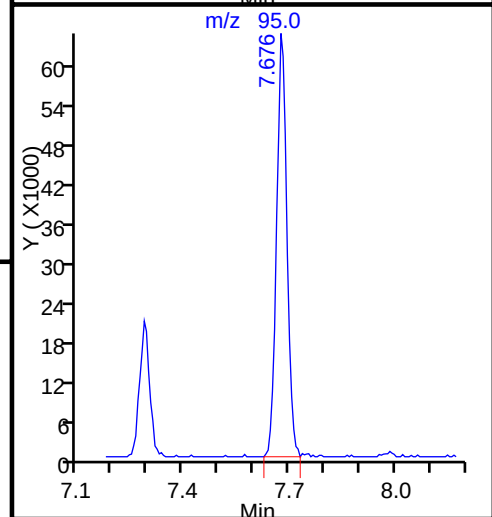
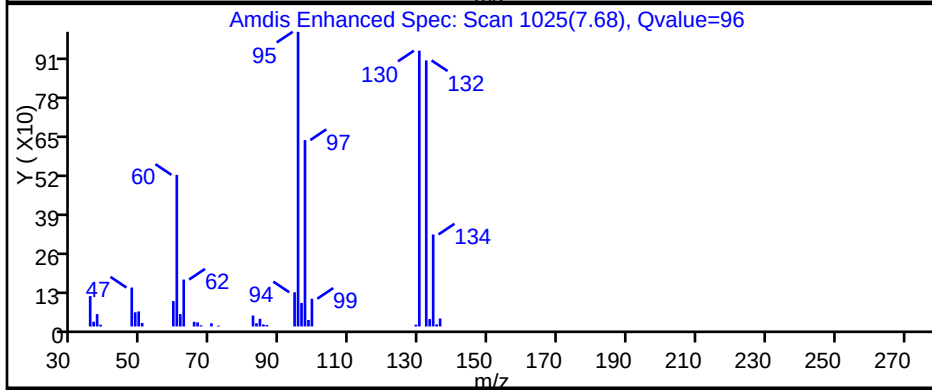
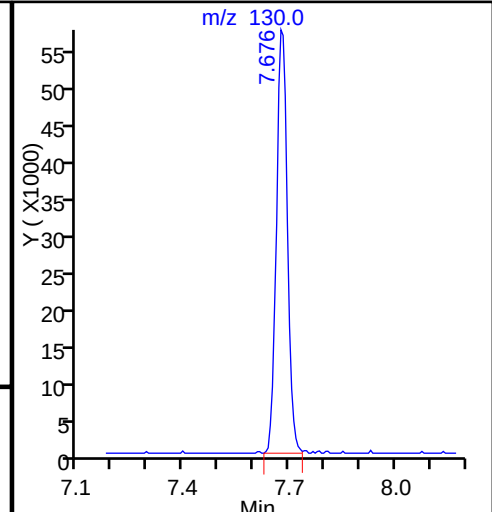
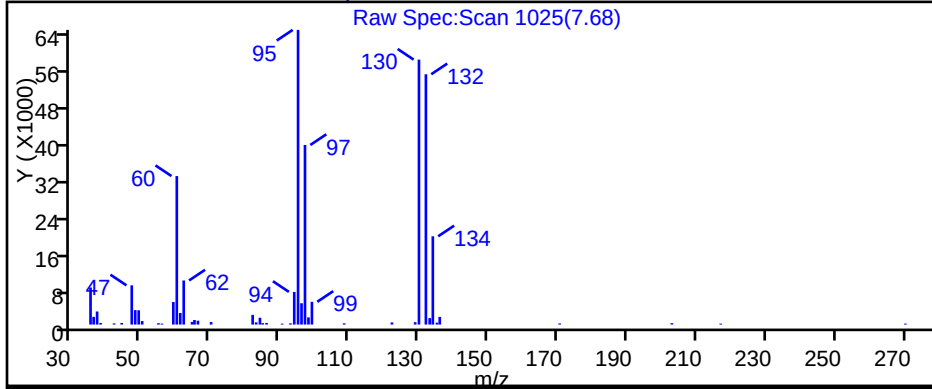
Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

**61 Trichloroethene, CAS: 79-01-6**

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007028.D

Injection Date: 07-Oct-2015 23:42:30

Instrument ID: CHHP6

Lims ID: 180-48309-C-5

Lab Sample ID: 180-48309-5

Client ID: HD-MW-92-0/1-0

Operator ID: 001562

ALS Bottle#: 28

Worklist Smp#: 28

Purge Vol: 5.000 mL

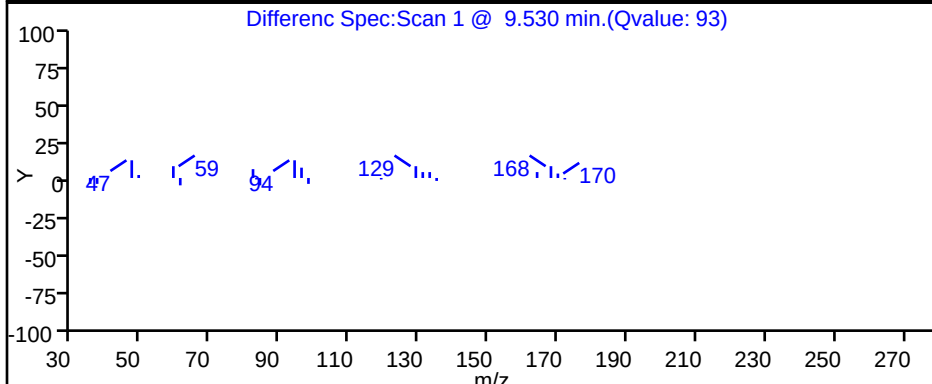
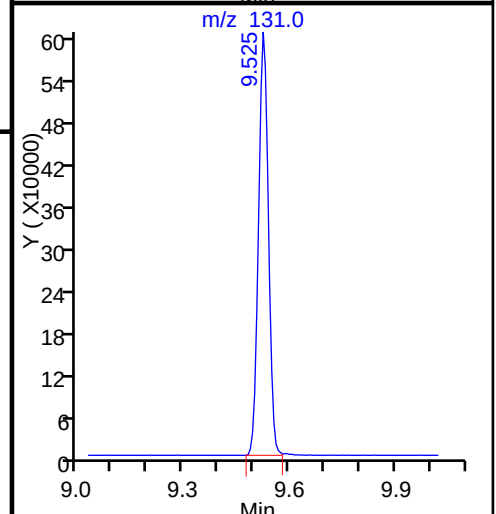
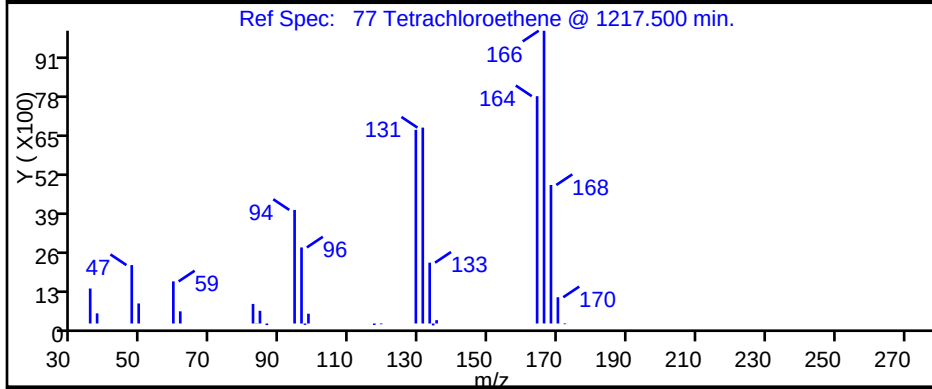
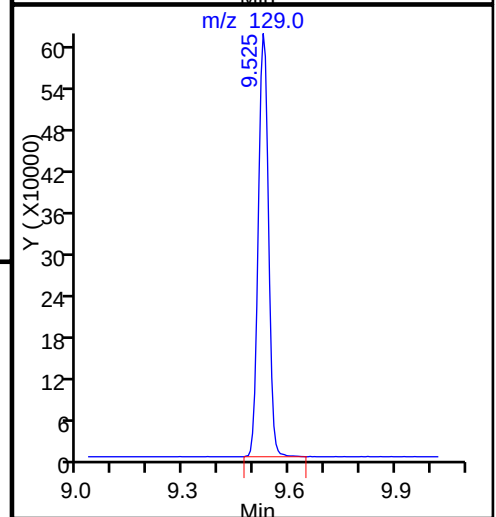
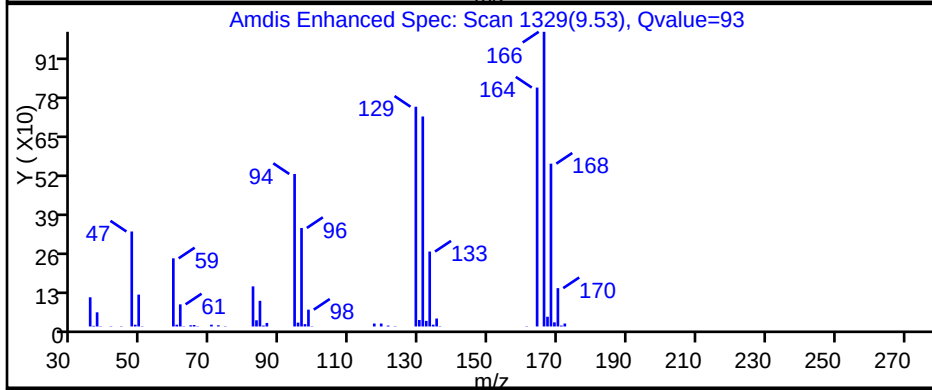
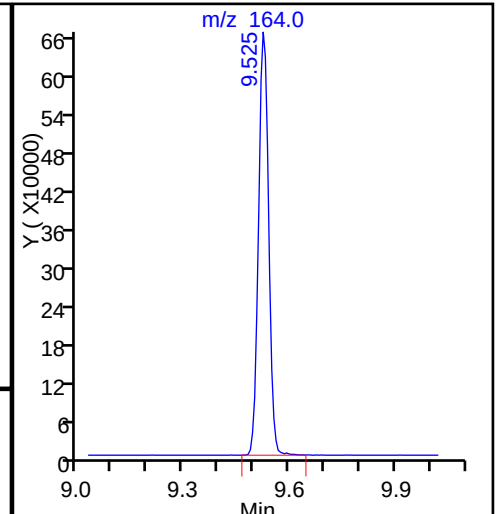
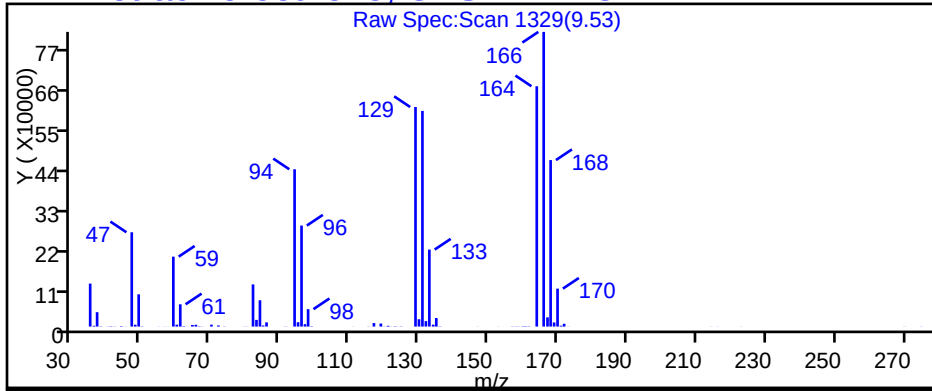
Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

**77 Tetrachloroethene, CAS: 127-18-4**

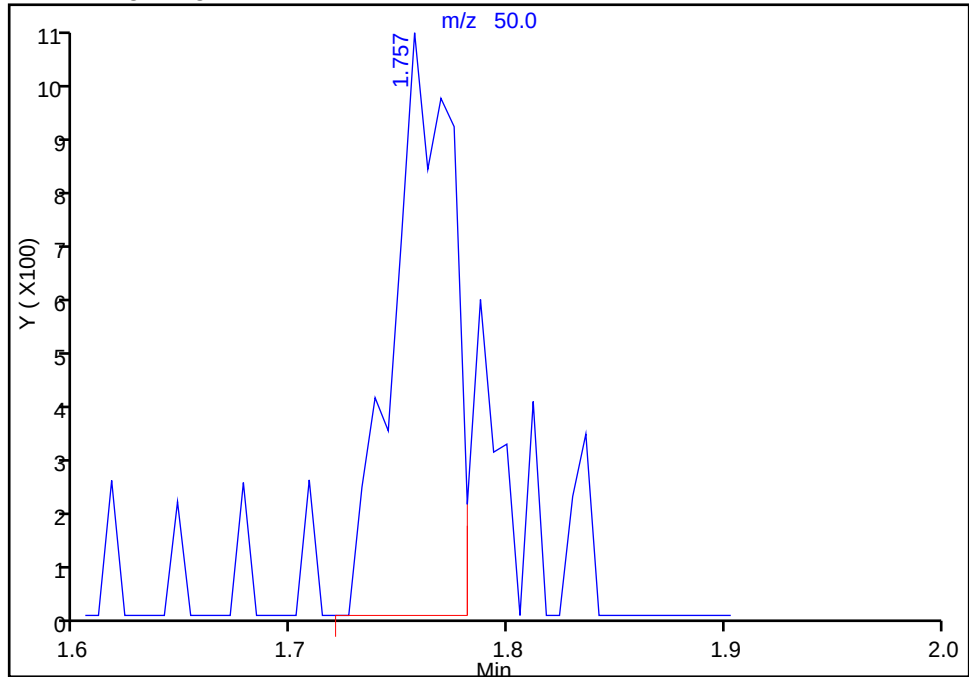
## TestAmerica Pittsburgh

|                 |                                                                 |                |                |
|-----------------|-----------------------------------------------------------------|----------------|----------------|
| Data File:      | \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007028.D |                |                |
| Injection Date: | 07-Oct-2015 23:42:30                                            | Instrument ID: | CHHP6          |
| Lims ID:        | 180-48309-C-5                                                   | Lab Sample ID: | 180-48309-5    |
| Client ID:      | HD-MW-92-0/1-0                                                  |                |                |
| Operator ID:    | 001562                                                          | ALS Bottle#:   | 28             |
| Purge Vol:      | 5.000 mL                                                        | Dil. Factor:   | 1.0000         |
| Method:         | MSVOA_LL_CHHP6                                                  | Limit Group:   | VOA 8260C ICAL |
| Column:         | DB-624 ( 0.18 mm)                                               | Detector:      | MS SCAN        |
|                 |                                                                 | Worklist Smp#: | 28             |

**12 Chloromethane, CAS: 74-87-3**

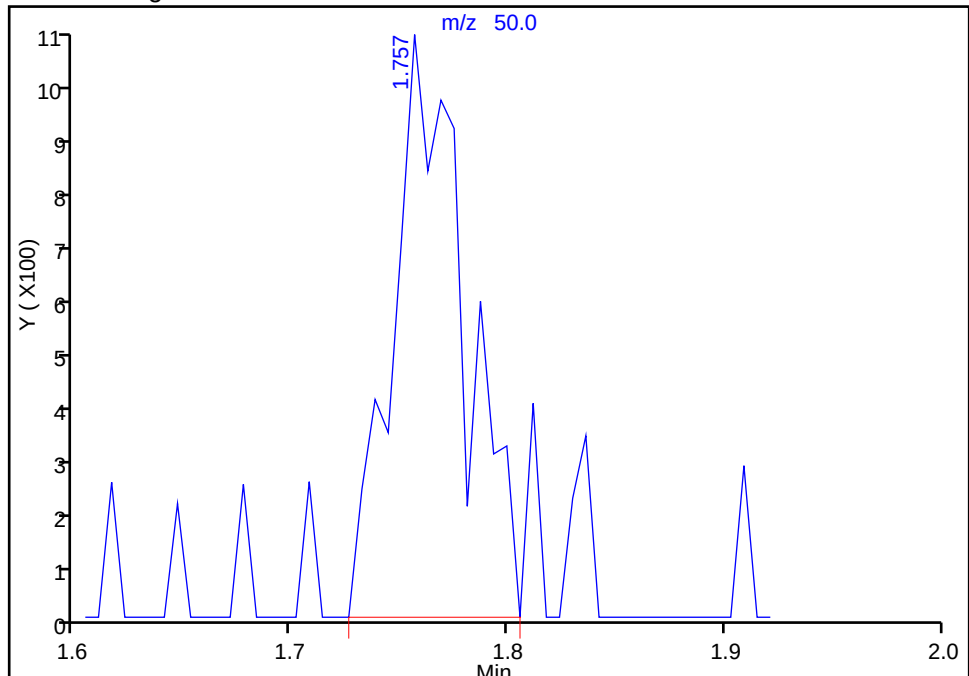
RT: 1.76  
Area: 2088  
Amount: 0.818816  
Amount Units: ng

## Processing Integration Results



RT: 1.76  
Area: 2533  
Amount: 0.993324  
Amount Units: ng

## Manual Integration Results



Reviewer: fergusond, 08-Oct-2015 09:01:49  
Audit Action: Manually Integrated  
Audit Reason: Incomplete Integration

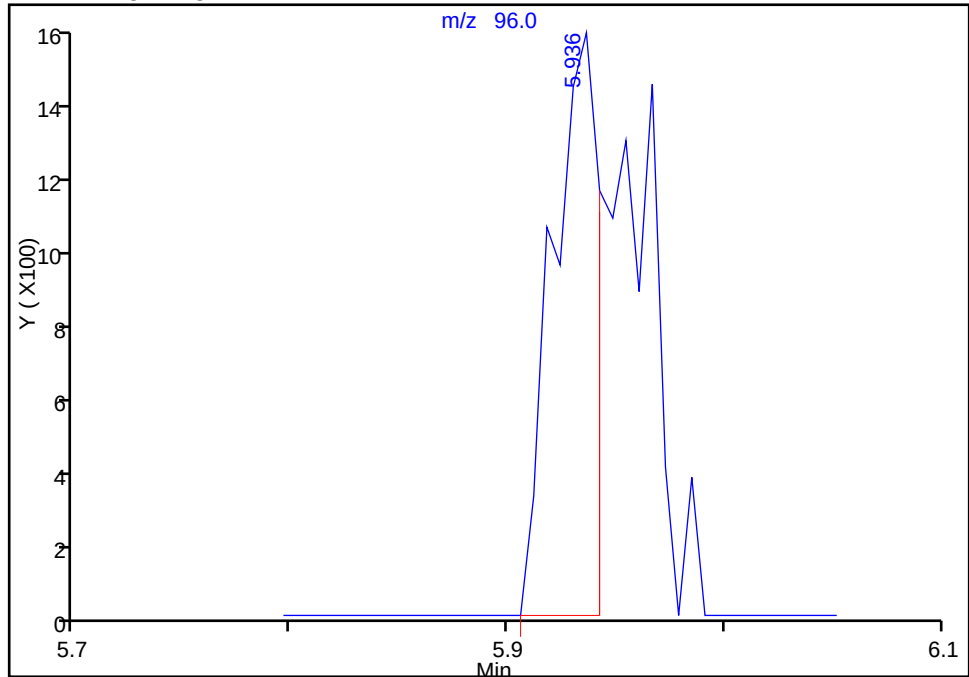
## TestAmerica Pittsburgh

|                 |                                                                 |                |                |
|-----------------|-----------------------------------------------------------------|----------------|----------------|
| Data File:      | \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007028.D |                |                |
| Injection Date: | 07-Oct-2015 23:42:30                                            | Instrument ID: | CHHP6          |
| Lims ID:        | 180-48309-C-5                                                   | Lab Sample ID: | 180-48309-5    |
| Client ID:      | HD-MW-92-0/1-0                                                  |                |                |
| Operator ID:    | 001562                                                          | ALS Bottle#:   | 28             |
| Purge Vol:      | 5.000 mL                                                        | Dil. Factor:   | 1.0000         |
| Method:         | MSVOA_LL_CHHP6                                                  | Limit Group:   | VOA 8260C ICAL |
| Column:         | DB-624 ( 0.18 mm)                                               | Detector:      | MS SCAN        |
|                 |                                                                 | Worklist Smp#: | 28             |

**43 cis-1,2-Dichloroethene, CAS: 156-59-2**

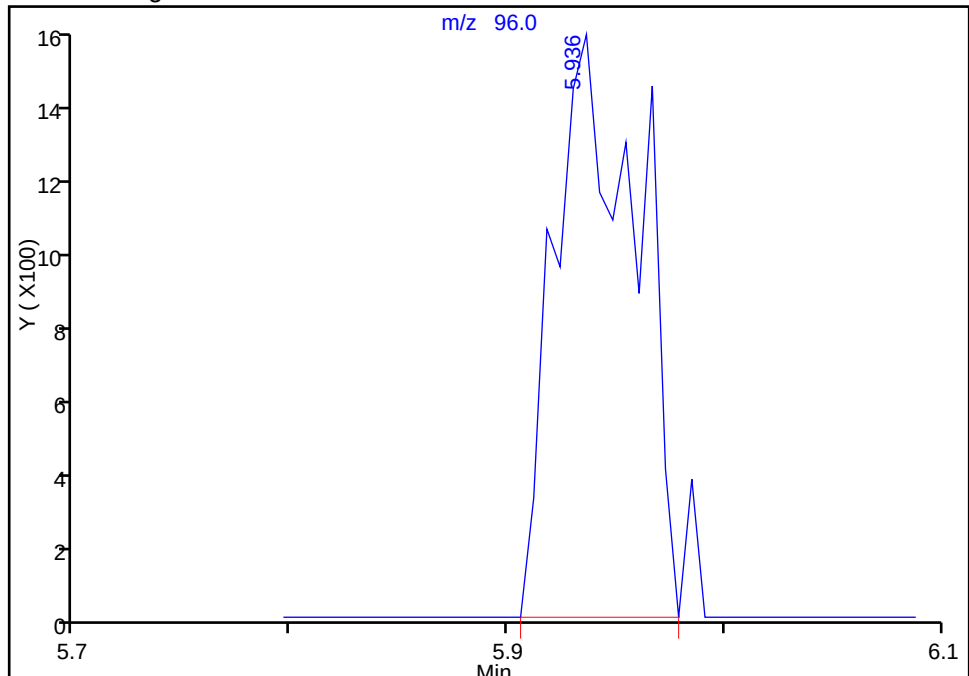
RT: 5.94  
Area: 2310  
Amount: 0.855859  
Amount Units: ng

## Processing Integration Results



RT: 5.94  
Area: 4119  
Amount: 1.526097  
Amount Units: ng

## Manual Integration Results



Reviewer: fergusond, 08-Oct-2015 09:01:49  
Audit Action: Manually Integrated  
Audit Reason: Incomplete Integration

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

|                                            |                                               |
|--------------------------------------------|-----------------------------------------------|
| Lab Name: <u>TestAmerica Pittsburgh</u>    | Job No.: <u>180-48309-1</u>                   |
| SDG No.: _____                             |                                               |
| Client Sample ID: <u>HD-MW-92-0/1-0 DL</u> | Lab Sample ID: <u>180-48309-5 DL</u>          |
| Matrix: <u>Water</u>                       | Lab File ID: <u>51008014.D</u>                |
| Analysis Method: <u>8260C</u>              | Date Collected: <u>09/30/2015 08:25</u>       |
| Sample wt/vol: <u>5 (mL)</u>               | Date Analyzed: <u>10/08/2015 16:48</u>        |
| Soil Aliquot Vol: _____                    | Dilution Factor: <u>10</u>                    |
| Soil Extract Vol.: _____                   | GC Column: <u>DB-624</u> ID: <u>0.18 (mm)</u> |
| % Moisture: _____                          | Level: (low/med) <u>Low</u>                   |
| Analysis Batch No.: <u>156309</u>          | Units: <u>ug/L</u>                            |

| CAS NO.    | COMPOUND NAME               | RESULT | Q  | RL | MDL  |
|------------|-----------------------------|--------|----|----|------|
| 74-87-3    | Chloromethane               | ND     |    | 10 | 2.8  |
| 75-01-4    | Vinyl chloride              | ND     | ^c | 10 | 2.3  |
| 74-83-9    | Bromomethane                | ND     | ^c | 10 | 3.1  |
| 75-00-3    | Chloroethane                | ND     | ^c | 10 | 2.1  |
| 75-35-4    | 1,1-Dichloroethene          | ND     |    | 10 | 3.0  |
| 67-64-1    | Acetone                     | ND     |    | 50 | 25   |
| 75-15-0    | Carbon disulfide            | ND     |    | 10 | 2.1  |
| 75-09-2    | Methylene Chloride          | ND     |    | 10 | 1.3  |
| 156-60-5   | trans-1,2-Dichloroethene    | ND     |    | 10 | 1.7  |
| 1634-04-4  | Methyl tert-butyl ether     | ND     |    | 10 | 1.8  |
| 75-34-3    | 1,1-Dichloroethane          | ND     |    | 10 | 1.2  |
| 156-59-2   | cis-1,2-Dichloroethene      | ND     |    | 10 | 2.4  |
| 74-97-5    | Bromochloromethane          | ND     |    | 10 | 1.8  |
| 78-93-3    | 2-Butanone (MEK)            | ND     |    | 50 | 5.5  |
| 67-66-3    | Chloroform                  | ND     |    | 10 | 1.7  |
| 71-55-6    | 1,1,1-Trichloroethane       | ND     |    | 10 | 2.9  |
| 56-23-5    | Carbon tetrachloride        | ND     |    | 10 | 1.4  |
| 71-43-2    | Benzene                     | ND     |    | 10 | 1.1  |
| 107-06-2   | 1,2-Dichloroethane          | ND     |    | 10 | 2.1  |
| 79-01-6    | Trichloroethene             | 12     |    | 10 | 1.4  |
| 78-87-5    | 1,2-Dichloropropane         | ND     |    | 10 | 0.95 |
| 75-27-4    | Bromodichloromethane        | ND     |    | 10 | 1.3  |
| 10061-01-5 | cis-1,3-Dichloropropene     | ND     |    | 10 | 1.9  |
| 108-10-1   | 4-Methyl-2-pentanone (MIBK) | ND     |    | 50 | 5.3  |
| 108-88-3   | Toluene                     | ND     |    | 10 | 1.5  |
| 10061-02-6 | trans-1,3-Dichloropropene   | ND     |    | 10 | 1.5  |
| 79-00-5    | 1,1,2-Trichloroethane       | ND     |    | 10 | 2.0  |
| 127-18-4   | Tetrachloroethene           | 150    |    | 10 | 1.5  |
| 591-78-6   | 2-Hexanone                  | ND     |    | 50 | 1.6  |
| 124-48-1   | Dibromochloromethane        | ND     |    | 10 | 1.4  |
| 106-93-4   | 1,2-Dibromoethane (EDB)     | ND     |    | 10 | 1.8  |
| 108-90-7   | Chlorobenzene               | ND     |    | 10 | 1.4  |
| 630-20-6   | 1,1,1,2-Tetrachloroethane   | ND     |    | 10 | 2.8  |
| 100-41-4   | Ethylbenzene                | ND     |    | 10 | 2.3  |
| 1330-20-7  | Xylenes, Total              | ND     |    | 30 | 4.9  |
| 100-42-5   | Styrene                     | ND     |    | 10 | 0.97 |

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-MW-92-0/1-0 DL Lab Sample ID: 180-48309-5 DL  
 Matrix: Water Lab File ID: 51008014.D  
 Analysis Method: 8260C Date Collected: 09/30/2015 08:25  
 Sample wt/vol: 5 (mL) Date Analyzed: 10/08/2015 16:48  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 10  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 156309 Units: ug/L

| CAS NO.  | COMPOUND NAME             | RESULT | Q  | RL   | MDL |
|----------|---------------------------|--------|----|------|-----|
| 75-25-2  | Bromoform                 | ND     |    | 10   | 1.9 |
| 79-34-5  | 1,1,2,2-Tetrachloroethane | ND     |    | 10   | 2.0 |
| 107-13-1 | Acrylonitrile             | ND     |    | 200  | 5.5 |
| 123-91-1 | 1,4-Dioxane               | ND     | ^c | 2000 | 340 |

| CAS NO.    | SURROGATE                    | %REC | Q | LIMITS |
|------------|------------------------------|------|---|--------|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 95   |   | 64-135 |
| 2037-26-5  | Toluene-d8 (Surr)            | 89   |   | 71-118 |
| 460-00-4   | 4-Bromofluorobenzene (Surr)  | 88   |   | 70-118 |
| 1868-53-7  | Dibromofluoromethane (Surr)  | 101  |   | 70-128 |

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\51008014.D  
 Lims ID: 180-48309-B-5 Lab Sample ID: 180-48309-5  
 Client ID: HD-MW-92-0/1-0  
 Sample Type: Client  
 Inject. Date: 08-Oct-2015 16:48:30 ALS Bottle#: 13 Worklist Smp#: 14  
 Purge Vol: 5.000 mL Dil. Factor: 10.0000  
 Sample Info: 180-48309-B-5, 10x  
 Misc. Info.: 180-0008892-014  
 Operator ID: 001562 Instrument ID: CHHP5  
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C ICAL  
 Last Update: 09-Oct-2015 08:30:24 Calib Date: 26-Aug-2015 17:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: XAWRK037

First Level Reviewer: fergusond

Date: 09-Oct-2015 08:30:24

| Compound                        | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | OnCol Amt<br>ng | Flags |
|---------------------------------|-----|--------------|------------------|------------------|----|----------|-----------------|-------|
| * 1 TBA-d9 (IS)                 | 65  | 4.271        | 4.269            | 0.002            | 0  | 148224   | 1000.0          |       |
| * 2 Fluorobenzene (IS)          | 96  | 7.295        | 7.286            | 0.009            | 98 | 289635   | 50.0            |       |
| * 3 Chlorobenzene-d5            | 119 | 10.385       | 10.389           | -0.004           | 86 | 77004    | 50.0            |       |
| * 4 1,4-Dichlorobenzene-d4      | 152 | 12.733       | 12.731           | 0.002            | 95 | 114152   | 50.0            |       |
| \$ 5 Dibromofluoromethane (Surr | 113 | 6.565        | 6.562            | 0.003            | 93 | 71953    | 50.6            |       |
| \$ 6 1,2-Dichloroethane-d4 (Sur | 65  | 6.936        | 6.934            | 0.002            | 0  | 92540    | 47.4            |       |
| \$ 7 Toluene-d8 (Surr)          | 98  | 8.937        | 8.935            | 0.002            | 93 | 263475   | 44.4            |       |
| \$ 8 4-Bromofluorobenzene (Surr | 95  | 11.571       | 11.569           | 0.002            | 92 | 98953    | 44.2            |       |
| 12 Chloromethane                | 50  |              | 1.769            |                  |    |          | ND              |       |
| 13 Vinyl chloride               | 62  |              | 1.909            |                  |    |          | ND              |       |
| 15 Bromomethane                 | 94  |              | 2.255            |                  |    |          | ND              |       |
| 16 Chloroethane                 | 64  |              | 2.395            |                  |    |          | ND              |       |
| 22 1,1-Dichloroethene           | 96  |              | 3.338            |                  |    |          | ND              |       |
| 24 Acetone                      | 43  |              | 3.448            |                  |    |          | ND              |       |
| 26 Carbon disulfide             | 76  |              | 3.630            |                  |    |          | ND              |       |
| 31 Methylene Chloride           | 84  |              | 4.135            |                  |    |          | ND              |       |
| 33 Acrylonitrile                | 53  |              | 4.525            |                  |    |          | ND              |       |
| 34 trans-1,2-Dichloroethene     | 96  |              | 4.561            |                  |    |          | ND              |       |
| 35 Methyl tert-butyl ether      | 73  |              | 4.573            |                  |    |          | ND              |       |
| 37 1,1-Dichloroethane           | 63  |              | 5.200            |                  |    |          | ND              |       |
| 45 cis-1,2-Dichloroethene       | 96  |              | 5.954            |                  |    |          | ND              |       |
| 46 2-Butanone (MEK)             | 43  |              | 5.960            |                  |    |          | ND              |       |
| 49 Chlorobromomethane           | 128 |              | 6.234            |                  |    |          | ND              |       |
| 52 Chloroform                   | 83  |              | 6.380            |                  |    |          | ND              |       |
| 53 1,1,1-Trichloroethane        | 97  |              | 6.538            |                  |    |          | ND              |       |
| 56 Carbon tetrachloride         | 117 |              | 6.715            |                  |    |          | ND              |       |
| 58 Benzene                      | 78  |              | 6.946            |                  |    |          | ND              |       |
| 59 1,2-Dichloroethane           | 62  |              | 7.025            |                  |    |          | ND              |       |
| 64 Trichloroethene              | 130 | 7.684        | 7.676            | 0.008            | 93 | 10773    | 6.17            |       |
| 67 1,2-Dichloropropane          | 63  |              | 7.949            |                  |    |          | ND              |       |
| 70 1,4-Dioxane                  | 88  |              | 8.029            |                  |    |          | ND              |       |

| Compound                       | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | OnCol Amt<br>ng | Flags |
|--------------------------------|-----|--------------|------------------|------------------|----|----------|-----------------|-------|
| 71 Dichlorobromomethane        | 83  |              | 8.235            |                  |    |          | ND              |       |
| 74 cis-1,3-Dichloropropene     | 75  |              | 8.673            |                  |    |          | ND              |       |
| 75 4-Methyl-2-pentanone (MIBK) | 43  |              | 8.826            |                  |    |          | ND              |       |
| 76 Toluene                     | 91  |              | 9.002            |                  |    |          | ND              |       |
| 77 trans-1,3-Dichloropropene   | 75  |              | 9.251            |                  |    |          | ND              |       |
| 79 1,1,2-Trichloroethane       | 97  |              | 9.446            |                  |    |          | ND              |       |
| 80 Tetrachloroethene           | 164 | 9.515        | 9.519            | -0.004           | 97 | 114079   | 77.1            |       |
| 82 2-Hexanone                  | 43  |              | 9.659            |                  |    |          | ND              |       |
| 84 Chlorodibromomethane        | 129 |              | 9.811            |                  |    |          | ND              |       |
| 85 Ethylene Dibromide          | 107 |              | 9.927            |                  |    |          | ND              |       |
| 87 Chlorobenzene               | 112 |              | 10.413           |                  |    |          | ND              |       |
| 89 1,1,1,2-Tetrachloroethane   | 131 |              | 10.511           |                  |    |          | ND              |       |
| 90 Ethylbenzene                | 106 |              | 10.517           |                  |    |          | ND              |       |
| 91 m-Xylene & p-Xylene         | 106 |              | 10.644           |                  |    |          | ND              |       |
| 92 o-Xylene                    | 106 |              | 11.028           |                  |    |          | ND              |       |
| 93 Styrene                     | 104 |              | 11.046           |                  |    |          | ND              |       |
| 94 Bromoform                   | 173 |              | 11.235           |                  |    |          | ND              |       |
| 99 1,1,2,2-Tetrachloroethane   | 83  |              | 11.709           |                  |    |          | ND              |       |
| S 133 Xylenes, Total           | 106 |              | 1.000            |                  |    |          | ND              |       |

**Reagents:**

VOA8260INT\_00042

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR\_00042

Amount Added: 2.00

Units: uL

Run Reagent



## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\51008014.D

Injection Date: 08-Oct-2015 16:48:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: 180-48309-B-5

Lab Sample ID: 180-48309-5

Worklist Smp#: 14

Client ID: HD-MW-92-0/1-0

Purge Vol: 5.000 mL

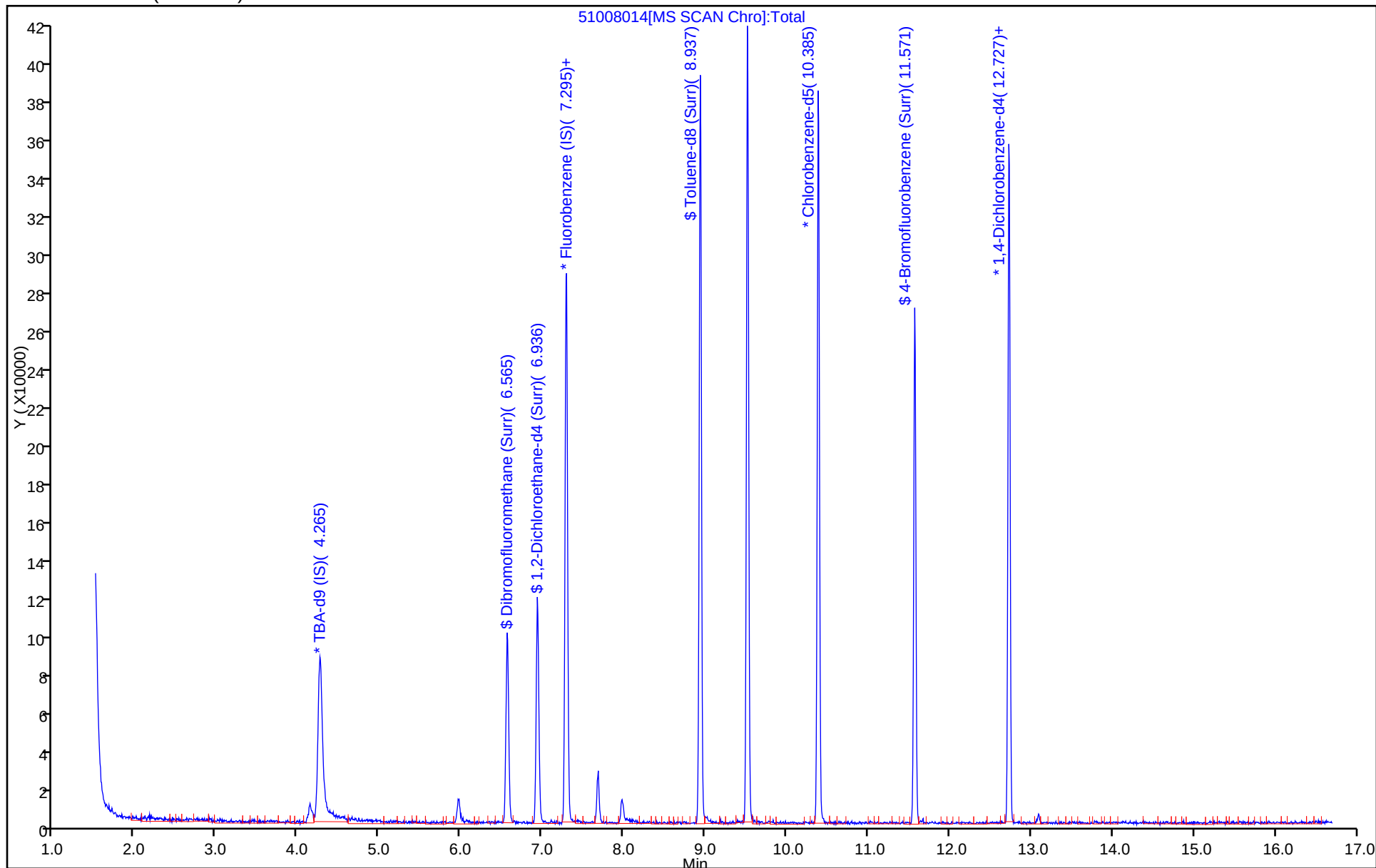
Dil. Factor: 10.0000

ALS Bottle#: 13

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\51008014.D

Injection Date: 08-Oct-2015 16:48:30

Instrument ID: CHHP5

Lims ID: 180-48309-B-5

Lab Sample ID: 180-48309-5

Client ID: HD-MW-92-0/1-0

Operator ID: 001562

ALS Bottle#: 13

Worklist Smp#: 14

Purge Vol: 5.000 mL

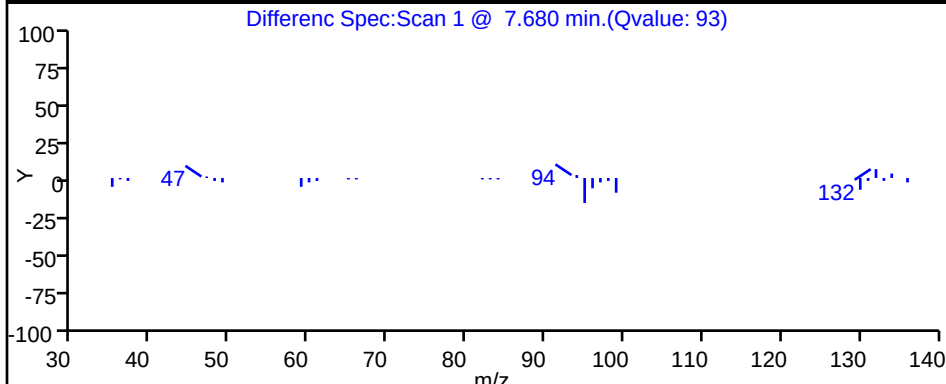
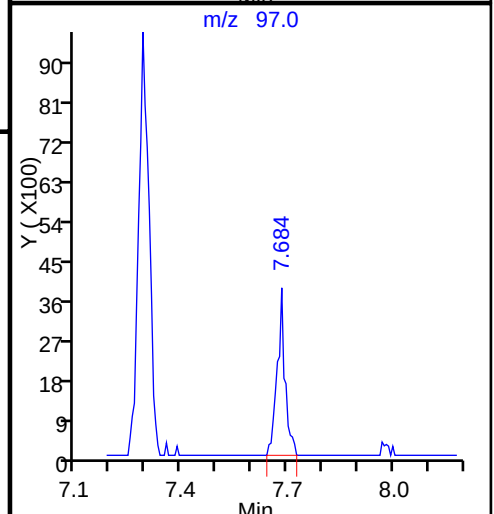
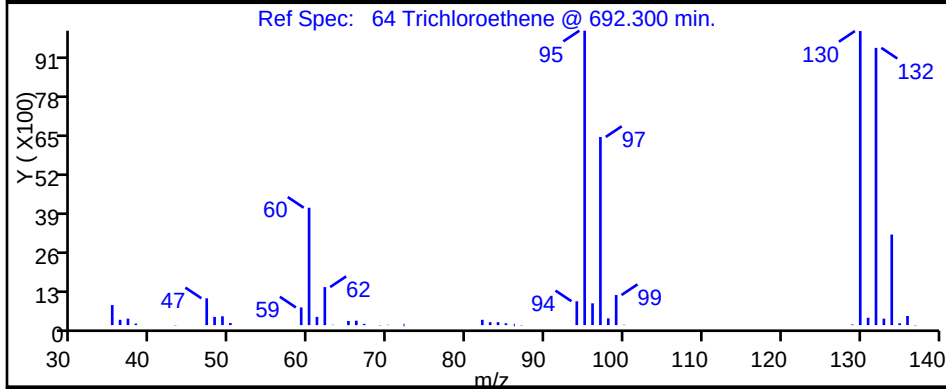
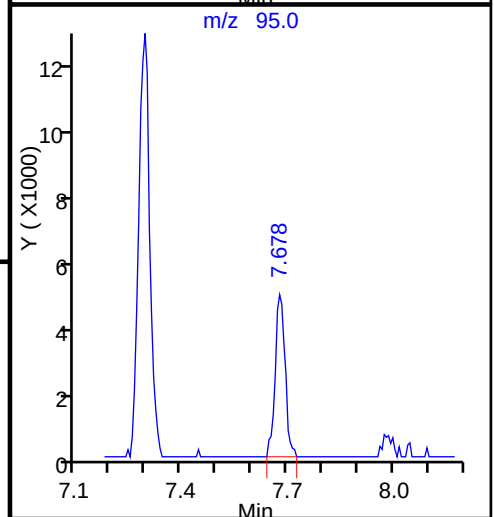
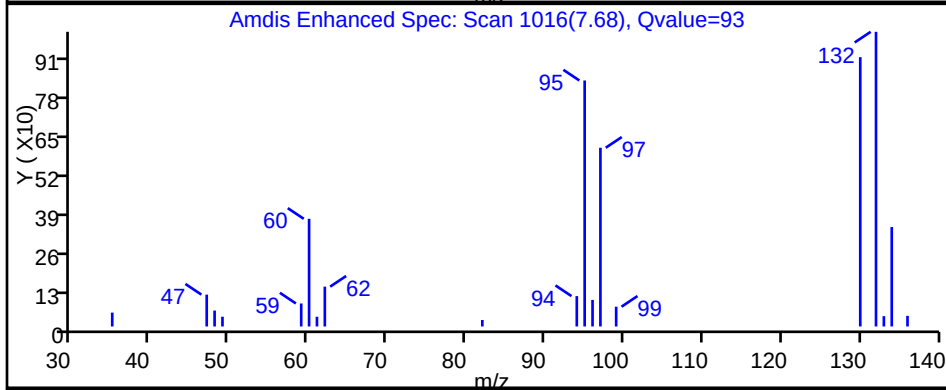
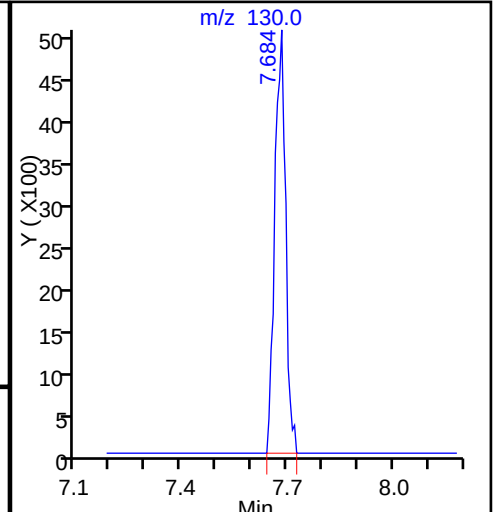
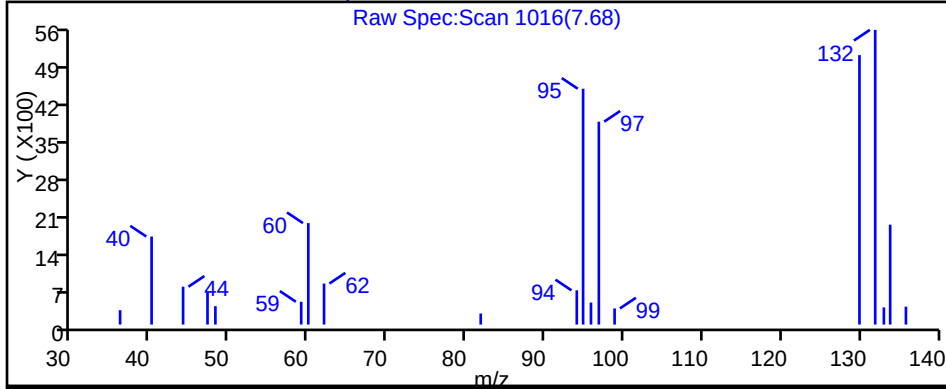
Dil. Factor: 10.0000

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

**64 Trichloroethene, CAS: 79-01-6**

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\51008014.D

Injection Date: 08-Oct-2015 16:48:30

Instrument ID: CHHP5

Lims ID: 180-48309-B-5

Lab Sample ID: 180-48309-5

Client ID: HD-MW-92-0/1-0

Operator ID: 001562

ALS Bottle#: 13

Worklist Smp#: 14

Purge Vol: 5.000 mL

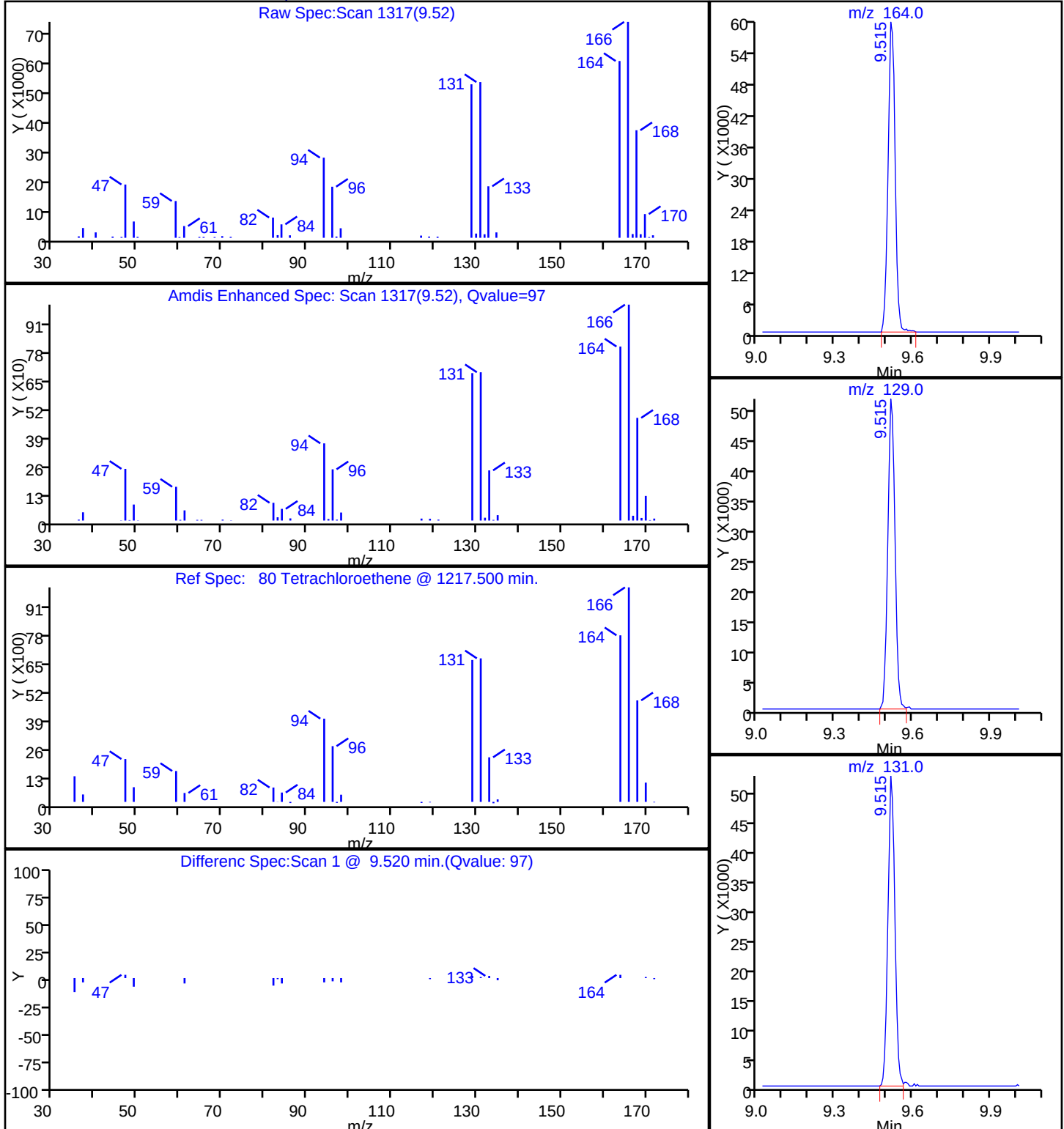
Dil. Factor: 10.0000

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

**80 Tetrachloroethene, CAS: 127-18-4**

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

|                                          |                                               |
|------------------------------------------|-----------------------------------------------|
| Lab Name: <u>TestAmerica Pittsburgh</u>  | Job No.: <u>180-48309-1</u>                   |
| SDG No.: _____                           |                                               |
| Client Sample ID: <u>HD-MW-64D-0/1-0</u> | Lab Sample ID: <u>180-48309-6</u>             |
| Matrix: <u>Water</u>                     | Lab File ID: <u>51008029.D</u>                |
| Analysis Method: <u>8260C</u>            | Date Collected: <u>09/30/2015 12:40</u>       |
| Sample wt/vol: <u>5 (mL)</u>             | Date Analyzed: <u>10/08/2015 22:50</u>        |
| Soil Aliquot Vol: _____                  | Dilution Factor: <u>2.5</u>                   |
| Soil Extract Vol.: _____                 | GC Column: <u>DB-624</u> ID: <u>0.18 (mm)</u> |
| % Moisture: _____                        | Level: (low/med) <u>Low</u>                   |
| Analysis Batch No.: <u>156309</u>        | Units: <u>ug/L</u>                            |

| CAS NO.    | COMPOUND NAME               | RESULT | Q  | RL  | MDL  |
|------------|-----------------------------|--------|----|-----|------|
| 74-87-3    | Chloromethane               | ND     |    | 2.5 | 0.71 |
| 75-01-4    | Vinyl chloride              | ND     | ^c | 2.5 | 0.57 |
| 74-83-9    | Bromomethane                | ND     | ^c | 2.5 | 0.78 |
| 75-00-3    | Chloroethane                | ND     | ^c | 2.5 | 0.54 |
| 75-35-4    | 1,1-Dichloroethene          | ND     |    | 2.5 | 0.74 |
| 67-64-1    | Acetone                     | ND     |    | 13  | 6.3  |
| 75-15-0    | Carbon disulfide            | ND     |    | 2.5 | 0.53 |
| 75-09-2    | Methylene Chloride          | ND     |    | 2.5 | 0.31 |
| 156-60-5   | trans-1,2-Dichloroethene    | ND     |    | 2.5 | 0.42 |
| 1634-04-4  | Methyl tert-butyl ether     | ND     |    | 2.5 | 0.46 |
| 75-34-3    | 1,1-Dichloroethane          | ND     |    | 2.5 | 0.29 |
| 156-59-2   | cis-1,2-Dichloroethene      | ND     |    | 2.5 | 0.59 |
| 74-97-5    | Bromochloromethane          | ND     |    | 2.5 | 0.45 |
| 78-93-3    | 2-Butanone (MEK)            | ND     |    | 13  | 1.4  |
| 67-66-3    | Chloroform                  | ND     |    | 2.5 | 0.43 |
| 71-55-6    | 1,1,1-Trichloroethane       | ND     |    | 2.5 | 0.72 |
| 56-23-5    | Carbon tetrachloride        | ND     |    | 2.5 | 0.34 |
| 71-43-2    | Benzene                     | ND     |    | 2.5 | 0.26 |
| 107-06-2   | 1,2-Dichloroethane          | ND     |    | 2.5 | 0.53 |
| 79-01-6    | Trichloroethene             | 240    | E  | 2.5 | 0.36 |
| 78-87-5    | 1,2-Dichloropropane         | ND     |    | 2.5 | 0.24 |
| 75-27-4    | Bromodichloromethane        | ND     |    | 2.5 | 0.33 |
| 10061-01-5 | cis-1,3-Dichloropropene     | ND     |    | 2.5 | 0.47 |
| 108-10-1   | 4-Methyl-2-pentanone (MIBK) | ND     |    | 13  | 1.3  |
| 108-88-3   | Toluene                     | ND     |    | 2.5 | 0.38 |
| 10061-02-6 | trans-1,3-Dichloropropene   | ND     |    | 2.5 | 0.37 |
| 79-00-5    | 1,1,2-Trichloroethane       | ND     |    | 2.5 | 0.50 |
| 127-18-4   | Tetrachloroethene           | 420    | E  | 2.5 | 0.37 |
| 591-78-6   | 2-Hexanone                  | ND     |    | 13  | 0.40 |
| 124-48-1   | Dibromochloromethane        | ND     |    | 2.5 | 0.34 |
| 106-93-4   | 1,2-Dibromoethane (EDB)     | ND     |    | 2.5 | 0.45 |
| 108-90-7   | Chlorobenzene               | ND     |    | 2.5 | 0.34 |
| 630-20-6   | 1,1,1,2-Tetrachloroethane   | ND     |    | 2.5 | 0.69 |
| 100-41-4   | Ethylbenzene                | ND     |    | 2.5 | 0.57 |
| 1330-20-7  | Xylenes, Total              | ND     |    | 7.5 | 1.2  |
| 100-42-5   | Styrene                     | ND     |    | 2.5 | 0.24 |

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-MW-64D-0/1-0 Lab Sample ID: 180-48309-6  
 Matrix: Water Lab File ID: 51008029.D  
 Analysis Method: 8260C Date Collected: 09/30/2015 12:40  
 Sample wt/vol: 5 (mL) Date Analyzed: 10/08/2015 22:50  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 2.5  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 156309 Units: ug/L

| CAS NO.  | COMPOUND NAME             | RESULT | Q  | RL  | MDL  |
|----------|---------------------------|--------|----|-----|------|
| 75-25-2  | Bromoform                 | ND     |    | 2.5 | 0.48 |
| 79-34-5  | 1,1,2,2-Tetrachloroethane | ND     |    | 2.5 | 0.50 |
| 107-13-1 | Acrylonitrile             | ND     |    | 50  | 1.4  |
| 123-91-1 | 1,4-Dioxane               | ND     | ^c | 500 | 86   |

| CAS NO.    | SURROGATE                    | %REC | Q | LIMITS |
|------------|------------------------------|------|---|--------|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 100  |   | 64-135 |
| 2037-26-5  | Toluene-d8 (Surr)            | 87   |   | 71-118 |
| 460-00-4   | 4-Bromofluorobenzene (Surr)  | 86   |   | 70-118 |
| 1868-53-7  | Dibromofluoromethane (Surr)  | 112  |   | 70-128 |

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\51008029.D  
 Lims ID: 180-48309-B-6 Lab Sample ID: 180-48309-6  
 Client ID: HD-MW-64D-0/1-0  
 Sample Type: Client  
 Inject. Date: 08-Oct-2015 22:50:30 ALS Bottle#: 28 Worklist Smp#: 29  
 Purge Vol: 5.000 mL Dil. Factor: 2.5000  
 Sample Info: 180-48309-B-6, 2.5x  
 Misc. Info.: 180-0008892-029  
 Operator ID: 001562 Instrument ID: CHHP5  
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C ICAL  
 Last Update: 09-Oct-2015 08:53:58 Calib Date: 26-Aug-2015 17:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: XAWRK037

First Level Reviewer: fergusond

Date: 09-Oct-2015 08:53:58

| Compound                        | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | OnCol Amt<br>ng | Flags |
|---------------------------------|-----|--------------|------------------|------------------|----|----------|-----------------|-------|
| * 1 TBA-d9 (IS)                 | 65  | 4.259        | 4.269            | -0.010           | 0  | 137187   | 1000.0          |       |
| * 2 Fluorobenzene (IS)          | 96  | 7.289        | 7.286            | 0.003            | 98 | 256752   | 50.0            |       |
| * 3 Chlorobenzene-d5            | 119 | 10.385       | 10.389           | -0.004           | 87 | 73999    | 50.0            |       |
| * 4 1,4-Dichlorobenzene-d4      | 152 | 12.733       | 12.731           | 0.002            | 95 | 104311   | 50.0            |       |
| \$ 5 Dibromofluoromethane (Surr | 113 | 6.571        | 6.562            | 0.009            | 92 | 70729    | 56.1            |       |
| \$ 6 1,2-Dichloroethane-d4 (Sur | 65  | 6.936        | 6.934            | 0.002            | 0  | 86587    | 50.0            |       |
| \$ 7 Toluene-d8 (Surr)          | 98  | 8.937        | 8.935            | 0.002            | 94 | 247131   | 43.3            |       |
| \$ 8 4-Bromofluorobenzene (Surr | 95  | 11.571       | 11.569           | 0.002            | 91 | 92283    | 42.9            |       |
| 12 Chloromethane                | 50  |              | 1.769            |                  |    |          | ND              |       |
| 13 Vinyl chloride               | 62  |              | 1.909            |                  |    |          | ND              |       |
| 15 Bromomethane                 | 94  |              | 2.255            |                  |    |          | ND              |       |
| 16 Chloroethane                 | 64  |              | 2.395            |                  |    |          | ND              |       |
| 22 1,1-Dichloroethene           | 96  |              | 3.338            |                  |    |          | ND              |       |
| 24 Acetone                      | 43  |              | 3.448            |                  |    |          | ND              |       |
| 26 Carbon disulfide             | 76  |              | 3.630            |                  |    |          | ND              |       |
| 31 Methylene Chloride           | 84  |              | 4.135            |                  |    |          | ND              |       |
| 33 Acrylonitrile                | 53  |              | 4.525            |                  |    |          | ND              |       |
| 34 trans-1,2-Dichloroethene     | 96  |              | 4.561            |                  |    |          | ND              |       |
| 35 Methyl tert-butyl ether      | 73  |              | 4.573            |                  |    |          | ND              |       |
| 37 1,1-Dichloroethane           | 63  |              | 5.200            |                  |    |          | ND              |       |
| 45 cis-1,2-Dichloroethene       | 96  |              | 5.954            |                  |    |          | ND              |       |
| 46 2-Butanone (MEK)             | 43  |              | 5.960            |                  |    |          | ND              |       |
| 49 Chlorobromomethane           | 128 |              | 6.234            |                  |    |          | ND              |       |
| 52 Chloroform                   | 83  | 6.388        | 6.380            | 0.008            | 22 | 1461     | 0.5529          |       |
| 53 1,1,1-Trichloroethane        | 97  |              | 6.538            |                  |    |          | ND              |       |
| 56 Carbon tetrachloride         | 117 |              | 6.715            |                  |    |          | ND              |       |
| 58 Benzene                      | 78  |              | 6.946            |                  |    |          | ND              |       |
| 59 1,2-Dichloroethane           | 62  |              | 7.025            |                  |    |          | ND              |       |
| 64 Trichloroethene              | 130 | 7.678        | 7.676            | 0.002            | 95 | 733182   | 473.4           | E     |
| 67 1,2-Dichloropropane          | 63  |              | 7.949            |                  |    |          | ND              |       |
| 70 1,4-Dioxane                  | 88  |              | 8.029            |                  |    |          | ND              |       |

| Compound                       | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | OnCol Amt<br>ng | Flags |
|--------------------------------|-----|--------------|------------------|------------------|----|----------|-----------------|-------|
| 71 Dichlorobromomethane        | 83  |              | 8.235            |                  |    |          | ND              |       |
| 74 cis-1,3-Dichloropropene     | 75  |              | 8.673            |                  |    |          | ND              |       |
| 75 4-Methyl-2-pentanone (MIBK) | 43  |              | 8.826            |                  |    |          | ND              |       |
| 76 Toluene                     | 91  |              | 9.002            |                  |    |          | ND              |       |
| 77 trans-1,3-Dichloropropene   | 75  |              | 9.251            |                  |    |          | ND              |       |
| 79 1,1,2-Trichloroethane       | 97  |              | 9.446            |                  |    |          | ND              |       |
| 80 Tetrachloroethene           | 164 | 9.515        | 9.519            | -0.004           | 97 | 1190740  | 837.3           | E     |
| 82 2-Hexanone                  | 43  |              | 9.659            |                  |    |          | ND              |       |
| 84 Chlorodibromomethane        | 129 |              | 9.811            |                  |    |          | ND              |       |
| 85 Ethylene Dibromide          | 107 |              | 9.927            |                  |    |          | ND              |       |
| 87 Chlorobenzene               | 112 |              | 10.413           |                  |    |          | ND              |       |
| 89 1,1,1,2-Tetrachloroethane   | 131 |              | 10.511           |                  |    |          | ND              |       |
| 90 Ethylbenzene                | 106 |              | 10.517           |                  |    |          | ND              |       |
| 91 m-Xylene & p-Xylene         | 106 |              | 10.644           |                  |    |          | ND              |       |
| 92 o-Xylene                    | 106 |              | 11.028           |                  |    |          | ND              |       |
| 93 Styrene                     | 104 |              | 11.046           |                  |    |          | ND              |       |
| 94 Bromoform                   | 173 |              | 11.235           |                  |    |          | ND              |       |
| 99 1,1,2,2-Tetrachloroethane   | 83  |              | 11.709           |                  |    |          | ND              |       |
| S 133 Xylenes, Total           | 106 |              | 1.000            |                  |    |          | ND              |       |

**QC Flag Legend**

Processing Flags

E - Exceeded Maximum Amount

**Reagents:**

VOA8260INT\_00042

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR\_00042

Amount Added: 2.00

Units: uL

Run Reagent

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\51008029.D

Injection Date: 08-Oct-2015 22:50:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: 180-48309-B-6

Lab Sample ID: 180-48309-6

Worklist Smp#: 29

Client ID: HD-MW-64D-0/1-0

Purge Vol: 5.000 mL

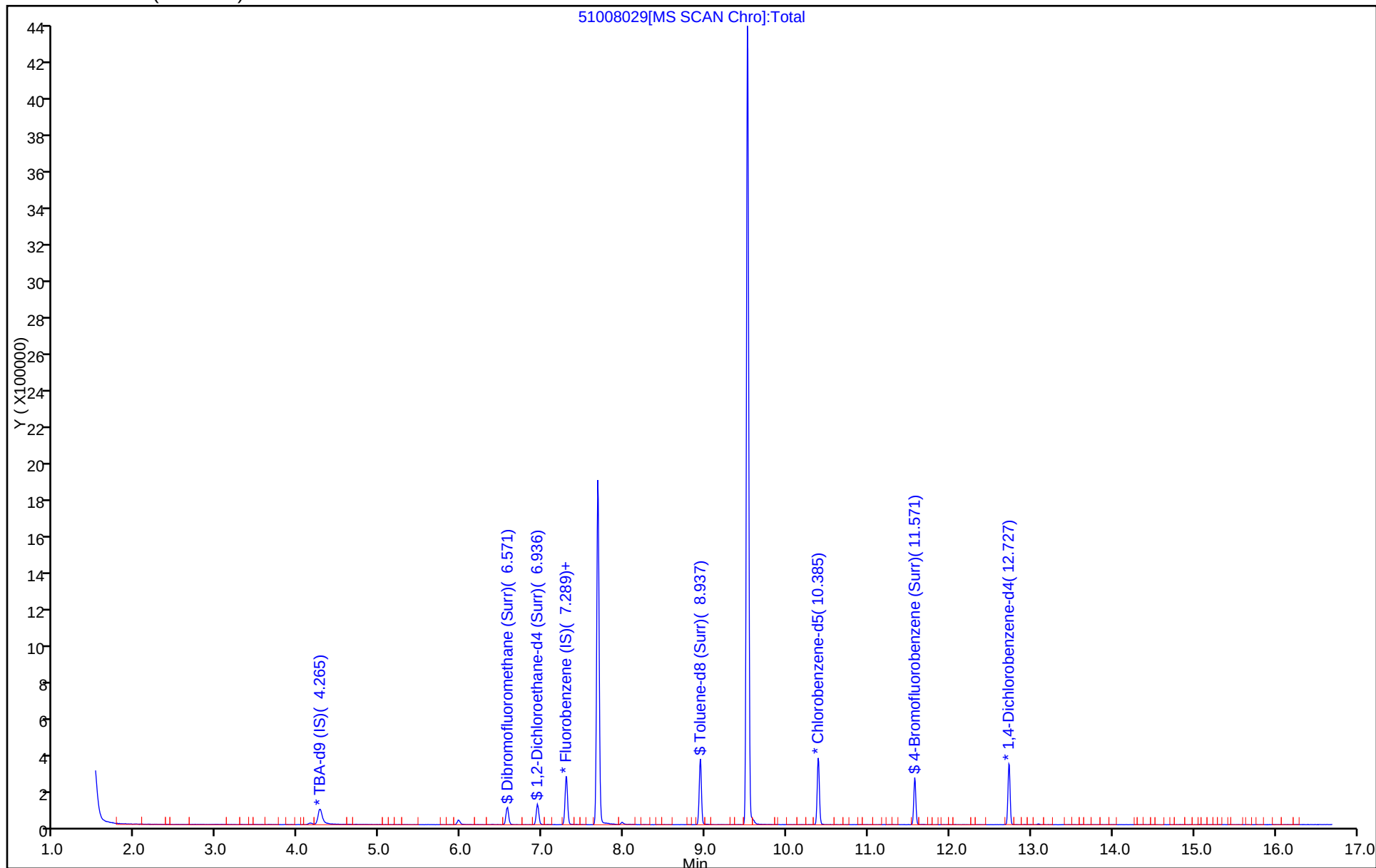
Dil. Factor: 2.5000

ALS Bottle#: 28

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 ( 0.18 mm)





## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\51008029.D

Injection Date: 08-Oct-2015 22:50:30

Instrument ID: CHHP5

Lims ID: 180-48309-B-6

Lab Sample ID: 180-48309-6

Client ID: HD-MW-64D-0/1-0

Operator ID: 001562

ALS Bottle#: 28

Worklist Smp#: 29

Purge Vol: 5.000 mL

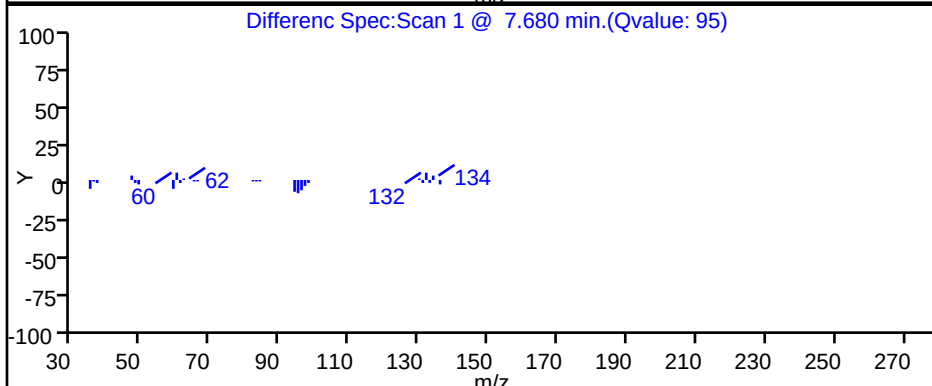
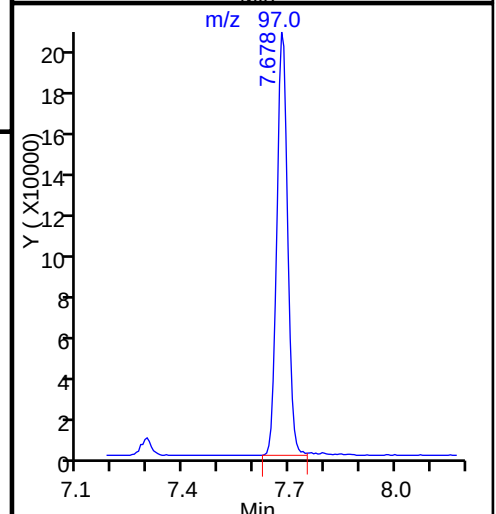
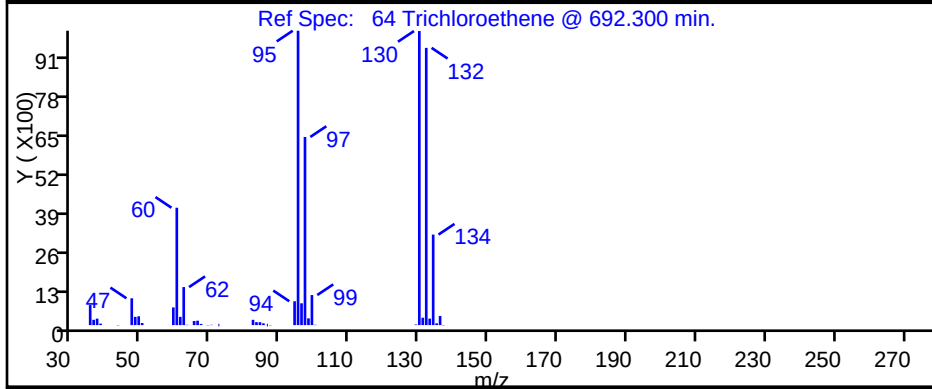
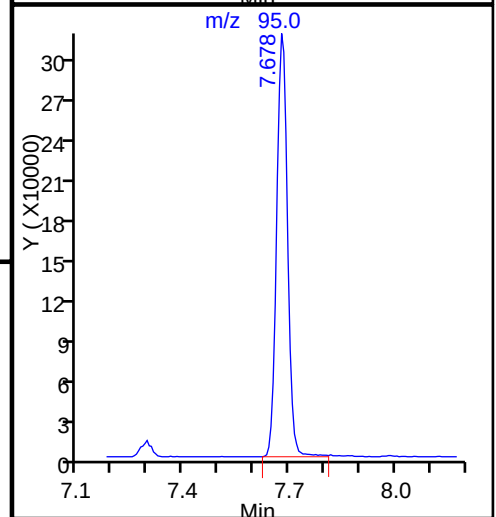
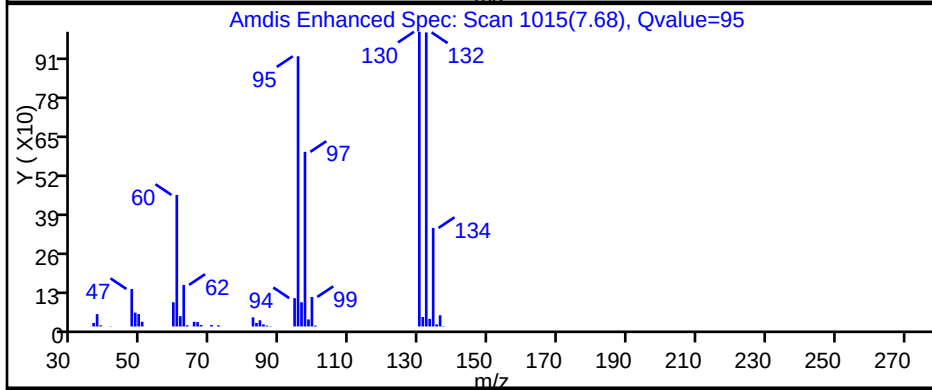
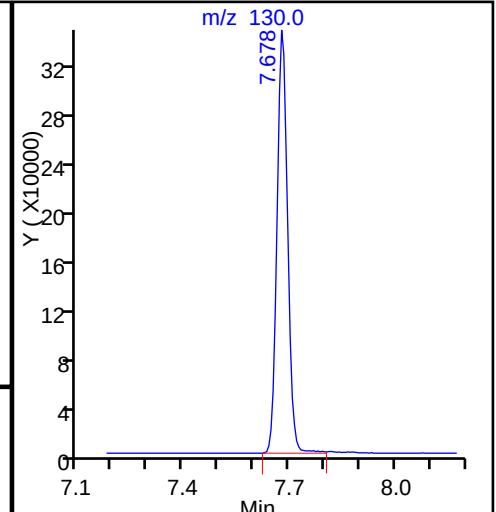
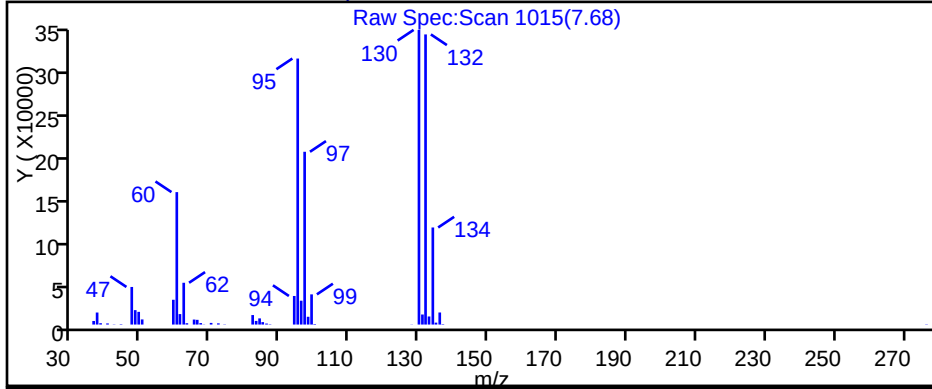
Dil. Factor: 2.5000

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

**64 Trichloroethene, CAS: 79-01-6**

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\51008029.D

Injection Date: 08-Oct-2015 22:50:30

Instrument ID: CHHP5

Lims ID: 180-48309-B-6

Lab Sample ID: 180-48309-6

Client ID: HD-MW-64D-0/1-0

Operator ID: 001562

ALS Bottle#: 28

Worklist Smp#: 29

Purge Vol: 5.000 mL

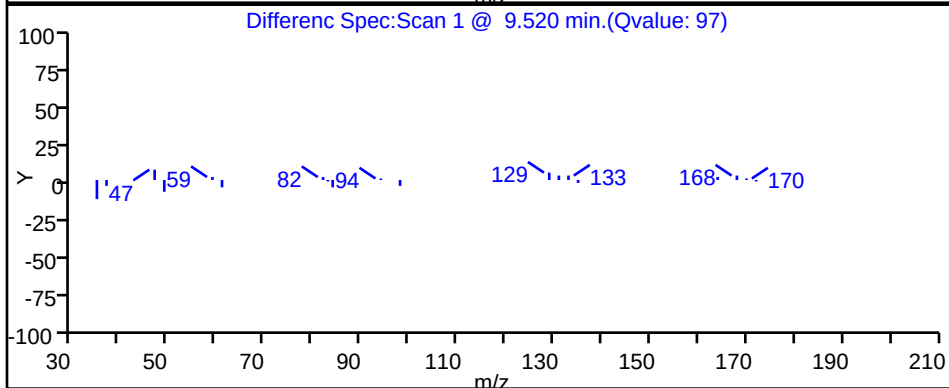
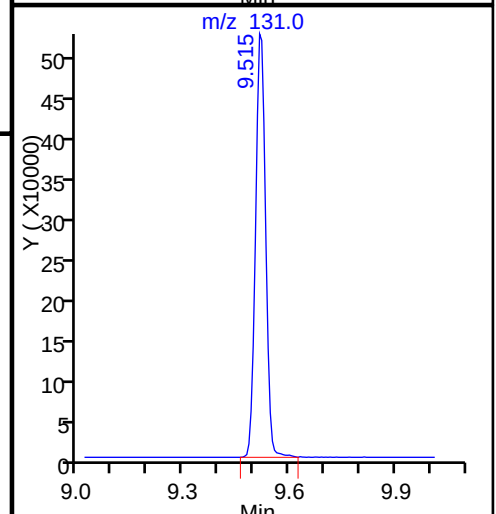
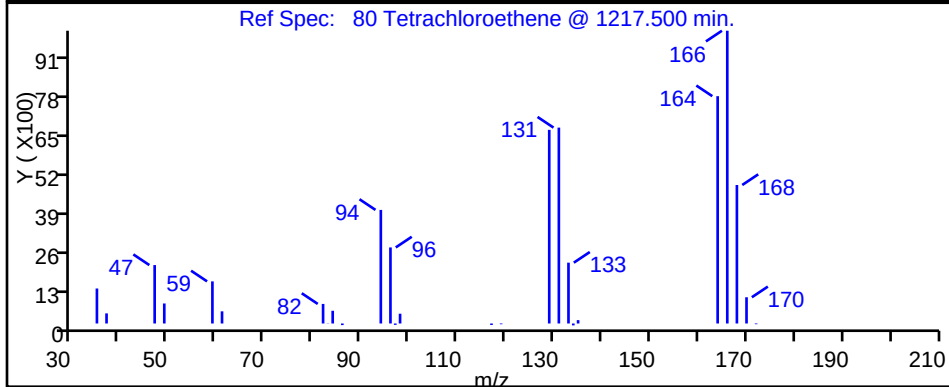
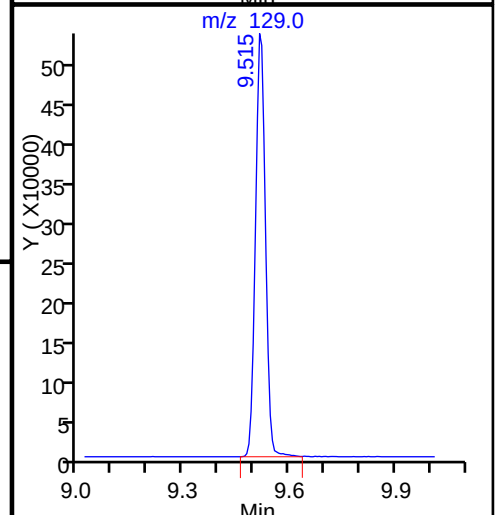
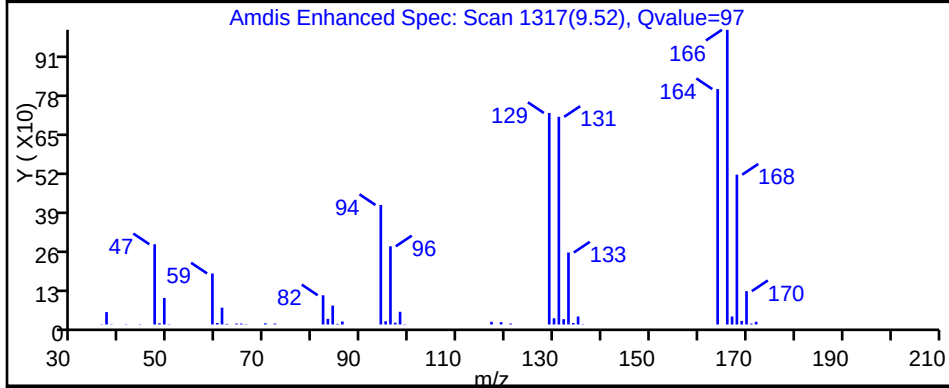
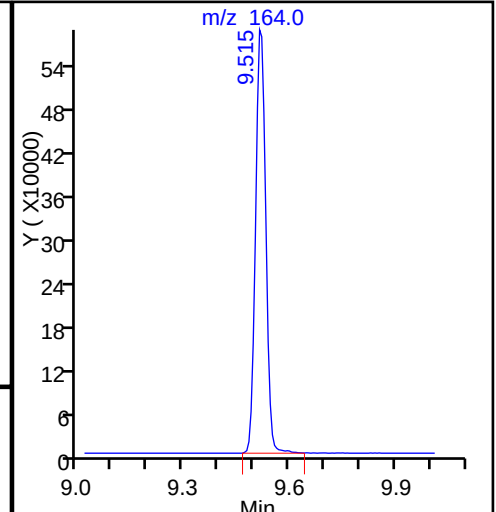
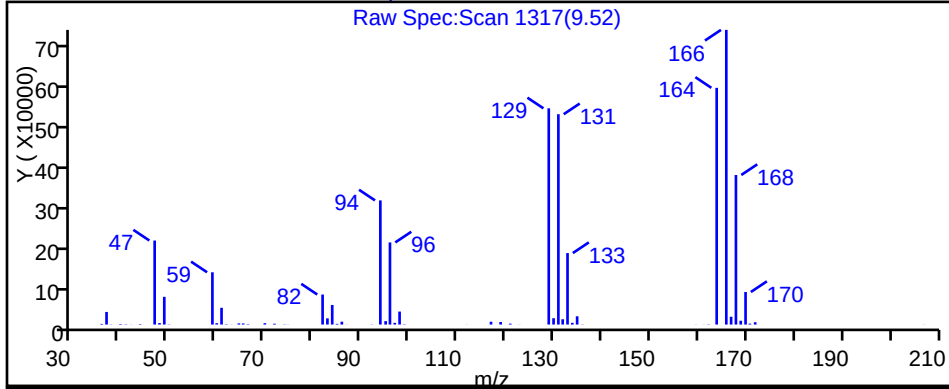
Dil. Factor: 2.5000

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

**80 Tetrachloroethene, CAS: 127-18-4**

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

|                                             |                                               |
|---------------------------------------------|-----------------------------------------------|
| Lab Name: <u>TestAmerica Pittsburgh</u>     | Job No.: <u>180-48309-1</u>                   |
| SDG No.: _____                              |                                               |
| Client Sample ID: <u>HD-MW-64D-0/1-0 DL</u> | Lab Sample ID: <u>180-48309-6 DL</u>          |
| Matrix: <u>Water</u>                        | Lab File ID: <u>61007022.D</u>                |
| Analysis Method: <u>8260C</u>               | Date Collected: <u>09/30/2015 12:40</u>       |
| Sample wt/vol: <u>5 (mL)</u>                | Date Analyzed: <u>10/07/2015 21:15</u>        |
| Soil Aliquot Vol: _____                     | Dilution Factor: <u>25</u>                    |
| Soil Extract Vol.: _____                    | GC Column: <u>DB-624</u> ID: <u>0.18 (mm)</u> |
| % Moisture: _____                           | Level: (low/med) <u>Low</u>                   |
| Analysis Batch No.: <u>156189</u>           | Units: <u>ug/L</u>                            |

| CAS NO.    | COMPOUND NAME               | RESULT | Q  | RL  | MDL |
|------------|-----------------------------|--------|----|-----|-----|
| 74-87-3    | Chloromethane               | ND     |    | 25  | 7.1 |
| 75-01-4    | Vinyl chloride              | ND     |    | 25  | 5.7 |
| 74-83-9    | Bromomethane                | ND     | ^c | 25  | 7.8 |
| 75-00-3    | Chloroethane                | ND     |    | 25  | 5.4 |
| 75-35-4    | 1,1-Dichloroethene          | ND     |    | 25  | 7.4 |
| 67-64-1    | Acetone                     | ND     |    | 130 | 63  |
| 75-15-0    | Carbon disulfide            | ND     |    | 25  | 5.3 |
| 75-09-2    | Methylene Chloride          | ND     |    | 25  | 3.1 |
| 156-60-5   | trans-1,2-Dichloroethene    | ND     |    | 25  | 4.2 |
| 1634-04-4  | Methyl tert-butyl ether     | ND     |    | 25  | 4.6 |
| 75-34-3    | 1,1-Dichloroethane          | ND     |    | 25  | 2.9 |
| 156-59-2   | cis-1,2-Dichloroethene      | ND     |    | 25  | 5.9 |
| 74-97-5    | Bromochloromethane          | ND     |    | 25  | 4.5 |
| 78-93-3    | 2-Butanone (MEK)            | ND     |    | 130 | 14  |
| 67-66-3    | Chloroform                  | ND     |    | 25  | 4.3 |
| 71-55-6    | 1,1,1-Trichloroethane       | ND     |    | 25  | 7.2 |
| 56-23-5    | Carbon tetrachloride        | ND     |    | 25  | 3.4 |
| 71-43-2    | Benzene                     | ND     |    | 25  | 2.6 |
| 107-06-2   | 1,2-Dichloroethane          | ND     |    | 25  | 5.3 |
| 79-01-6    | Trichloroethene             | 210    |    | 25  | 3.6 |
| 78-87-5    | 1,2-Dichloropropane         | ND     |    | 25  | 2.4 |
| 75-27-4    | Bromodichloromethane        | ND     |    | 25  | 3.3 |
| 10061-01-5 | cis-1,3-Dichloropropene     | ND     |    | 25  | 4.7 |
| 108-10-1   | 4-Methyl-2-pentanone (MIBK) | ND     |    | 130 | 13  |
| 108-88-3   | Toluene                     | ND     |    | 25  | 3.8 |
| 10061-02-6 | trans-1,3-Dichloropropene   | ND     |    | 25  | 3.7 |
| 79-00-5    | 1,1,2-Trichloroethane       | ND     |    | 25  | 5.0 |
| 127-18-4   | Tetrachloroethene           | 420    |    | 25  | 3.7 |
| 591-78-6   | 2-Hexanone                  | ND     | ^c | 130 | 4.0 |
| 124-48-1   | Dibromochloromethane        | ND     |    | 25  | 3.4 |
| 106-93-4   | 1,2-Dibromoethane (EDB)     | ND     |    | 25  | 4.5 |
| 108-90-7   | Chlorobenzene               | ND     |    | 25  | 3.4 |
| 630-20-6   | 1,1,1,2-Tetrachloroethane   | ND     | ^c | 25  | 6.9 |
| 100-41-4   | Ethylbenzene                | ND     |    | 25  | 5.7 |
| 1330-20-7  | Xylenes, Total              | ND     |    | 75  | 12  |
| 100-42-5   | Styrene                     | ND     | ^c | 25  | 2.4 |

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-MW-64D-0/1-0 DL Lab Sample ID: 180-48309-6 DL  
 Matrix: Water Lab File ID: 61007022.D  
 Analysis Method: 8260C Date Collected: 09/30/2015 12:40  
 Sample wt/vol: 5 (mL) Date Analyzed: 10/07/2015 21:15  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 25  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 156189 Units: ug/L

| CAS NO.  | COMPOUND NAME             | RESULT | Q  | RL   | MDL |
|----------|---------------------------|--------|----|------|-----|
| 75-25-2  | Bromoform                 | ND     | ^c | 25   | 4.8 |
| 79-34-5  | 1,1,2,2-Tetrachloroethane | ND     |    | 25   | 5.0 |
| 107-13-1 | Acrylonitrile             | ND     | ^c | 500  | 14  |
| 123-91-1 | 1,4-Dioxane               | ND     | ^c | 5000 | 860 |

| CAS NO.    | SURROGATE                    | %REC | Q | LIMITS |
|------------|------------------------------|------|---|--------|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 106  |   | 64-135 |
| 2037-26-5  | Toluene-d8 (Surr)            | 98   |   | 71-118 |
| 460-00-4   | 4-Bromofluorobenzene (Surr)  | 83   |   | 70-118 |
| 1868-53-7  | Dibromofluoromethane (Surr)  | 110  |   | 70-128 |

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007022.D  
 Lims ID: 180-48309-C-6 Lab Sample ID: 180-48309-6  
 Client ID: HD-MW-64D-0/1-0  
 Sample Type: Client  
 Inject. Date: 07-Oct-2015 21:15:30 ALS Bottle#: 22 Worklist Smp#: 22  
 Purge Vol: 5.000 mL Dil. Factor: 25.0000  
 Sample Info: 180-48309-C-6, 25x  
 Misc. Info.: 180-0008874-022  
 Operator ID: 001562 Instrument ID: CHHP6  
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\MSVOA\_LL\_CHHP6.m  
 Limit Group: VOA 8260C ICAL  
 Last Update: 08-Oct-2015 08:57:28 Calib Date: 14-Sep-2015 16:03:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150914-8521.b\60914006.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: XAWRK015

First Level Reviewer: fergusond

Date: 08-Oct-2015 08:57:28

| Compound                        | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | OnCol Amt<br>ng | Flags |
|---------------------------------|-----|--------------|------------------|------------------|----|----------|-----------------|-------|
| * 1 TBA-d9 (IS)                 | 65  | 4.232        | 4.245            | -0.013           | 88 | 188512   | 1000.0          |       |
| * 2 Fluorobenzene (IS)          | 96  | 7.286        | 7.281            | 0.005            | 98 | 440516   | 50.0            |       |
| * 3 Chlorobenzene-d5            | 119 | 10.394       | 10.396           | -0.002           | 90 | 109386   | 50.0            |       |
| * 4 1,4-Dichlorobenzene-d4      | 152 | 12.749       | 12.750           | -0.001           | 97 | 169650   | 50.0            |       |
| \$ 5 Dibromofluoromethane (Surr | 113 | 6.556        | 6.551            | 0.005            | 93 | 111952   | 55.2            |       |
| \$ 6 1,2-Dichloroethane-d4 (Sur | 65  | 6.933        | 6.928            | 0.005            | 70 | 173056   | 52.9            |       |
| \$ 7 Toluene-d8 (Surr)          | 98  | 8.940        | 8.942            | -0.002           | 94 | 424543   | 49.2            |       |
| \$ 8 4-Bromofluorobenzene (Surr | 95  | 11.581       | 11.588           | -0.007           | 88 | 158109   | 41.3            |       |
| 12 Chloromethane                | 50  |              | 1.757            |                  |    |          | ND              |       |
| 13 Vinyl chloride               | 62  |              | 1.903            |                  |    |          | ND              |       |
| 15 Bromomethane                 | 94  |              | 2.232            |                  |    |          | ND              |       |
| 16 Chloroethane                 | 64  |              | 2.371            |                  |    |          | ND              |       |
| 22 1,1-Dichloroethene           | 96  |              | 3.339            |                  |    |          | ND              |       |
| 24 Acetone                      | 43  |              | 3.418            |                  |    |          | ND              |       |
| 26 Carbon disulfide             | 76  |              | 3.625            |                  |    |          | ND              |       |
| 31 Methylene Chloride           | 84  | 4.141        | 4.124            | 0.017            | 90 | 15939    | 0.2065          |       |
| 33 Acrylonitrile                | 53  |              | 4.501            |                  |    |          | ND              |       |
| 34 trans-1,2-Dichloroethene     | 96  |              | 4.568            |                  |    |          | ND              |       |
| 35 Methyl tert-butyl ether      | 73  |              | 4.574            |                  |    |          | ND              |       |
| 37 1,1-Dichloroethane           | 63  |              | 5.188            |                  |    |          | ND              |       |
| 43 cis-1,2-Dichloroethene       | 96  |              | 5.936            |                  |    |          | ND              |       |
| 44 2-Butanone (MEK)             | 43  |              | 5.949            |                  |    |          | ND              |       |
| 48 Chlorobromomethane           | 128 |              | 6.222            |                  |    |          | ND              |       |
| 50 Chloroform                   | 83  |              | 6.368            |                  |    |          | ND              |       |
| 51 1,1,1-Trichloroethane        | 97  |              | 6.539            |                  |    |          | ND              |       |
| 53 Carbon tetrachloride         | 117 |              | 6.709            |                  |    |          | ND              |       |
| 56 Benzene                      | 78  |              | 6.940            |                  |    |          | ND              |       |
| 57 1,2-Dichloroethane           | 62  |              | 7.013            |                  |    |          | ND              |       |
| 61 Trichloroethene              | 130 | 7.675        | 7.676            | -0.001           | 96 | 91074    | 42.5            |       |
| 64 1,2-Dichloropropane          | 63  |              | 7.950            |                  |    |          | ND              |       |
| 65 1,4-Dioxane                  | 88  |              | 8.029            |                  |    |          | ND              |       |

| Compound                       | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | OnCol Amt<br>ng | Flags |
|--------------------------------|-----|--------------|------------------|------------------|----|----------|-----------------|-------|
| 68 Dichlorobromomethane        | 83  |              | 8.230            |                  |    |          | ND              |       |
| 71 cis-1,3-Dichloropropene     | 75  |              | 8.674            |                  |    |          | ND              |       |
| 72 4-Methyl-2-pentanone (MIBK) | 43  |              | 8.826            |                  |    |          | ND              |       |
| 73 Toluene                     | 91  |              | 9.009            |                  |    |          | ND              |       |
| 74 trans-1,3-Dichloropropene   | 75  |              | 9.252            |                  |    |          | ND              |       |
| 76 1,1,2-Trichloroethane       | 97  |              | 9.447            |                  |    |          | ND              |       |
| 77 Tetrachloroethene           | 164 | 9.524        | 9.526            | -0.002           | 96 | 161003   | 83.6            |       |
| 79 2-Hexanone                  | 43  |              | 9.659            |                  |    |          | ND              |       |
| 81 Chlorodibromomethane        | 129 |              | 9.824            |                  |    |          | ND              |       |
| 82 Ethylene Dibromide          | 107 |              | 9.939            |                  |    |          | ND              |       |
| 84 Chlorobenzene               | 112 |              | 10.426           |                  |    |          | ND              |       |
| 86 1,1,1,2-Tetrachloroethane   | 131 |              | 10.523           |                  |    |          | ND              |       |
| 87 Ethylbenzene                | 106 |              | 10.523           |                  |    |          | ND              |       |
| 88 m-Xylene & p-Xylene         | 106 |              | 10.657           |                  |    |          | ND              |       |
| 89 o-Xylene                    | 106 |              | 11.040           |                  |    |          | ND              |       |
| 90 Styrene                     | 104 |              | 11.059           |                  |    |          | ND              |       |
| 91 Bromoform                   | 173 |              | 11.241           |                  |    |          | ND              |       |
| 96 1,1,2,2-Tetrachloroethane   | 83  |              | 11.716           |                  |    |          | ND              |       |
| S 131 Xylenes, Total           | 106 |              | 1.000            |                  |    |          | ND              |       |

**Reagents:**

VOA8260INT\_00042

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR\_00042

Amount Added: 2.00

Units: uL

Run Reagent

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007022.D

Injection Date: 07-Oct-2015 21:15:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: 180-48309-C-6

Lab Sample ID: 180-48309-6

Worklist Smp#: 22

Client ID: HD-MW-64D-0/1-0

Purge Vol: 5.000 mL

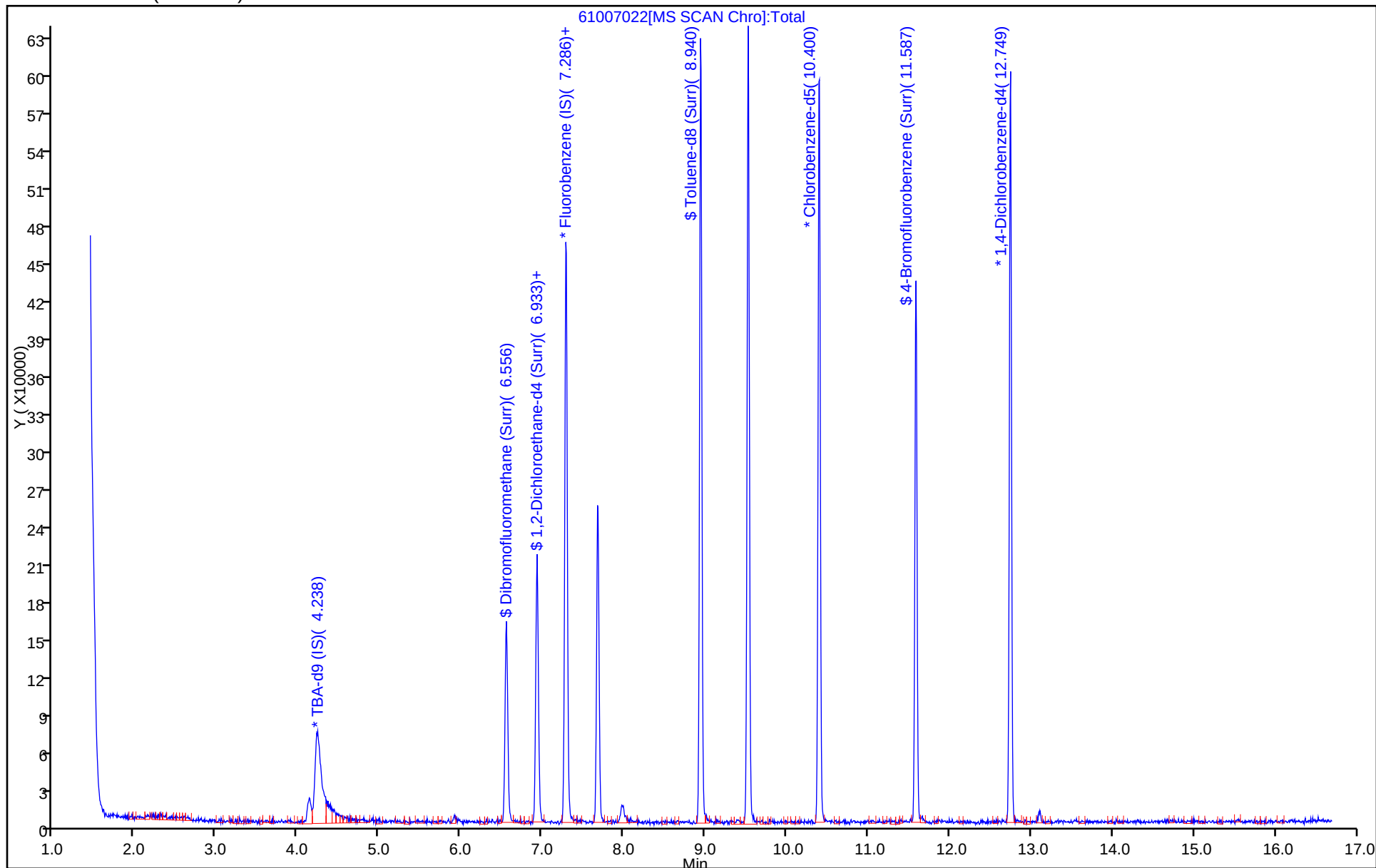
Dil. Factor: 25.0000

ALS Bottle#: 22

Method: MSVOA\_LL\_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007022.D

Injection Date: 07-Oct-2015 21:15:30

Instrument ID: CHHP6

Lims ID: 180-48309-C-6

Lab Sample ID: 180-48309-6

Client ID: HD-MW-64D-0/1-0

Operator ID: 001562

ALS Bottle#: 22

Worklist Smp#: 22

Purge Vol: 5.000 mL

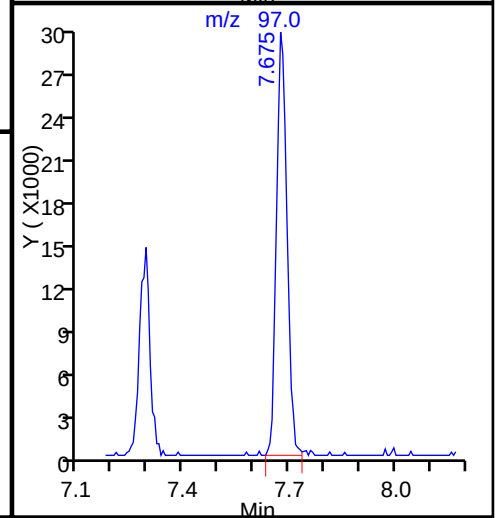
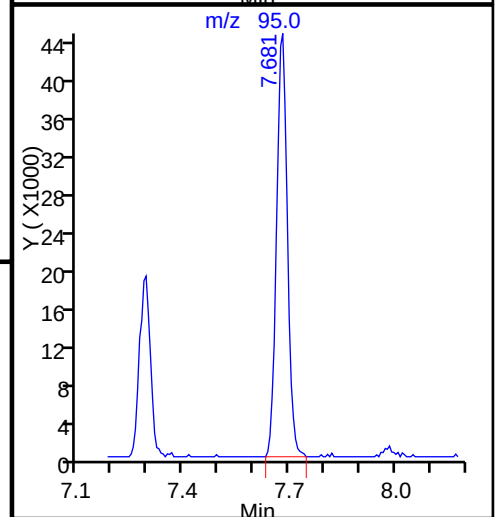
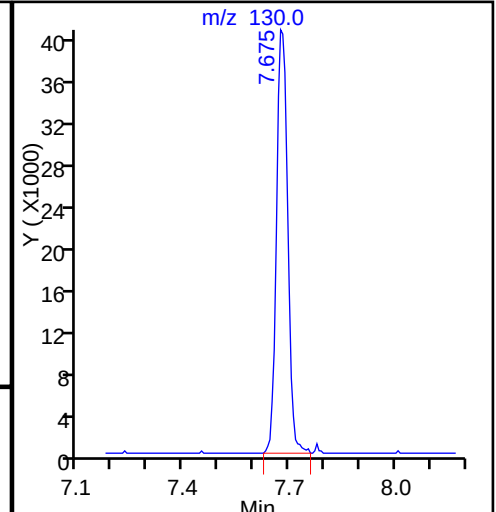
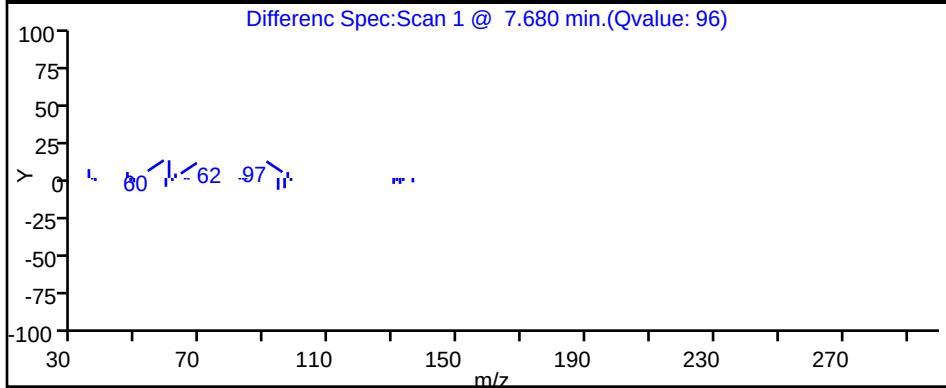
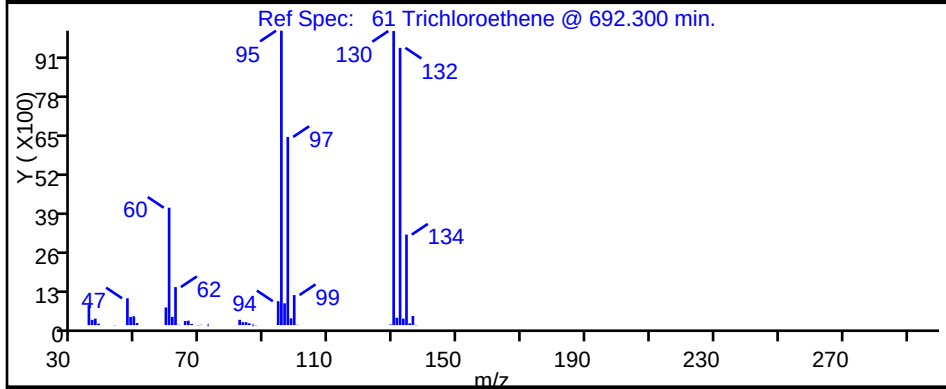
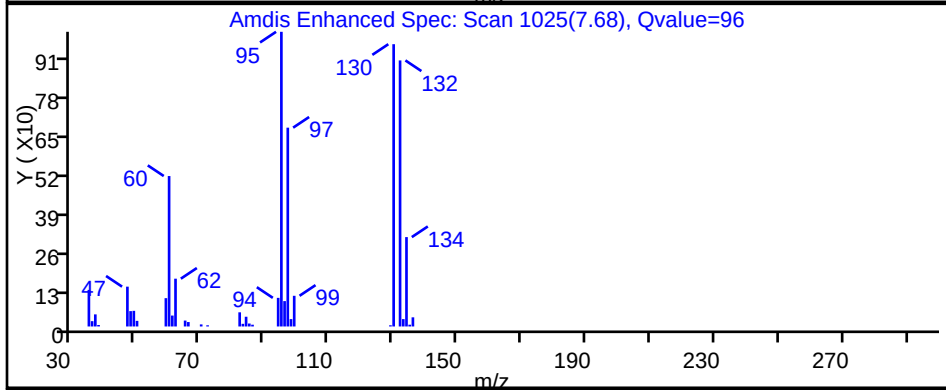
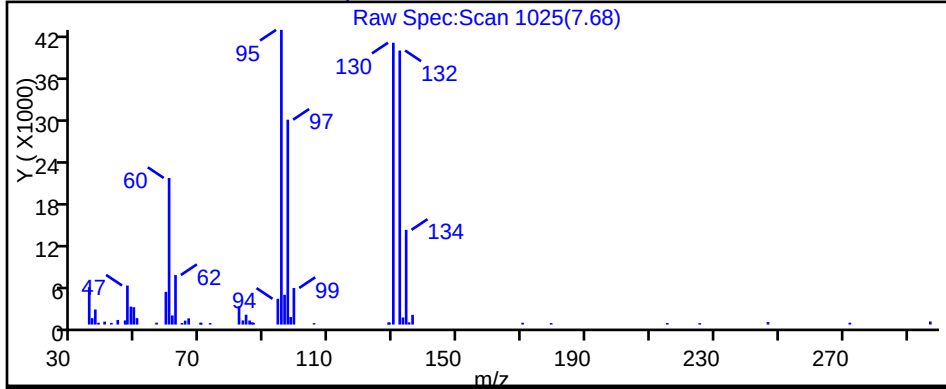
Dil. Factor: 25.0000

Method: MSVOA\_LL\_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

**61 Trichloroethene, CAS: 79-01-6**



## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007022.D

Injection Date: 07-Oct-2015 21:15:30

Instrument ID: CHHP6

Lims ID: 180-48309-C-6

Lab Sample ID: 180-48309-6

Client ID: HD-MW-64D-0/1-0

Operator ID: 001562

ALS Bottle#: 22

Worklist Smp#: 22

Purge Vol: 5.000 mL

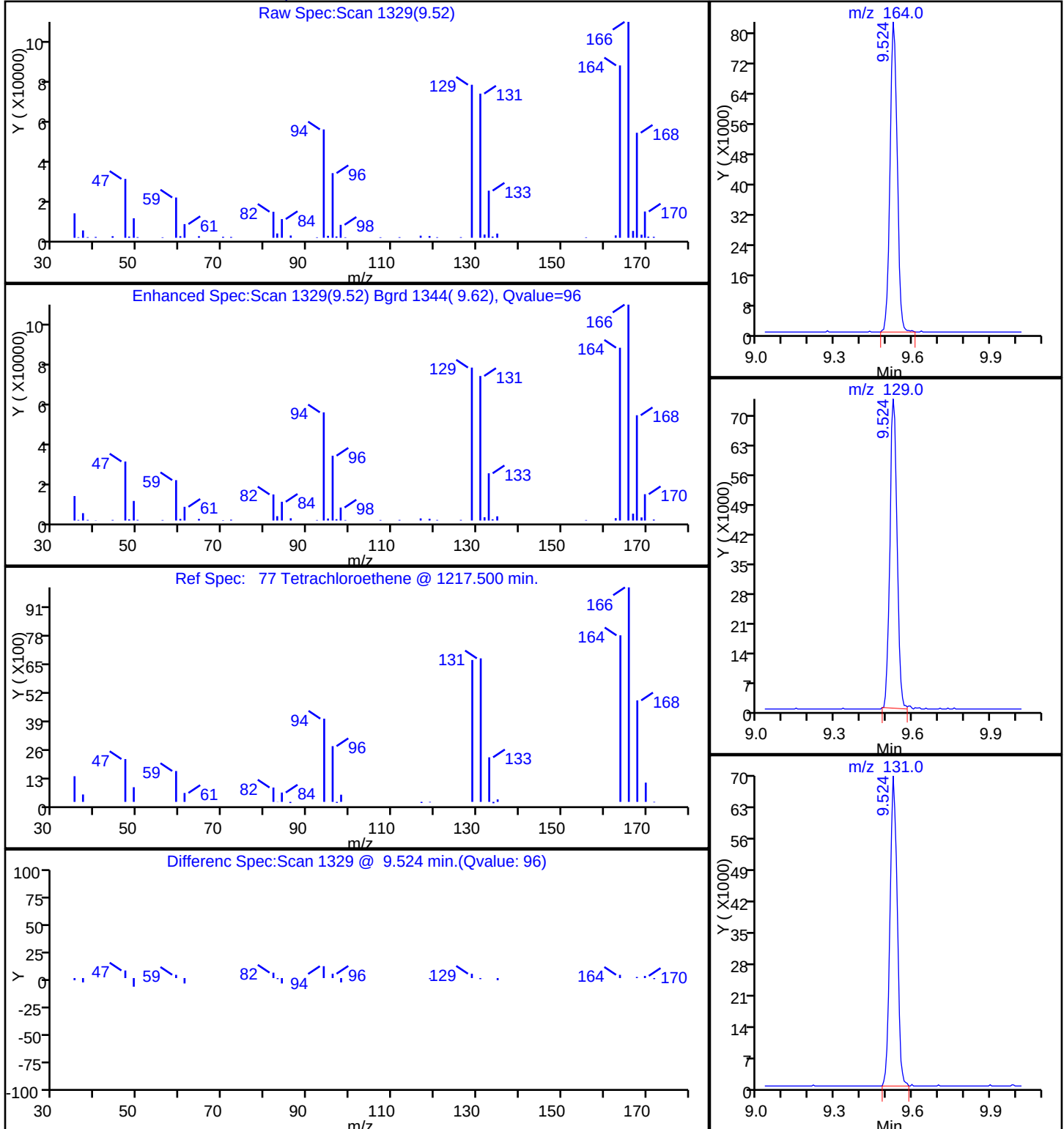
Dil. Factor: 25.0000

Method: MSVOA\_LL\_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)

Detector: MS SCAN

**77 Tetrachloroethene, CAS: 127-18-4**

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

|                                         |                                               |
|-----------------------------------------|-----------------------------------------------|
| Lab Name: <u>TestAmerica Pittsburgh</u> | Job No.: <u>180-48309-1</u>                   |
| SDG No.: _____                          |                                               |
| Client Sample ID: <u>HD-QC12-0/1-2</u>  | Lab Sample ID: <u>180-48309-7</u>             |
| Matrix: <u>Water</u>                    | Lab File ID: <u>61007018.D</u>                |
| Analysis Method: <u>8260C</u>           | Date Collected: <u>09/30/2015 12:00</u>       |
| Sample wt/vol: <u>5(mL)</u>             | Date Analyzed: <u>10/07/2015 19:39</u>        |
| Soil Aliquot Vol: _____                 | Dilution Factor: <u>1</u>                     |
| Soil Extract Vol.: _____                | GC Column: <u>DB-624</u> ID: <u>0.18 (mm)</u> |
| % Moisture: _____                       | Level: (low/med) <u>Low</u>                   |
| Analysis Batch No.: <u>156189</u>       | Units: <u>ug/L</u>                            |

| CAS NO.    | COMPOUND NAME               | RESULT | Q  | RL  | MDL   |
|------------|-----------------------------|--------|----|-----|-------|
| 74-87-3    | Chloromethane               | ND     |    | 1.0 | 0.28  |
| 75-01-4    | Vinyl chloride              | ND     |    | 1.0 | 0.23  |
| 74-83-9    | Bromomethane                | ND     | ^c | 1.0 | 0.31  |
| 75-00-3    | Chloroethane                | ND     |    | 1.0 | 0.21  |
| 75-35-4    | 1,1-Dichloroethene          | ND     |    | 1.0 | 0.30  |
| 67-64-1    | Acetone                     | ND     |    | 5.0 | 2.5   |
| 75-15-0    | Carbon disulfide            | ND     |    | 1.0 | 0.21  |
| 75-09-2    | Methylene Chloride          | ND     |    | 1.0 | 0.13  |
| 156-60-5   | trans-1,2-Dichloroethene    | ND     |    | 1.0 | 0.17  |
| 1634-04-4  | Methyl tert-butyl ether     | ND     |    | 1.0 | 0.18  |
| 75-34-3    | 1,1-Dichloroethane          | ND     |    | 1.0 | 0.12  |
| 156-59-2   | cis-1,2-Dichloroethene      | ND     |    | 1.0 | 0.24  |
| 74-97-5    | Bromochloromethane          | ND     |    | 1.0 | 0.18  |
| 78-93-3    | 2-Butanone (MEK)            | ND     |    | 5.0 | 0.55  |
| 67-66-3    | Chloroform                  | ND     |    | 1.0 | 0.17  |
| 71-55-6    | 1,1,1-Trichloroethane       | ND     |    | 1.0 | 0.29  |
| 56-23-5    | Carbon tetrachloride        | ND     |    | 1.0 | 0.14  |
| 71-43-2    | Benzene                     | ND     |    | 1.0 | 0.11  |
| 107-06-2   | 1,2-Dichloroethane          | ND     |    | 1.0 | 0.21  |
| 79-01-6    | Trichloroethene             | ND     |    | 1.0 | 0.14  |
| 78-87-5    | 1,2-Dichloropropane         | ND     |    | 1.0 | 0.095 |
| 75-27-4    | Bromodichloromethane        | ND     |    | 1.0 | 0.13  |
| 10061-01-5 | cis-1,3-Dichloropropene     | ND     |    | 1.0 | 0.19  |
| 108-10-1   | 4-Methyl-2-pentanone (MIBK) | ND     |    | 5.0 | 0.53  |
| 108-88-3   | Toluene                     | ND     |    | 1.0 | 0.15  |
| 10061-02-6 | trans-1,3-Dichloropropene   | ND     |    | 1.0 | 0.15  |
| 79-00-5    | 1,1,2-Trichloroethane       | ND     |    | 1.0 | 0.20  |
| 127-18-4   | Tetrachloroethene           | ND     |    | 1.0 | 0.15  |
| 591-78-6   | 2-Hexanone                  | ND     | ^c | 5.0 | 0.16  |
| 124-48-1   | Dibromochloromethane        | ND     |    | 1.0 | 0.14  |
| 106-93-4   | 1,2-Dibromoethane (EDB)     | ND     |    | 1.0 | 0.18  |
| 108-90-7   | Chlorobenzene               | ND     |    | 1.0 | 0.14  |
| 630-20-6   | 1,1,1,2-Tetrachloroethane   | ND     | ^c | 1.0 | 0.28  |
| 100-41-4   | Ethylbenzene                | ND     |    | 1.0 | 0.23  |
| 1330-20-7  | Xylenes, Total              | ND     |    | 3.0 | 0.49  |
| 100-42-5   | Styrene                     | ND     | ^c | 1.0 | 0.097 |

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: HD-QC12-0/1-2 Lab Sample ID: 180-48309-7  
 Matrix: Water Lab File ID: 61007018.D  
 Analysis Method: 8260C Date Collected: 09/30/2015 12:00  
 Sample wt/vol: 5 (mL) Date Analyzed: 10/07/2015 19:39  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 156189 Units: ug/L

| CAS NO.  | COMPOUND NAME             | RESULT | Q  | RL  | MDL  |
|----------|---------------------------|--------|----|-----|------|
| 75-25-2  | Bromoform                 | ND     | ^c | 1.0 | 0.19 |
| 79-34-5  | 1,1,2,2-Tetrachloroethane | ND     |    | 1.0 | 0.20 |
| 107-13-1 | Acrylonitrile             | ND     | ^c | 20  | 0.55 |
| 123-91-1 | 1,4-Dioxane               | ND     | ^c | 200 | 34   |

| CAS NO.    | SURROGATE                    | %REC | Q | LIMITS |
|------------|------------------------------|------|---|--------|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 105  |   | 64-135 |
| 2037-26-5  | Toluene-d8 (Surr)            | 109  |   | 71-118 |
| 460-00-4   | 4-Bromofluorobenzene (Surr)  | 91   |   | 70-118 |
| 1868-53-7  | Dibromofluoromethane (Surr)  | 106  |   | 70-128 |

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007018.D  
 Lims ID: 180-48309-A-7 Lab Sample ID: 180-48309-7  
 Client ID: HD-QC12-0/1-2  
 Sample Type: Client  
 Inject. Date: 07-Oct-2015 19:39:30 ALS Bottle#: 18 Worklist Smp#: 18  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: 180-48309-A-7  
 Misc. Info.: 180-0008874-018  
 Operator ID: 001562 Instrument ID: CHHP6  
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\MSVOA\_LL\_CHHP6.m  
 Limit Group: VOA 8260C ICAL  
 Last Update: 08-Oct-2015 08:52:33 Calib Date: 14-Sep-2015 16:03:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150914-8521.b\60914006.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: XAWRK015

First Level Reviewer: fergusond

Date: 08-Oct-2015 08:52:33

| Compound                        | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | OnCol Amt<br>ng | Flags |
|---------------------------------|-----|--------------|------------------|------------------|----|----------|-----------------|-------|
| * 1 TBA-d9 (IS)                 | 65  | 4.229        | 4.245            | -0.016           | 87 | 191745   | 1000.0          |       |
| * 2 Fluorobenzene (IS)          | 96  | 7.289        | 7.281            | 0.008            | 97 | 452546   | 50.0            |       |
| * 3 Chlorobenzene-d5            | 119 | 10.398       | 10.396           | 0.002            | 90 | 101366   | 50.0            |       |
| * 4 1,4-Dichlorobenzene-d4      | 152 | 12.752       | 12.750           | 0.002            | 97 | 173799   | 50.0            |       |
| \$ 5 Dibromofluoromethane (Surr | 113 | 6.559        | 6.551            | 0.008            | 93 | 110314   | 52.9            |       |
| \$ 6 1,2-Dichloroethane-d4 (Sur | 65  | 6.930        | 6.928            | 0.002            | 70 | 176630   | 52.5            |       |
| \$ 7 Toluene-d8 (Surr)          | 98  | 8.944        | 8.942            | 0.002            | 94 | 434222   | 54.3            |       |
| \$ 8 4-Bromofluorobenzene (Surr | 95  | 11.590       | 11.588           | 0.002            | 90 | 161940   | 45.6            |       |
| 12 Chloromethane                | 50  | 1.765        | 1.757            | 0.008            | 1  | 2750     | 1.02            | M     |
| 13 Vinyl chloride               | 62  |              | 1.903            |                  |    |          | ND              |       |
| 15 Bromomethane                 | 94  |              | 2.232            |                  |    |          | ND              |       |
| 16 Chloroethane                 | 64  |              | 2.371            |                  |    |          | ND              |       |
| 22 1,1-Dichloroethene           | 96  |              | 3.339            |                  |    |          | ND              |       |
| 24 Acetone                      | 43  |              | 3.418            |                  |    |          | ND              |       |
| 26 Carbon disulfide             | 76  |              | 3.625            |                  |    |          | ND              |       |
| 31 Methylene Chloride           | 84  |              | 4.124            |                  |    |          | ND              |       |
| 33 Acrylonitrile                | 53  |              | 4.501            |                  |    |          | ND              |       |
| 34 trans-1,2-Dichloroethene     | 96  |              | 4.568            |                  |    |          | ND              |       |
| 35 Methyl tert-butyl ether      | 73  |              | 4.574            |                  |    |          | ND              |       |
| 37 1,1-Dichloroethane           | 63  |              | 5.188            |                  |    |          | ND              |       |
| 43 cis-1,2-Dichloroethene       | 96  |              | 5.936            |                  |    |          | ND              |       |
| 44 2-Butanone (MEK)             | 43  |              | 5.949            |                  |    |          | ND              |       |
| 48 Chlorobromomethane           | 128 |              | 6.222            |                  |    |          | ND              |       |
| 50 Chloroform                   | 83  |              | 6.368            |                  |    |          | ND              |       |
| 51 1,1,1-Trichloroethane        | 97  |              | 6.539            |                  |    |          | ND              |       |
| 53 Carbon tetrachloride         | 117 |              | 6.709            |                  |    |          | ND              |       |
| 56 Benzene                      | 78  |              | 6.940            |                  |    |          | ND              |       |
| 57 1,2-Dichloroethane           | 62  |              | 7.013            |                  |    |          | ND              |       |
| 61 Trichloroethene              | 130 |              | 7.676            |                  |    |          | ND              |       |
| 64 1,2-Dichloropropane          | 63  |              | 7.950            |                  |    |          | ND              |       |
| 65 1,4-Dioxane                  | 88  |              | 8.029            |                  |    |          | ND              |       |

| Compound                       | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q | Response | OnCol Amt<br>ng | Flags |
|--------------------------------|-----|--------------|------------------|------------------|---|----------|-----------------|-------|
| 68 Dichlorobromomethane        | 83  |              | 8.230            |                  |   |          | ND              |       |
| 71 cis-1,3-Dichloropropene     | 75  |              | 8.674            |                  |   |          | ND              |       |
| 72 4-Methyl-2-pentanone (MIBK) | 43  |              | 8.826            |                  |   |          | ND              |       |
| 73 Toluene                     | 91  |              | 9.009            |                  |   |          | ND              |       |
| 74 trans-1,3-Dichloropropene   | 75  |              | 9.252            |                  |   |          | ND              |       |
| 76 1,1,2-Trichloroethane       | 97  |              | 9.447            |                  |   |          | ND              |       |
| 77 Tetrachloroethene           | 164 |              | 9.526            |                  |   |          | ND              |       |
| 79 2-Hexanone                  | 43  |              | 9.659            |                  |   |          | ND              |       |
| 81 Chlorodibromomethane        | 129 |              | 9.824            |                  |   |          | ND              |       |
| 82 Ethylene Dibromide          | 107 |              | 9.939            |                  |   |          | ND              |       |
| 84 Chlorobenzene               | 112 |              | 10.426           |                  |   |          | ND              |       |
| 86 1,1,1,2-Tetrachloroethane   | 131 |              | 10.523           |                  |   |          | ND              |       |
| 87 Ethylbenzene                | 106 |              | 10.523           |                  |   |          | ND              |       |
| 88 m-Xylene & p-Xylene         | 106 |              | 10.657           |                  |   |          | ND              |       |
| 89 o-Xylene                    | 106 |              | 11.040           |                  |   |          | ND              |       |
| 90 Styrene                     | 104 |              | 11.059           |                  |   |          | ND              |       |
| 91 Bromoform                   | 173 |              | 11.241           |                  |   |          | ND              |       |
| 96 1,1,2,2-Tetrachloroethane   | 83  |              | 11.716           |                  |   |          | ND              |       |
| S 131 Xylenes, Total           | 106 |              | 1.000            |                  |   |          | ND              |       |

### QC Flag Legend

Review Flags

M - Manually Integrated

### Reagents:

VOA8260INT\_00042

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR\_00042

Amount Added: 2.00

Units: uL

Run Reagent

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007018.D

Injection Date: 07-Oct-2015 19:39:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: 180-48309-A-7

Lab Sample ID: 180-48309-7

Worklist Smp#: 18

Client ID: HD-QC12-0/1-2

Purge Vol: 5.000 mL

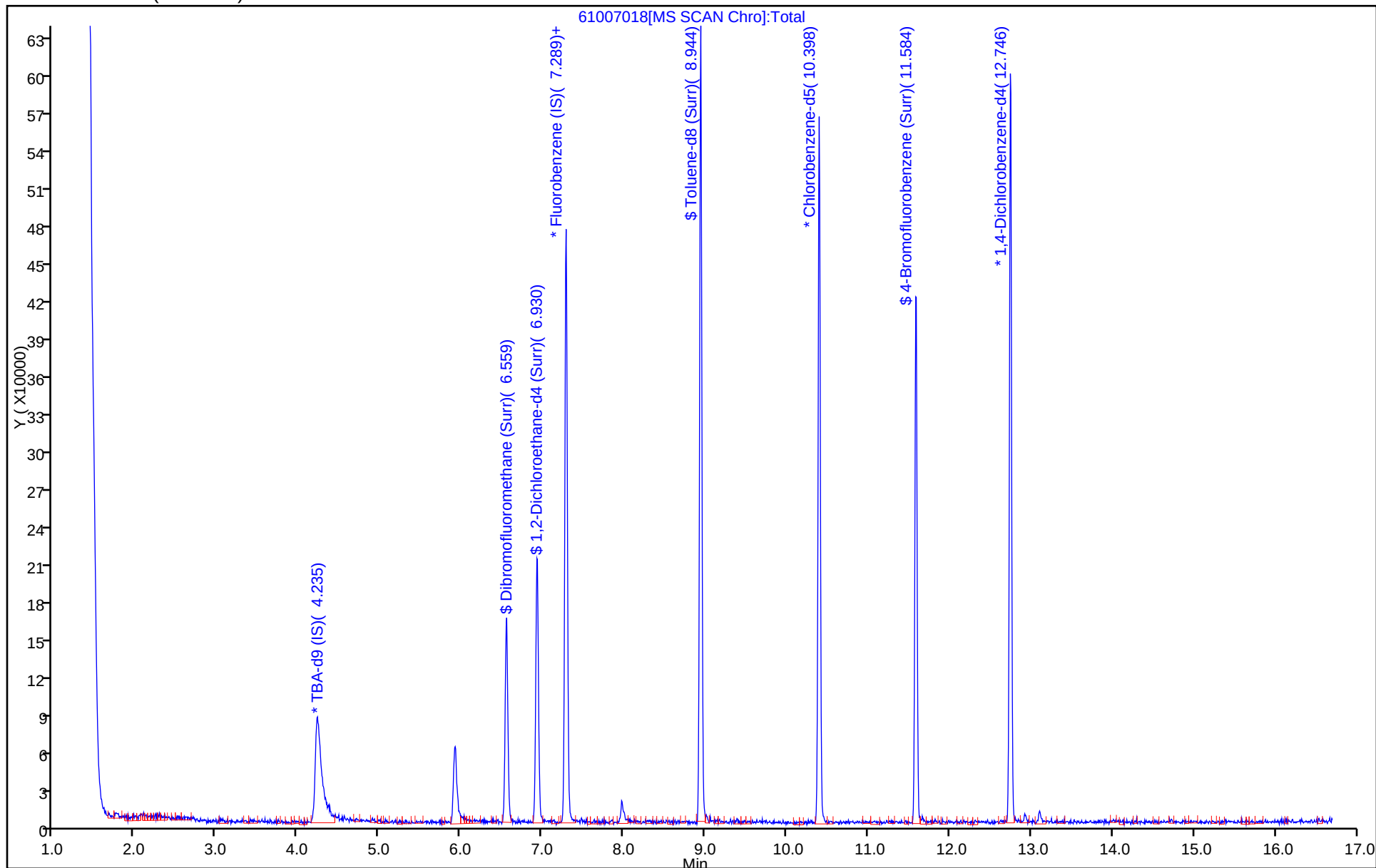
Dil. Factor: 1.0000

ALS Bottle#: 18

Method: MSVOA\_LL\_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



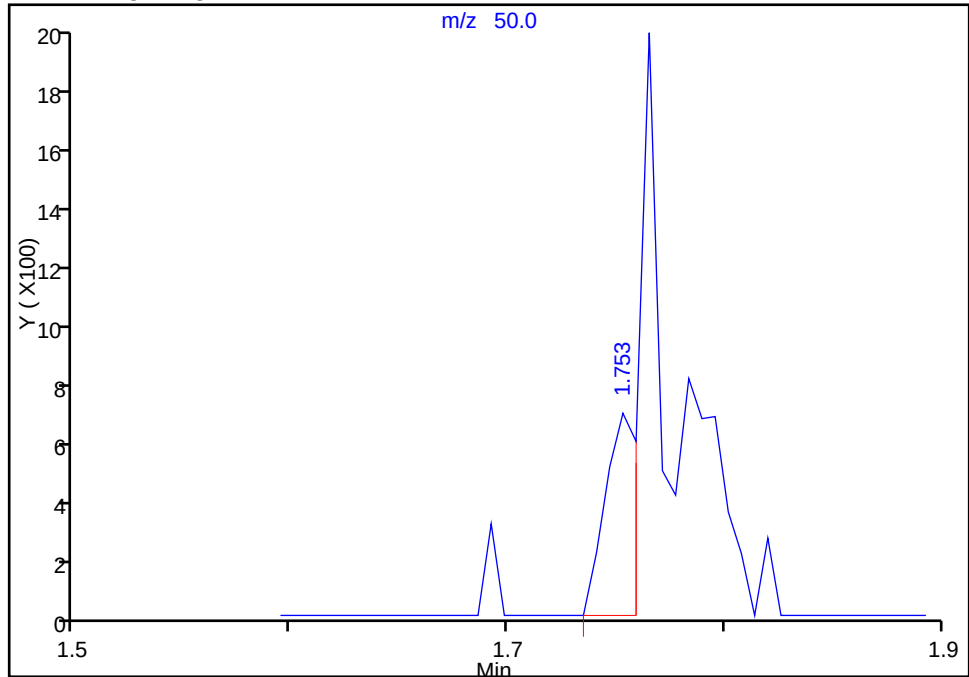
## TestAmerica Pittsburgh

|                 |                                                                 |                |                |
|-----------------|-----------------------------------------------------------------|----------------|----------------|
| Data File:      | \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007018.D |                |                |
| Injection Date: | 07-Oct-2015 19:39:30                                            | Instrument ID: | CHHP6          |
| Lims ID:        | 180-48309-A-7                                                   | Lab Sample ID: | 180-48309-7    |
| Client ID:      | HD-QC12-0/1-2                                                   |                |                |
| Operator ID:    | 001562                                                          | ALS Bottle#:   | 18             |
| Purge Vol:      | 5.000 mL                                                        | Dil. Factor:   | 1.0000         |
| Method:         | MSVOA_LL_CHHP6                                                  | Limit Group:   | VOA 8260C ICAL |
| Column:         | DB-624 ( 0.18 mm)                                               | Detector:      | MS SCAN        |
|                 |                                                                 | Worklist Smp#: | 18             |

**12 Chloromethane, CAS: 74-87-3**

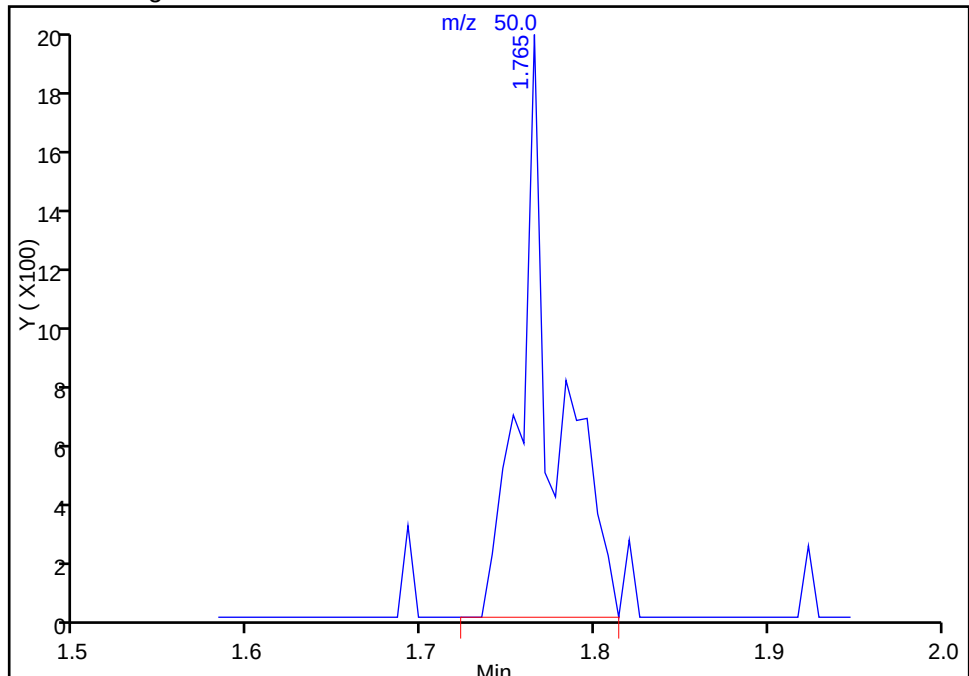
RT: 1.75  
Area: 724  
Amount: 0.268066  
Amount Units: ng

## Processing Integration Results



RT: 1.77  
Area: 2750  
Amount: 1.018207  
Amount Units: ng

## Manual Integration Results



Reviewer: fergusond, 08-Oct-2015 08:52:33  
Audit Action: Manually Integrated  
Audit Reason: Incomplete Integration

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 151868

SDG No.: \_\_\_\_\_

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/26/2015 15:04 Calibration End Date: 08/26/2015 17:52 Calibration ID: 25113

Calibration Files:

|         |                   |              |
|---------|-------------------|--------------|
| LEVEL:  | LAB SAMPLE ID:    | LAB FILE ID: |
| Level 1 | IC 180-151868/6   | 50826006.D   |
| Level 2 | IC 180-151868/8   | 50826008.D   |
| Level 3 | ICIS 180-151868/9 | 50826009.D   |
| Level 4 | IC 180-151868/10  | 50826010.D   |
| Level 5 | IC 180-151868/11  | 50826011.D   |
| Level 6 | IC 180-151868/12  | 50826012.D   |
| Level 7 | IC 180-151868/13  | 50826013.D   |
| Level 8 | IC 180-151868/14  | 50826014.D   |

| ANALYTE                               | RRF              |                  |                  |        |        | CURVE TYPE | COEFFICIENT |        |    | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---------------------------------------|------------------|------------------|------------------|--------|--------|------------|-------------|--------|----|---|---------|------|---|----------|------------|---|----------------|
|                                       | LVL 1            | LVL 2            | LVL 3            | LVL 4  | LVL 5  |            | B           | M1     | M2 |   |         |      |   |          |            |   |                |
|                                       | LVL 6            | LVL 7            | LVL 8            |        |        |            |             |        |    |   |         |      |   |          |            |   |                |
| Dichlorodifluoromethane               | 0.3287<br>0.2623 | 0.2973<br>0.2575 | 0.3036<br>0.2768 | 0.2652 | 0.2686 | Ave        |             | 0.2825 |    |   | 0.1000  | 8.8  |   | 20.0     |            |   |                |
| Chloromethane                         | 0.5129<br>0.3809 | 0.4550<br>0.3728 | 0.4119<br>0.4194 | 0.3793 | 0.3858 | Ave        |             | 0.4148 |    |   | 0.1000  | 11.6 |   | 20.0     |            |   |                |
| Vinyl chloride                        | 0.4001<br>0.3434 | 0.3977<br>0.3372 | 0.3943<br>0.3699 | 0.3444 | 0.3565 | Ave        |             | 0.3679 |    |   | 0.1000  | 7.2  |   | 20.0     |            |   |                |
| 1,3-Butadiene                         | 0.5239<br>0.3986 | 0.4751<br>0.3875 | 0.4623<br>0.4226 | 0.3955 | 0.4108 | Ave        |             | 0.4345 |    |   | 0.0100  | 11.0 |   | 20.0     |            |   |                |
| Bromomethane                          | 0.1691<br>0.1521 | 0.1576<br>0.1241 | 0.1270<br>0.1576 | 0.1608 | 0.1494 | Ave        |             | 0.1497 |    |   | 0.0500  | 10.7 |   | 20.0     |            |   |                |
| Chloroethane                          | 0.2791<br>0.2041 | 0.2380<br>0.2011 | 0.2154<br>0.2199 | 0.2110 | 0.2070 | Ave        |             | 0.2220 |    |   | 0.0500  | 11.6 |   | 20.0     |            |   |                |
| Dichlorofluoromethane                 | 0.5546<br>0.4260 | 0.5213<br>0.4285 | 0.5031<br>0.4664 | 0.4321 | 0.4354 | Ave        |             | 0.4709 |    |   | 0.0100  | 10.5 |   | 20.0     |            |   |                |
| Trichlorofluoromethane                | 0.3948<br>0.3299 | 0.3814<br>0.3233 | 0.3774<br>0.3496 | 0.3273 | 0.3345 | Ave        |             | 0.3523 |    |   | 0.1000  | 8.0  |   | 20.0     |            |   |                |
| Ethyl ether                           | 0.4234<br>0.2964 | 0.3324<br>0.2960 | 0.3164<br>0.3549 | 0.2973 | 0.2952 | Ave        |             | 0.3265 |    |   | 0.0100  | 13.7 |   | 20.0     |            |   |                |
| Acrolein                              | 0.0512<br>0.0479 | 0.0489<br>0.0478 | 0.0480<br>0.0550 | 0.0441 | 0.0462 | Ave        |             | 0.0486 |    |   | 0.0100  | 6.7  |   | 20.0     |            |   |                |
| 1,1-Dichloroethene                    | 0.2946<br>0.2694 | 0.2816<br>0.2624 | 0.2875<br>0.2968 | 0.2618 | 0.2736 | Ave        |             | 0.2785 |    |   | 0.1000  | 5.0  |   | 20.0     |            |   |                |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.3300<br>0.2776 | 0.3157<br>0.2707 | 0.3079<br>0.2975 | 0.2771 | 0.2839 | Ave        |             | 0.2951 |    |   | 0.1000  | 7.2  |   | 20.0     |            |   |                |
| Acetone                               | 0.1264<br>0.0944 | 0.1213<br>0.0888 | 0.0958<br>0.1083 | 0.0854 | 0.0868 | Ave        |             | 0.1009 |    |   | 0.0500  | 15.8 |   | 20.0     |            |   |                |
| Iodomethane                           | 0.4682<br>0.3963 | 0.4179<br>0.3889 | 0.4130<br>0.4559 | 0.3863 | 0.3938 | Ave        |             | 0.4150 |    |   | 0.0100  | 7.5  |   | 20.0     |            |   |                |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.



FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 151868

SDG No.: \_\_\_\_\_

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/26/2015 15:04 Calibration End Date: 08/26/2015 17:52 Calibration ID: 25113

| ANALYTE                  | RRF              |                  |                  |        |        | CURVE<br>TYPE | COEFFICIENT |        |    | # | MIN RRF | %RSD | # | MAX<br>%RSD | R^2<br>OR COD | # | MIN R^2<br>OR COD |
|--------------------------|------------------|------------------|------------------|--------|--------|---------------|-------------|--------|----|---|---------|------|---|-------------|---------------|---|-------------------|
|                          | LVL 1<br>LVL 6   | LVL 2<br>LVL 7   | LVL 3<br>LVL 8   | LVL 4  | LVL 5  |               | B           | M1     | M2 |   |         |      |   |             |               |   |                   |
| Carbon disulfide         | 0.6362<br>0.6697 | 0.5938<br>0.6592 | 0.6262<br>0.7601 | 0.5915 | 0.6365 | Ave           |             | 0.6466 |    |   | 0.1000  | 8.3  |   | 20.0        |               |   |                   |
| Allyl chloride           | 0.1392<br>0.1626 | 0.1500<br>0.1654 | 0.1522<br>0.1887 | 0.1471 | 0.1566 | Ave           |             | 0.1577 |    |   | 0.0100  | 9.6  |   | 20.0        |               |   |                   |
| Methyl acetate           | 0.3337<br>0.2890 | 0.3263<br>0.2857 | 0.2882<br>0.3263 | 0.2787 | 0.2836 | Ave           |             | 0.3015 |    |   | 0.1000  | 7.6  |   | 20.0        |               |   |                   |
| Methylene Chloride       | 0.6517<br>0.2904 | 0.3723<br>0.2913 | 0.3258<br>0.3382 | 0.3056 | 0.2911 | Lin2          | 1.8054      | 0.2910 |    |   | 0.1000  |      |   |             | 0.9950        |   | 0.9900            |
| tert-Butyl alcohol       | 1.3524<br>1.1479 | 1.0348<br>1.0778 | 1.0400<br>1.1523 | 1.0913 | 1.1079 | Ave           |             | 1.1255 |    |   | 0.0100  | 9.0  |   | 20.0        |               |   |                   |
| Acrylonitrile            | 0.1618<br>0.1395 | 0.1545<br>0.1388 | 0.1504<br>0.1578 | 0.1327 | 0.1347 | Ave           |             | 0.1463 |    |   | 0.0100  | 7.7  |   | 20.0        |               |   |                   |
| trans-1,2-Dichloroethene | 0.3383<br>0.2905 | 0.3111<br>0.2805 | 0.3070<br>0.3253 | 0.2770 | 0.2891 | Ave           |             | 0.3024 |    |   | 0.1000  | 7.2  |   | 20.0        |               |   |                   |
| Methyl tert-butyl ether  | 0.7340<br>0.6851 | 0.6905<br>0.6950 | 0.6558<br>0.8276 | 0.6473 | 0.6637 | Ave           |             | 0.6999 |    |   | 0.1000  | 8.3  |   | 20.0        |               |   |                   |
| Hexane                   | 0.5487<br>0.5062 | 0.5124<br>0.4822 | 0.5150<br>0.5325 | 0.4707 | 0.4929 | Ave           |             | 0.5076 |    |   | 0.0100  | 5.1  |   | 20.0        |               |   |                   |
| 1,1-Dichloroethane       | 0.6731<br>0.5678 | 0.6009<br>0.5615 | 0.5929<br>0.6517 | 0.5533 | 0.5641 | Ave           |             | 0.5957 |    |   | 0.2000  | 7.5  |   | 20.0        |               |   |                   |
| Vinyl acetate            | 0.4658<br>0.4559 | 0.4321<br>0.4509 | 0.4142<br>0.5072 | 0.4114 | 0.4375 | Ave           |             | 0.4469 |    |   | 0.0100  | 6.9  |   | 20.0        |               |   |                   |
| 2,2-Dichloropropane      | 0.2543<br>0.2353 | 0.2294<br>0.2294 | 0.2373<br>0.2670 | 0.2227 | 0.2344 | Ave           |             | 0.2387 |    |   | 0.0100  | 6.1  |   | 20.0        |               |   |                   |
| cis-1,2-Dichloroethene   | 0.3560<br>0.3133 | 0.3276<br>0.3052 | 0.3171<br>0.3596 | 0.3029 | 0.3027 | Ave           |             | 0.3230 |    |   | 0.1000  | 7.1  |   | 20.0        |               |   |                   |
| 2-Butanone (MEK)         | 0.1700<br>0.1465 | 0.1604<br>0.1446 | 0.1482<br>0.1652 | 0.1430 | 0.1348 | Ave           |             | 0.1516 |    |   | 0.0500  | 8.1  |   | 20.0        |               |   |                   |
| Bromochloromethane       | 0.1549<br>0.1331 | 0.1498<br>0.1336 | 0.1364<br>0.1592 | 0.1347 | 0.1330 | Ave           |             | 0.1418 |    |   | 0.0100  | 7.7  |   | 20.0        |               |   |                   |
| Tetrahydrofuran          | 0.1584<br>0.1188 | 0.1210<br>0.1173 | 0.1165<br>0.1328 | 0.1044 | 0.1035 | Ave           |             | 0.1216 |    |   | 0.0100  | 14.4 |   | 20.0        |               |   |                   |
| Chloroform               | 0.6121<br>0.4769 | 0.5334<br>0.4687 | 0.5043<br>0.5518 | 0.4874 | 0.4825 | Ave           |             | 0.5146 |    |   | 0.2000  | 9.5  |   | 20.0        |               |   |                   |
| 1,1,1-Trichloroethane    | 0.3907<br>0.3764 | 0.3802<br>0.3610 | 0.3863<br>0.4248 | 0.3588 | 0.3661 | Ave           |             | 0.3805 |    |   | 0.1000  | 5.6  |   | 20.0        |               |   |                   |
| Cyclohexane              | 0.6174<br>0.6347 | 0.6332<br>0.6154 | 0.6564<br>0.6862 | 0.6129 | 0.6374 | Ave           |             | 0.6367 |    |   | 0.1000  | 3.9  |   | 20.0        |               |   |                   |
| Carbon tetrachloride     | 0.3208<br>0.3222 | 0.3255<br>0.3130 | 0.3231<br>0.3616 | 0.3071 | 0.3191 | Ave           |             | 0.3240 |    |   | 0.1000  | 5.0  |   | 20.0        |               |   |                   |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 151868

SDG No.: \_\_\_\_\_

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/26/2015 15:04 Calibration End Date: 08/26/2015 17:52 Calibration ID: 25113

| ANALYTE                     | RRF              |                  |                  |        |        | CURVE<br>TYPE | COEFFICIENT |        |    | # | MIN RRF | %RSD | # | MAX<br>%RSD | R^2<br>OR COD | # | MIN R^2<br>OR COD |
|-----------------------------|------------------|------------------|------------------|--------|--------|---------------|-------------|--------|----|---|---------|------|---|-------------|---------------|---|-------------------|
|                             | LVL 1<br>LVL 6   | LVL 2<br>LVL 7   | LVL 3<br>LVL 8   | LVL 4  | LVL 5  |               | B           | M1     | M2 |   |         |      |   |             |               |   |                   |
| 1,1-Dichloropropene         | 0.4109<br>0.4177 | 0.4291<br>0.3991 | 0.4295<br>0.4615 | 0.4010 | 0.4176 | Ave           |             | 0.4208 |    |   | 0.0100  | 4.7  |   | 20.0        |               |   |                   |
| Isobutyl alcohol            | 0.0095<br>0.0095 | 0.0091<br>0.0100 | 0.0099<br>0.0111 | 0.0081 | 0.0090 | Ave           |             | 0.0095 |    | * | 0.0100  | 9.4  |   | 20.0        |               |   |                   |
| Benzene                     | 1.3619<br>1.1379 | 1.3471<br>1.1166 | 1.2583<br>1.2803 | 1.1865 | 1.1745 | Ave           |             | 1.2329 |    |   | 0.5000  | 7.6  |   | 20.0        |               |   |                   |
| 1,2-Dichloroethane          | 0.4741<br>0.4037 | 0.4480<br>0.4008 | 0.4163<br>0.4668 | 0.4018 | 0.3996 | Ave           |             | 0.4264 |    |   | 0.1000  | 7.4  |   | 20.0        |               |   |                   |
| n-Heptane                   | 0.4905<br>0.4664 | 0.4584<br>0.4370 | 0.4667<br>0.4920 | 0.4330 | 0.4446 | Ave           |             | 0.4611 |    |   | 0.0100  | 4.9  |   | 20.0        |               |   |                   |
| Trichloroethene             | 0.3438<br>0.2884 | 0.3023<br>0.2830 | 0.3001<br>0.3282 | 0.2819 | 0.2852 | Ave           |             | 0.3016 |    |   | 0.2000  | 7.6  |   | 20.0        |               |   |                   |
| Methylcyclohexane           | 0.4249<br>0.4931 | 0.4566<br>0.4767 | 0.4833<br>0.5272 | 0.4569 | 0.4841 | Ave           |             | 0.4753 |    |   | 0.1000  | 6.4  |   | 20.0        |               |   |                   |
| 1,2-Dichloropropane         | 0.3806<br>0.3114 | 0.3166<br>0.3023 | 0.3142<br>0.3619 | 0.2970 | 0.3041 | Ave           |             | 0.3235 |    |   | 0.1000  | 9.5  |   | 20.0        |               |   |                   |
| 1,4-Dioxane                 | 0.0018<br>0.0024 | 0.0022<br>0.0023 | 0.0022<br>0.0026 | 0.0021 | 0.0022 | Ave           |             | 0.0022 |    | * | 0.0100  | 11.0 |   | 20.0        |               |   |                   |
| Dibromomethane              | 0.1726<br>0.1580 | 0.1745<br>0.1564 | 0.1618<br>0.1826 | 0.1547 | 0.1528 | Ave           |             | 0.1642 |    |   | 0.0100  | 6.7  |   | 20.0        |               |   |                   |
| Bromodichloromethane        | 0.3187<br>0.3277 | 0.3165<br>0.3275 | 0.3067<br>0.3841 | 0.3076 | 0.3105 | Ave           |             | 0.3249 |    |   | 0.2000  | 7.8  |   | 20.0        |               |   |                   |
| cis-1,3-Dichloropropene     | 0.3262<br>0.4065 | 0.3324<br>0.4128 | 0.3462<br>0.4886 | 0.3587 | 0.3740 | Ave           |             | 0.3807 |    |   | 0.2000  | 14.2 |   | 20.0        |               |   |                   |
| 4-Methyl-2-pentanone (MIBK) | 1.0903<br>1.2759 | 1.2109<br>1.2196 | 1.2320<br>1.3578 | 1.2204 | 1.2490 | Ave           |             | 1.2320 |    |   | 0.1000  | 6.0  |   | 20.0        |               |   |                   |
| Toluene                     | 5.5703<br>4.5203 | 5.5571<br>4.1167 | 5.4822<br>4.5535 | 4.9121 | 4.8891 | Ave           |             | 4.9502 |    |   | 0.4000  | 11.0 |   | 20.0        |               |   |                   |
| trans-1,3-Dichloropropene   | 1.1012<br>1.3656 | 1.2222<br>1.3022 | 1.2566<br>1.5136 | 1.2587 | 1.3145 | Ave           |             | 1.2918 |    |   | 0.1000  | 9.2  |   | 20.0        |               |   |                   |
| Ethyl methacrylate          | 1.0084<br>1.3290 | 1.1451<br>1.2693 | 1.2245<br>1.4637 | 1.2645 | 1.2889 | Ave           |             | 1.2492 |    |   | 0.0100  | 10.7 |   | 20.0        |               |   |                   |
| 1,1,2-Trichloroethane       | 0.9854<br>0.8899 | 1.0921<br>0.8150 | 0.9726<br>0.9474 | 0.9168 | 0.9135 | Ave           |             | 0.9416 |    |   | 0.1000  | 8.6  |   | 20.0        |               |   |                   |
| Tetrachloroethene           | 1.1379<br>0.8860 | 1.0568<br>0.8108 | 1.0252<br>0.9003 | 0.9316 | 0.9384 | Ave           |             | 0.9609 |    |   | 0.2000  | 11.0 |   | 20.0        |               |   |                   |
| 1,3-Dichloropropane         | 1.9919<br>1.6394 | 1.8881<br>1.5526 | 1.7977<br>1.7492 | 1.7044 | 1.6621 | Ave           |             | 1.7482 |    |   | 0.0100  | 8.1  |   | 20.0        |               |   |                   |
| 2-Hexanone                  | 0.8243<br>0.9047 | 0.9086<br>0.8711 | 0.9027<br>0.9534 | 0.8729 | 0.8767 | Ave           |             | 0.8893 |    |   | 0.1000  | 4.2  |   | 20.0        |               |   |                   |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 151868  
SDG No.: \_\_\_\_\_  
Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N  
Calibration Start Date: 08/26/2015 15:04 Calibration End Date: 08/26/2015 17:52 Calibration ID: 25113

| ANALYTE                     | RRF              |                  |                  |        |        | CURVE<br>TYPE | COEFFICIENT |        |    | # | MIN RRF | %RSD | # | MAX<br>%RSD | R^2<br>OR COD | # | MIN R^2<br>OR COD |
|-----------------------------|------------------|------------------|------------------|--------|--------|---------------|-------------|--------|----|---|---------|------|---|-------------|---------------|---|-------------------|
|                             | LVL 1<br>LVL 6   | LVL 2<br>LVL 7   | LVL 3<br>LVL 8   | LVL 4  | LVL 5  |               | B           | M1     | M2 |   |         |      |   |             |               |   |                   |
| Dibromochloromethane        | 0.7656<br>0.8311 | 0.7604<br>0.7903 | 0.8248<br>0.9219 | 0.8043 | 0.8232 | Ave           |             | 0.8152 |    |   | 0.1000  | 6.2  |   | 20.0        |               |   |                   |
| 1,2-Dibromoethane (EDB)     | 0.9759<br>0.8616 | 0.9872<br>0.8306 | 0.9279<br>0.9400 | 0.8704 | 0.8651 | Ave           |             | 0.9073 |    |   | 0.1000  | 6.4  |   | 20.0        |               |   |                   |
| 3-Chlorobenzotrifluoride    | 1.9141<br>1.5139 | 1.7300<br>1.3853 | 1.7441<br>1.3810 | 1.5596 | 1.4979 | Ave           |             | 1.5907 |    |   | 0.0100  | 11.9 |   | 20.0        |               |   |                   |
| Chlorobenzene               | 3.7359<br>2.9360 | 3.5057<br>2.7547 | 3.3592<br>3.0452 | 3.0983 | 3.0632 | Ave           |             | 3.1873 |    |   | 0.5000  | 10.1 |   | 20.0        |               |   |                   |
| 4-Chlorobenzotrifluoride    | 1.7602<br>1.4166 | 1.6482<br>1.3106 | 1.6401<br>1.3278 | 1.5024 | 1.4249 | Ave           |             | 1.5038 |    |   | 0.0100  | 10.9 |   | 20.0        |               |   |                   |
| 1,1,1,2-Tetrachloroethane   | 1.1225<br>0.9996 | 1.0966<br>0.9489 | 1.0413<br>1.0904 | 1.0057 | 1.0062 | Ave           |             | 1.0389 |    |   | 0.0100  | 5.7  |   | 20.0        |               |   |                   |
| Ethylbenzene                | 1.6196<br>1.6672 | 1.7534<br>1.5472 | 1.8359<br>1.7000 | 1.6962 | 1.6973 | Ave           |             | 1.6896 |    |   | 0.1000  | 5.1  |   | 20.0        |               |   |                   |
| m-Xylene & p-Xylene         | 1.9469<br>2.0590 | 2.1320<br>1.8861 | 2.2561<br>2.1036 | 2.0873 | 2.1024 | Ave           |             | 2.0717 |    |   | 0.1000  | 5.5  |   | 20.0        |               |   |                   |
| o-Xylene                    | 1.7875<br>1.9631 | 1.9618<br>1.8192 | 2.1700<br>2.0438 | 2.0181 | 1.9885 | Ave           |             | 1.9690 |    |   | 0.3000  | 6.2  |   | 20.0        |               |   |                   |
| Styrene                     | 2.9089<br>3.2190 | 3.4288<br>3.0069 | 3.5226<br>3.3091 | 3.3907 | 3.3066 | Ave           |             | 3.2616 |    |   | 0.3000  | 6.4  |   | 20.0        |               |   |                   |
| Bromoform                   | 0.4690<br>0.4795 | 0.4313<br>0.4703 | 0.4499<br>0.5395 | 0.4346 | 0.4474 | Ave           |             | 0.4652 |    |   | 0.1000  | 7.4  |   | 20.0        |               |   |                   |
| 2-Chlorobenzotrifluoride    | 1.7885<br>1.4787 | 1.7489<br>1.3827 | 1.7033<br>1.3749 | 1.5707 | 1.4741 | Ave           |             | 1.5652 |    |   | 0.0100  | 10.5 |   | 20.0        |               |   |                   |
| Isopropylbenzene            | 4.3653<br>4.6596 | 5.1113<br>4.2808 | 5.5491<br>4.6316 | 4.9755 | 5.0001 | Ave           |             | 4.8217 |    |   | 0.1000  | 8.7  |   | 20.0        |               |   |                   |
| 1,1,2,2-Tetrachloroethane   | 1.4661<br>1.1699 | 1.3993<br>1.1182 | 1.3725<br>1.2326 | 1.2215 | 1.1808 | Ave           |             | 1.2701 |    |   | 0.3000  | 9.9  |   | 20.0        |               |   |                   |
| Bromobenzene                | 0.9000<br>0.8558 | 0.8314<br>0.8194 | 0.8380<br>0.9507 | 0.8287 | 0.8423 | Ave           |             | 0.8583 |    |   | 0.0100  | 5.2  |   | 20.0        |               |   |                   |
| trans-1,4-Dichloro-2-butene | 0.2917<br>0.3299 | 0.2806<br>0.3207 | 0.2875<br>0.3711 | 0.2997 | 0.3010 | Ave           |             | 0.3103 |    |   | 0.0100  | 9.5  |   | 20.0        |               |   |                   |
| 1,2,3-Trichloropropane      | 0.3063<br>0.2797 | 0.2926<br>0.2700 | 0.2690<br>0.3158 | 0.2674 | 0.2639 | Ave           |             | 0.2831 |    |   | 0.0100  | 6.9  |   | 20.0        |               |   |                   |
| N-Propylbenzene             | 0.8996<br>1.0031 | 0.9330<br>0.9647 | 1.0104<br>1.0875 | 0.9757 | 0.9863 | Ave           |             | 0.9825 |    |   | 0.0100  | 5.7  |   | 20.0        |               |   |                   |
| 2-Chlorotoluene             | 0.7422<br>0.8347 | 0.8275<br>0.8182 | 0.8534<br>0.9287 | 0.8318 | 0.8446 | Ave           |             | 0.8351 |    |   | 0.0100  | 6.1  |   | 20.0        |               |   |                   |
| 3-Chlorotoluene             | 0.8266<br>0.8699 | 0.8669<br>0.8353 | 0.8759<br>0.8984 | 0.8585 | 0.8348 | Ave           |             | 0.8583 |    |   | 0.0100  | 2.9  |   | 20.0        |               |   |                   |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 151868

SDG No.: \_\_\_\_\_

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/26/2015 15:04 Calibration End Date: 08/26/2015 17:52 Calibration ID: 25113

| ANALYTE                            | RRF              |                  |                  |        |        | CURVE<br>TYPE | COEFFICIENT |        |    | # | MIN RRF | %RSD | # | MAX<br>%RSD | R^2<br>OR COD | # | MIN R^2<br>OR COD |
|------------------------------------|------------------|------------------|------------------|--------|--------|---------------|-------------|--------|----|---|---------|------|---|-------------|---------------|---|-------------------|
|                                    | LVL 1<br>LVL 6   | LVL 2<br>LVL 7   | LVL 3<br>LVL 8   | LVL 4  | LVL 5  |               | B           | M1     | M2 |   |         |      |   |             |               |   |                   |
| 1,3,5-Trimethylbenzene             | 2.3645<br>2.7734 | 2.8908<br>2.6232 | 2.9957<br>2.8967 | 2.8185 | 2.8452 | Ave           |             | 2.7760 |    |   | 0.0100  | 7.1  |   | 20.0        |               |   |                   |
| 4-Chlorotoluene                    | 0.8633<br>0.9172 | 0.9746<br>0.8728 | 0.9234<br>0.9963 | 0.8946 | 0.9096 | Ave           |             | 0.9190 |    |   | 0.0100  | 5.0  |   | 20.0        |               |   |                   |
| tert-Butylbenzene                  | 1.8741<br>2.3430 | 2.1778<br>2.2068 | 2.3521<br>2.4799 | 2.2754 | 2.3463 | Ave           |             | 2.2569 |    |   | 0.0100  | 8.0  |   | 20.0        |               |   |                   |
| 1,2,4-Trimethylbenzene             | 2.3075<br>2.7925 | 2.8627<br>2.6520 | 2.9863<br>2.9459 | 2.8624 | 2.8401 | Ave           |             | 2.7812 |    |   | 0.0100  | 7.8  |   | 20.0        |               |   |                   |
| 3,4-Dichlorobenzotrifluoride       | 0.9332<br>0.7629 | 0.7706<br>0.7120 | 0.8114<br>0.7421 | 0.7469 | 0.7246 | Ave           |             | 0.7754 |    |   | 0.0100  | 9.1  |   | 20.0        |               |   |                   |
| sec-Butylbenzene                   | 2.7780<br>3.1978 | 3.2532<br>3.0155 | 3.5024<br>3.2789 | 3.1902 | 3.2760 | Ave           |             | 3.1865 |    |   | 0.0100  | 6.7  |   | 20.0        |               |   |                   |
| 1,3-Dichlorobenzene                | 1.5731<br>1.4773 | 1.6002<br>1.4395 | 1.5858<br>1.6167 | 1.4673 | 1.4672 | Ave           |             | 1.5284 |    |   | 0.6000  | 4.7  |   | 20.0        |               |   |                   |
| 4-Isopropyltoluene                 | 2.1994<br>2.7400 | 2.7068<br>2.6136 | 2.9233<br>2.8630 | 2.7523 | 2.7684 | Ave           |             | 2.6959 |    |   | 0.0100  | 8.2  |   | 20.0        |               |   |                   |
| 1,4-Dichlorobenzene                | 1.8395<br>1.4959 | 1.6730<br>1.4568 | 1.6062<br>1.6474 | 1.5057 | 1.4918 | Ave           |             | 1.5895 |    |   | 0.5000  | 8.1  |   | 20.0        |               |   |                   |
| 2,4-Dichlorobenzotrifluoride       | 0.8167<br>0.7142 | 0.7458<br>0.6499 | 0.7804<br>0.6801 | 0.6991 | 0.6616 | Ave           |             | 0.7185 |    |   | 0.0100  | 8.2  |   | 20.0        |               |   |                   |
| 2,5-Dichlorobenzotrifluoride       | 0.8953<br>0.7661 | 0.7731<br>0.7682 | 0.8004<br>0.7491 | 0.7462 | 0.7137 | Ave           |             | 0.7765 |    |   | 0.0100  | 7.0  |   | 20.0        |               |   |                   |
| n-Butylbenzene                     | 1.9548<br>2.3709 | 2.2758<br>2.2727 | 2.5056<br>2.4426 | 2.2735 | 2.3594 | Ave           |             | 2.3069 |    |   | 0.0100  | 7.2  |   | 20.0        |               |   |                   |
| 1,2-Dichlorobenzene                | 1.6347<br>1.3388 | 1.5012<br>1.3288 | 1.4944<br>1.4525 | 1.3452 | 1.3303 | Ave           |             | 1.4282 |    |   | 0.4000  | 7.8  |   | 20.0        |               |   |                   |
| 1,2-Dibromo-3-Chloropropane        | 0.1072<br>0.1191 | 0.1212<br>0.1226 | 0.1194<br>0.1351 | 0.1034 | 0.1102 | Ave           |             | 0.1173 |    |   | 0.0500  | 8.6  |   | 20.0        |               |   |                   |
| 2,4- & 2,5- & 2,6- Dichlorotoluene | 0.7554<br>0.8278 | 0.7846<br>0.8399 | 0.9569<br>0.8065 | 0.7811 | 0.7733 | Ave           |             | 0.8157 |    |   | 0.0100  | 7.8  |   | 20.0        |               |   |                   |
| 2,3- & 3,4- Dichlorotoluene        | 0.7045<br>0.7833 | 0.7591<br>0.8096 | 0.9510<br>0.7804 | 0.7194 | 0.7151 | Ave           |             | 0.7778 |    |   | 0.0100  | 10.2 |   | 20.0        |               |   |                   |
| 1,2,4-Trichlorobenzene             | 0.5337<br>0.5349 | 0.5713<br>0.5698 | 0.6897<br>0.5692 | 0.4840 | 0.4928 | Ave           |             | 0.5557 |    |   | 0.2000  | 11.5 |   | 20.0        |               |   |                   |
| Hexachlorobutadiene                | 0.2789<br>0.2527 | 0.2957<br>0.2535 | 0.3393<br>0.2508 | 0.2366 | 0.2338 | Ave           |             | 0.2677 |    |   | 0.0100  | 13.3 |   | 20.0        |               |   |                   |
| Naphthalene                        | 1.2233<br>1.4724 | 1.2705<br>1.5865 | 1.7478<br>1.5810 | 1.2452 | 1.2988 | Ave           |             | 1.4282 |    |   | 0.0100  | 13.7 |   | 20.0        |               |   |                   |
| 1,2,3-Trichlorobenzene             | 0.4915<br>0.4124 | 0.4501<br>0.4480 | 0.5796<br>0.4500 | 0.3828 | 0.3844 | Ave           |             | 0.4498 |    |   | 0.0100  | 14.2 |   | 20.0        |               |   |                   |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 151868

SDG No.: \_\_\_\_\_

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/26/2015 15:04 Calibration End Date: 08/26/2015 17:52 Calibration ID: 25113

| ANALYTE                      | RRF              |                  |                  |        |        | CURVE<br>TYPE | COEFFICIENT |        |    | # | MIN RRF | %RSD | # | MAX<br>%RSD | R^2<br>OR COD | # | MIN R^2<br>OR COD |
|------------------------------|------------------|------------------|------------------|--------|--------|---------------|-------------|--------|----|---|---------|------|---|-------------|---------------|---|-------------------|
|                              | LVL 1<br>LVL 6   | LVL 2<br>LVL 7   | LVL 3<br>LVL 8   | LVL 4  | LVL 5  |               | B           | M1     | M2 |   |         |      |   |             |               |   |                   |
| 2,4,5-Trichlorotoluene       | 0.1695<br>0.1581 | 0.1451<br>0.1827 | 0.2185<br>0.1750 | 0.1232 | 0.1263 | Ave           |             | 0.1623 |    |   | 0.0100  | 19.4 |   | 20.0        |               |   |                   |
| 2,3,6-Trichlorotoluene       | 0.1057<br>++++   | 0.1323<br>++++   | 0.2120<br>++++   | 0.1162 | 0.1265 | Ave           |             | 0.1496 |    |   | 0.0100  | 24.0 | * | 20.0        |               |   |                   |
| Dibromofluoromethane (Surr)  | 0.2897<br>0.2274 | 0.2548<br>0.2230 | 0.2447<br>0.2662 | 0.2287 | 0.2299 | Ave           |             | 0.2455 |    |   |         | 9.5  |   | 20.0        |               |   |                   |
| 1,2-Dichloroethane-d4 (Surr) | 0.4203<br>0.3099 | 0.3560<br>0.3035 | 0.3369<br>0.3556 | 0.3100 | 0.3058 | Ave           |             | 0.3373 |    |   |         | 11.9 |   | 20.0        |               |   |                   |
| Toluene-d8 (Surr)            | 4.5689<br>3.4832 | 4.1450<br>3.1902 | 4.3481<br>3.5716 | 3.8169 | 3.7347 | Ave           |             | 3.8573 |    |   |         | 12.1 |   | 20.0        |               |   |                   |
| 4-Bromofluorobenzene (Surr)  | 1.6296<br>1.3602 | 1.5022<br>1.2884 | 1.5824<br>1.4505 | 1.4462 | 1.3812 | Ave           |             | 1.4551 |    |   |         | 7.8  |   | 20.0        |               |   |                   |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 151868

SDG No.: \_\_\_\_\_

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/26/2015 15:04 Calibration End Date: 08/26/2015 17:52 Calibration ID: 25113

Calibration Files:

|         |                   |              |
|---------|-------------------|--------------|
| LEVEL:  | LAB SAMPLE ID:    | LAB FILE ID: |
| Level 1 | IC 180-151868/6   | 50826006.D   |
| Level 2 | IC 180-151868/8   | 50826008.D   |
| Level 3 | ICIS 180-151868/9 | 50826009.D   |
| Level 4 | IC 180-151868/10  | 50826010.D   |
| Level 5 | IC 180-151868/11  | 50826011.D   |
| Level 6 | IC 180-151868/12  | 50826012.D   |
| Level 7 | IC 180-151868/13  | 50826013.D   |
| Level 8 | IC 180-151868/14  | 50826014.D   |

| ANALYTE                               | IS<br>REF | CURVE<br>TYPE | RESPONSE         |                   |                   |        |        | CONCENTRATION (NG) |                |                |       |       |
|---------------------------------------|-----------|---------------|------------------|-------------------|-------------------|--------|--------|--------------------|----------------|----------------|-------|-------|
|                                       |           |               | LVL 1<br>LVL 6   | LVL 2<br>LVL 7    | LVL 3<br>LVL 8    | LVL 4  | LVL 5  | LVL 1<br>LVL 6     | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4 | LVL 5 |
| Dichlorodifluoromethane               | FB        | Ave           | 13335<br>461015  | 63359<br>506611   | 139988<br>585297  | 195493 | 268740 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Chloromethane                         | FB        | Ave           | 20806<br>669660  | 96975<br>733518   | 189967<br>886889  | 279657 | 386017 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Vinyl chloride                        | FB        | Ave           | 16232<br>603655  | 84746<br>663498   | 181809<br>782206  | 253941 | 356745 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,3-Butadiene                         | FB        | Ave           | 21253<br>700624  | 101243<br>762590  | 213171<br>893578  | 291582 | 411077 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Bromomethane                          | FB        | Ave           | 6860<br>267454   | 33586<br>244127   | 58568<br>333317   | 118541 | 149495 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Chloroethane                          | FB        | Ave           | 11321<br>358728  | 50718<br>395735   | 99329<br>465079   | 155578 | 207155 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Dichlorofluoromethane                 | FB        | Ave           | 22499<br>748877  | 111107<br>843233  | 232009<br>986298  | 318608 | 435665 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Trichlorofluoromethane                | FB        | Ave           | 16013<br>579992  | 81291<br>636269   | 174036<br>739174  | 241309 | 334740 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Ethyl ether                           | FB        | Ave           | 17175<br>521056  | 70836<br>582513   | 145899<br>750491  | 219194 | 295395 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Acrolein                              | FB        | Ave           | 41531<br>108307  | 52087<br>117496   | 66358<br>127965   | 75936  | 92519  | 100<br>225         | 125<br>250     | 150<br>275     | 175   | 200   |
| 1,1-Dichloroethene                    | FB        | Ave           | 11952<br>473565  | 60024<br>516257   | 132602<br>627614  | 192998 | 273818 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | FB        | Ave           | 13388<br>488054  | 67283<br>532678   | 141996<br>629046  | 204297 | 284081 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Acetone                               | FB        | Ave           | 25628<br>332039  | 51703<br>349354   | 88342<br>457819   | 125942 | 173687 | 25.0<br>350        | 50.0<br>400    | 100<br>500     | 150   | 200   |
| Iodomethane                           | FB        | Ave           | 18992<br>696716  | 89056<br>765249   | 190440<br>963985  | 284793 | 394076 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Carbon disulfide                      | FB        | Ave           | 25807<br>1177201 | 126552<br>1297173 | 288788<br>1607306 | 436105 | 636866 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 151868

SDG No.: \_\_\_\_\_

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/26/2015 15:04 Calibration End Date: 08/26/2015 17:52 Calibration ID: 25113

| ANALYTE                  | IS<br>REF | CURVE<br>TYPE | RESPONSE         |                   |                   |         |         | CONCENTRATION (NG) |                |                |       |       |
|--------------------------|-----------|---------------|------------------|-------------------|-------------------|---------|---------|--------------------|----------------|----------------|-------|-------|
|                          |           |               | LVL 1<br>LVL 6   | LVL 2<br>LVL 7    | LVL 3<br>LVL 8    | LVL 4   | LVL 5   | LVL 1<br>LVL 6     | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4 | LVL 5 |
| Allyl chloride           | FB        | Ave           | 5646<br>285911   | 31974<br>325399   | 70192<br>399041   | 108440  | 156677  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Methyl acetate           | FB        | Ave           | 67684<br>2539904 | 347746<br>2811173 | 664608<br>3450277 | 1027560 | 1419018 | 25.0<br>875        | 125<br>1000    | 250<br>1250    | 375   | 500   |
| Methylene Chloride       | FB        | Lin2          | 26437<br>510471  | 79338<br>573290   | 150258<br>715184  | 225319  | 291271  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| tert-Butyl alcohol       | TBA       | Ave           | 9257<br>352268   | 39038<br>410928   | 81932<br>514360   | 122262  | 185374  | 50.0<br>1750       | 250<br>2000    | 500<br>2500    | 750   | 1000  |
| Acrylonitrile            | FB        | Ave           | 65631<br>2452551 | 329204<br>2730347 | 693478<br>3337347 | 978697  | 1347643 | 50.0<br>1750       | 250<br>2000    | 500<br>2500    | 750   | 1000  |
| trans-1,2-Dichloroethene | FB        | Ave           | 13723<br>510637  | 66301<br>552053   | 141577<br>687878  | 204201  | 289331  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Methyl tert-butyl ether  | FB        | Ave           | 29774<br>1204325 | 147150<br>1367672 | 302403<br>1750025 | 477236  | 664089  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Hexane                   | FB        | Ave           | 22257<br>889892  | 109198<br>948868  | 237492<br>1125958 | 347025  | 493203  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,1-Dichloroethane       | FB        | Ave           | 27303<br>998105  | 128072<br>1104940 | 273423<br>1377944 | 407919  | 564450  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Vinyl acetate            | FB        | Ave           | 18896<br>801339  | 92081<br>887283   | 191017<br>1072494 | 303320  | 437799  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 2,2-Dichloropropane      | FB        | Ave           | 10315<br>413686  | 48880<br>451339   | 109416<br>564524  | 164171  | 234514  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| cis-1,2-Dichloroethene   | FB        | Ave           | 14442<br>550789  | 69819<br>600559   | 146208<br>760457  | 223289  | 302874  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 2-Butanone (MEK)         | FB        | Ave           | 34471<br>514894  | 68384<br>569128   | 136667<br>698551  | 210830  | 269779  | 25.0<br>350        | 50.0<br>400    | 100<br>500     | 150   | 200   |
| Bromochloromethane       | FB        | Ave           | 6284<br>234034   | 31931<br>262832   | 62915<br>336595   | 99282   | 133128  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Tetrahydrofuran          | FB        | Ave           | 12850<br>417684  | 51589<br>461621   | 107444<br>561739  | 153971  | 207145  | 10.0<br>350        | 50.0<br>400    | 100<br>500     | 150   | 200   |
| Chloroform               | FB        | Ave           | 24828<br>838419  | 113670<br>922240  | 232542<br>1166838 | 359318  | 482795  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,1,1-Trichloroethane    | FB        | Ave           | 15850<br>661680  | 81030<br>710348   | 178131<br>898258  | 264507  | 366328  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Cyclohexane              | FB        | Ave           | 25044<br>1115710 | 134937<br>1210903 | 302702<br>1451032 | 451893  | 637776  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Carbon tetrachloride     | FB        | Ave           | 13013<br>566329  | 69375<br>616016   | 148991<br>764597  | 226405  | 319309  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,1-Dichloropropene      | FB        | Ave           | 16668<br>734207  | 91438<br>785333   | 198075<br>975802  | 295676  | 417880  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Isobutyl alcohol         | FB        | Ave           | 9663<br>417725   | 48239<br>492768   | 113924<br>588608  | 149085  | 224262  | 125<br>4375        | 625<br>5000    | 1250<br>6250   | 1875  | 2500  |

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 151868

SDG No.: \_\_\_\_\_

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/26/2015 15:04 Calibration End Date: 08/26/2015 17:52 Calibration ID: 25113

| ANALYTE                     | IS<br>REF | CURVE<br>TYPE | RESPONSE         |                   |                   |        |         | CONCENTRATION (NG) |                |                |       |       |
|-----------------------------|-----------|---------------|------------------|-------------------|-------------------|--------|---------|--------------------|----------------|----------------|-------|-------|
|                             |           |               | LVL 1<br>LVL 6   | LVL 2<br>LVL 7    | LVL 3<br>LVL 8    | LVL 4  | LVL 5   | LVL 1<br>LVL 6     | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4 | LVL 5 |
| Benzene                     | FB        | Ave           | 55246<br>2000326 | 287091<br>2197241 | 580241<br>2707324 | 874781 | 1175215 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,2-Dichloroethane          | FB        | Ave           | 19231<br>709743  | 95482<br>788760   | 191991<br>987010  | 296218 | 399895  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| n-Heptane                   | FB        | Ave           | 19899<br>819932  | 97699<br>859948   | 215218<br>1040377 | 319252 | 444901  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Trichloroethene             | FB        | Ave           | 13948<br>506964  | 64418<br>556980   | 138404<br>693909  | 207852 | 285365  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Methylcyclohexane           | FB        | Ave           | 17237<br>866758  | 97305<br>937977   | 222858<br>1114866 | 336831 | 484430  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,2-Dichloropropane         | FB        | Ave           | 15440<br>547361  | 67479<br>594824   | 144895<br>765352  | 218947 | 304322  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,4-Dioxane                 | FB        | Ave           | 1429<br>82622    | 9374<br>91547     | 20164<br>111802   | 31691  | 44562   | 100<br>3500        | 500<br>4000    | 1000<br>5000   | 1500  | 2000  |
| Dibromomethane              | FB        | Ave           | 7003<br>277699   | 37187<br>307857   | 74626<br>386058   | 114083 | 152946  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Bromodichloromethane        | FB        | Ave           | 12926<br>576102  | 67441<br>644471   | 141423<br>812136  | 226806 | 310676  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| cis-1,3-Dichloropropene     | FB        | Ave           | 13234<br>714562  | 70847<br>812298   | 159644<br>1033255 | 264451 | 374197  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 4-Methyl-2-pentanone (MIBK) | CBZ       | Ave           | 52387<br>1157588 | 122590<br>1320471 | 267134<br>1599371 | 434749 | 614019  | 25.0<br>350        | 50.0<br>400    | 100<br>500     | 150   | 200   |
| Toluene                     | CBZ       | Ave           | 53527<br>2050607 | 281285<br>2228576 | 594334<br>2681762 | 874948 | 1201786 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| trans-1,3-Dichloropropene   | CBZ       | Ave           | 10582<br>619485  | 61867<br>704918   | 136231<br>891401  | 224205 | 323125  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Ethyl methacrylate          | CBZ       | Ave           | 9690<br>602921   | 57962<br>687101   | 132749<br>862044  | 225233 | 316812  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,1,2-Trichloroethane       | CBZ       | Ave           | 9469<br>403722   | 55277<br>441190   | 105440<br>557982  | 163298 | 224541  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Tetrachloroethene           | CBZ       | Ave           | 10935<br>401915  | 53495<br>438898   | 111146<br>530215  | 165929 | 230665  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,3-Dichloropropane         | CBZ       | Ave           | 19141<br>743698  | 95569<br>840507   | 194887<br>1030200 | 303582 | 408560  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 2-Hexanone                  | CBZ       | Ave           | 39604<br>820858  | 91984<br>943138   | 195734<br>1123041 | 310969 | 430988  | 25.0<br>350        | 50.0<br>400    | 100<br>500     | 150   | 200   |
| Dibromochloromethane        | CBZ       | Ave           | 7357<br>377032   | 38492<br>427847   | 89414<br>542940   | 143257 | 202349  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,2-Dibromoethane (EDB)     | CBZ       | Ave           | 9378<br>390862   | 49971<br>449617   | 100600<br>553588  | 155041 | 212653  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 3-Chlorobenzotrifluoride    | CBZ       | Ave           | 18393<br>686777  | 87568<br>749898   | 189078<br>813323  | 277802 | 368187  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |



FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 151868

SDG No.: \_\_\_\_\_

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/26/2015 15:04 Calibration End Date: 08/26/2015 17:52 Calibration ID: 25113

| ANALYTE                     | IS<br>REF | CURVE<br>TYPE | RESPONSE         |                   |                   |        |         | CONCENTRATION (NG) |                |                |       |       |
|-----------------------------|-----------|---------------|------------------|-------------------|-------------------|--------|---------|--------------------|----------------|----------------|-------|-------|
|                             |           |               | LVL 1<br>LVL 6   | LVL 2<br>LVL 7    | LVL 3<br>LVL 8    | LVL 4  | LVL 5   | LVL 1<br>LVL 6     | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4 | LVL 5 |
| Chlorobenzene               | CBZ       | Ave           | 35900<br>1331912 | 177451<br>1491257 | 364174<br>1793475 | 551865 | 752971  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 4-Chlorobenzotrifluoride    | CBZ       | Ave           | 16914<br>642626  | 83430<br>709487   | 177807<br>781989  | 267607 | 350243  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,1,1,2-Tetrachloroethane   | CBZ       | Ave           | 10787<br>453483  | 55507<br>513686   | 112884<br>642159  | 179137 | 247335  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Ethylbenzene                | CBZ       | Ave           | 15563<br>756322  | 88753<br>837593   | 199030<br>1001210 | 302122 | 417206  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| m-Xylene & p-Xylene         | CBZ       | Ave           | 18709<br>934055  | 107918<br>1021032 | 244588<br>1238884 | 371799 | 516778  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| o-Xylene                    | CBZ       | Ave           | 17177<br>890574  | 99302<br>984811   | 235252<br>1203666 | 359461 | 488783  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Styrene                     | CBZ       | Ave           | 27953<br>1460286 | 173558<br>1627751 | 381888<br>1948876 | 603962 | 812783  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Bromoform                   | CBZ       | Ave           | 4507<br>217546   | 21829<br>254607   | 48771<br>317730   | 77411  | 109983  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 2-Chlorobenzotrifluoride    | CBZ       | Ave           | 17186<br>670799  | 88525<br>748529   | 184654<br>809757  | 279773 | 362334  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Isopropylbenzene            | CBZ       | Ave           | 41948<br>2113845 | 258721<br>2317406 | 601591<br>2727755 | 886244 | 1229067 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,1,2,2-Tetrachloroethane   | CBZ       | Ave           | 14088<br>530728  | 70831<br>605346   | 148796<br>725938  | 217578 | 290248  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Bromobenzene                | DCB       | Ave           | 12648<br>543146  | 66130<br>609774   | 144660<br>743219  | 218069 | 300450  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| trans-1,4-Dichloro-2-butene | DCB       | Ave           | 4099<br>209384   | 22318<br>238659   | 49630<br>290130   | 78865  | 107372  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,2,3-Trichloropropane      | DCB       | Ave           | 4305<br>177490   | 23273<br>200908   | 46443<br>246872   | 70373  | 94129   | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| N-Propylbenzene             | DCB       | Ave           | 12643<br>636587  | 74204<br>717909   | 174426<br>850210  | 256762 | 351814  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 2-Chlorotoluene             | DCB       | Ave           | 10430<br>529736  | 65813<br>608876   | 147328<br>726063  | 218909 | 301246  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 3-Chlorotoluene             | DCB       | Ave           | 11617<br>552058  | 68954<br>621607   | 151211<br>702342  | 225916 | 297767  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,3,5-Trimethylbenzene      | DCB       | Ave           | 33229<br>1760059 | 229921<br>1952122 | 517168<br>2264532 | 741712 | 1014826 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 4-Chlorotoluene             | DCB       | Ave           | 12133<br>582109  | 77519<br>649501   | 159410<br>778860  | 235437 | 324433  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| tert-Butylbenzene           | DCB       | Ave           | 26338<br>1486960 | 173217<br>1642231 | 406052<br>1938716 | 598804 | 836893  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,2,4-Trimethylbenzene      | DCB       | Ave           | 32428<br>1772230 | 227690<br>1973541 | 515539<br>2303042 | 753282 | 1013032 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 151868

SDG No.: \_\_\_\_\_

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/26/2015 15:04 Calibration End Date: 08/26/2015 17:52 Calibration ID: 25113

| ANALYTE                            | IS<br>REF | CURVE<br>TYPE | RESPONSE         |                   |                   |        |         | CONCENTRATION (NG) |                |                |       |       |
|------------------------------------|-----------|---------------|------------------|-------------------|-------------------|--------|---------|--------------------|----------------|----------------|-------|-------|
|                                    |           |               | LVL 1<br>LVL 6   | LVL 2<br>LVL 7    | LVL 3<br>LVL 8    | LVL 4  | LVL 5   | LVL 1<br>LVL 6     | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4 | LVL 5 |
| 3,4-Dichlorobenzotrifluoride       | DCB       | Ave           | 13115<br>484133  | 61289<br>529814   | 140073<br>580120  | 196559 | 258438  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| sec-Butylbenzene                   | DCB       | Ave           | 39041<br>2029430 | 258745<br>2244027 | 604638<br>2563359 | 839536 | 1168492 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,3-Dichlorobenzene                | DCB       | Ave           | 22108<br>937539  | 127273<br>1071203 | 273757<br>1263925 | 386149 | 523315  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 4-Isopropyltoluene                 | DCB       | Ave           | 30909<br>1738859 | 215293<br>1944911 | 504672<br>2238219 | 724310 | 987448  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,4-Dichlorobenzene                | DCB       | Ave           | 25851<br>949324  | 133066<br>1084086 | 277292<br>1287906 | 396239 | 532103  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 2,4-Dichlorobenzotrifluoride       | DCB       | Ave           | 11477<br>453275  | 59316<br>483618   | 134729<br>531698  | 183967 | 235991  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 2,5-Dichlorobenzotrifluoride       | DCB       | Ave           | 12582<br>486163  | 61489<br>571654   | 138171<br>585601  | 196358 | 254571  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| n-Butylbenzene                     | DCB       | Ave           | 27472<br>1504673 | 181007<br>1691227 | 432555<br>1909580 | 598297 | 841574  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,2-Dichlorobenzene                | DCB       | Ave           | 22973<br>849612  | 119403<br>988861  | 257985<br>1135542 | 354012 | 474503  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,2-Dibromo-3-Chloropropane        | DCB       | Ave           | 1507<br>75555    | 9637<br>91242     | 20608<br>105625   | 27203  | 39315   | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 2,4- & 2,5- & 2,6- Dichlorotoluene | DCB       | Ave           | 31847<br>1576122 | 187206<br>1875036 | 495585<br>1891413 | 616649 | 827426  | 15.0<br>525        | 75.0<br>600    | 150<br>750     | 225   | 300   |
| 2,3- & 3,4- Dichlorotoluene        | DCB       | Ave           | 19801<br>994231  | 120746<br>1204899 | 328345<br>1220209 | 378630 | 510138  | 10.0<br>350        | 50.0<br>400    | 100<br>500     | 150   | 200   |
| 1,2,4-Trichlorobenzene             | DCB       | Ave           | 7500<br>339446   | 45439<br>424061   | 119069<br>445017  | 127381 | 175776  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Hexachlorobutadiene                | DCB       | Ave           | 3919<br>160392   | 23516<br>188644   | 58574<br>196056   | 62268  | 83392   | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Naphthalene                        | DCB       | Ave           | 17192<br>934428  | 101055<br>1180622 | 301738<br>1235965 | 327683 | 463258  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,2,3-Trichlorobenzene             | DCB       | Ave           | 6907<br>261711   | 35802<br>333363   | 100055<br>351787  | 100749 | 137103  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 2,4,5-Trichlorotoluene             | DCB       | Ave           | 2382<br>100325   | 11540<br>135933   | 37716<br>136778   | 32434  | 45065   | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 2,3,6-Trichlorotoluene             | DCB       | Ave           | 1485<br>+++++    | 10524<br>+++++    | 36592<br>+++++    | 30574  | 45128   | 5.00<br>+++++      | 25.0<br>+++++  | 50.0<br>+++++  | 75.0  | 100   |
| Dibromofluoromethane (Surr)        | FB        | Ave           | 11752<br>399678  | 54310<br>438908   | 112824<br>562879  | 168602 | 230039  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,2-Dichloroethane-d4 (Surr)       | FB        | Ave           | 17051<br>544829  | 75876<br>597233   | 155346<br>751925  | 228530 | 306020  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Toluene-d8 (Surr)                  | CBZ       | Ave           | 43904<br>1580158 | 209810<br>1727014 | 471382<br>2103482 | 679876 | 918031  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 151868

SDG No.: \_\_\_\_\_

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/26/2015 15:04 Calibration End Date: 08/26/2015 17:52 Calibration ID: 25113

| ANALYTE                     | IS<br>REF | CURVE<br>TYPE | RESPONSE        |                 |                  |        |        | CONCENTRATION (NG) |                |                |       |       |
|-----------------------------|-----------|---------------|-----------------|-----------------|------------------|--------|--------|--------------------|----------------|----------------|-------|-------|
|                             |           |               | LVL 1<br>LVL 6  | LVL 2<br>LVL 7  | LVL 3<br>LVL 8   | LVL 4  | LVL 5  | LVL 1<br>LVL 6     | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4 | LVL 5 |
| 4-Bromofluorobenzene (Surr) | CBZ       | Ave           | 15659<br>617045 | 76038<br>697446 | 171548<br>854277 | 257596 | 339508 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |

Curve Type Legend:

Ave = Average ISTD

Lin2 = Linear 1/conc^2 ISTD

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
READBACK PERCENT ERROR

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 151868

SDG No.: \_\_\_\_\_

Instrument ID: CHHP5 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/26/2015 15:04 Calibration End Date: 08/26/2015 17:52 Calibration ID: 25113

Calibration Files:

| LEVEL:  | LAB SAMPLE ID:    | LAB FILE ID: |
|---------|-------------------|--------------|
| Level 1 | IC 180-151868/6   | 50826006.D   |
| Level 2 | IC 180-151868/8   | 50826008.D   |
| Level 3 | ICIS 180-151868/9 | 50826009.D   |
| Level 4 | IC 180-151868/10  | 50826010.D   |
| Level 5 | IC 180-151868/11  | 50826011.D   |
| Level 6 | IC 180-151868/12  | 50826012.D   |
| Level 7 | IC 180-151868/13  | 50826013.D   |
| Level 8 | IC 180-151868/14  | 50826014.D   |

| ANALYTE            | PERCENT ERROR |         |         |         |         |         | PERCENT ERROR LIMIT |       |       |       |       |       |
|--------------------|---------------|---------|---------|---------|---------|---------|---------------------|-------|-------|-------|-------|-------|
|                    | LVL 1 #       | LVL 2 # | LVL 3 # | LVL 4 # | LVL 5 # | LVL 6 # | LVL 1               | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 6 |
|                    | LVL 7 #       | LVL 8 # |         |         |         |         | LVL 7               | LVL 8 |       |       |       |       |
| Methylene Chloride | -0.1          | 3.1     | -0.5    | -3.3    | -6.2    | -3.8    | 40                  | 40    | 40    | 40    | 40    | 40    |
|                    | -3.0          | 13.7    |         |         |         |         | 40                  | 40    |       |       |       |       |

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826006.D  
 Lims ID: IC VSTD1  
 Client ID:  
 Sample Type: IC Calib Level: 1  
 Inject. Date: 26-Aug-2015 15:04:30 ALS Bottle#: 6 Worklist Smp#: 6  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: IC VSTD1  
 Misc. Info.: 180-0008300-006  
 Operator ID: 001562 Instrument ID: CHHP5  
 Sublist: chrom-MSVOA\_LL\_CHHP5\*sub4  
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C ICAL  
 Last Update: 27-Aug-2015 12:16:48 Calib Date: 26-Aug-2015 17:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: XAWRK048

First Level Reviewer: fergusond

Date: 27-Aug-2015 12:16:48

| Compound                        | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q   | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|---------------------------------|-----|--------------|------------------|------------------|-----|----------|---------------|-----------------|-------|
| * 1 TBA-d9 (IS)                 | 65  | 4.266        | 4.274            | -0.008           | 0   | 136898   | 1000.0        | 1000.0          |       |
| * 2 Fluorobenzene (IS)          | 96  | 7.290        | 7.291            | -0.001           | 98  | 405648   | 50.0          | 50.0            |       |
| * 3 Chlorobenzene-d5            | 119 | 10.386       | 10.387           | -0.001           | 88  | 96094    | 50.0          | 50.0            |       |
| * 4 1,4-Dichlorobenzene-d4      | 152 | 12.728       | 12.730           | -0.002           | 97  | 140534   | 50.0          | 50.0            |       |
| \$ 5 Dibromofluoromethane (Surr | 113 | 6.566        | 6.567            | -0.001           | 89  | 11752    | 5.00          | 5.90            |       |
| \$ 6 1,2-Dichloroethane-d4 (Sur | 65  | 6.937        | 6.938            | -0.001           | 0   | 17051    | 5.00          | 6.23            |       |
| \$ 7 Toluene-d8 (Surr)          | 98  | 8.938        | 8.933            | 0.005            | 95  | 43904    | 5.00          | 5.92            |       |
| \$ 8 4-Bromofluorobenzene (Surr | 95  | 11.572       | 11.574           | -0.002           | 84  | 15659    | 5.00          | 5.60            |       |
| 11 Dichlorodifluoromethane      | 85  | 1.608        | 1.627            | -0.019           | 94  | 13335    | 5.00          | 5.82            |       |
| 12 Chloromethane                | 50  | 1.760        | 1.761            | -0.001           | 98  | 20806    | 5.00          | 6.18            |       |
| 13 Vinyl chloride               | 62  | 1.906        | 1.901            | 0.005            | 72  | 16232    | 5.00          | 5.44            |       |
| 14 Butadiene                    | 39  | 1.930        | 1.931            | -0.001           | 96  | 21253    | 5.00          | 6.03            |       |
| 15 Bromomethane                 | 94  | 2.228        | 2.236            | -0.008           | 92  | 6860     | 5.00          | 5.65            |       |
| 16 Chloroethane                 | 64  | 2.386        | 2.376            | 0.010            | 96  | 11321    | 5.00          | 6.29            |       |
| 17 Dichlorofluoromethane        | 67  | 2.660        | 2.661            | -0.001           | 95  | 22499    | 5.00          | 5.89            |       |
| 18 Trichlorofluoromethane       | 101 | 2.648        | 2.661            | -0.013           | 71  | 16013    | 5.00          | 5.60            | M     |
| 20 Ethyl ether                  | 59  | 3.049        | 3.051            | -0.002           | 97  | 17175    | 5.00          | 6.48            |       |
| 21 Acrolein                     | 56  | 3.220        | 3.233            | -0.013           | 99  | 41531    | 100.0         | 105.2           |       |
| 22 1,1-Dichloroethene           | 96  | 3.335        | 3.355            | -0.020           | 78  | 11952    | 5.00          | 5.29            |       |
| 23 1,1,2-Trichloro-1,2,2-trif   | 101 | 3.402        | 3.416            | -0.014           | 66  | 13388    | 5.00          | 5.59            |       |
| 24 Acetone                      | 43  | 3.451        | 3.452            | -0.001           | 99  | 25628    | 25.0          | 31.3            | M     |
| 25 Iodomethane                  | 142 | 3.536        | 3.556            | -0.020           | 100 | 18992    | 5.00          | 5.64            |       |
| 26 Carbon disulfide             | 76  | 3.627        | 3.635            | -0.008           | 99  | 25807    | 5.00          | 4.92            |       |
| 28 3-Chloro-1-propene           | 76  | 3.913        | 3.921            | -0.008           | 88  | 5646     | 5.00          | 4.41            |       |
| 30 Methyl acetate               | 43  | 3.938        | 3.945            | -0.007           | 100 | 67684    | 25.0          | 27.7            |       |
| 31 Methylene Chloride           | 84  | 4.126        | 4.152            | -0.026           | 96  | 26437    | 5.00          | 4.99            |       |
| 32 2-Methyl-2-propanol          | 59  | 4.406        | 4.413            | -0.007           | 90  | 9257     | 50.0          | 60.1            |       |
| 33 Acrylonitrile                | 53  | 4.515        | 4.517            | -0.002           | 99  | 65631    | 50.0          | 55.3            |       |
| 34 trans-1,2-Dichloroethene     | 96  | 4.558        | 4.566            | -0.008           | 90  | 13723    | 5.00          | 5.59            |       |
| 35 Methyl tert-butyl ether      | 73  | 4.576        | 4.584            | -0.008           | 92  | 29774    | 5.00          | 5.24            |       |

| Compound                       | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 36 Hexane                      | 57  | 4.990     | 4.991         | -0.001        | 93 | 22257    | 5.00       | 5.40         |       |
| 37 1,1-Dichloroethane          | 63  | 5.203     | 5.198         | 0.005         | 96 | 27303    | 5.00       | 5.65         |       |
| 38 Vinyl acetate               | 43  | 5.252     | 5.253         | -0.001        | 98 | 18896    | 5.00       | 5.21         |       |
| 45 cis-1,2-Dichloroethene      | 96  | 5.951     | 5.953         | -0.002        | 85 | 14442    | 5.00       | 5.51         |       |
| 44 2,2-Dichloropropane         | 77  | 5.939     | 5.946         | -0.007        | 60 | 10315    | 5.00       | 5.33         |       |
| 46 2-Butanone (MEK)            | 43  | 5.963     | 5.959         | 0.004         | 97 | 34471    | 25.0       | 28.0         |       |
| 49 Chlorobromomethane          | 128 | 6.237     | 6.238         | -0.001        | 92 | 6284     | 5.00       | 5.46         |       |
| 51 Tetrahydrofuran             | 42  | 6.249     | 6.257         | -0.008        | 93 | 12850    | 10.0       | 13.0         |       |
| 52 Chloroform                  | 83  | 6.389     | 6.385         | 0.005         | 74 | 24828    | 5.00       | 5.95         |       |
| 53 1,1,1-Trichloroethane       | 97  | 6.535     | 6.549         | -0.014        | 91 | 15850    | 5.00       | 5.13         |       |
| 54 Cyclohexane                 | 56  | 6.614     | 6.616         | -0.002        | 96 | 25044    | 5.00       | 4.85         |       |
| 56 Carbon tetrachloride        | 117 | 6.718     | 6.719         | -0.001        | 94 | 13013    | 5.00       | 4.95         |       |
| 55 1,1-Dichloropropene         | 75  | 6.724     | 6.731         | -0.007        | 91 | 16668    | 5.00       | 4.88         |       |
| 57 Isobutyl alcohol            | 41  | 6.918     | 6.926         | -0.008        | 70 | 9663     | 125.0      | 125.1        |       |
| 58 Benzene                     | 78  | 6.943     | 6.944         | -0.001        | 97 | 55246    | 5.00       | 5.52         |       |
| 59 1,2-Dichloroethane          | 62  | 7.022     | 7.023         | -0.001        | 95 | 19231    | 5.00       | 5.56         |       |
| 62 n-Heptane                   | 43  | 7.314     | 7.309         | 0.005         | 93 | 19899    | 5.00       | 5.32         |       |
| 64 Trichloroethene             | 130 | 7.679     | 7.674         | 0.005         | 92 | 13948    | 5.00       | 5.70         |       |
| 66 Methylcyclohexane           | 83  | 7.916     | 7.918         | -0.002        | 93 | 17237    | 5.00       | 4.47         |       |
| 67 1,2-Dichloropropane         | 63  | 7.947     | 7.954         | -0.007        | 90 | 15440    | 5.00       | 5.88         |       |
| 70 1,4-Dioxane                 | 88  | 8.026     | 8.027         | -0.001        | 42 | 1429     | 100.0      | 79.0         |       |
| 68 Dibromomethane              | 93  | 8.026     | 8.039         | -0.013        | 95 | 7003     | 5.00       | 5.26         |       |
| 71 Dichlorobromomethane        | 83  | 8.232     | 8.234         | -0.002        | 93 | 12926    | 5.00       | 4.90         |       |
| 74 cis-1,3-Dichloropropene     | 75  | 8.664     | 8.678         | -0.014        | 65 | 13234    | 5.00       | 4.29         |       |
| 75 4-Methyl-2-pentanone (MIBK) | 43  | 8.823     | 8.830         | -0.007        | 97 | 52387    | 25.0       | 22.1         |       |
| 76 Toluene                     | 91  | 9.005     | 9.006         | -0.001        | 97 | 53527    | 5.00       | 5.63         |       |
| 77 trans-1,3-Dichloropropene   | 75  | 9.248     | 9.250         | -0.002        | 96 | 10582    | 5.00       | 4.26         |       |
| 78 Ethyl methacrylate          | 69  | 9.315     | 9.311         | 0.004         | 94 | 9690     | 5.00       | 4.04         |       |
| 79 1,1,2-Trichloroethane       | 97  | 9.449     | 9.444         | 0.005         | 93 | 9469     | 5.00       | 5.23         |       |
| 80 Tetrachloroethene           | 164 | 9.522     | 9.517         | 0.005         | 93 | 10935    | 5.00       | 5.92         |       |
| 81 1,3-Dichloropropane         | 76  | 9.607     | 9.603         | 0.004         | 99 | 19141    | 5.00       | 5.70         |       |
| 82 2-Hexanone                  | 43  | 9.662     | 9.657         | 0.005         | 97 | 39604    | 25.0       | 23.2         |       |
| 84 Chlorodibromomethane        | 129 | 9.814     | 9.816         | -0.002        | 89 | 7357     | 5.00       | 4.70         |       |
| 85 Ethylene Dibromide          | 107 | 9.930     | 9.931         | -0.001        | 99 | 9378     | 5.00       | 5.38         |       |
| 86 3-Chlorobenzotrifluoride    | 180 | 10.392    | 10.387        | 0.005         | 56 | 18393    | 5.00       | 6.02         |       |
| 87 Chlorobenzene               | 112 | 10.416    | 10.418        | -0.002        | 94 | 35900    | 5.00       | 5.86         |       |
| 88 4-Chlorobenzotrifluoride    | 180 | 10.477    | 10.479        | -0.002        | 96 | 16914    | 5.00       | 5.85         |       |
| 89 1,1,1,2-Tetrachloroethane   | 131 | 10.508    | 10.509        | -0.001        | 87 | 10787    | 5.00       | 5.40         |       |
| 90 Ethylbenzene                | 106 | 10.514    | 10.515        | -0.001        | 98 | 15563    | 5.00       | 4.79         |       |
| 91 m-Xylene & p-Xylene         | 106 | 10.648    | 10.649        | -0.001        | 0  | 18709    | 5.00       | 4.70         |       |
| 92 o-Xylene                    | 106 | 11.025    | 11.026        | -0.001        | 97 | 17177    | 5.00       | 4.54         |       |
| 93 Styrene                     | 104 | 11.049    | 11.051        | -0.002        | 93 | 27953    | 5.00       | 4.46         |       |
| 94 Bromoform                   | 173 | 11.226    | 11.233        | -0.007        | 96 | 4507     | 5.00       | 5.04         |       |
| 96 2-Chlorobenzotrifluoride    | 180 | 11.305    | 11.294        | 0.011         | 92 | 17186    | 5.00       | 5.71         |       |
| 97 Isopropylbenzene            | 105 | 11.396    | 11.397        | -0.001        | 96 | 41948    | 5.00       | 4.53         |       |
| 100 Bromobenzene               | 156 | 11.712    | 11.708        | 0.004         | 96 | 12648    | 5.00       | 5.24         |       |
| 99 1,1,2,2-Tetrachloroethane   | 83  | 11.712    | 11.708        | 0.004         | 82 | 14088    | 5.00       | 5.77         |       |
| 102 trans-1,4-Dichloro-2-buten | 53  | 11.749    | 11.744        | 0.005         | 58 | 4099     | 5.00       | 4.70         |       |
| 101 1,2,3-Trichloropropane     | 110 | 11.761    | 11.762        | -0.001        | 85 | 4305     | 5.00       | 5.41         |       |
| 103 N-Propylbenzene            | 120 | 11.810    | 11.811        | -0.001        | 99 | 12643    | 5.00       | 4.58         |       |
| 104 2-Chlorotoluene            | 126 | 11.895    | 11.902        | -0.007        | 95 | 10430    | 5.00       | 4.44         |       |
| 105 3-Chlorotoluene            | 126 | 11.968    | 11.963        | 0.005         | 96 | 11617    | 5.00       | 4.82         |       |

| Compound                         | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|----------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 106 1,3,5-Trimethylbenzene       | 105 | 11.992    | 11.993        | -0.001        | 95 | 33229    | 5.00       | 4.26         |       |
| 107 4-Chlorotoluene              | 126 | 12.022    | 12.024        | -0.002        | 98 | 12133    | 5.00       | 4.70         |       |
| 108 tert-Butylbenzene            | 119 | 12.308    | 12.310        | -0.002        | 96 | 26338    | 5.00       | 4.15         |       |
| 110 1,2,4-Trimethylbenzene       | 105 | 12.369    | 12.371        | -0.002        | 96 | 32428    | 5.00       | 4.15         |       |
| 111 1,2-dichloro-4-(trifluorom   | 214 | 12.406    | 12.413        | -0.007        | 95 | 13115    | 5.00       | 6.02         |       |
| 112 sec-Butylbenzene             | 105 | 12.533    | 12.535        | -0.002        | 96 | 39041    | 5.00       | 4.36         |       |
| 113 1,3-Dichlorobenzene          | 146 | 12.655    | 12.650        | 0.005         | 94 | 22108    | 5.00       | 5.15         |       |
| 114 4-Isopropyltoluene           | 119 | 12.692    | 12.687        | 0.005         | 94 | 30909    | 5.00       | 4.08         |       |
| 115 1,4-Dichlorobenzene          | 146 | 12.752    | 12.754        | -0.002        | 94 | 25851    | 5.00       | 5.79         |       |
| 116 2,4-Dichloro-1-(trifluorom   | 214 | 12.783    | 12.778        | 0.005         | 92 | 11477    | 5.00       | 5.68         |       |
| 118 2,5-Dichlorobenzotrifluori   | 214 | 12.825    | 12.821        | 0.004         | 0  | 12582    | 5.00       | 5.77         |       |
| 120 n-Butylbenzene               | 91  | 13.099    | 13.101        | -0.002        | 98 | 27472    | 5.00       | 4.24         |       |
| 121 1,2-Dichlorobenzene          | 146 | 13.111    | 13.113        | -0.002        | 97 | 22973    | 5.00       | 5.72         |       |
| 122 1,2-Dibromo-3-Chloropropan   | 75  | 13.920    | 13.904        | 0.016         | 1  | 1507     | 5.00       | 4.57         |       |
| 123 2,4- & 2,5- & 2,6- Dichlor   | 125 | 14.048    | 14.044        | 0.004         | 0  | 31847    | 15.0       | 13.9         |       |
| 125 2,3- & 3,4- Dichlorotoluen   | 125 | 14.462    | 14.463        | -0.001        | 0  | 19801    | 10.0       | 9.06         |       |
| 126 1,2,4-Trichlorobenzene       | 180 | 14.723    | 14.725        | -0.002        | 94 | 7500     | 5.00       | 4.80         |       |
| 127 Hexachlorobutadiene          | 225 | 14.876    | 14.871        | 0.005         | 90 | 3919     | 5.00       | 5.21         |       |
| 128 Naphthalene                  | 128 | 14.991    | 14.993        | -0.002        | 96 | 17192    | 5.00       | 4.28         |       |
| 129 1,2,3-Trichlorobenzene       | 180 | 15.216    | 15.218        | -0.002        | 92 | 6907     | 5.00       | 5.46         |       |
| 131 2,4,5-Trichlorotoluene       | 159 | 15.989    | 15.990        | -0.001        | 0  | 2382     | 5.00       | 5.22         |       |
| 130 2,3,6-Trichlorotoluene       | 159 | 16.092    | 16.094        | -0.002        | 87 | 1485     | 5.00       | 3.53         |       |
| 147 2,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 149 3,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 150 2,6-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 148 2,3-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 146 2,5-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| S 133 Xylenes, Total             | 106 |           |               |               | 0  |          | 10.0       | 9.24         |       |
| S 134 1,2-Dichloroethene, Total  | 96  |           |               |               | 0  |          | 10.0       | 11.1         |       |
| S 135 1,3-Dichloropropene, Total | 1   |           |               |               | 0  |          | 10.0       | 8.55         |       |

### QC Flag Legend

#### Processing Flags

ND - Not Detected or Marked ND

#### Review Flags

M - Manually Integrated

### Reagents:

|                     |                    |           |             |
|---------------------|--------------------|-----------|-------------|
| VOA8260VOAPRI_00139 | Amount Added: 0.20 | Units: uL |             |
| voaWEE1stRest_00001 | Amount Added: 0.20 | Units: uL |             |
| VOAVAPRI_00006      | Amount Added: 0.20 | Units: uL |             |
| voaWKet1 Rest_00001 | Amount Added: 0.80 | Units: uL |             |
| VOAACROLEINPR_00006 | Amount Added: 4.00 | Units: uL |             |
| VOA8260SURRE_00040  | Amount Added: 0.20 | Units: uL |             |
| VOA8260INT_00040    | Amount Added: 2.00 | Units: uL | Run Reagent |

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826006.D

Injection Date: 26-Aug-2015 15:04:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: IC VSTD1

Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL

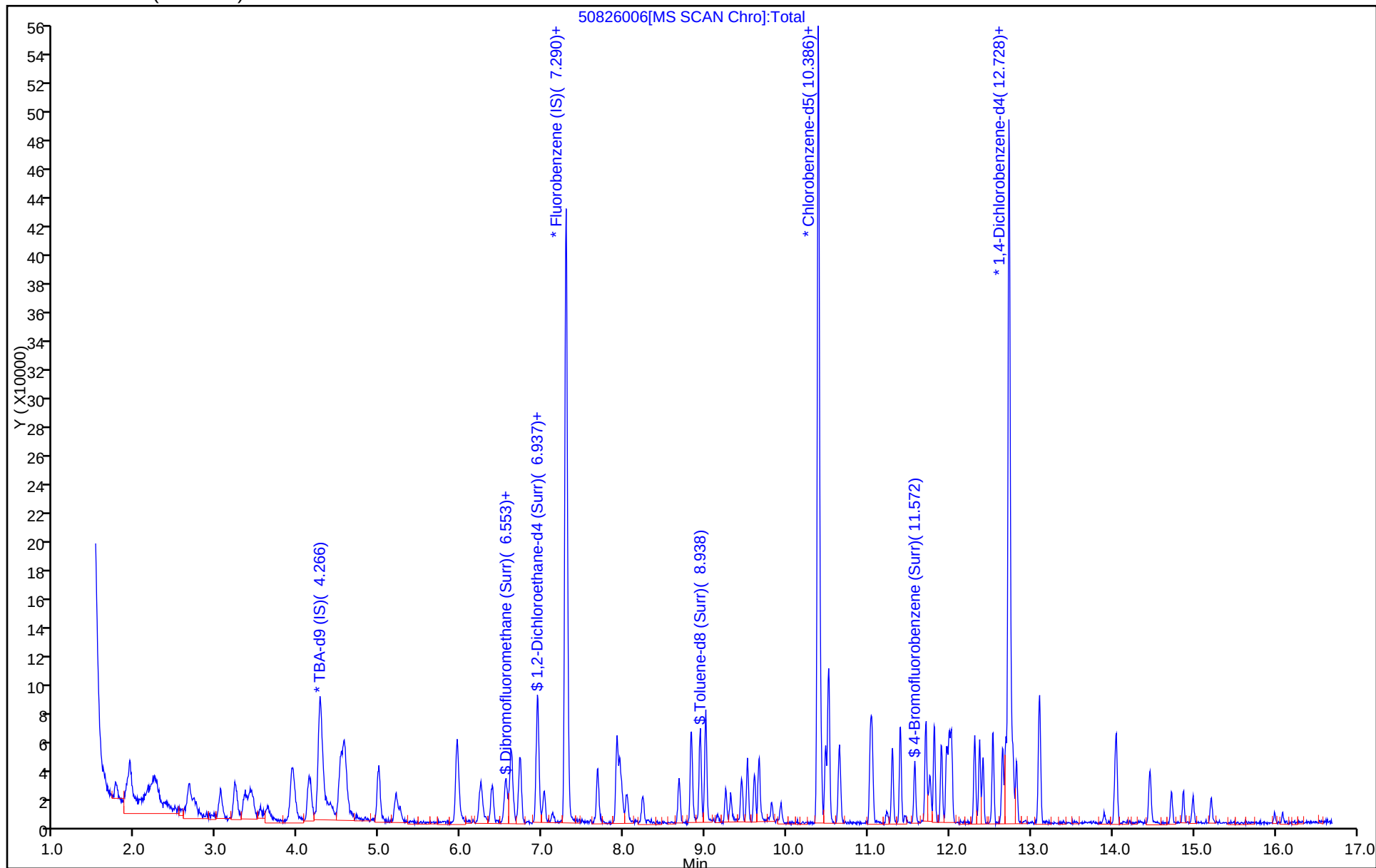
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 ( 0.18 mm)





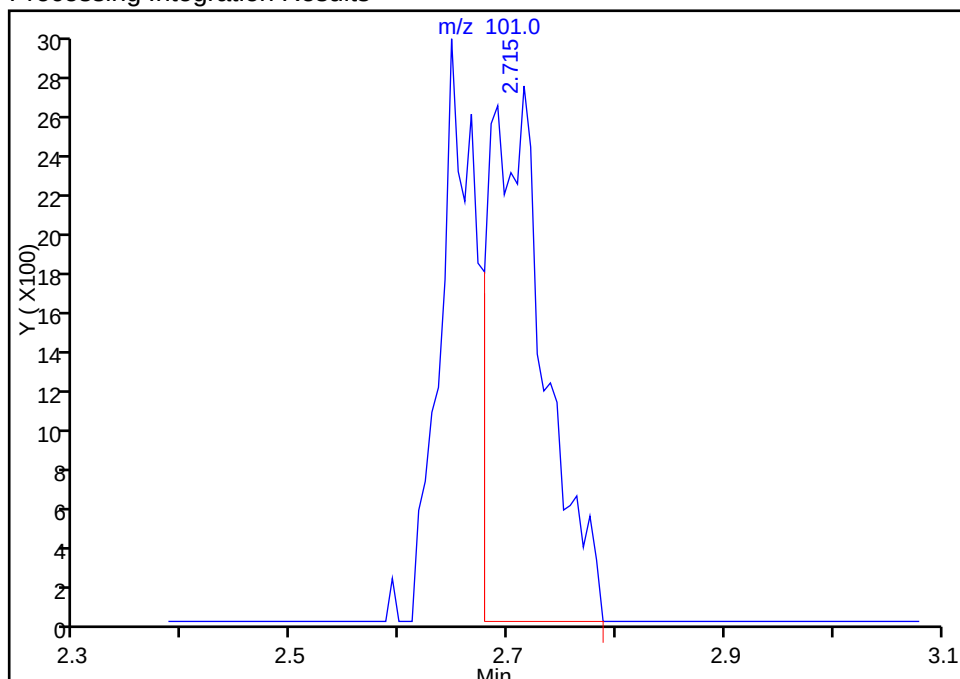
## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826006.D  
Injection Date: 26-Aug-2015 15:04:30 Instrument ID: CHHP5  
Lims ID: IC VSTD1  
Client ID:  
Operator ID: 001562 ALS Bottle#: 6 Worklist Smp#: 6  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C ICAL  
Column: DB-624 ( 0.18 mm) Detector MS SCAN

**18 Trichlorofluoromethane, CAS: 75-69-4**

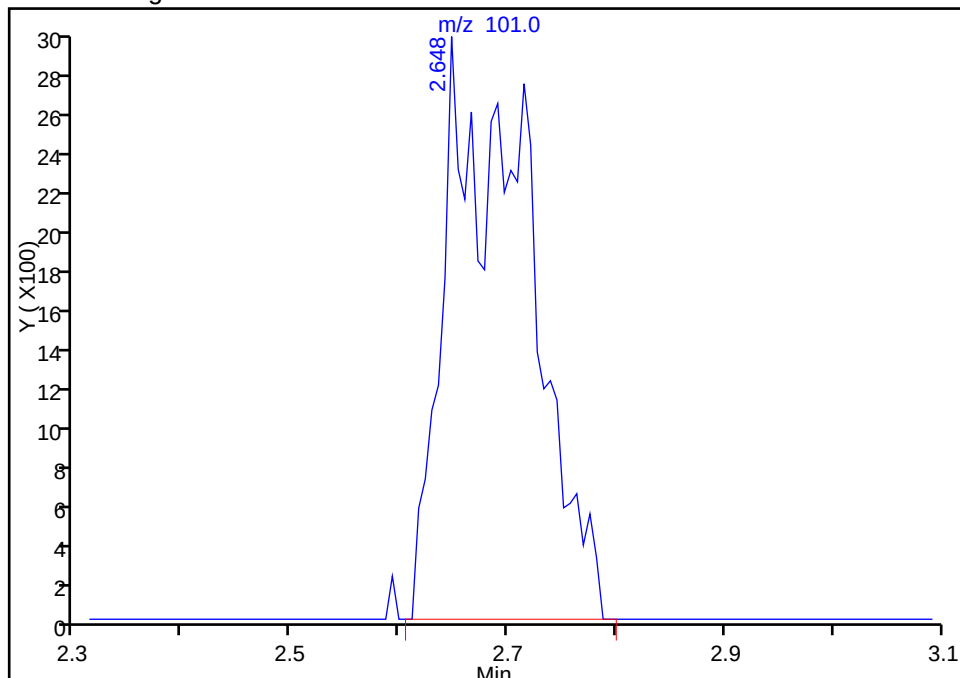
RT: 2.71  
Area: 9760  
Amount: 4.111403  
Amount Units: ng

## Processing Integration Results



RT: 2.65  
Area: 16013  
Amount: 5.602773  
Amount Units: ng

## Manual Integration Results



Reviewer: fergusond, 27-Aug-2015 10:07:27  
Audit Action: Manually Integrated  
Audit Reason: Incomplete Integration

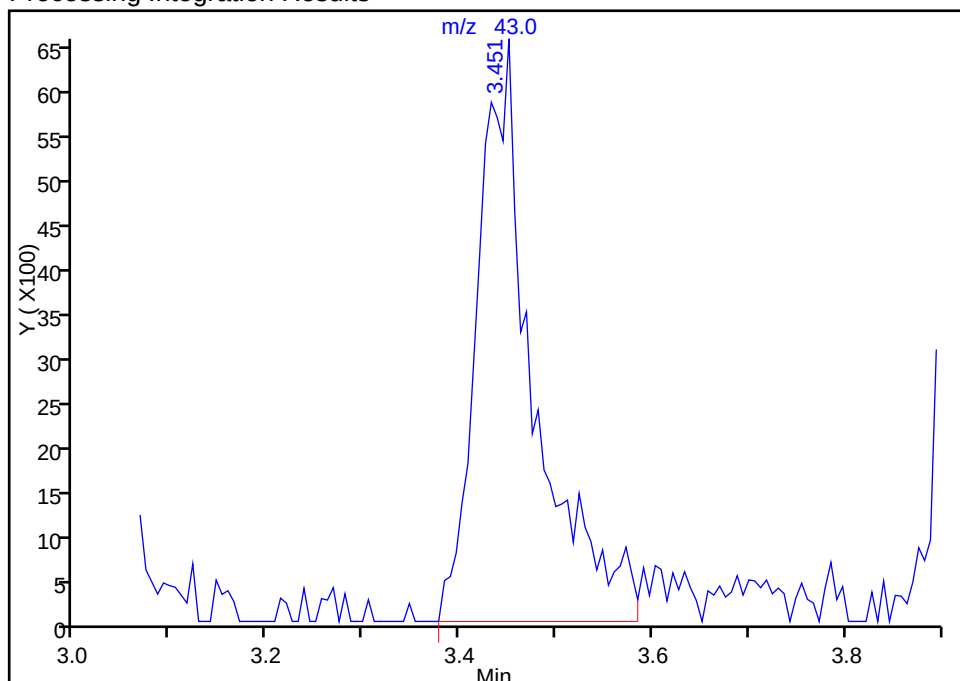
## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826006.D  
Injection Date: 26-Aug-2015 15:04:30 Instrument ID: CHHP5  
Lims ID: IC VSTD1  
Client ID:  
Operator ID: 001562 ALS Bottle#: 6 Worklist Smp#: 6  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C ICAL  
Column: DB-624 ( 0.18 mm) Detector MS SCAN

## 24 Acetone, CAS: 67-64-1

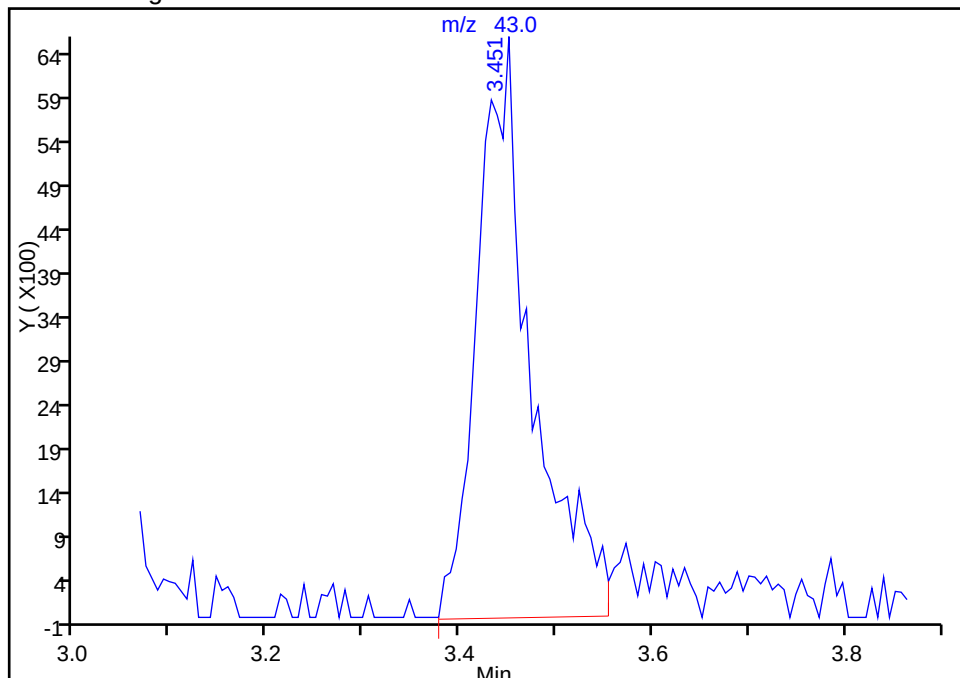
RT: 3.45  
Area: 26617  
Amount: 32.323853  
Amount Units: ng

## Processing Integration Results



RT: 3.45  
Area: 25628  
Amount: 31.310834  
Amount Units: ng

## Manual Integration Results



Reviewer: fergusond, 27-Aug-2015 10:07:27  
Audit Action: Manually Integrated  
Audit Reason: Peak Tail

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826008.D  
 Lims ID: IC VSTD5  
 Client ID:  
 Sample Type: IC Calib Level: 2  
 Inject. Date: 26-Aug-2015 15:28:30 ALS Bottle#: 7 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: IC VSTD5  
 Misc. Info.: 180-0008300-008  
 Operator ID: 001562 Instrument ID: CHHP5  
 Sublist: chrom-MSVOA\_LL\_CHHP5\*sub4  
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C ICAL  
 Last Update: 27-Aug-2015 11:47:16 Calib Date: 26-Aug-2015 17:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: XAWRK048

First Level Reviewer: fergusond

Date: 27-Aug-2015 10:07:55

| Compound                        | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q   | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|---------------------------------|-----|--------------|------------------|------------------|-----|----------|---------------|-----------------|-------|
| * 1 TBA-d9 (IS)                 | 65  | 4.260        | 4.267            | -0.007           | 0   | 150907   | 1000.0        | 1000.0          |       |
| * 2 Fluorobenzene (IS)          | 96  | 7.290        | 7.290            | 0.000            | 97  | 426232   | 50.0          | 50.0            |       |
| * 3 Chlorobenzene-d5            | 119 | 10.386       | 10.387           | -0.001           | 89  | 101235   | 50.0          | 50.0            |       |
| * 4 1,4-Dichlorobenzene-d4      | 152 | 12.728       | 12.729           | -0.001           | 96  | 159073   | 50.0          | 50.0            |       |
| \$ 5 Dibromofluoromethane (Surr | 113 | 6.566        | 6.560            | 0.006            | 92  | 54310    | 25.0          | 25.9            |       |
| \$ 6 1,2-Dichloroethane-d4 (Sur | 65  | 6.931        | 6.931            | 0.000            | 0   | 75876    | 25.0          | 26.4            |       |
| \$ 7 Toluene-d8 (Surr)          | 98  | 8.938        | 8.939            | -0.001           | 95  | 209810   | 25.0          | 26.9            |       |
| \$ 8 4-Bromofluorobenzene (Surr | 95  | 11.572       | 11.573           | -0.001           | 85  | 76038    | 25.0          | 25.8            |       |
| 11 Dichlorodifluoromethane      | 85  | 1.608        | 1.614            | -0.006           | 99  | 63359    | 25.0          | 26.3            |       |
| 12 Chloromethane                | 50  | 1.760        | 1.766            | -0.006           | 99  | 96975    | 25.0          | 27.4            |       |
| 13 Vinyl chloride               | 62  | 1.893        | 1.894            | -0.001           | 97  | 84746    | 25.0          | 27.0            |       |
| 14 Butadiene                    | 39  | 1.930        | 1.937            | -0.007           | 97  | 101243   | 25.0          | 27.3            |       |
| 15 Bromomethane                 | 94  | 2.234        | 2.247            | -0.013           | 88  | 33586    | 25.0          | 26.3            |       |
| 16 Chloroethane                 | 64  | 2.386        | 2.387            | -0.001           | 99  | 50718    | 25.0          | 26.8            |       |
| 17 Dichlorofluoromethane        | 67  | 2.660        | 2.661            | -0.001           | 97  | 111107   | 25.0          | 27.7            |       |
| 18 Trichlorofluoromethane       | 101 | 2.690        | 2.667            | 0.023            | 87  | 81291    | 25.0          | 27.1            |       |
| 20 Ethyl ether                  | 59  | 3.043        | 3.050            | -0.007           | 93  | 70836    | 25.0          | 25.5            |       |
| 21 Acrolein                     | 56  | 3.226        | 3.232            | -0.006           | 99  | 52087    | 125.0         | 125.6           |       |
| 22 1,1-Dichloroethene           | 96  | 3.347        | 3.348            | -0.001           | 93  | 60024    | 25.0          | 25.3            |       |
| 23 1,1,2-Trichloro-1,2,2-trif   | 101 | 3.414        | 3.403            | 0.011            | 94  | 67283    | 25.0          | 26.7            |       |
| 24 Acetone                      | 43  | 3.451        | 3.445            | 0.006            | 100 | 51703    | 50.0          | 60.1            |       |
| 25 Iodomethane                  | 142 | 3.536        | 3.543            | -0.007           | 98  | 89056    | 25.0          | 25.2            |       |
| 26 Carbon disulfide             | 76  | 3.627        | 3.628            | -0.001           | 100 | 126552   | 25.0          | 23.0            |       |
| 28 3-Chloro-1-propene           | 76  | 3.913        | 3.920            | -0.007           | 86  | 31974    | 25.0          | 23.8            |       |
| 30 Methyl acetate               | 43  | 3.938        | 3.938            | 0.000            | 99  | 347746   | 125.0         | 135.3           |       |
| 31 Methylene Chloride           | 84  | 4.144        | 4.139            | 0.005            | 97  | 79338    | 25.0          | 25.8            |       |
| 32 2-Methyl-2-propanol          | 59  | 4.400        | 4.407            | -0.007           | 87  | 39038    | 250.0         | 229.8           |       |
| 33 Acrylonitrile                | 53  | 4.522        | 4.522            | 0.000            | 100 | 329204   | 250.0         | 264.0           |       |
| 34 trans-1,2-Dichloroethene     | 96  | 4.564        | 4.565            | -0.001           | 97  | 66301    | 25.0          | 25.7            |       |
| 35 Methyl tert-butyl ether      | 73  | 4.576        | 4.577            | -0.001           | 95  | 147150   | 25.0          | 24.7            |       |

| Compound                       | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 36 Hexane                      | 57  | 4.990     | 4.997         | -0.007        | 95 | 109198   | 25.0       | 25.2         |       |
| 37 1,1-Dichloroethane          | 63  | 5.203     | 5.204         | -0.001        | 96 | 128072   | 25.0       | 25.2         |       |
| 38 Vinyl acetate               | 43  | 5.252     | 5.252         | 0.000         | 97 | 92081    | 25.0       | 24.2         |       |
| 45 cis-1,2-Dichloroethene      | 96  | 5.951     | 5.952         | -0.001        | 86 | 69819    | 25.0       | 25.4         |       |
| 44 2,2-Dichloropropane         | 77  | 5.945     | 5.952         | -0.007        | 58 | 48880    | 25.0       | 24.0         |       |
| 46 2-Butanone (MEK)            | 43  | 5.957     | 5.964         | -0.007        | 66 | 68384    | 50.0       | 52.9         |       |
| 49 Chlorobromomethane          | 128 | 6.237     | 6.238         | -0.001        | 91 | 31931    | 25.0       | 26.4         |       |
| 51 Tetrahydrofuran             | 42  | 6.255     | 6.250         | 0.005         | 91 | 51589    | 50.0       | 49.8         |       |
| 52 Chloroform                  | 83  | 6.377     | 6.384         | -0.007        | 96 | 113670   | 25.0       | 25.9         |       |
| 53 1,1,1-Trichloroethane       | 97  | 6.541     | 6.542         | -0.001        | 95 | 81030    | 25.0       | 25.0         |       |
| 54 Cyclohexane                 | 56  | 6.614     | 6.615         | -0.001        | 96 | 134937   | 25.0       | 24.9         |       |
| 56 Carbon tetrachloride        | 117 | 6.712     | 6.718         | -0.006        | 95 | 69375    | 25.0       | 25.1         |       |
| 55 1,1-Dichloropropene         | 75  | 6.730     | 6.730         | 0.000         | 91 | 91438    | 25.0       | 25.5         |       |
| 57 Isobutyl alcohol            | 41  | 6.925     | 6.925         | -0.001        | 78 | 48239    | 625.0      | 594.3        |       |
| 58 Benzene                     | 78  | 6.943     | 6.943         | 0.000         | 98 | 287091   | 25.0       | 27.3         |       |
| 59 1,2-Dichloroethane          | 62  | 7.022     | 7.022         | 0.000         | 96 | 95482    | 25.0       | 26.3         |       |
| 62 n-Heptane                   | 43  | 7.308     | 7.308         | 0.000         | 93 | 97699    | 25.0       | 24.9         |       |
| 64 Trichloroethene             | 130 | 7.673     | 7.679         | -0.006        | 96 | 64418    | 25.0       | 25.1         |       |
| 66 Methylcyclohexane           | 83  | 7.916     | 7.917         | -0.001        | 96 | 97305    | 25.0       | 24.0         |       |
| 67 1,2-Dichloropropane         | 63  | 7.953     | 7.947         | 0.006         | 94 | 67479    | 25.0       | 24.5         |       |
| 70 1,4-Dioxane                 | 88  | 8.032     | 8.026         | 0.006         | 40 | 9374     | 500.0      | 493.0        |       |
| 68 Dibromomethane              | 93  | 8.038     | 8.038         | 0.000         | 94 | 37187    | 25.0       | 26.6         |       |
| 71 Dichlorobromomethane        | 83  | 8.232     | 8.233         | -0.001        | 97 | 67441    | 25.0       | 24.4         |       |
| 74 cis-1,3-Dichloropropene     | 75  | 8.677     | 8.677         | 0.000         | 88 | 70847    | 25.0       | 21.8         |       |
| 75 4-Methyl-2-pentanone (MIBK) | 43  | 8.829     | 8.829         | 0.000         | 99 | 122590   | 50.0       | 49.1         |       |
| 76 Toluene                     | 91  | 9.005     | 9.006         | -0.001        | 98 | 281285   | 25.0       | 28.1         |       |
| 77 trans-1,3-Dichloropropene   | 75  | 9.248     | 9.249         | -0.001        | 99 | 61867    | 25.0       | 23.7         |       |
| 78 Ethyl methacrylate          | 69  | 9.309     | 9.310         | -0.001        | 91 | 57962    | 25.0       | 22.9         |       |
| 79 1,1,2-Trichloroethane       | 97  | 9.443     | 9.444         | -0.001        | 94 | 55277    | 25.0       | 29.0         |       |
| 80 Tetrachloroethene           | 164 | 9.516     | 9.517         | -0.001        | 96 | 53495    | 25.0       | 27.5         |       |
| 81 1,3-Dichloropropane         | 76  | 9.601     | 9.602         | -0.001        | 98 | 95569    | 25.0       | 27.0         |       |
| 82 2-Hexanone                  | 43  | 9.656     | 9.657         | -0.001        | 98 | 91984    | 50.0       | 51.1         |       |
| 84 Chlorodibromomethane        | 129 | 9.814     | 9.815         | -0.001        | 91 | 38492    | 25.0       | 23.3         |       |
| 85 Ethylene Dibromide          | 107 | 9.930     | 9.930         | 0.000         | 95 | 49971    | 25.0       | 27.2         |       |
| 86 3-Chlorobenzotrifluoride    | 180 | 10.386    | 10.387        | -0.001        | 69 | 87568    | 25.0       | 27.2         |       |
| 87 Chlorobenzene               | 112 | 10.416    | 10.417        | -0.001        | 94 | 177451   | 25.0       | 27.5         |       |
| 88 4-Chlorobenzotrifluoride    | 180 | 10.477    | 10.478        | -0.001        | 96 | 83430    | 25.0       | 27.4         |       |
| 89 1,1,1,2-Tetrachloroethane   | 131 | 10.508    | 10.508        | 0.000         | 89 | 55507    | 25.0       | 26.4         |       |
| 90 Ethylbenzene                | 106 | 10.514    | 10.514        | 0.000         | 99 | 88753    | 25.0       | 25.9         |       |
| 91 m-Xylene & p-Xylene         | 106 | 10.648    | 10.648        | 0.000         | 0  | 107918   | 25.0       | 25.7         |       |
| 92 o-Xylene                    | 106 | 11.031    | 11.025        | 0.006         | 98 | 99302    | 25.0       | 24.9         |       |
| 93 Styrene                     | 104 | 11.049    | 11.050        | -0.001        | 94 | 173558   | 25.0       | 26.3         |       |
| 94 Bromoform                   | 173 | 11.232    | 11.232        | 0.000         | 95 | 21829    | 25.0       | 23.2         |       |
| 96 2-Chlorobenzotrifluoride    | 180 | 11.299    | 11.299        | 0.000         | 97 | 88525    | 25.0       | 27.9         |       |
| 97 Isopropylbenzene            | 105 | 11.396    | 11.396        | 0.000         | 97 | 258721   | 25.0       | 26.5         |       |
| 100 Bromobenzene               | 156 | 11.712    | 11.707        | 0.005         | 96 | 66130    | 25.0       | 24.2         |       |
| 99 1,1,2,2-Tetrachloroethane   | 83  | 11.706    | 11.707        | -0.001        | 78 | 70831    | 25.0       | 27.5         |       |
| 102 trans-1,4-Dichloro-2-buten | 53  | 11.743    | 11.743        | 0.000         | 69 | 22318    | 25.0       | 22.6         |       |
| 101 1,2,3-Trichloropropane     | 110 | 11.761    | 11.762        | -0.001        | 87 | 23273    | 25.0       | 25.8         |       |
| 103 N-Propylbenzene            | 120 | 11.810    | 11.810        | 0.000         | 99 | 74204    | 25.0       | 23.7         |       |
| 104 2-Chlorotoluene            | 126 | 11.895    | 11.901        | -0.006        | 95 | 65813    | 25.0       | 24.8         |       |
| 105 3-Chlorotoluene            | 126 | 11.962    | 11.968        | -0.006        | 95 | 68954    | 25.0       | 25.3         |       |

| Compound                         | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|----------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 106 1,3,5-Trimethylbenzene       | 105 | 11.992    | 11.993        | -0.001        | 95 | 229921   | 25.0       | 26.0         |       |
| 107 4-Chlorotoluene              | 126 | 12.022    | 12.023        | -0.001        | 98 | 77519    | 25.0       | 26.5         |       |
| 108 tert-Butylbenzene            | 119 | 12.308    | 12.309        | -0.001        | 95 | 173217   | 25.0       | 24.1         |       |
| 110 1,2,4-Trimethylbenzene       | 105 | 12.369    | 12.370        | -0.001        | 98 | 227690   | 25.0       | 25.7         |       |
| 111 1,2-dichloro-4-(trifluorom   | 214 | 12.412    | 12.412        | 0.000         | 98 | 61289    | 25.0       | 24.8         |       |
| 112 sec-Butylbenzene             | 105 | 12.533    | 12.534        | -0.001        | 95 | 258745   | 25.0       | 25.5         |       |
| 113 1,3-Dichlorobenzene          | 146 | 12.649    | 12.650        | -0.001        | 96 | 127273   | 25.0       | 26.2         |       |
| 114 4-Isopropyltoluene           | 119 | 12.692    | 12.692        | 0.000         | 97 | 215293   | 25.0       | 25.1         |       |
| 115 1,4-Dichlorobenzene          | 146 | 12.752    | 12.753        | -0.001        | 95 | 133066   | 25.0       | 26.3         |       |
| 116 2,4-Dichloro-1-(trifluorom   | 214 | 12.777    | 12.777        | 0.000         | 93 | 59316    | 25.0       | 25.9         |       |
| 118 2,5-Dichlorobenzotrifluori   | 214 | 12.819    | 12.820        | -0.001        | 0  | 61489    | 25.0       | 24.9         |       |
| 120 n-Butylbenzene               | 91  | 13.099    | 13.100        | -0.001        | 98 | 181007   | 25.0       | 24.7         |       |
| 121 1,2-Dichlorobenzene          | 146 | 13.111    | 13.112        | -0.001        | 95 | 119403   | 25.0       | 26.3         |       |
| 122 1,2-Dibromo-3-Chloropropan   | 75  | 13.902    | 13.897        | 0.005         | 70 | 9637     | 25.0       | 25.8         |       |
| 123 2,4- & 2,5- & 2,6- Dichlor   | 125 | 14.042    | 14.049        | -0.007        | 0  | 187206   | 75.0       | 72.1         |       |
| 125 2,3- & 3,4- Dichlorotoluen   | 125 | 14.462    | 14.463        | -0.001        | 0  | 120746   | 50.0       | 48.8         |       |
| 126 1,2,4-Trichlorobenzene       | 180 | 14.730    | 14.724        | 0.006         | 92 | 45439    | 25.0       | 25.7         |       |
| 127 Hexachlorobutadiene          | 225 | 14.870    | 14.870        | 0.000         | 95 | 23516    | 25.0       | 27.6         |       |
| 128 Naphthalene                  | 128 | 14.991    | 14.992        | -0.001        | 98 | 101055   | 25.0       | 22.2         |       |
| 129 1,2,3-Trichlorobenzene       | 180 | 15.210    | 15.217        | -0.007        | 93 | 35802    | 25.0       | 25.0         |       |
| 131 2,4,5-Trichlorotoluene       | 159 | 15.995    | 15.990        | 0.005         | 0  | 11540    | 25.0       | 22.3         |       |
| 130 2,3,6-Trichlorotoluene       | 159 | 16.092    | 16.093        | -0.001        | 92 | 10524    | 25.0       | 22.1         |       |
| 148 2,3-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 147 2,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 146 2,5-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 150 2,6-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 149 3,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| S 133 Xylenes, Total             | 106 |           |               |               | 0  |          | 50.0       | 50.6         |       |
| S 134 1,2-Dichloroethene, Total  | 96  |           |               |               | 0  |          | 50.0       | 51.1         |       |
| S 135 1,3-Dichloropropene, Total | 1   |           |               |               | 0  |          | 50.0       | 45.5         |       |

### QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

### Reagents:

|                     |                    |           |             |
|---------------------|--------------------|-----------|-------------|
| VOA8260SURR_00040   | Amount Added: 1.00 | Units: uL |             |
| VOA8260VOAPRI_00139 | Amount Added: 1.00 | Units: uL |             |
| voaWEE1stRest_00001 | Amount Added: 1.00 | Units: uL |             |
| voaWKet1 Rest_00001 | Amount Added: 1.00 | Units: uL |             |
| VOAACROLEINPR_00006 | Amount Added: 5.00 | Units: uL |             |
| VOAVAPRI_00006      | Amount Added: 1.00 | Units: uL |             |
| VOA8260INT_00040    | Amount Added: 2.00 | Units: uL | Run Reagent |

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826008.D

Injection Date: 26-Aug-2015 15:28:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: IC VSTD5

Worklist Smp#: 8

Client ID:

Purge Vol: 5.000 mL

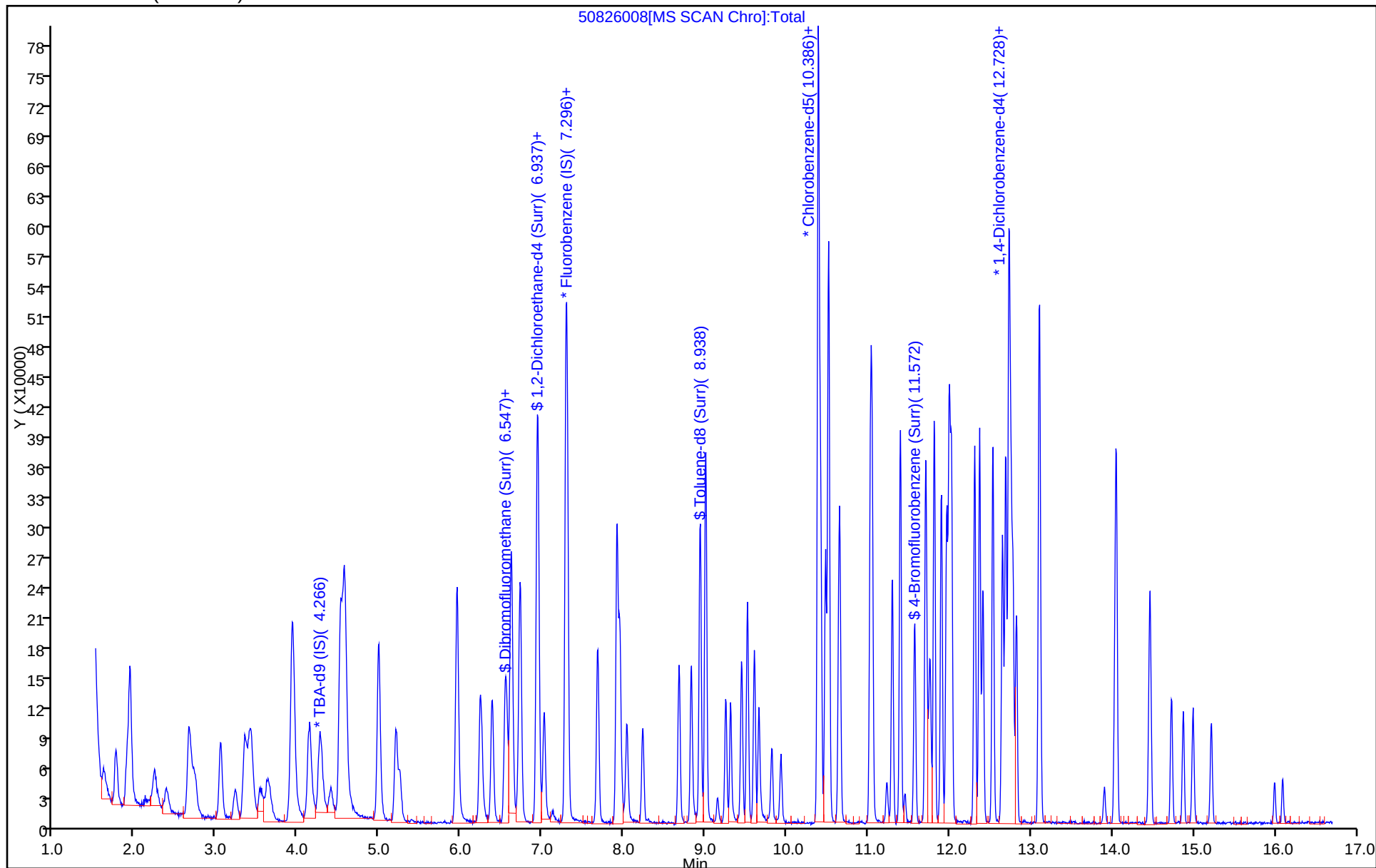
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826009.D  
 Lims ID: ICIS VSTD10  
 Client ID:  
 Sample Type: ICIS Calib Level: 3  
 Inject. Date: 26-Aug-2015 15:52:30 ALS Bottle#: 8 Worklist Smp#: 9  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: ICIS VSTD10  
 Misc. Info.: 180-0008300-009  
 Operator ID: 001562 Instrument ID: CHHP5  
 Sublist: chrom-MSVOA\_LL\_CHHP5\*sub4  
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C ICAL  
 Last Update: 27-Aug-2015 12:15:57 Calib Date: 26-Aug-2015 17:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: XAWRK048

First Level Reviewer: fergusond

Date: 27-Aug-2015 08:52:40

| Compound                        | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q   | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|---------------------------------|-----|--------------|------------------|------------------|-----|----------|---------------|-----------------|-------|
| * 1 TBA-d9 (IS)                 | 65  | 4.274        | 4.274            | 0.000            | 0   | 157569   | 1000.0        | 1000.0          |       |
| * 2 Fluorobenzene (IS)          | 96  | 7.291        | 7.291            | 0.000            | 98  | 461146   | 50.0          | 50.0            |       |
| * 3 Chlorobenzene-d5            | 119 | 10.387       | 10.387           | 0.000            | 88  | 108412   | 50.0          | 50.0            |       |
| * 4 1,4-Dichlorobenzene-d4      | 152 | 12.730       | 12.730           | 0.000            | 96  | 172635   | 50.0          | 50.0            |       |
| \$ 5 Dibromofluoromethane (Surr | 113 | 6.567        | 6.567            | 0.000            | 94  | 112824   | 50.0          | 49.8            |       |
| \$ 6 1,2-Dichloroethane-d4 (Sur | 65  | 6.938        | 6.938            | 0.000            | 0   | 155346   | 50.0          | 49.9            |       |
| \$ 7 Toluene-d8 (Surr)          | 98  | 8.933        | 8.933            | 0.000            | 94  | 471382   | 50.0          | 56.4            |       |
| \$ 8 4-Bromofluorobenzene (Surr | 95  | 11.574       | 11.574           | 0.000            | 86  | 171548   | 50.0          | 54.4            |       |
| 11 Dichlorodifluoromethane      | 85  | 1.627        | 1.627            | 0.000            | 99  | 139988   | 50.0          | 53.7            |       |
| 12 Chloromethane                | 50  | 1.761        | 1.761            | 0.000            | 100 | 189967   | 50.0          | 49.7            |       |
| 13 Vinyl chloride               | 62  | 1.901        | 1.901            | 0.000            | 97  | 181809   | 50.0          | 53.6            |       |
| 14 Butadiene                    | 39  | 1.931        | 1.931            | 0.000            | 97  | 213171   | 50.0          | 53.2            |       |
| 15 Bromomethane                 | 94  | 2.236        | 2.236            | 0.000            | 92  | 58568    | 50.0          | 42.4            |       |
| 16 Chloroethane                 | 64  | 2.376        | 2.376            | 0.000            | 99  | 99329    | 50.0          | 48.5            |       |
| 17 Dichlorofluoromethane        | 67  | 2.661        | 2.661            | 0.000            | 97  | 232009   | 50.0          | 53.4            |       |
| 18 Trichlorofluoromethane       | 101 | 2.661        | 2.661            | 0.000            | 43  | 174036   | 50.0          | 53.6            |       |
| 20 Ethyl ether                  | 59  | 3.051        | 3.051            | 0.000            | 97  | 145899   | 50.0          | 48.5            |       |
| 21 Acrolein                     | 56  | 3.233        | 3.233            | 0.000            | 98  | 66358    | 150.0         | 147.9           |       |
| 22 1,1-Dichloroethene           | 96  | 3.355        | 3.355            | 0.000            | 95  | 132602   | 50.0          | 51.6            |       |
| 23 1,1,2-Trichloro-1,2,2-trif   | 101 | 3.416        | 3.416            | 0.000            | 94  | 141996   | 50.0          | 52.2            |       |
| 24 Acetone                      | 43  | 3.452        | 3.452            | 0.000            | 99  | 88342    | 100.0         | 94.9            |       |
| 25 Iodomethane                  | 142 | 3.556        | 3.556            | 0.000            | 98  | 190440   | 50.0          | 49.8            |       |
| 26 Carbon disulfide             | 76  | 3.635        | 3.635            | 0.000            | 100 | 288788   | 50.0          | 48.4            |       |
| 28 3-Chloro-1-propene           | 76  | 3.921        | 3.921            | 0.000            | 88  | 70192    | 50.0          | 48.3            |       |
| 30 Methyl acetate               | 43  | 3.945        | 3.945            | 0.000            | 99  | 664608   | 250.0         | 239.0           |       |
| 31 Methylene Chloride           | 84  | 4.152        | 4.152            | 0.000            | 97  | 150258   | 50.0          | 49.8            |       |
| 32 2-Methyl-2-propanol          | 59  | 4.413        | 4.413            | 0.000            | 87  | 81932    | 500.0         | 462.0           |       |
| 33 Acrylonitrile                | 53  | 4.517        | 4.517            | 0.000            | 99  | 693478   | 500.0         | 514.1           |       |
| 34 trans-1,2-Dichloroethene     | 96  | 4.566        | 4.566            | 0.000            | 96  | 141577   | 50.0          | 50.8            |       |
| 35 Methyl tert-butyl ether      | 73  | 4.584        | 4.584            | 0.000            | 95  | 302403   | 50.0          | 46.8            |       |



| Compound                       | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q   | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|-----|----------|------------|--------------|-------|
| 36 Hexane                      | 57  | 4.991     | 4.991         | 0.000         | 95  | 237492   | 50.0       | 50.7         |       |
| 37 1,1-Dichloroethane          | 63  | 5.198     | 5.198         | 0.000         | 96  | 273423   | 50.0       | 49.8         |       |
| 38 Vinyl acetate               | 43  | 5.253     | 5.253         | 0.000         | 97  | 191017   | 50.0       | 46.3         |       |
| 45 cis-1,2-Dichloroethene      | 96  | 5.953     | 5.953         | 0.000         | 86  | 146208   | 50.0       | 49.1         |       |
| 44 2,2-Dichloropropane         | 77  | 5.946     | 5.946         | 0.000         | 60  | 109416   | 50.0       | 49.7         |       |
| 46 2-Butanone (MEK)            | 43  | 5.959     | 5.959         | 0.000         | 73  | 136667   | 100.0      | 97.8         |       |
| 49 Chlorobromomethane          | 128 | 6.238     | 6.238         | 0.000         | 91  | 62915    | 50.0       | 48.1         |       |
| 51 Tetrahydrofuran             | 42  | 6.257     | 6.257         | 0.000         | 94  | 107444   | 100.0      | 95.8         |       |
| 52 Chloroform                  | 83  | 6.385     | 6.385         | 0.000         | 96  | 232542   | 50.0       | 49.0         |       |
| 53 1,1,1-Trichloroethane       | 97  | 6.549     | 6.549         | 0.000         | 96  | 178131   | 50.0       | 50.8         |       |
| 54 Cyclohexane                 | 56  | 6.616     | 6.616         | 0.000         | 96  | 302702   | 50.0       | 51.5         |       |
| 56 Carbon tetrachloride        | 117 | 6.719     | 6.719         | 0.000         | 95  | 148991   | 50.0       | 49.9         |       |
| 55 1,1-Dichloropropene         | 75  | 6.731     | 6.731         | 0.000         | 91  | 198075   | 50.0       | 51.0         |       |
| 57 Isobutyl alcohol            | 41  | 6.926     | 6.926         | 0.000         | 79  | 113924   | 1250.0     | 1297.3       |       |
| 58 Benzene                     | 78  | 6.944     | 6.944         | 0.000         | 98  | 580241   | 50.0       | 51.0         |       |
| 59 1,2-Dichloroethane          | 62  | 7.023     | 7.023         | 0.000         | 96  | 191991   | 50.0       | 48.8         |       |
| 62 n-Heptane                   | 43  | 7.309     | 7.309         | 0.000         | 96  | 215218   | 50.0       | 50.6         |       |
| 64 Trichloroethene             | 130 | 7.674     | 7.674         | 0.000         | 97  | 138404   | 50.0       | 49.8         |       |
| 66 Methylcyclohexane           | 83  | 7.918     | 7.918         | 0.000         | 96  | 222858   | 50.0       | 50.8         |       |
| 67 1,2-Dichloropropane         | 63  | 7.954     | 7.954         | 0.000         | 95  | 144895   | 50.0       | 48.6         |       |
| 70 1,4-Dioxane                 | 88  | 8.027     | 8.027         | 0.000         | 48  | 20164    | 1000.0     | 980.3        |       |
| 68 Dibromomethane              | 93  | 8.039     | 8.039         | 0.000         | 96  | 74626    | 50.0       | 49.3         |       |
| 71 Dichlorobromomethane        | 83  | 8.234     | 8.234         | 0.000         | 98  | 141423   | 50.0       | 47.2         |       |
| 74 cis-1,3-Dichloropropene     | 75  | 8.678     | 8.678         | 0.000         | 90  | 159644   | 50.0       | 45.5         |       |
| 75 4-Methyl-2-pentanone (MIBK) | 43  | 8.830     | 8.830         | 0.000         | 99  | 267134   | 100.0      | 100.0        |       |
| 76 Toluene                     | 91  | 9.006     | 9.006         | 0.000         | 98  | 594334   | 50.0       | 55.4         |       |
| 77 trans-1,3-Dichloropropene   | 75  | 9.250     | 9.250         | 0.000         | 98  | 136231   | 50.0       | 48.6         |       |
| 78 Ethyl methacrylate          | 69  | 9.311     | 9.311         | 0.000         | 94  | 132749   | 50.0       | 49.0         |       |
| 79 1,1,2-Trichloroethane       | 97  | 9.444     | 9.444         | 0.000         | 94  | 105440   | 50.0       | 51.6         |       |
| 80 Tetrachloroethene           | 164 | 9.517     | 9.517         | 0.000         | 95  | 111146   | 50.0       | 53.3         |       |
| 81 1,3-Dichloropropane         | 76  | 9.603     | 9.603         | 0.000         | 98  | 194887   | 50.0       | 51.4         |       |
| 82 2-Hexanone                  | 43  | 9.657     | 9.657         | 0.000         | 99  | 195734   | 100.0      | 101.5        |       |
| 84 Chlorodibromomethane        | 129 | 9.816     | 9.816         | 0.000         | 89  | 89414    | 50.0       | 50.6         |       |
| 85 Ethylene Dibromide          | 107 | 9.931     | 9.931         | 0.000         | 100 | 100600   | 50.0       | 51.1         |       |
| 86 3-Chlorobenzotrifluoride    | 180 | 10.387    | 10.387        | 0.000         | 86  | 189078   | 50.0       | 54.8         |       |
| 87 Chlorobenzene               | 112 | 10.418    | 10.418        | 0.000         | 93  | 364174   | 50.0       | 52.7         |       |
| 88 4-Chlorobenzotrifluoride    | 180 | 10.479    | 10.479        | 0.000         | 96  | 177807   | 50.0       | 54.5         |       |
| 89 1,1,1,2-Tetrachloroethane   | 131 | 10.509    | 10.509        | 0.000         | 91  | 112884   | 50.0       | 50.1         |       |
| 90 Ethylbenzene                | 106 | 10.515    | 10.515        | 0.000         | 99  | 199030   | 50.0       | 54.3         |       |
| 91 m-Xylene & p-Xylene         | 106 | 10.649    | 10.649        | 0.000         | 0   | 244588   | 50.0       | 54.5         |       |
| 92 o-Xylene                    | 106 | 11.026    | 11.026        | 0.000         | 97  | 235252   | 50.0       | 55.1         |       |
| 93 Styrene                     | 104 | 11.051    | 11.051        | 0.000         | 95  | 381888   | 50.0       | 54.0         |       |
| 94 Bromoform                   | 173 | 11.233    | 11.233        | 0.000         | 96  | 48771    | 50.0       | 48.4         |       |
| 96 2-Chlorobenzotrifluoride    | 180 | 11.294    | 11.294        | 0.000         | 96  | 184654   | 50.0       | 54.4         |       |
| 97 Isopropylbenzene            | 105 | 11.397    | 11.397        | 0.000         | 97  | 601591   | 50.0       | 57.5         |       |
| 100 Bromobenzene               | 156 | 11.708    | 11.708        | 0.000         | 94  | 144660   | 50.0       | 48.8         |       |
| 99 1,1,2,2-Tetrachloroethane   | 83  | 11.708    | 11.708        | 0.000         | 77  | 148796   | 50.0       | 54.0         |       |
| 102 trans-1,4-Dichloro-2-buten | 53  | 11.744    | 11.744        | 0.000         | 79  | 49630    | 50.0       | 46.3         |       |
| 101 1,2,3-Trichloropropane     | 110 | 11.762    | 11.762        | 0.000         | 88  | 46443    | 50.0       | 47.5         |       |
| 103 N-Propylbenzene            | 120 | 11.811    | 11.811        | 0.000         | 99  | 174426   | 50.0       | 51.4         |       |
| 104 2-Chlorotoluene            | 126 | 11.902    | 11.902        | 0.000         | 96  | 147328   | 50.0       | 51.1         |       |
| 105 3-Chlorotoluene            | 126 | 11.963    | 11.963        | 0.000         | 96  | 151211   | 50.0       | 51.0         |       |



| Compound                         | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|----------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 106 1,3,5-Trimethylbenzene       | 105 | 11.993    | 11.993        | 0.000         | 95 | 517168   | 50.0       | 54.0         |       |
| 107 4-Chlorotoluene              | 126 | 12.024    | 12.024        | 0.000         | 98 | 159410   | 50.0       | 50.2         |       |
| 108 tert-Butylbenzene            | 119 | 12.310    | 12.310        | 0.000         | 95 | 406052   | 50.0       | 52.1         |       |
| 110 1,2,4-Trimethylbenzene       | 105 | 12.371    | 12.371        | 0.000         | 98 | 515539   | 50.0       | 53.7         |       |
| 111 1,2-dichloro-4-(trifluorom   | 214 | 12.413    | 12.413        | 0.000         | 98 | 140073   | 50.0       | 52.3         |       |
| 112 sec-Butylbenzene             | 105 | 12.535    | 12.535        | 0.000         | 95 | 604638   | 50.0       | 55.0         |       |
| 113 1,3-Dichlorobenzene          | 146 | 12.650    | 12.650        | 0.000         | 98 | 273757   | 50.0       | 51.9         |       |
| 114 4-Isopropyltoluene           | 119 | 12.687    | 12.687        | 0.000         | 97 | 504672   | 50.0       | 54.2         |       |
| 115 1,4-Dichlorobenzene          | 146 | 12.754    | 12.754        | 0.000         | 93 | 277292   | 50.0       | 50.5         |       |
| 116 2,4-Dichloro-1-(trifluorom   | 214 | 12.778    | 12.778        | 0.000         | 96 | 134729   | 50.0       | 54.3         |       |
| 118 2,5-Dichlorobenzotrifluori   | 214 | 12.821    | 12.821        | 0.000         | 0  | 138171   | 50.0       | 51.5         |       |
| 120 n-Butylbenzene               | 91  | 13.101    | 13.101        | 0.000         | 98 | 432555   | 50.0       | 54.3         |       |
| 121 1,2-Dichlorobenzene          | 146 | 13.113    | 13.113        | 0.000         | 95 | 257985   | 50.0       | 52.3         |       |
| 122 1,2-Dibromo-3-Chloropropan   | 75  | 13.904    | 13.904        | 0.000         | 76 | 20608    | 50.0       | 50.9         |       |
| 123 2,4- & 2,5- & 2,6- Dichlor   | 125 | 14.044    | 14.044        | 0.000         | 0  | 495585   | 150.0      | 176.0        |       |
| 125 2,3- & 3,4- Dichlorotoluen   | 125 | 14.463    | 14.463        | 0.000         | 0  | 328345   | 100.0      | 122.3        |       |
| 126 1,2,4-Trichlorobenzene       | 180 | 14.725    | 14.725        | 0.000         | 93 | 119069   | 50.0       | 62.1         |       |
| 127 Hexachlorobutadiene          | 225 | 14.871    | 14.871        | 0.000         | 97 | 58574    | 50.0       | 63.4         |       |
| 128 Naphthalene                  | 128 | 14.993    | 14.993        | 0.000         | 97 | 301738   | 50.0       | 61.2         |       |
| 129 1,2,3-Trichlorobenzene       | 180 | 15.218    | 15.218        | 0.000         | 95 | 100055   | 50.0       | 64.4         |       |
| 131 2,4,5-Trichlorotoluene       | 159 | 15.990    | 15.990        | 0.000         | 0  | 37716    | 50.0       | 67.3         |       |
| 130 2,3,6-Trichlorotoluene       | 159 | 16.094    | 16.094        | 0.000         | 94 | 36592    | 50.0       | 70.8         |       |
| 148 2,3-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 147 2,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 146 2,5-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 150 2,6-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 149 3,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| S 133 Xylenes, Total             | 106 |           |               |               | 0  |          | 100.0      | 109.6        |       |
| S 134 1,2-Dichloroethene, Total  | 96  |           |               |               | 0  |          | 100.0      | 99.8         |       |
| S 135 1,3-Dichloropropene, Total | 1   |           |               |               | 0  |          | 100.0      | 94.1         |       |

### QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

### Reagents:

|                     |                    |           |             |
|---------------------|--------------------|-----------|-------------|
| VOAACROLEINPR_00006 | Amount Added: 6.00 | Units: uL |             |
| VOAVAPRI_00006      | Amount Added: 2.00 | Units: uL |             |
| VOA8260SURR_00040   | Amount Added: 2.00 | Units: uL |             |
| VOA8260VOAPRI_00139 | Amount Added: 2.00 | Units: uL |             |
| voaWEE1stRest_00001 | Amount Added: 2.00 | Units: uL |             |
| voaWKet1 Rest_00001 | Amount Added: 2.00 | Units: uL |             |
| VOA8260INT_00040    | Amount Added: 2.00 | Units: uL | Run Reagent |

Report Date: 27-Aug-2015 12:16:00

Chrom Revision: 2.2 23-Jul-2015 08:26:08

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826009.D

Injection Date: 26-Aug-2015 15:52:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: ICIS VSTD10

Worklist Smp#: 9

Client ID:

Purge Vol: 5.000 mL

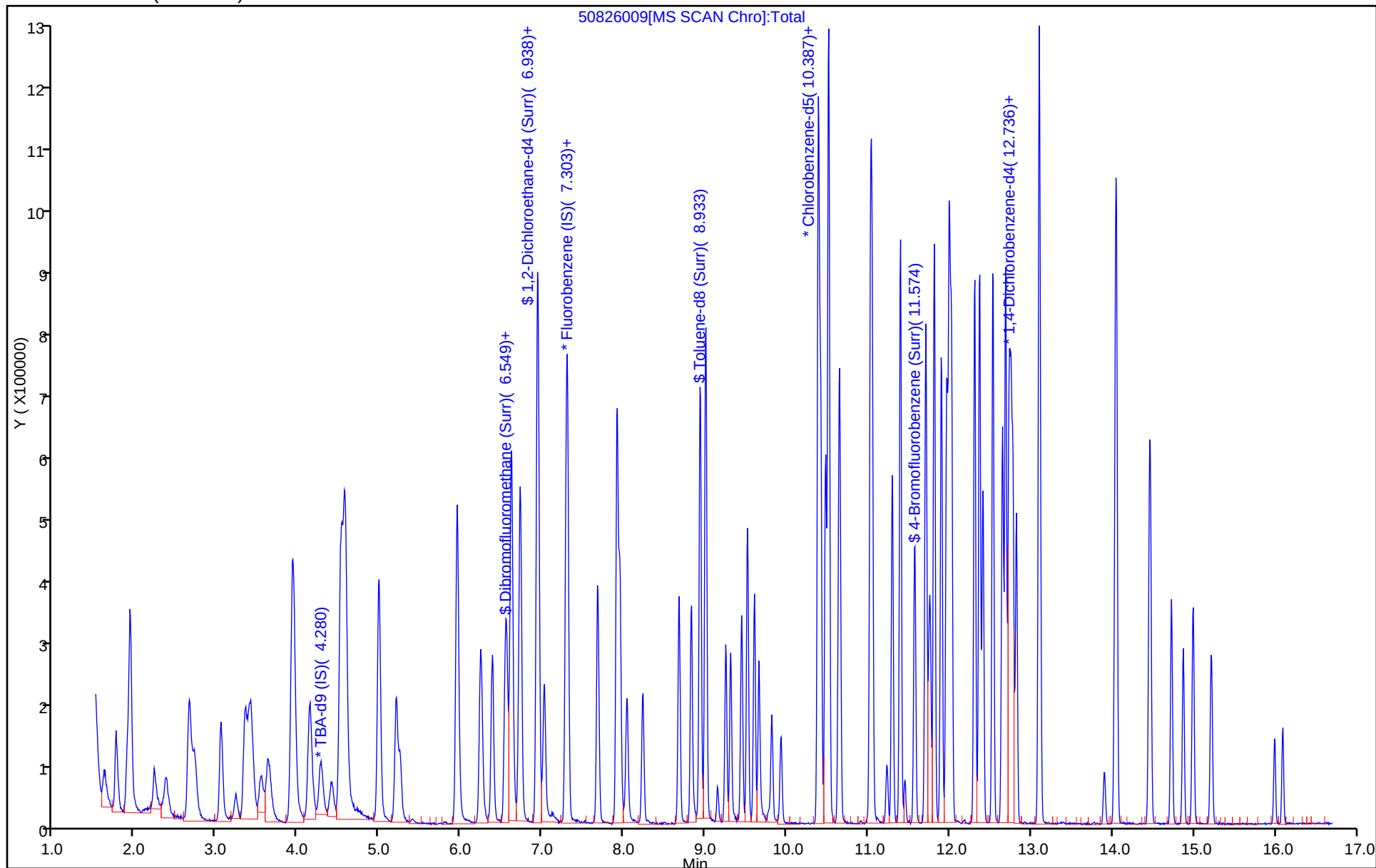
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826010.D  
 Lims ID: IC VSTD15  
 Client ID:  
 Sample Type: IC Calib Level: 4  
 Inject. Date: 26-Aug-2015 16:16:30 ALS Bottle#: 9 Worklist Smp#: 10  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: IC VSTD15  
 Misc. Info.: 180-0008300-010  
 Operator ID: 001562 Instrument ID: CHHP5  
 Sublist: chrom-MSVOA\_LL\_CHHP5\*sub4  
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C ICAL  
 Last Update: 27-Aug-2015 11:49:37 Calib Date: 26-Aug-2015 17:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: XAWRK048

First Level Reviewer: fergusond

Date: 27-Aug-2015 10:26:59

| Compound                        | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q   | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|---------------------------------|-----|--------------|------------------|------------------|-----|----------|---------------|-----------------|-------|
| * 1 TBA-d9 (IS)                 | 65  | 4.267        | 4.267            | 0.000            | 0   | 149384   | 1000.0        | 1000.0          |       |
| * 2 Fluorobenzene (IS)          | 96  | 7.290        | 7.290            | 0.000            | 98  | 491519   | 50.0          | 50.0            |       |
| * 3 Chlorobenzene-d5            | 119 | 10.387       | 10.387           | 0.000            | 87  | 118747   | 50.0          | 50.0            |       |
| * 4 1,4-Dichlorobenzene-d4      | 152 | 12.729       | 12.729           | 0.000            | 96  | 175441   | 50.0          | 50.0            |       |
| \$ 5 Dibromofluoromethane (Surr | 113 | 6.560        | 6.560            | 0.000            | 93  | 168602   | 75.0          | 69.8            |       |
| \$ 6 1,2-Dichloroethane-d4 (Sur | 65  | 6.931        | 6.931            | 0.000            | 0   | 228530   | 75.0          | 68.9            |       |
| \$ 7 Toluene-d8 (Surr)          | 98  | 8.939        | 8.939            | 0.000            | 95  | 679876   | 75.0          | 74.2            |       |
| \$ 8 4-Bromofluorobenzene (Surr | 95  | 11.573       | 11.573           | 0.000            | 87  | 257596   | 75.0          | 74.5            |       |
| 11 Dichlorodifluoromethane      | 85  | 1.614        | 1.614            | 0.000            | 99  | 195493   | 75.0          | 70.4            |       |
| 12 Chloromethane                | 50  | 1.766        | 1.766            | 0.000            | 99  | 279657   | 75.0          | 68.6            |       |
| 13 Vinyl chloride               | 62  | 1.894        | 1.894            | 0.000            | 98  | 253941   | 75.0          | 70.2            |       |
| 14 Butadiene                    | 39  | 1.937        | 1.937            | 0.000            | 95  | 291582   | 75.0          | 68.3            |       |
| 15 Bromomethane                 | 94  | 2.247        | 2.247            | 0.000            | 90  | 118541   | 75.0          | 80.5            |       |
| 16 Chloroethane                 | 64  | 2.387        | 2.387            | 0.000            | 99  | 155578   | 75.0          | 71.3            |       |
| 17 Dichlorofluoromethane        | 67  | 2.661        | 2.661            | 0.000            | 99  | 318608   | 75.0          | 68.8            |       |
| 18 Trichlorofluoromethane       | 101 | 2.667        | 2.667            | 0.000            | 59  | 241309   | 75.0          | 69.7            |       |
| 20 Ethyl ether                  | 59  | 3.050        | 3.050            | 0.000            | 98  | 219194   | 75.0          | 68.3            |       |
| 21 Acrolein                     | 56  | 3.232        | 3.232            | 0.000            | 99  | 75936    | 175.0         | 158.8           |       |
| 22 1,1-Dichloroethene           | 96  | 3.348        | 3.348            | 0.000            | 94  | 192998   | 75.0          | 70.5            |       |
| 23 1,1,2-Trichloro-1,2,2-trif   | 101 | 3.403        | 3.403            | 0.000            | 94  | 204297   | 75.0          | 70.4            |       |
| 24 Acetone                      | 43  | 3.445        | 3.445            | 0.000            | 98  | 125942   | 150.0         | 127.0           |       |
| 25 Iodomethane                  | 142 | 3.543        | 3.543            | 0.000            | 99  | 284793   | 75.0          | 69.8            |       |
| 26 Carbon disulfide             | 76  | 3.628        | 3.628            | 0.000            | 100 | 436105   | 75.0          | 68.6            |       |
| 28 3-Chloro-1-propene           | 76  | 3.920        | 3.920            | 0.000            | 88  | 108440   | 75.0          | 69.9            |       |
| 30 Methyl acetate               | 43  | 3.938        | 3.938            | 0.000            | 99  | 1027560  | 375.0         | 346.7           |       |
| 31 Methylene Chloride           | 84  | 4.139        | 4.139            | 0.000            | 97  | 225319   | 75.0          | 72.5            |       |
| 32 2-Methyl-2-propanol          | 59  | 4.407        | 4.407            | 0.000            | 87  | 122262   | 750.0         | 727.2           |       |
| 33 Acrylonitrile                | 53  | 4.522        | 4.522            | 0.000            | 98  | 978697   | 750.0         | 680.6           |       |
| 34 trans-1,2-Dichloroethene     | 96  | 4.565        | 4.565            | 0.000            | 95  | 204201   | 75.0          | 68.7            |       |
| 35 Methyl tert-butyl ether      | 73  | 4.577        | 4.577            | 0.000            | 96  | 477236   | 75.0          | 69.4            |       |

| Compound                       | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 36 Hexane                      | 57  | 4.997     | 4.997         | 0.000         | 96 | 347025   | 75.0       | 69.5         |       |
| 37 1,1-Dichloroethane          | 63  | 5.204     | 5.204         | 0.000         | 97 | 407919   | 75.0       | 69.7         |       |
| 38 Vinyl acetate               | 43  | 5.252     | 5.252         | 0.000         | 97 | 303320   | 75.0       | 69.0         |       |
| 45 cis-1,2-Dichloroethene      | 96  | 5.952     | 5.952         | 0.000         | 84 | 223289   | 75.0       | 70.3         |       |
| 44 2,2-Dichloropropane         | 77  | 5.952     | 5.952         | 0.000         | 58 | 164171   | 75.0       | 70.0         |       |
| 46 2-Butanone (MEK)            | 43  | 5.964     | 5.964         | 0.000         | 78 | 210830   | 150.0      | 141.5        |       |
| 49 Chlorobromomethane          | 128 | 6.238     | 6.238         | 0.000         | 92 | 99282    | 75.0       | 71.2         |       |
| 51 Tetrahydrofuran             | 42  | 6.250     | 6.250         | 0.000         | 91 | 153971   | 150.0      | 128.8        |       |
| 52 Chloroform                  | 83  | 6.384     | 6.384         | 0.000         | 97 | 359318   | 75.0       | 71.0         |       |
| 53 1,1,1-Trichloroethane       | 97  | 6.542     | 6.542         | 0.000         | 96 | 264507   | 75.0       | 70.7         |       |
| 54 Cyclohexane                 | 56  | 6.615     | 6.615         | 0.000         | 97 | 451893   | 75.0       | 72.2         |       |
| 56 Carbon tetrachloride        | 117 | 6.718     | 6.718         | 0.000         | 96 | 226405   | 75.0       | 71.1         |       |
| 55 1,1-Dichloropropene         | 75  | 6.730     | 6.730         | 0.000         | 92 | 295676   | 75.0       | 71.5         |       |
| 57 Isobutyl alcohol            | 41  | 6.925     | 6.925         | 0.000         | 92 | 149085   | 1875.0     | 1592.8       |       |
| 58 Benzene                     | 78  | 6.943     | 6.943         | 0.000         | 98 | 874781   | 75.0       | 72.2         |       |
| 59 1,2-Dichloroethane          | 62  | 7.022     | 7.022         | 0.000         | 97 | 296218   | 75.0       | 70.7         |       |
| 62 n-Heptane                   | 43  | 7.308     | 7.308         | 0.000         | 96 | 319252   | 75.0       | 70.4         |       |
| 64 Trichloroethene             | 130 | 7.679     | 7.679         | 0.000         | 97 | 207852   | 75.0       | 70.1         |       |
| 66 Methylcyclohexane           | 83  | 7.917     | 7.917         | 0.000         | 96 | 336831   | 75.0       | 72.1         |       |
| 67 1,2-Dichloropropane         | 63  | 7.947     | 7.947         | 0.000         | 94 | 218947   | 75.0       | 68.8         |       |
| 70 1,4-Dioxane                 | 88  | 8.026     | 8.026         | 0.000         | 39 | 31691    | 1500.0     | 1445.4       |       |
| 68 Dibromomethane              | 93  | 8.038     | 8.038         | 0.000         | 96 | 114083   | 75.0       | 70.7         |       |
| 71 Dichlorobromomethane        | 83  | 8.233     | 8.233         | 0.000         | 98 | 226806   | 75.0       | 71.0         |       |
| 74 cis-1,3-Dichloropropene     | 75  | 8.677     | 8.677         | 0.000         | 91 | 264451   | 75.0       | 70.7         |       |
| 75 4-Methyl-2-pentanone (MIBK) | 43  | 8.829     | 8.829         | 0.000         | 99 | 434749   | 150.0      | 148.6        |       |
| 76 Toluene                     | 91  | 9.006     | 9.006         | 0.000         | 98 | 874948   | 75.0       | 74.4         |       |
| 77 trans-1,3-Dichloropropene   | 75  | 9.249     | 9.249         | 0.000         | 99 | 224205   | 75.0       | 73.1         |       |
| 78 Ethyl methacrylate          | 69  | 9.310     | 9.310         | 0.000         | 93 | 225233   | 75.0       | 75.9         |       |
| 79 1,1,2-Trichloroethane       | 97  | 9.444     | 9.444         | 0.000         | 94 | 163298   | 75.0       | 73.0         |       |
| 80 Tetrachloroethene           | 164 | 9.517     | 9.517         | 0.000         | 95 | 165929   | 75.0       | 72.7         |       |
| 81 1,3-Dichloropropane         | 76  | 9.602     | 9.602         | 0.000         | 98 | 303582   | 75.0       | 73.1         |       |
| 82 2-Hexanone                  | 43  | 9.657     | 9.657         | 0.000         | 99 | 310969   | 150.0      | 147.2        |       |
| 84 Chlorodibromomethane        | 129 | 9.815     | 9.815         | 0.000         | 91 | 143257   | 75.0       | 74.0         |       |
| 85 Ethylene Dibromide          | 107 | 9.930     | 9.930         | 0.000         | 99 | 155041   | 75.0       | 71.9         |       |
| 86 3-Chlorobenzotrifluoride    | 180 | 10.387    | 10.387        | 0.000         | 91 | 277802   | 75.0       | 73.5         |       |
| 87 Chlorobenzene               | 112 | 10.417    | 10.417        | 0.000         | 93 | 551865   | 75.0       | 72.9         |       |
| 88 4-Chlorobenzotrifluoride    | 180 | 10.478    | 10.478        | 0.000         | 95 | 267607   | 75.0       | 74.9         |       |
| 89 1,1,1,2-Tetrachloroethane   | 131 | 10.508    | 10.508        | 0.000         | 92 | 179137   | 75.0       | 72.6         |       |
| 90 Ethylbenzene                | 106 | 10.514    | 10.514        | 0.000         | 99 | 302122   | 75.0       | 75.3         |       |
| 91 m-Xylene & p-Xylene         | 106 | 10.648    | 10.648        | 0.000         | 0  | 371799   | 75.0       | 75.6         |       |
| 92 o-Xylene                    | 106 | 11.025    | 11.025        | 0.000         | 97 | 359461   | 75.0       | 76.9         |       |
| 93 Styrene                     | 104 | 11.050    | 11.050        | 0.000         | 95 | 603962   | 75.0       | 78.0         |       |
| 94 Bromoform                   | 173 | 11.232    | 11.232        | 0.000         | 96 | 77411    | 75.0       | 70.1         |       |
| 96 2-Chlorobenzotrifluoride    | 180 | 11.299    | 11.299        | 0.000         | 96 | 279773   | 75.0       | 75.3         |       |
| 97 Isopropylbenzene            | 105 | 11.396    | 11.396        | 0.000         | 97 | 886244   | 75.0       | 77.4         |       |
| 100 Bromobenzene               | 156 | 11.707    | 11.707        | 0.000         | 95 | 218069   | 75.0       | 72.4         |       |
| 99 1,1,2,2-Tetrachloroethane   | 83  | 11.707    | 11.707        | 0.000         | 76 | 217578   | 75.0       | 72.1         |       |
| 102 trans-1,4-Dichloro-2-buten | 53  | 11.743    | 11.743        | 0.000         | 72 | 78865    | 75.0       | 72.4         |       |
| 101 1,2,3-Trichloropropane     | 110 | 11.762    | 11.762        | 0.000         | 88 | 70373    | 75.0       | 70.8         |       |
| 103 N-Propylbenzene            | 120 | 11.810    | 11.810        | 0.000         | 99 | 256762   | 75.0       | 74.5         |       |
| 104 2-Chlorotoluene            | 126 | 11.901    | 11.901        | 0.000         | 96 | 218909   | 75.0       | 74.7         |       |
| 105 3-Chlorotoluene            | 126 | 11.968    | 11.968        | 0.000         | 96 | 225916   | 75.0       | 75.0         |       |

| Compound                         | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|----------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 106 1,3,5-Trimethylbenzene       | 105 | 11.993    | 11.993        | 0.000         | 94 | 741712   | 75.0       | 76.1         |       |
| 107 4-Chlorotoluene              | 126 | 12.023    | 12.023        | 0.000         | 98 | 235437   | 75.0       | 73.0         |       |
| 108 tert-Butylbenzene            | 119 | 12.309    | 12.309        | 0.000         | 94 | 598804   | 75.0       | 75.6         |       |
| 110 1,2,4-Trimethylbenzene       | 105 | 12.370    | 12.370        | 0.000         | 98 | 753282   | 75.0       | 77.2         |       |
| 111 1,2-dichloro-4-(trifluorom   | 214 | 12.412    | 12.412        | 0.000         | 98 | 196559   | 75.0       | 72.2         |       |
| 112 sec-Butylbenzene             | 105 | 12.534    | 12.534        | 0.000         | 95 | 839536   | 75.0       | 75.1         |       |
| 113 1,3-Dichlorobenzene          | 146 | 12.650    | 12.650        | 0.000         | 97 | 386149   | 75.0       | 72.0         |       |
| 114 4-Isopropyltoluene           | 119 | 12.692    | 12.692        | 0.000         | 97 | 724310   | 75.0       | 76.6         |       |
| 115 1,4-Dichlorobenzene          | 146 | 12.753    | 12.753        | 0.000         | 93 | 396239   | 75.0       | 71.0         |       |
| 116 2,4-Dichloro-1-(trifluorom   | 214 | 12.777    | 12.777        | 0.000         | 96 | 183967   | 75.0       | 73.0         |       |
| 118 2,5-Dichlorobenzotrifluori   | 214 | 12.820    | 12.820        | 0.000         | 0  | 196358   | 75.0       | 72.1         |       |
| 120 n-Butylbenzene               | 91  | 13.100    | 13.100        | 0.000         | 98 | 598297   | 75.0       | 73.9         |       |
| 121 1,2-Dichlorobenzene          | 146 | 13.112    | 13.112        | 0.000         | 95 | 354012   | 75.0       | 70.6         |       |
| 122 1,2-Dibromo-3-Chloropropan   | 75  | 13.897    | 13.897        | 0.000         | 77 | 27203    | 75.0       | 66.1         |       |
| 123 2,4- & 2,5- & 2,6- Dichlor   | 125 | 14.049    | 14.049        | 0.000         | 0  | 616649   | 225.0      | 215.5        |       |
| 125 2,3- & 3,4- Dichlorotoluen   | 125 | 14.463    | 14.463        | 0.000         | 0  | 378630   | 150.0      | 138.7        |       |
| 126 1,2,4-Trichlorobenzene       | 180 | 14.724    | 14.724        | 0.000         | 95 | 127381   | 75.0       | 65.3         |       |
| 127 Hexachlorobutadiene          | 225 | 14.870    | 14.870        | 0.000         | 96 | 62268    | 75.0       | 66.3         |       |
| 128 Naphthalene                  | 128 | 14.992    | 14.992        | 0.000         | 98 | 327683   | 75.0       | 65.4         |       |
| 129 1,2,3-Trichlorobenzene       | 180 | 15.217    | 15.217        | 0.000         | 94 | 100749   | 75.0       | 63.8         |       |
| 131 2,4,5-Trichlorotoluene       | 159 | 15.990    | 15.990        | 0.000         | 0  | 32434    | 75.0       | 57.0         |       |
| 130 2,3,6-Trichlorotoluene       | 159 | 16.093    | 16.093        | 0.000         | 92 | 30574    | 75.0       | 58.2         |       |
| 148 2,3-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 147 2,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 146 2,5-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 150 2,6-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 149 3,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| S 134 1,2-Dichloroethene, Total  | 96  |           |               |               | 0  |          | 150.0      | 139.0        |       |
| S 133 Xylenes, Total             | 106 |           |               |               | 0  |          | 150.0      | 152.4        |       |
| S 135 1,3-Dichloropropene, Total | 1   |           |               |               | 0  |          | 150.0      | 143.7        |       |

### QC Flag Legend

#### Processing Flags

ND - Not Detected or Marked ND

### Reagents:

|                     |                    |           |             |
|---------------------|--------------------|-----------|-------------|
| VOAVAPRI_00006      | Amount Added: 3.00 | Units: uL |             |
| voaWKet1 Rest_00001 | Amount Added: 3.00 | Units: uL |             |
| voaWEE1stRest_00001 | Amount Added: 3.00 | Units: uL |             |
| VOA8260VOAPRI_00139 | Amount Added: 3.00 | Units: uL |             |
| VOA8260SURR_00040   | Amount Added: 3.00 | Units: uL |             |
| VOAACROLEINPR_00006 | Amount Added: 7.00 | Units: uL |             |
| VOA8260INT_00040    | Amount Added: 2.00 | Units: uL | Run Reagent |

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826010.D

Injection Date: 26-Aug-2015 16:16:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: IC VSTD15

Worklist Smp#: 10

Client ID:

Purge Vol: 5.000 mL

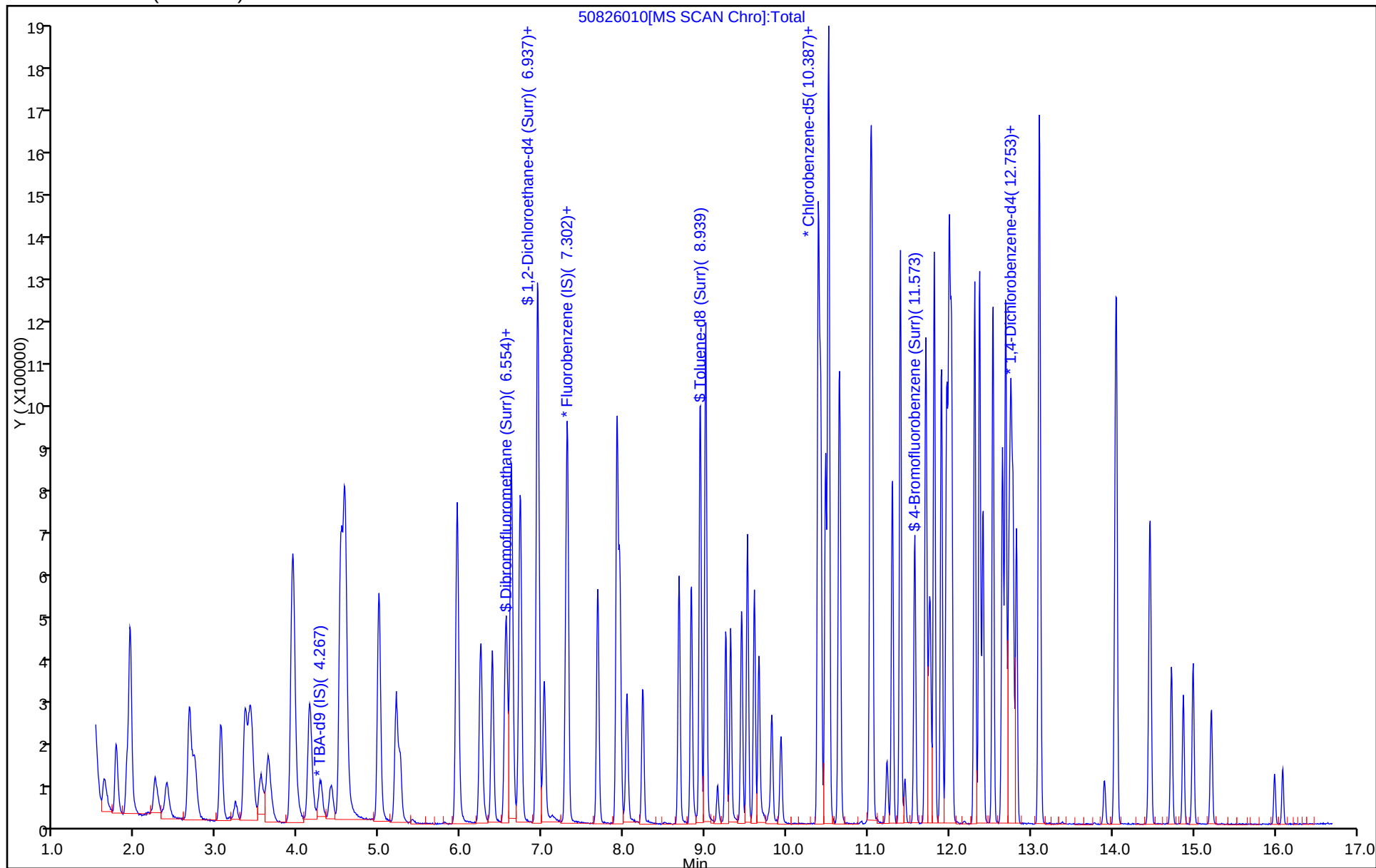
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826011.D  
 Lims ID: IC VSTD20  
 Client ID:  
 Sample Type: IC Calib Level: 5  
 Inject. Date: 26-Aug-2015 16:40:30 ALS Bottle#: 10 Worklist Smp#: 11  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: IC VSTD20  
 Misc. Info.: 180-0008300-011  
 Operator ID: 001562 Instrument ID: CHHP5  
 Sublist: chrom-MSVOA\_LL\_CHHP5\*sub4  
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C ICAL  
 Last Update: 27-Aug-2015 11:44:05 Calib Date: 26-Aug-2015 17:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: XAWRK048

First Level Reviewer: fergusond

Date: 27-Aug-2015 10:30:53

| Compound                        | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q   | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|---------------------------------|-----|--------------|------------------|------------------|-----|----------|---------------|-----------------|-------|
| * 1 TBA-d9 (IS)                 | 65  | 4.272        | 4.267            | 0.005            | 0   | 167321   | 1000.0        | 1000.0          |       |
| * 2 Fluorobenzene (IS)          | 96  | 7.289        | 7.290            | -0.001           | 98  | 500323   | 50.0          | 50.0            |       |
| * 3 Chlorobenzene-d5            | 119 | 10.386       | 10.387           | -0.001           | 85  | 122904   | 50.0          | 50.0            |       |
| * 4 1,4-Dichlorobenzene-d4      | 152 | 12.728       | 12.729           | -0.001           | 95  | 178343   | 50.0          | 50.0            |       |
| \$ 5 Dibromofluoromethane (Surr | 113 | 6.566        | 6.560            | 0.006            | 94  | 230039   | 100.0         | 93.6            |       |
| \$ 6 1,2-Dichloroethane-d4 (Sur | 65  | 6.937        | 6.931            | 0.006            | 0   | 306020   | 100.0         | 90.7            |       |
| \$ 7 Toluene-d8 (Surr)          | 98  | 8.938        | 8.939            | -0.001           | 95  | 918031   | 100.0         | 96.8            |       |
| \$ 8 4-Bromofluorobenzene (Surr | 95  | 11.572       | 11.573           | -0.001           | 86  | 339508   | 100.0         | 94.9            |       |
| 11 Dichlorodifluoromethane      | 85  | 1.614        | 1.614            | 0.000            | 99  | 268740   | 100.0         | 95.1            |       |
| 12 Chloromethane                | 50  | 1.766        | 1.766            | 0.000            | 99  | 386017   | 100.0         | 93.0            |       |
| 13 Vinyl chloride               | 62  | 1.900        | 1.894            | 0.006            | 98  | 356745   | 100.0         | 96.9            |       |
| 14 Butadiene                    | 39  | 1.936        | 1.937            | -0.001           | 97  | 411077   | 100.0         | 94.5            |       |
| 15 Bromomethane                 | 94  | 2.240        | 2.247            | -0.007           | 90  | 149495   | 100.0         | 99.8            |       |
| 16 Chloroethane                 | 64  | 2.386        | 2.387            | -0.001           | 99  | 207155   | 100.0         | 93.3            |       |
| 17 Dichlorofluoromethane        | 67  | 2.666        | 2.661            | 0.005            | 97  | 435665   | 100.0         | 92.4            |       |
| 18 Trichlorofluoromethane       | 101 | 2.715        | 2.667            | 0.048            | 97  | 334740   | 100.0         | 95.0            |       |
| 20 Ethyl ether                  | 59  | 3.049        | 3.050            | -0.001           | 97  | 295395   | 100.0         | 90.4            |       |
| 21 Acrolein                     | 56  | 3.226        | 3.232            | -0.006           | 98  | 92519    | 200.0         | 190.1           |       |
| 22 1,1-Dichloroethene           | 96  | 3.353        | 3.348            | 0.005            | 95  | 273818   | 100.0         | 98.3            |       |
| 23 1,1,2-Trichloro-1,2,2-trif   | 101 | 3.414        | 3.403            | 0.011            | 93  | 284081   | 100.0         | 96.2            |       |
| 24 Acetone                      | 43  | 3.439        | 3.445            | -0.006           | 99  | 173687   | 200.0         | 172.0           |       |
| 25 Iodomethane                  | 142 | 3.536        | 3.543            | -0.007           | 98  | 394076   | 100.0         | 94.9            |       |
| 26 Carbon disulfide             | 76  | 3.627        | 3.628            | -0.001           | 100 | 636866   | 100.0         | 98.4            |       |
| 28 3-Chloro-1-propene           | 76  | 3.925        | 3.920            | 0.005            | 88  | 156677   | 100.0         | 99.3            |       |
| 30 Methyl acetate               | 43  | 3.938        | 3.938            | 0.000            | 99  | 1419018  | 500.0         | 470.4           |       |
| 31 Methylene Chloride           | 84  | 4.138        | 4.139            | -0.001           | 97  | 291271   | 100.0         | 93.8            |       |
| 32 2-Methyl-2-propanol          | 59  | 4.406        | 4.407            | -0.001           | 90  | 185374   | 1000.0        | 984.3           |       |
| 33 Acrylonitrile                | 53  | 4.522        | 4.522            | 0.000            | 99  | 1347643  | 1000.0        | 920.7           |       |
| 34 trans-1,2-Dichloroethene     | 96  | 4.564        | 4.565            | -0.001           | 95  | 289331   | 100.0         | 95.6            |       |
| 35 Methyl tert-butyl ether      | 73  | 4.582        | 4.577            | 0.005            | 96  | 664089   | 100.0         | 94.8            |       |



| Compound                       | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q   | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|-----|----------|------------|--------------|-------|
| 36 Hexane                      | 57  | 4.990     | 4.997         | -0.007        | 97  | 493203   | 100.0      | 97.1         |       |
| 37 1,1-Dichloroethane          | 63  | 5.203     | 5.204         | -0.001        | 96  | 564450   | 100.0      | 94.7         |       |
| 38 Vinyl acetate               | 43  | 5.252     | 5.252         | 0.000         | 97  | 437799   | 100.0      | 97.9         |       |
| 44 2,2-Dichloropropane         | 77  | 5.945     | 5.952         | -0.007        | 78  | 234514   | 100.0      | 98.2         |       |
| 45 cis-1,2-Dichloroethene      | 96  | 5.951     | 5.952         | -0.001        | 85  | 302874   | 100.0      | 93.7         |       |
| 46 2-Butanone (MEK)            | 43  | 5.957     | 5.964         | -0.007        | 62  | 269779   | 200.0      | 177.9        |       |
| 49 Chlorobromomethane          | 128 | 6.237     | 6.238         | -0.001        | 92  | 133128   | 100.0      | 93.8         |       |
| 51 Tetrahydrofuran             | 42  | 6.249     | 6.250         | -0.001        | 91  | 207145   | 200.0      | 170.2        |       |
| 52 Chloroform                  | 83  | 6.383     | 6.384         | -0.001        | 96  | 482795   | 100.0      | 93.8         |       |
| 53 1,1,1-Trichloroethane       | 97  | 6.541     | 6.542         | -0.001        | 97  | 366328   | 100.0      | 96.2         |       |
| 54 Cyclohexane                 | 56  | 6.614     | 6.615         | -0.001        | 96  | 637776   | 100.0      | 100.1        |       |
| 56 Carbon tetrachloride        | 117 | 6.718     | 6.718         | 0.000         | 94  | 319309   | 100.0      | 98.5         |       |
| 55 1,1-Dichloropropene         | 75  | 6.730     | 6.730         | 0.000         | 91  | 417880   | 100.0      | 99.2         |       |
| 57 Isobutyl alcohol            | 41  | 6.924     | 6.925         | -0.001        | 92  | 224262   | 2500.0     | 2353.8       |       |
| 58 Benzene                     | 78  | 6.943     | 6.943         | 0.000         | 98  | 1175215  | 100.0      | 95.3         |       |
| 59 1,2-Dichloroethane          | 62  | 7.022     | 7.022         | 0.000         | 96  | 399895   | 100.0      | 93.7         |       |
| 62 n-Heptane                   | 43  | 7.308     | 7.308         | 0.000         | 97  | 444901   | 100.0      | 96.4         |       |
| 64 Trichloroethene             | 130 | 7.679     | 7.679         | 0.000         | 96  | 285365   | 100.0      | 94.6         |       |
| 66 Methylcyclohexane           | 83  | 7.916     | 7.917         | -0.001        | 96  | 484430   | 100.0      | 101.8        |       |
| 67 1,2-Dichloropropane         | 63  | 7.947     | 7.947         | -0.001        | 94  | 304322   | 100.0      | 94.0         |       |
| 70 1,4-Dioxane                 | 88  | 8.026     | 8.026         | 0.000         | 40  | 44562    | 2000.0     | 1996.7       |       |
| 68 Dibromomethane              | 93  | 8.038     | 8.038         | 0.000         | 97  | 152946   | 100.0      | 93.1         |       |
| 71 Dichlorobromomethane        | 83  | 8.232     | 8.233         | -0.001        | 97  | 310676   | 100.0      | 95.6         |       |
| 74 cis-1,3-Dichloropropene     | 75  | 8.677     | 8.677         | 0.000         | 90  | 374197   | 100.0      | 98.2         |       |
| 75 4-Methyl-2-pentanone (MIBK) | 43  | 8.829     | 8.829         | 0.000         | 99  | 614019   | 200.0      | 202.8        |       |
| 76 Toluene                     | 91  | 9.005     | 9.006         | -0.001        | 98  | 1201786  | 100.0      | 98.8         |       |
| 77 trans-1,3-Dichloropropene   | 75  | 9.254     | 9.249         | 0.005         | 99  | 323125   | 100.0      | 101.8        |       |
| 78 Ethyl methacrylate          | 69  | 9.309     | 9.310         | -0.001        | 94  | 316812   | 100.0      | 103.2        |       |
| 79 1,1,2-Trichloroethane       | 97  | 9.443     | 9.444         | -0.001        | 94  | 224541   | 100.0      | 97.0         |       |
| 80 Tetrachloroethene           | 164 | 9.516     | 9.517         | -0.001        | 95  | 230665   | 100.0      | 97.7         |       |
| 81 1,3-Dichloropropane         | 76  | 9.601     | 9.602         | -0.001        | 98  | 408560   | 100.0      | 95.1         |       |
| 82 2-Hexanone                  | 43  | 9.656     | 9.657         | -0.001        | 99  | 430988   | 200.0      | 197.2        |       |
| 84 Chlorodibromomethane        | 129 | 9.820     | 9.815         | 0.005         | 89  | 202349   | 100.0      | 101.0        |       |
| 85 Ethylene Dibromide          | 107 | 9.930     | 9.930         | 0.000         | 100 | 212653   | 100.0      | 95.3         |       |
| 86 3-Chlorobenzotrifluoride    | 180 | 10.386    | 10.387        | -0.001        | 91  | 368187   | 100.0      | 94.2         |       |
| 87 Chlorobenzene               | 112 | 10.416    | 10.417        | -0.001        | 93  | 752971   | 100.0      | 96.1         |       |
| 88 4-Chlorobenzotrifluoride    | 180 | 10.477    | 10.478        | -0.001        | 96  | 350243   | 100.0      | 94.7         |       |
| 89 1,1,1,2-Tetrachloroethane   | 131 | 10.508    | 10.508        | 0.000         | 91  | 247335   | 100.0      | 96.9         |       |
| 90 Ethylbenzene                | 106 | 10.520    | 10.514        | 0.006         | 99  | 417206   | 100.0      | 100.5        |       |
| 91 m-Xylene & p-Xylene         | 106 | 10.648    | 10.648        | 0.000         | 0   | 516778   | 100.0      | 101.5        |       |
| 92 o-Xylene                    | 106 | 11.031    | 11.025        | 0.006         | 97  | 488783   | 100.0      | 101.0        |       |
| 93 Styrene                     | 104 | 11.049    | 11.050        | -0.001        | 95  | 812783   | 100.0      | 101.4        |       |
| 94 Bromoform                   | 173 | 11.232    | 11.232        | 0.000         | 96  | 109983   | 100.0      | 96.2         |       |
| 96 2-Chlorobenzotrifluoride    | 180 | 11.299    | 11.299        | -0.001        | 95  | 362334   | 100.0      | 94.2         |       |
| 97 Isopropylbenzene            | 105 | 11.396    | 11.396        | 0.000         | 97  | 1229067  | 100.0      | 103.7        |       |
| 100 Bromobenzene               | 156 | 11.706    | 11.707        | -0.001        | 95  | 300450   | 100.0      | 98.1         |       |
| 99 1,1,2,2-Tetrachloroethane   | 83  | 11.706    | 11.707        | -0.001        | 76  | 290248   | 100.0      | 93.0         |       |
| 102 trans-1,4-Dichloro-2-buten | 53  | 11.743    | 11.743        | 0.000         | 75  | 107372   | 100.0      | 97.0         |       |
| 101 1,2,3-Trichloropropane     | 110 | 11.767    | 11.762        | 0.005         | 84  | 94129    | 100.0      | 93.2         |       |
| 103 N-Propylbenzene            | 120 | 11.816    | 11.810        | 0.006         | 99  | 351814   | 100.0      | 100.4        |       |
| 104 2-Chlorotoluene            | 126 | 11.901    | 11.901        | 0.000         | 96  | 301246   | 100.0      | 101.1        |       |
| 105 3-Chlorotoluene            | 126 | 11.968    | 11.968        | 0.000         | 95  | 297767   | 100.0      | 97.3         |       |



| Compound                         | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|----------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 106 1,3,5-Trimethylbenzene       | 105 | 11.992    | 11.993        | -0.001        | 94 | 1014826  | 100.0      | 102.5        |       |
| 107 4-Chlorotoluene              | 126 | 12.022    | 12.023        | -0.001        | 98 | 324433   | 100.0      | 99.0         |       |
| 108 tert-Butylbenzene            | 119 | 12.308    | 12.309        | -0.001        | 94 | 836893   | 100.0      | 104.0        |       |
| 110 1,2,4-Trimethylbenzene       | 105 | 12.369    | 12.370        | -0.001        | 98 | 1013032  | 100.0      | 102.1        |       |
| 111 1,2-dichloro-4-(trifluorom   | 214 | 12.412    | 12.412        | 0.000         | 98 | 258438   | 100.0      | 93.4         |       |
| 112 sec-Butylbenzene             | 105 | 12.533    | 12.534        | -0.001        | 95 | 1168492  | 100.0      | 102.8        |       |
| 113 1,3-Dichlorobenzene          | 146 | 12.649    | 12.650        | -0.001        | 97 | 523315   | 100.0      | 96.0         |       |
| 114 4-Isopropyltoluene           | 119 | 12.692    | 12.692        | 0.000         | 96 | 987448   | 100.0      | 102.7        |       |
| 115 1,4-Dichlorobenzene          | 146 | 12.752    | 12.753        | -0.001        | 94 | 532103   | 100.0      | 93.9         |       |
| 116 2,4-Dichloro-1-(trifluorom   | 214 | 12.777    | 12.777        | 0.000         | 95 | 235991   | 100.0      | 92.1         |       |
| 118 2,5-Dichlorobenzotrifluori   | 214 | 12.819    | 12.820        | -0.001        | 0  | 254571   | 100.0      | 91.9         |       |
| 120 n-Butylbenzene               | 91  | 13.099    | 13.100        | -0.001        | 98 | 841574   | 100.0      | 102.3        |       |
| 121 1,2-Dichlorobenzene          | 146 | 13.111    | 13.112        | -0.001        | 94 | 474503   | 100.0      | 93.1         |       |
| 122 1,2-Dibromo-3-Chloropropan   | 75  | 13.902    | 13.897        | 0.005         | 77 | 39315    | 100.0      | 94.0         |       |
| 123 2,4- & 2,5- & 2,6- Dichlor   | 125 | 14.042    | 14.049        | -0.007        | 0  | 827426   | 300.0      | 284.4        |       |
| 125 2,3- & 3,4- Dichlorotoluen   | 125 | 14.462    | 14.463        | -0.001        | 0  | 510138   | 200.0      | 183.9        |       |
| 126 1,2,4-Trichlorobenzene       | 180 | 14.723    | 14.724        | -0.001        | 94 | 175776   | 100.0      | 88.7         |       |
| 127 Hexachlorobutadiene          | 225 | 14.869    | 14.870        | -0.001        | 97 | 83392    | 100.0      | 87.3         |       |
| 128 Naphthalene                  | 128 | 14.991    | 14.992        | -0.001        | 98 | 463258   | 100.0      | 90.9         |       |
| 129 1,2,3-Trichlorobenzene       | 180 | 15.210    | 15.217        | -0.007        | 96 | 137103   | 100.0      | 85.4         |       |
| 131 2,4,5-Trichlorotoluene       | 159 | 15.995    | 15.990        | 0.005         | 0  | 45065    | 100.0      | 77.8         |       |
| 130 2,3,6-Trichlorotoluene       | 159 | 16.092    | 16.093        | -0.001        | 97 | 45128    | 100.0      | 84.5         |       |
| 146 2,5-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 148 2,3-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 147 2,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 149 3,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 150 2,6-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| S 134 1,2-Dichloroethene, Total  | 96  |           |               |               | 0  |          | 200.0      | 189.3        |       |
| S 133 Xylenes, Total             | 106 |           |               |               | 0  |          | 200.0      | 202.5        |       |
| S 135 1,3-Dichloropropene, Total | 1   |           |               |               | 0  |          | 200.0      | 200.0        |       |

### QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

### Reagents:

|                     |                    |           |             |
|---------------------|--------------------|-----------|-------------|
| VOAACROLEINPR_00006 | Amount Added: 8.00 | Units: uL |             |
| VOAVAPRI_00006      | Amount Added: 4.00 | Units: uL |             |
| voaWKet1 Rest_00001 | Amount Added: 4.00 | Units: uL |             |
| voaWEE1stRest_00001 | Amount Added: 4.00 | Units: uL |             |
| VOA8260VOAPRI_00139 | Amount Added: 4.00 | Units: uL |             |
| VOA8260SURR_00040   | Amount Added: 4.00 | Units: uL |             |
| VOA8260INT_00040    | Amount Added: 2.00 | Units: uL | Run Reagent |

Chrom Revision: 2.2 23-Jul-2015 08:26:08

Operator ID: 001562

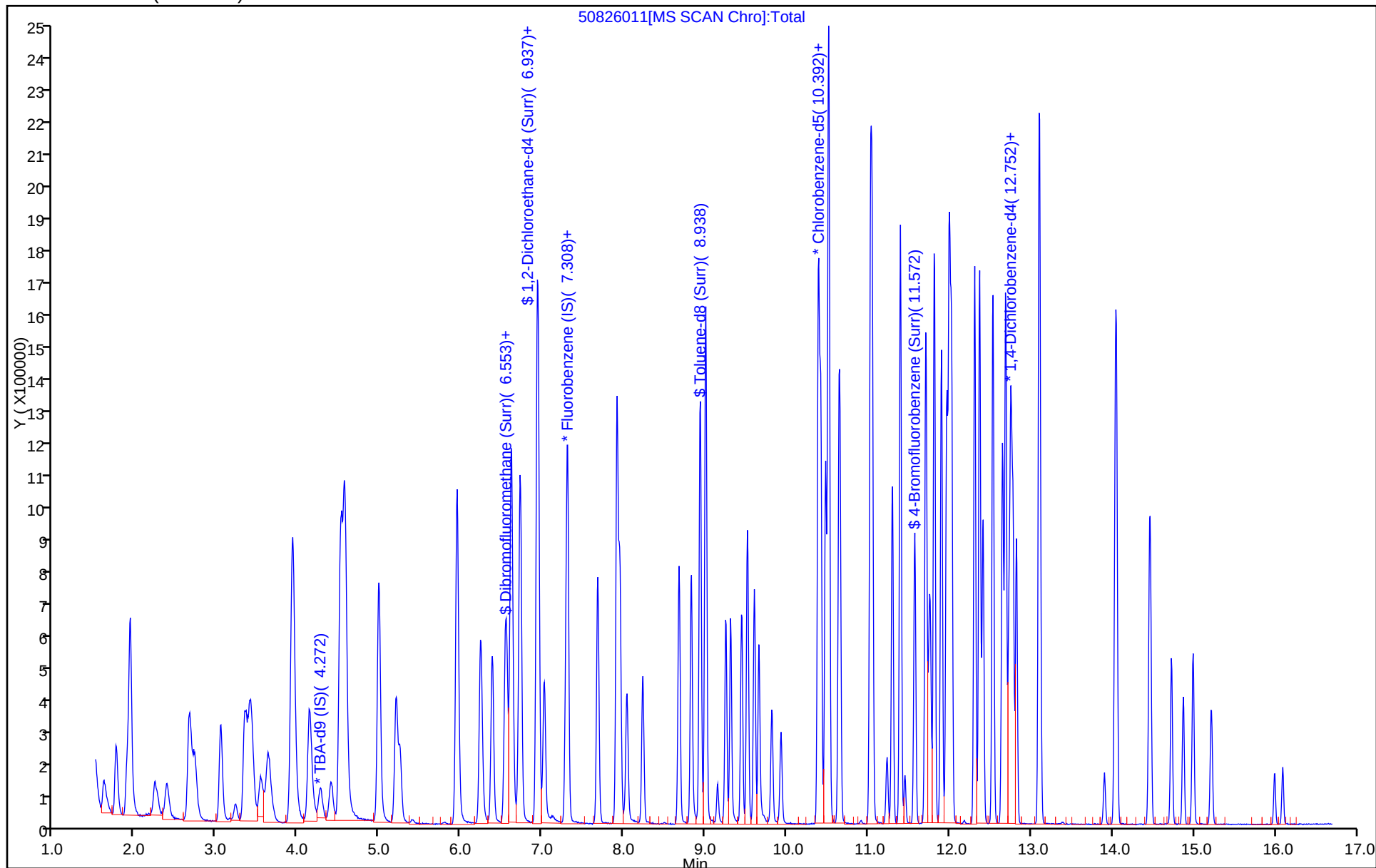
Worklist Smp#: 11

Client ID:

ALS Bottle#: 10

Limit Group: VOA 8260C ICAL

Column: DB-624 ( 0.18 mm)



TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826012.D  
 Lims ID: IC VSTD35  
 Client ID:  
 Sample Type: IC Calib Level: 6  
 Inject. Date: 26-Aug-2015 17:04:30 ALS Bottle#: 11 Worklist Smp#: 12  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: IC VSTD35  
 Misc. Info.: 180-0008300-012  
 Operator ID: 001562 Instrument ID: CHHP5  
 Sublist: chrom-MSVOA\_LL\_CHHP5\*sub4  
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C ICAL  
 Last Update: 27-Aug-2015 11:50:05 Calib Date: 26-Aug-2015 17:52:30  
 Integrator: RTE ID Type: RT Order ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: XAWRK048

First Level Reviewer: fergusond

Date: 27-Aug-2015 11:50:05

| Compound                        | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q   | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|---------------------------------|-----|--------------|------------------|------------------|-----|----------|---------------|-----------------|-------|
| * 1 TBA-d9 (IS)                 | 65  | 4.278        | 4.267            | 0.011            | 0   | 175358   | 1000.0        | 1000.0          |       |
| * 2 Fluorobenzene (IS)          | 96  | 7.289        | 7.290            | -0.001           | 98  | 502256   | 50.0          | 50.0            |       |
| * 3 Chlorobenzene-d5            | 119 | 10.385       | 10.387           | -0.002           | 63  | 129614   | 50.0          | 50.0            |       |
| * 4 1,4-Dichlorobenzene-d4      | 152 | 12.727       | 12.729           | -0.002           | 95  | 181323   | 50.0          | 50.0            |       |
| \$ 5 Dibromofluoromethane (Surr | 113 | 6.559        | 6.560            | -0.001           | 93  | 399678   | 175.0         | 162.0           |       |
| \$ 6 1,2-Dichloroethane-d4 (Sur | 65  | 6.930        | 6.931            | -0.001           | 0   | 544829   | 175.0         | 160.8           |       |
| \$ 7 Toluene-d8 (Surr)          | 98  | 8.937        | 8.939            | -0.002           | 94  | 1580158  | 175.0         | 158.0           |       |
| \$ 8 4-Bromofluorobenzene (Surr | 95  | 11.572       | 11.573           | -0.001           | 87  | 617045   | 175.0         | 163.6           |       |
| 11 Dichlorodifluoromethane      | 85  | 1.619        | 1.614            | 0.005            | 99  | 461015   | 175.0         | 162.5           |       |
| 12 Chloromethane                | 50  | 1.765        | 1.766            | -0.001           | 99  | 669660   | 175.0         | 160.7           |       |
| 13 Vinyl chloride               | 62  | 1.905        | 1.894            | 0.011            | 98  | 603655   | 175.0         | 163.3           |       |
| 14 Butadiene                    | 39  | 1.935        | 1.937            | -0.002           | 94  | 700624   | 175.0         | 160.5           |       |
| 15 Bromomethane                 | 94  | 2.233        | 2.247            | -0.014           | 90  | 267454   | 175.0         | 177.8           |       |
| 16 Chloroethane                 | 64  | 2.379        | 2.387            | -0.008           | 99  | 358728   | 175.0         | 160.9           |       |
| 17 Dichlorofluoromethane        | 67  | 2.659        | 2.661            | -0.002           | 98  | 748877   | 175.0         | 158.3           |       |
| 18 Trichlorofluoromethane       | 101 | 2.708        | 2.667            | 0.041            | 98  | 579992   | 175.0         | 163.9           |       |
| 20 Ethyl ether                  | 59  | 3.049        | 3.050            | -0.001           | 97  | 521056   | 175.0         | 158.9           |       |
| 21 Acrolein                     | 56  | 3.231        | 3.232            | -0.001           | 99  | 108307   | 225.0         | 221.7           |       |
| 22 1,1-Dichloroethene           | 96  | 3.347        | 3.348            | -0.001           | 95  | 473565   | 175.0         | 169.3           |       |
| 23 1,1,2-Trichloro-1,2,2-trif   | 101 | 3.408        | 3.403            | 0.005            | 94  | 488054   | 175.0         | 164.7           |       |
| 24 Acetone                      | 43  | 3.438        | 3.445            | -0.007           | 98  | 332039   | 350.0         | 327.6           |       |
| 25 Iodomethane                  | 142 | 3.547        | 3.543            | 0.004            | 98  | 696716   | 175.0         | 167.1           |       |
| 26 Carbon disulfide             | 76  | 3.633        | 3.628            | 0.005            | 100 | 1177201  | 175.0         | 181.2           |       |
| 28 3-Chloro-1-propene           | 76  | 3.919        | 3.920            | -0.001           | 89  | 285911   | 175.0         | 180.5           |       |
| 30 Methyl acetate               | 43  | 3.937        | 3.938            | -0.001           | 99  | 2539904  | 875.0         | 838.7           |       |
| 31 Methylene Chloride           | 84  | 4.138        | 4.139            | -0.001           | 97  | 510471   | 175.0         | 168.4           |       |
| 32 2-Methyl-2-propanol          | 59  | 4.411        | 4.407            | 0.004            | 90  | 352268   | 1750.0        | 1784.8          |       |
| 33 Acrylonitrile                | 53  | 4.521        | 4.522            | -0.001           | 99  | 2452551  | 1750.0        | 1669.2          |       |
| 34 trans-1,2-Dichloroethene     | 96  | 4.570        | 4.565            | 0.005            | 95  | 510637   | 175.0         | 168.1           |       |
| 35 Methyl tert-butyl ether      | 73  | 4.582        | 4.577            | 0.005            | 97  | 1204325  | 175.0         | 171.3           |       |

| Compound                       | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 36 Hexane                      | 57  | 4.989     | 4.997         | -0.008        | 96 | 889892   | 175.0      | 174.5        |       |
| 37 1,1-Dichloroethane          | 63  | 5.202     | 5.204         | -0.002        | 96 | 998105   | 175.0      | 166.8        |       |
| 38 Vinyl acetate               | 43  | 5.251     | 5.252         | -0.001        | 97 | 801339   | 175.0      | 178.5        |       |
| 44 2,2-Dichloropropane         | 77  | 5.944     | 5.952         | -0.008        | 79 | 413686   | 175.0      | 172.5        |       |
| 45 cis-1,2-Dichloroethene      | 96  | 5.950     | 5.952         | -0.002        | 86 | 550789   | 175.0      | 169.7        |       |
| 46 2-Butanone (MEK)            | 43  | 5.957     | 5.964         | -0.007        | 98 | 514894   | 350.0      | 338.2        |       |
| 49 Chlorobromomethane          | 128 | 6.236     | 6.238         | -0.002        | 92 | 234034   | 175.0      | 164.3        |       |
| 51 Tetrahydrofuran             | 42  | 6.249     | 6.250         | -0.001        | 91 | 417684   | 350.0      | 342.0        |       |
| 52 Chloroform                  | 83  | 6.382     | 6.384         | -0.002        | 96 | 838419   | 175.0      | 162.2        |       |
| 53 1,1,1-Trichloroethane       | 97  | 6.541     | 6.542         | -0.001        | 97 | 661680   | 175.0      | 173.1        |       |
| 54 Cyclohexane                 | 56  | 6.614     | 6.615         | -0.001        | 96 | 1115710  | 175.0      | 174.4        |       |
| 56 Carbon tetrachloride        | 117 | 6.717     | 6.718         | -0.001        | 96 | 566329   | 175.0      | 174.0        |       |
| 55 1,1-Dichloropropene         | 75  | 6.729     | 6.730         | -0.001        | 91 | 734207   | 175.0      | 173.7        |       |
| 57 Isobutyl alcohol            | 41  | 6.924     | 6.925         | -0.001        | 94 | 417725   | 4375.0     | 4367.4       |       |
| 58 Benzene                     | 78  | 6.942     | 6.943         | -0.001        | 98 | 2000326  | 175.0      | 161.5        |       |
| 59 1,2-Dichloroethane          | 62  | 7.021     | 7.022         | -0.001        | 97 | 709743   | 175.0      | 165.7        |       |
| 62 n-Heptane                   | 43  | 7.307     | 7.308         | -0.001        | 96 | 819932   | 175.0      | 177.0        |       |
| 64 Trichloroethene             | 130 | 7.678     | 7.679         | -0.001        | 97 | 506964   | 175.0      | 167.3        |       |
| 66 Methylcyclohexane           | 83  | 7.915     | 7.917         | -0.002        | 96 | 866758   | 175.0      | 181.5        |       |
| 67 1,2-Dichloropropane         | 63  | 7.946     | 7.947         | -0.001        | 94 | 547361   | 175.0      | 168.4        |       |
| 70 1,4-Dioxane                 | 88  | 8.025     | 8.026         | -0.001        | 46 | 82622    | 3500.0     | 3687.8       | M     |
| 68 Dibromomethane              | 93  | 8.037     | 8.038         | -0.001        | 96 | 277699   | 175.0      | 168.4        |       |
| 71 Dichlorobromomethane        | 83  | 8.232     | 8.233         | -0.001        | 98 | 576102   | 175.0      | 176.5        |       |
| 74 cis-1,3-Dichloropropene     | 75  | 8.676     | 8.677         | -0.001        | 90 | 714562   | 175.0      | 186.9        |       |
| 75 4-Methyl-2-pentanone (MIBK) | 43  | 8.828     | 8.829         | -0.001        | 98 | 1157588  | 350.0      | 362.5        |       |
| 76 Toluene                     | 91  | 9.004     | 9.006         | -0.002        | 97 | 2050607  | 175.0      | 159.8        |       |
| 77 trans-1,3-Dichloropropene   | 75  | 9.248     | 9.249         | -0.001        | 98 | 619485   | 175.0      | 185.0        |       |
| 78 Ethyl methacrylate          | 69  | 9.309     | 9.310         | -0.001        | 94 | 602921   | 175.0      | 186.2        |       |
| 79 1,1,2-Trichloroethane       | 97  | 9.442     | 9.444         | -0.002        | 93 | 403722   | 175.0      | 165.4        |       |
| 80 Tetrachloroethene           | 164 | 9.515     | 9.517         | -0.002        | 95 | 401915   | 175.0      | 161.4        |       |
| 81 1,3-Dichloropropane         | 76  | 9.601     | 9.602         | -0.001        | 98 | 743698   | 175.0      | 164.1        |       |
| 82 2-Hexanone                  | 43  | 9.655     | 9.657         | -0.002        | 99 | 820858   | 350.0      | 356.1        |       |
| 84 Chlorodibromomethane        | 129 | 9.813     | 9.815         | -0.002        | 91 | 377032   | 175.0      | 178.4        |       |
| 85 Ethylene Dibromide          | 107 | 9.929     | 9.930         | -0.001        | 99 | 390862   | 175.0      | 166.2        |       |
| 86 3-Chlorobenzotrifluoride    | 180 | 10.385    | 10.387        | -0.002        | 92 | 686777   | 175.0      | 166.5        |       |
| 87 Chlorobenzene               | 112 | 10.416    | 10.417        | -0.001        | 91 | 1331912  | 175.0      | 161.2        |       |
| 88 4-Chlorobenzotrifluoride    | 180 | 10.477    | 10.478        | -0.001        | 96 | 642626   | 175.0      | 164.8        |       |
| 89 1,1,1,2-Tetrachloroethane   | 131 | 10.507    | 10.508        | -0.001        | 93 | 453483   | 175.0      | 168.4        |       |
| 90 Ethylbenzene                | 106 | 10.513    | 10.514        | -0.001        | 98 | 756322   | 175.0      | 172.7        |       |
| 91 m-Xylene & p-Xylene         | 106 | 10.647    | 10.648        | -0.001        | 0  | 934055   | 175.0      | 173.9        |       |
| 92 o-Xylene                    | 106 | 11.030    | 11.025        | 0.005         | 95 | 890574   | 175.0      | 174.5        |       |
| 93 Styrene                     | 104 | 11.048    | 11.050        | -0.002        | 95 | 1460286  | 175.0      | 172.7        |       |
| 94 Bromoform                   | 173 | 11.231    | 11.232        | -0.001        | 96 | 217546   | 175.0      | 180.4        |       |
| 96 2-Chlorobenzotrifluoride    | 180 | 11.298    | 11.299        | -0.001        | 95 | 670799   | 175.0      | 165.3        |       |
| 97 Isopropylbenzene            | 105 | 11.395    | 11.396        | -0.001        | 97 | 2113845  | 175.0      | 169.1        |       |
| 100 Bromobenzene               | 156 | 11.712    | 11.707        | 0.005         | 95 | 543146   | 175.0      | 174.5        |       |
| 99 1,1,2,2-Tetrachloroethane   | 83  | 11.705    | 11.707        | -0.002        | 77 | 530728   | 175.0      | 161.2        |       |
| 102 trans-1,4-Dichloro-2-buten | 53  | 11.742    | 11.743        | -0.001        | 78 | 209384   | 175.0      | 186.1        |       |
| 101 1,2,3-Trichloropropane     | 110 | 11.760    | 11.762        | -0.002        | 87 | 177490   | 175.0      | 172.9        |       |
| 103 N-Propylbenzene            | 120 | 11.815    | 11.810        | 0.005         | 97 | 636587   | 175.0      | 178.7        |       |
| 104 2-Chlorotoluene            | 126 | 11.900    | 11.901        | -0.001        | 95 | 529736   | 175.0      | 174.9        |       |
| 105 3-Chlorotoluene            | 126 | 11.967    | 11.968        | -0.001        | 95 | 552058   | 175.0      | 177.4        |       |

| Compound                         | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|----------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 106 1,3,5-Trimethylbenzene       | 105 | 11.997    | 11.993        | 0.004         | 95 | 1760059  | 175.0      | 174.8        |       |
| 107 4-Chlorotoluene              | 126 | 12.022    | 12.023        | -0.001        | 98 | 582109   | 175.0      | 174.7        |       |
| 108 tert-Butylbenzene            | 119 | 12.308    | 12.309        | -0.001        | 94 | 1486960  | 175.0      | 181.7        |       |
| 110 1,2,4-Trimethylbenzene       | 105 | 12.369    | 12.370        | -0.001        | 98 | 1772230  | 175.0      | 175.7        |       |
| 111 1,2-dichloro-4-(trifluorom   | 214 | 12.411    | 12.412        | -0.001        | 98 | 484133   | 175.0      | 172.2        |       |
| 112 sec-Butylbenzene             | 105 | 12.533    | 12.534        | -0.001        | 96 | 2029430  | 175.0      | 175.6        |       |
| 113 1,3-Dichlorobenzene          | 146 | 12.648    | 12.650        | -0.002        | 97 | 937539   | 175.0      | 169.2        |       |
| 114 4-Isopropyltoluene           | 119 | 12.691    | 12.692        | -0.001        | 96 | 1738859  | 175.0      | 177.9        |       |
| 115 1,4-Dichlorobenzene          | 146 | 12.752    | 12.753        | -0.001        | 93 | 949324   | 175.0      | 164.7        |       |
| 116 2,4-Dichloro-1-(trifluorom   | 214 | 12.782    | 12.777        | 0.005         | 95 | 453275   | 175.0      | 174.0        |       |
| 118 2,5-Dichlorobenzotrifluori   | 214 | 12.819    | 12.820        | -0.001        | 0  | 486163   | 175.0      | 172.6        |       |
| 120 n-Butylbenzene               | 91  | 13.099    | 13.100        | -0.001        | 97 | 1504673  | 175.0      | 179.9        |       |
| 121 1,2-Dichlorobenzene          | 146 | 13.111    | 13.112        | -0.001        | 96 | 849612   | 175.0      | 164.0        |       |
| 122 1,2-Dibromo-3-Chloropropan   | 75  | 13.902    | 13.897        | 0.005         | 79 | 75555    | 175.0      | 177.7        |       |
| 123 2,4- & 2,5- & 2,6- Dichlor   | 125 | 14.048    | 14.049        | -0.001        | 0  | 1576122  | 525.0      | 532.8        |       |
| 125 2,3- & 3,4- Dichlorotoluen   | 125 | 14.461    | 14.463        | -0.002        | 0  | 994231   | 350.0      | 352.5        |       |
| 126 1,2,4-Trichlorobenzene       | 180 | 14.723    | 14.724        | -0.001        | 94 | 339446   | 175.0      | 168.4        |       |
| 127 Hexachlorobutadiene          | 225 | 14.869    | 14.870        | -0.001        | 97 | 160392   | 175.0      | 165.2        |       |
| 128 Naphthalene                  | 128 | 14.990    | 14.992        | -0.002        | 98 | 934428   | 175.0      | 180.4        |       |
| 129 1,2,3-Trichlorobenzene       | 180 | 15.216    | 15.217        | -0.001        | 94 | 261711   | 175.0      | 160.4        |       |
| 131 2,4,5-Trichlorotoluene       | 159 | 15.988    | 15.990        | -0.002        | 0  | 100325   | 175.0      | 170.5        |       |
| 130 2,3,6-Trichlorotoluene       | 159 | 16.092    | 16.093        | -0.001        | 94 | 99793    | 175.0      | 185.2        |       |
| 148 2,3-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 146 2,5-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 150 2,6-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 149 3,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 147 2,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| S 133 Xylenes, Total             | 106 |           |               |               | 0  |          | 350.0      | 348.4        |       |
| S 134 1,2-Dichloroethene, Total  | 96  |           |               |               | 0  |          | 350.0      | 337.9        |       |
| S 135 1,3-Dichloropropene, Total | 1   |           |               |               | 0  |          | 350.0      | 371.9        |       |

### QC Flag Legend

#### Processing Flags

ND - Not Detected or Marked ND

#### Review Flags

M - Manually Integrated

### Reagents:

|                     |                    |           |             |
|---------------------|--------------------|-----------|-------------|
| VOA8260SURR_00040   | Amount Added: 7.00 | Units: uL |             |
| VOA8260VOAPRI_00139 | Amount Added: 7.00 | Units: uL |             |
| voaWEE1stRest_00001 | Amount Added: 7.00 | Units: uL |             |
| voaWKet1 Rest_00001 | Amount Added: 7.00 | Units: uL |             |
| VOAVAPRI_00006      | Amount Added: 7.00 | Units: uL |             |
| VOAACROLEINPR_00006 | Amount Added: 9.00 | Units: uL |             |
| VOA8260INT_00040    | Amount Added: 2.00 | Units: uL | Run Reagent |

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826012.D

Injection Date: 26-Aug-2015 17:04:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: IC VSTD35

Worklist Smp#: 12

Client ID:

Purge Vol: 5.000 mL

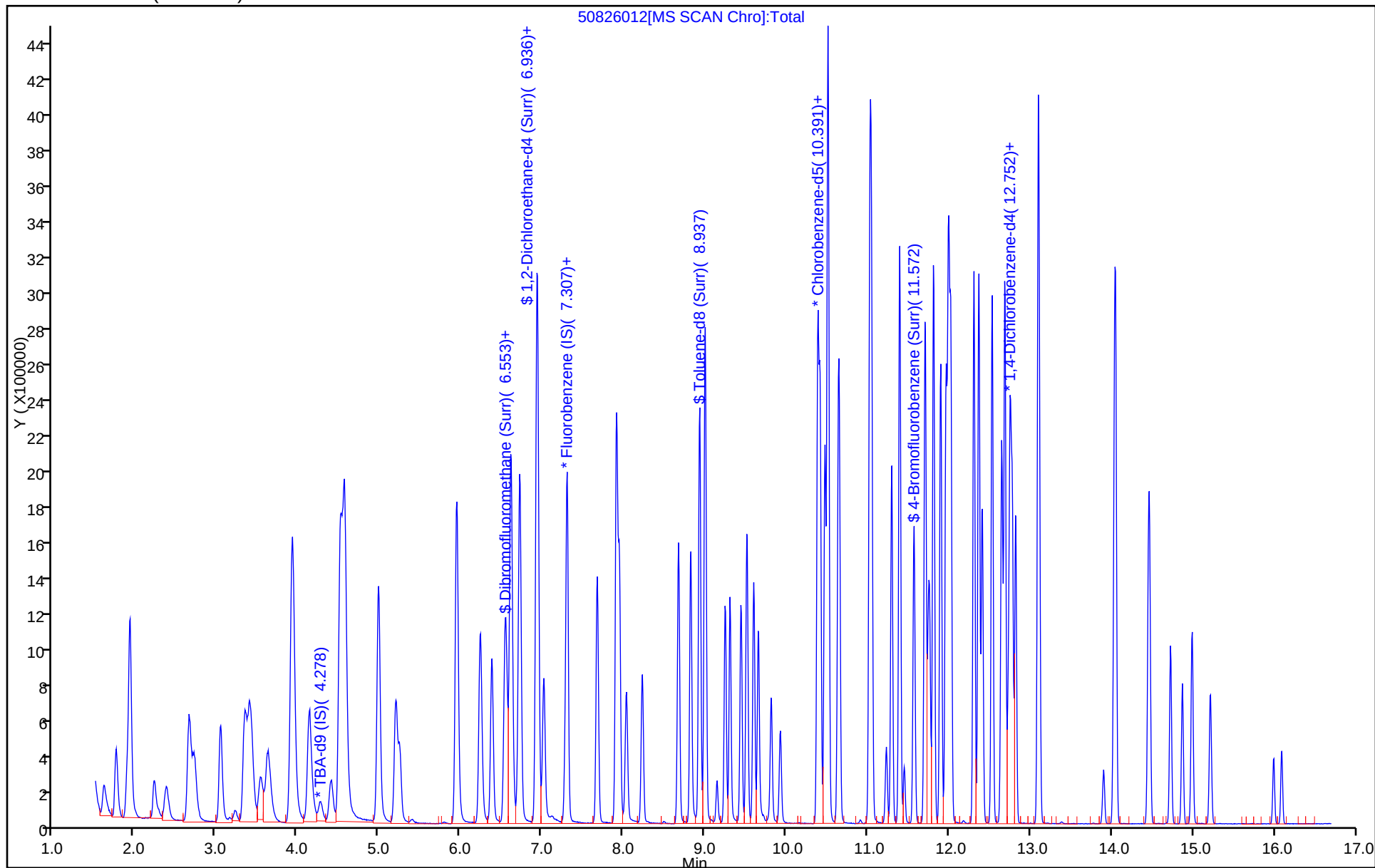
Dil. Factor: 1.0000

ALS Bottle#: 11

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



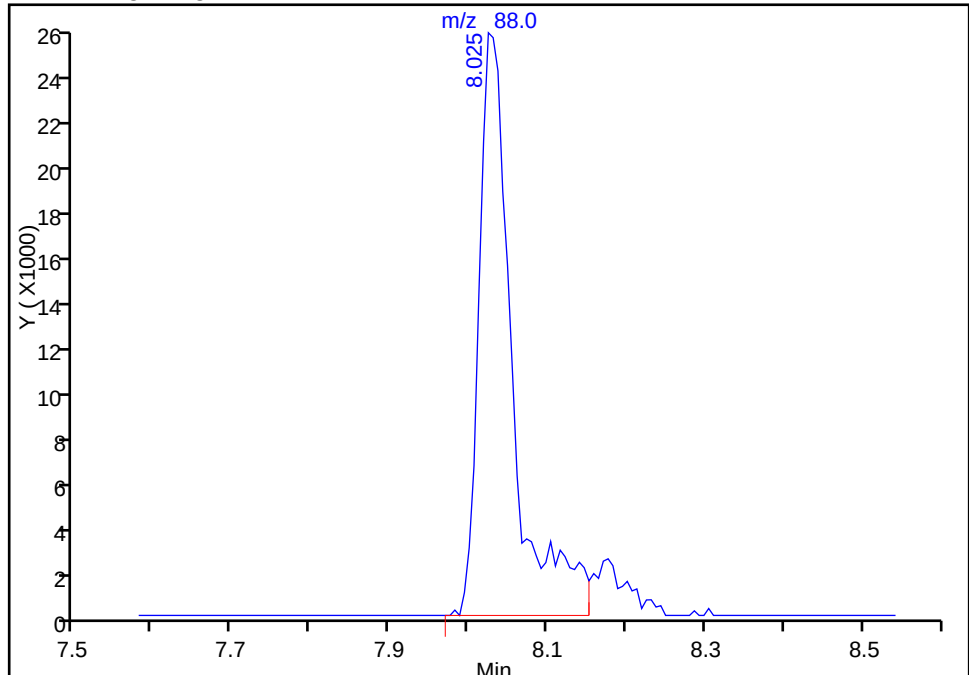
## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826012.D  
Injection Date: 26-Aug-2015 17:04:30 Instrument ID: CHHP5  
Lims ID: IC VSTD35  
Client ID:  
Operator ID: 001562 ALS Bottle#: 11 Worklist Smp#: 12  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C ICAL  
Column: DB-624 ( 0.18 mm) Detector MS SCAN

## 70 1,4-Dioxane, CAS: 123-91-1

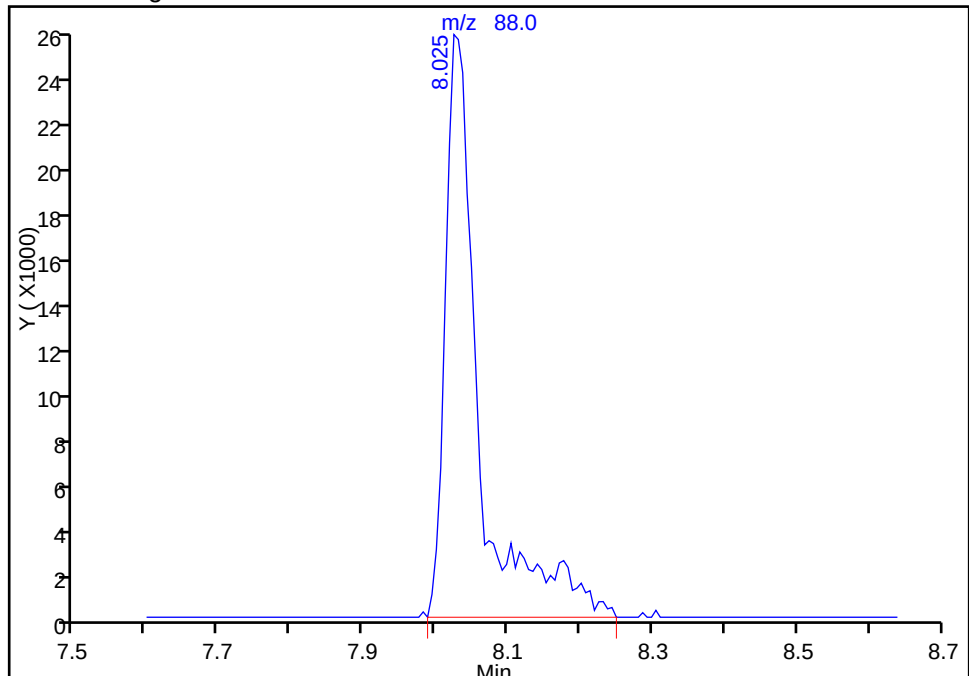
RT: 8.02  
Area: 75762  
Amount: 3419.0350  
Amount Units: ng

## Processing Integration Results



RT: 8.02  
Area: 82622  
Amount: 3687.8427  
Amount Units: ng

## Manual Integration Results



Reviewer: fergusond, 27-Aug-2015 10:34:42  
Audit Action: Manually Integrated  
Audit Reason: Incomplete Integration



TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826013.D  
 Lims ID: IC VSTD40  
 Client ID:  
 Sample Type: IC Calib Level: 7  
 Inject. Date: 26-Aug-2015 17:28:30 ALS Bottle#: 12 Worklist Smp#: 13  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: IC VSTD40  
 Misc. Info.: 180-0008300-013  
 Operator ID: 001562 Instrument ID: CHHP5  
 Sublist: chrom-MSVOA\_LL\_CHHP5\*sub4  
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C ICAL  
 Last Update: 27-Aug-2015 11:50:23 Calib Date: 26-Aug-2015 17:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: XAWRK048

First Level Reviewer: fergusond

Date: 27-Aug-2015 10:38:36

| Compound                        | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q   | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|---------------------------------|-----|--------------|------------------|------------------|-----|----------|---------------|-----------------|-------|
| * 1 TBA-d9 (IS)                 | 65  | 4.274        | 4.267            | 0.007            | 0   | 190633   | 1000.0        | 1000.0          |       |
| * 2 Fluorobenzene (IS)          | 96  | 7.285        | 7.290            | -0.005           | 98  | 491948   | 50.0          | 50.0            |       |
| * 3 Chlorobenzene-d5            | 119 | 10.388       | 10.387           | 0.001            | 59  | 135336   | 50.0          | 50.0            |       |
| * 4 1,4-Dichlorobenzene-d4      | 152 | 12.730       | 12.729           | 0.001            | 94  | 186041   | 50.0          | 50.0            |       |
| \$ 5 Dibromofluoromethane (Surr | 113 | 6.562        | 6.560            | 0.002            | 94  | 438908   | 200.0         | 181.7           |       |
| \$ 6 1,2-Dichloroethane-d4 (Sur | 65  | 6.933        | 6.931            | 0.002            | 0   | 597233   | 200.0         | 180.0           |       |
| \$ 7 Toluene-d8 (Surr)          | 98  | 8.934        | 8.939            | -0.005           | 94  | 1727014  | 200.0         | 165.4           |       |
| \$ 8 4-Bromofluorobenzene (Surr | 95  | 11.568       | 11.573           | -0.005           | 86  | 697446   | 200.0         | 177.1           |       |
| 11 Dichlorodifluoromethane      | 85  | 1.616        | 1.614            | 0.002            | 98  | 506611   | 200.0         | 182.3           |       |
| 12 Chloromethane                | 50  | 1.762        | 1.766            | -0.004           | 99  | 733518   | 200.0         | 179.7           |       |
| 13 Vinyl chloride               | 62  | 1.902        | 1.894            | 0.008            | 98  | 663498   | 200.0         | 183.3           |       |
| 14 Butadiene                    | 39  | 1.938        | 1.937            | 0.001            | 95  | 762590   | 200.0         | 178.4           |       |
| 15 Bromomethane                 | 94  | 2.230        | 2.247            | -0.017           | 91  | 244127   | 200.0         | 165.7           |       |
| 16 Chloroethane                 | 64  | 2.382        | 2.387            | -0.005           | 99  | 395735   | 200.0         | 181.2           |       |
| 17 Dichlorofluoromethane        | 67  | 2.662        | 2.661            | 0.001            | 98  | 843233   | 200.0         | 182.0           |       |
| 18 Trichlorofluoromethane       | 101 | 2.711        | 2.667            | 0.044            | 98  | 636269   | 200.0         | 183.6           |       |
| 20 Ethyl ether                  | 59  | 3.045        | 3.050            | -0.005           | 97  | 582513   | 200.0         | 181.3           |       |
| 21 Acrolein                     | 56  | 3.228        | 3.232            | -0.004           | 99  | 117496   | 250.0         | 245.5           |       |
| 22 1,1-Dichloroethene           | 96  | 3.343        | 3.348            | -0.005           | 94  | 516257   | 200.0         | 188.4           |       |
| 23 1,1,2-Trichloro-1,2,2-trif   | 101 | 3.410        | 3.403            | 0.007            | 93  | 532678   | 200.0         | 183.5           |       |
| 24 Acetone                      | 43  | 3.435        | 3.445            | -0.010           | 99  | 349354   | 400.0         | 351.9           |       |
| 25 Iodomethane                  | 142 | 3.538        | 3.543            | -0.005           | 98  | 765249   | 200.0         | 187.4           |       |
| 26 Carbon disulfide             | 76  | 3.629        | 3.628            | 0.001            | 100 | 1297173  | 200.0         | 203.9           |       |
| 28 3-Chloro-1-propene           | 76  | 3.921        | 3.920            | 0.001            | 89  | 325399   | 200.0         | 209.7           |       |
| 30 Methyl acetate               | 43  | 3.940        | 3.938            | 0.002            | 99  | 2811173  | 1000.0        | 947.8           |       |
| 31 Methylene Chloride           | 84  | 4.134        | 4.139            | -0.005           | 97  | 573290   | 200.0         | 194.0           |       |
| 32 2-Methyl-2-propanol          | 59  | 4.408        | 4.407            | 0.001            | 90  | 410928   | 2000.0        | 1915.2          |       |
| 33 Acrylonitrile                | 53  | 4.517        | 4.522            | -0.005           | 98  | 2730347  | 2000.0        | 1897.2          |       |
| 34 trans-1,2-Dichloroethene     | 96  | 4.560        | 4.565            | -0.005           | 95  | 552053   | 200.0         | 185.6           |       |
| 35 Methyl tert-butyl ether      | 73  | 4.578        | 4.577            | 0.001            | 97  | 1367672  | 200.0         | 198.6           |       |



| Compound                       | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 36 Hexane                      | 57  | 4.986     | 4.997         | -0.011        | 97 | 948868   | 200.0      | 190.0        |       |
| 37 1,1-Dichloroethane          | 63  | 5.199     | 5.204         | -0.005        | 97 | 1104940  | 200.0      | 188.5        |       |
| 38 Vinyl acetate               | 43  | 5.247     | 5.252         | -0.005        | 97 | 887283   | 200.0      | 201.8        |       |
| 45 cis-1,2-Dichloroethene      | 96  | 5.947     | 5.952         | -0.005        | 84 | 600559   | 200.0      | 188.9        |       |
| 44 2,2-Dichloropropane         | 77  | 5.947     | 5.952         | -0.005        | 84 | 451339   | 200.0      | 192.2        |       |
| 46 2-Butanone (MEK)            | 43  | 5.953     | 5.964         | -0.011        | 90 | 569128   | 400.0      | 381.6        |       |
| 49 Chlorobromomethane          | 128 | 6.239     | 6.238         | 0.001         | 92 | 262832   | 200.0      | 188.3        |       |
| 51 Tetrahydrofuran             | 42  | 6.245     | 6.250         | -0.005        | 95 | 461621   | 400.0      | 385.8        |       |
| 52 Chloroform                  | 83  | 6.379     | 6.384         | -0.005        | 95 | 922240   | 200.0      | 182.1        |       |
| 53 1,1,1-Trichloroethane       | 97  | 6.543     | 6.542         | 0.001         | 96 | 710348   | 200.0      | 189.7        |       |
| 54 Cyclohexane                 | 56  | 6.610     | 6.615         | -0.005        | 96 | 1210903  | 200.0      | 193.3        |       |
| 56 Carbon tetrachloride        | 117 | 6.714     | 6.718         | -0.004        | 95 | 616016   | 200.0      | 193.2        |       |
| 55 1,1-Dichloropropene         | 75  | 6.726     | 6.730         | -0.004        | 93 | 785333   | 200.0      | 189.7        |       |
| 57 Isobutyl alcohol            | 41  | 6.927     | 6.925         | 0.002         | 94 | 492768   | 5000.0     | 5259.9       |       |
| 58 Benzene                     | 78  | 6.939     | 6.943         | -0.004        | 98 | 2197241  | 200.0      | 181.1        |       |
| 59 1,2-Dichloroethane          | 62  | 7.018     | 7.022         | -0.004        | 96 | 788760   | 200.0      | 188.0        |       |
| 62 n-Heptane                   | 43  | 7.310     | 7.308         | 0.002         | 96 | 859948   | 200.0      | 189.6        |       |
| 64 Trichloroethene             | 130 | 7.675     | 7.679         | -0.004        | 96 | 556980   | 200.0      | 187.7        |       |
| 66 Methylcyclohexane           | 83  | 7.912     | 7.917         | -0.005        | 96 | 937977   | 200.0      | 200.6        |       |
| 67 1,2-Dichloropropane         | 63  | 7.949     | 7.947         | 0.002         | 94 | 594824   | 200.0      | 186.9        |       |
| 70 1,4-Dioxane                 | 88  | 8.034     | 8.026         | 0.008         | 41 | 91547    | 4000.0     | 4171.8       |       |
| 68 Dibromomethane              | 93  | 8.034     | 8.038         | -0.004        | 97 | 307857   | 200.0      | 190.6        |       |
| 71 Dichlorobromomethane        | 83  | 8.228     | 8.233         | -0.005        | 98 | 644471   | 200.0      | 201.6        |       |
| 74 cis-1,3-Dichloropropene     | 75  | 8.672     | 8.677         | -0.005        | 91 | 812298   | 200.0      | 216.9        |       |
| 75 4-Methyl-2-pentanone (MIBK) | 43  | 8.825     | 8.829         | -0.004        | 98 | 1320471  | 400.0      | 396.0        |       |
| 76 Toluene                     | 91  | 9.001     | 9.006         | -0.005        | 97 | 2228576  | 200.0      | 166.3        |       |
| 77 trans-1,3-Dichloropropene   | 75  | 9.250     | 9.249         | 0.001         | 98 | 704918   | 200.0      | 201.6        |       |
| 78 Ethyl methacrylate          | 69  | 9.311     | 9.310         | 0.001         | 94 | 687101   | 200.0      | 203.2        |       |
| 79 1,1,2-Trichloroethane       | 97  | 9.445     | 9.444         | 0.001         | 94 | 441190   | 200.0      | 173.1        |       |
| 80 Tetrachloroethene           | 164 | 9.518     | 9.517         | 0.001         | 95 | 438898   | 200.0      | 168.8        |       |
| 81 1,3-Dichloropropane         | 76  | 9.603     | 9.602         | 0.001         | 98 | 840507   | 200.0      | 177.6        |       |
| 82 2-Hexanone                  | 43  | 9.658     | 9.657         | 0.001         | 98 | 943138   | 400.0      | 391.8        |       |
| 84 Chlorodibromomethane        | 129 | 9.816     | 9.815         | 0.001         | 91 | 427847   | 200.0      | 193.9        |       |
| 85 Ethylene Dibromide          | 107 | 9.926     | 9.930         | -0.004        | 98 | 449617   | 200.0      | 183.1        |       |
| 86 3-Chlorobenzotrifluoride    | 180 | 10.388    | 10.387        | 0.001         | 93 | 749898   | 200.0      | 174.2        |       |
| 87 Chlorobenzene               | 112 | 10.412    | 10.417        | -0.005        | 92 | 1491257  | 200.0      | 172.9        |       |
| 88 4-Chlorobenzotrifluoride    | 180 | 10.473    | 10.478        | -0.005        | 96 | 709487   | 200.0      | 174.3        |       |
| 89 1,1,1,2-Tetrachloroethane   | 131 | 10.510    | 10.508        | 0.002         | 94 | 513686   | 200.0      | 182.7        |       |
| 90 Ethylbenzene                | 106 | 10.516    | 10.514        | 0.002         | 98 | 837593   | 200.0      | 183.2        |       |
| 91 m-Xylene & p-Xylene         | 106 | 10.650    | 10.648        | 0.002         | 0  | 1021032  | 200.0      | 182.1        |       |
| 92 o-Xylene                    | 106 | 11.027    | 11.025        | 0.002         | 97 | 984811   | 200.0      | 184.8        |       |
| 93 Styrene                     | 104 | 11.051    | 11.050        | 0.001         | 94 | 1627751  | 200.0      | 184.4        |       |
| 94 Bromoform                   | 173 | 11.234    | 11.232        | 0.002         | 96 | 254607   | 200.0      | 202.2        |       |
| 96 2-Chlorobenzotrifluoride    | 180 | 11.294    | 11.299        | -0.005        | 95 | 748529   | 200.0      | 176.7        |       |
| 97 Isopropylbenzene            | 105 | 11.392    | 11.396        | -0.004        | 97 | 2317406  | 200.0      | 177.6        |       |
| 100 Bromobenzene               | 156 | 11.708    | 11.707        | 0.001         | 95 | 609774   | 200.0      | 190.9        |       |
| 99 1,1,2,2-Tetrachloroethane   | 83  | 11.708    | 11.707        | 0.001         | 78 | 605346   | 200.0      | 176.1        |       |
| 102 trans-1,4-Dichloro-2-buten | 53  | 11.745    | 11.743        | 0.002         | 43 | 238659   | 200.0      | 206.7        |       |
| 101 1,2,3-Trichloropropane     | 110 | 11.763    | 11.762        | 0.001         | 86 | 200908   | 200.0      | 190.7        |       |
| 103 N-Propylbenzene            | 120 | 11.812    | 11.810        | 0.002         | 97 | 717909   | 200.0      | 196.4        |       |
| 104 2-Chlorotoluene            | 126 | 11.897    | 11.901        | -0.004        | 96 | 608876   | 200.0      | 195.9        |       |
| 105 3-Chlorotoluene            | 126 | 11.964    | 11.968        | -0.004        | 95 | 621607   | 200.0      | 194.6        |       |

| Compound                         | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|----------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 106 1,3,5-Trimethylbenzene       | 105 | 11.994    | 11.993        | 0.001         | 95 | 1952122  | 200.0      | 189.0        |       |
| 107 4-Chlorotoluene              | 126 | 12.024    | 12.023        | 0.001         | 98 | 649501   | 200.0      | 189.9        |       |
| 108 tert-Butylbenzene            | 119 | 12.310    | 12.309        | 0.001         | 94 | 1642231  | 200.0      | 195.6        |       |
| 110 1,2,4-Trimethylbenzene       | 105 | 12.365    | 12.370        | -0.005        | 98 | 1973541  | 200.0      | 190.7        |       |
| 111 1,2-dichloro-4-(trifluorom   | 214 | 12.408    | 12.412        | -0.004        | 97 | 529814   | 200.0      | 183.6        |       |
| 112 sec-Butylbenzene             | 105 | 12.529    | 12.534        | -0.005        | 96 | 2244027  | 200.0      | 189.3        |       |
| 113 1,3-Dichlorobenzene          | 146 | 12.651    | 12.650        | 0.001         | 96 | 1071203  | 200.0      | 188.4        |       |
| 114 4-Isopropyltoluene           | 119 | 12.688    | 12.692        | -0.004        | 97 | 1944911  | 200.0      | 193.9        |       |
| 115 1,4-Dichlorobenzene          | 146 | 12.754    | 12.753        | 0.001         | 94 | 1084086  | 200.0      | 183.3        |       |
| 116 2,4-Dichloro-1-(trifluorom   | 214 | 12.779    | 12.777        | 0.002         | 95 | 483618   | 200.0      | 180.9        |       |
| 118 2,5-Dichlorobenzotrifluori   | 214 | 12.821    | 12.820        | 0.001         | 0  | 571654   | 200.0      | 197.9        |       |
| 120 n-Butylbenzene               | 91  | 13.095    | 13.100        | -0.005        | 98 | 1691227  | 200.0      | 197.0        |       |
| 121 1,2-Dichlorobenzene          | 146 | 13.107    | 13.112        | -0.005        | 94 | 988861   | 200.0      | 186.1        |       |
| 122 1,2-Dibromo-3-Chloropropan   | 75  | 13.904    | 13.897        | 0.007         | 78 | 91242    | 200.0      | 209.1        |       |
| 123 2,4- & 2,5- & 2,6- Dichlor   | 125 | 14.044    | 14.049        | -0.005        | 0  | 1875036  | 600.0      | 617.8        |       |
| 125 2,3- & 3,4- Dichlorotoluen   | 125 | 14.458    | 14.463        | -0.005        | 0  | 1204899  | 400.0      | 416.3        |       |
| 126 1,2,4-Trichlorobenzene       | 180 | 14.726    | 14.724        | 0.002         | 94 | 424061   | 200.0      | 205.1        |       |
| 127 Hexachlorobutadiene          | 225 | 14.872    | 14.870        | 0.002         | 97 | 188644   | 200.0      | 189.4        |       |
| 128 Naphthalene                  | 128 | 14.987    | 14.992        | -0.005        | 98 | 1180622  | 200.0      | 222.2        |       |
| 129 1,2,3-Trichlorobenzene       | 180 | 15.212    | 15.217        | -0.005        | 95 | 333363   | 200.0      | 199.2        |       |
| 131 2,4,5-Trichlorotoluene       | 159 | 15.991    | 15.990        | 0.001         | 0  | 135933   | 200.0      | 225.1        |       |
| 130 2,3,6-Trichlorotoluene       | 159 | 16.088    | 16.093        | -0.005        | 95 | 131306   | 200.0      | 242.0        |       |
| 150 2,6-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 149 3,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 146 2,5-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 147 2,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 148 2,3-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| S 134 1,2-Dichloroethene, Total  | 96  |           |               |               | 0  |          | 400.0      | 374.5        |       |
| S 133 Xylenes, Total             | 106 |           |               |               | 0  |          | 400.0      | 366.9        |       |
| S 135 1,3-Dichloropropene, Total | 1   |           |               |               | 0  |          | 400.0      | 418.5        |       |

### QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

### Reagents:

|                     |                     |           |             |
|---------------------|---------------------|-----------|-------------|
| VOAACROLEINPR_00006 | Amount Added: 10.00 | Units: uL |             |
| VOAVAPRI_00006      | Amount Added: 8.00  | Units: uL |             |
| voaWKet1 Rest_00001 | Amount Added: 8.00  | Units: uL |             |
| voaWEE1stRest_00001 | Amount Added: 8.00  | Units: uL |             |
| VOA8260VOAPRI_00139 | Amount Added: 8.00  | Units: uL |             |
| VOA8260SURR_00040   | Amount Added: 8.00  | Units: uL |             |
| VOA8260INT_00040    | Amount Added: 2.00  | Units: uL | Run Reagent |

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826013.D

Injection Date: 26-Aug-2015 17:28:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: IC VSTD40

Worklist Smp#: 13

Client ID:

Purge Vol: 5.000 mL

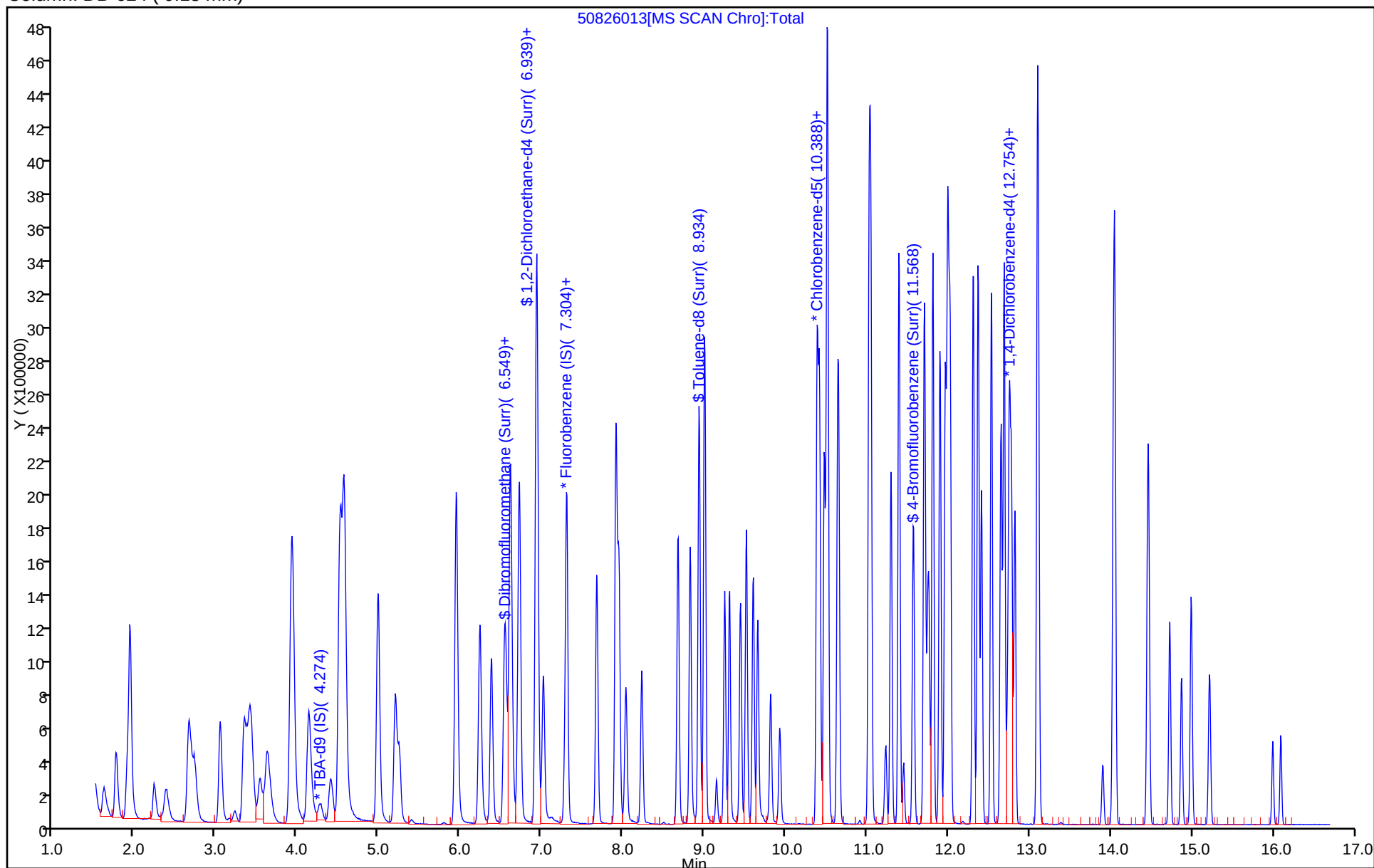
Dil. Factor: 1.0000

ALS Bottle#: 12

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D  
 Lims ID: IC VSTD50  
 Client ID:  
 Sample Type: IC Calib Level: 8  
 Inject. Date: 26-Aug-2015 17:52:30 ALS Bottle#: 13 Worklist Smp#: 14  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: IC VSTD50  
 Misc. Info.: 180-0008300-014  
 Operator ID: 001562 Instrument ID: CHHP5  
 Sublist: chrom-MSVOA\_LL\_CHHP5\*sub4  
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C ICAL  
 Last Update: 27-Aug-2015 11:50:43 Calib Date: 26-Aug-2015 17:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: XAWRK048

First Level Reviewer: fergusond

Date: 27-Aug-2015 10:43:05

| Compound                        | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q   | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|---------------------------------|-----|--------------|------------------|------------------|-----|----------|---------------|-----------------|-------|
| * 1 TBA-d9 (IS)                 | 65  | 4.271        | 4.267            | 0.004            | 0   | 178553   | 1000.0        | 1000.0          |       |
| * 2 Fluorobenzene (IS)          | 96  | 7.289        | 7.290            | -0.001           | 98  | 422908   | 50.0          | 50.0            |       |
| * 3 Chlorobenzene-d5            | 119 | 10.385       | 10.387           | -0.002           | 56  | 117789   | 50.0          | 50.0            |       |
| * 4 1,4-Dichlorobenzene-d4      | 152 | 12.728       | 12.729           | -0.001           | 92  | 156354   | 50.0          | 50.0            |       |
| \$ 5 Dibromofluoromethane (Surr | 113 | 6.559        | 6.560            | -0.001           | 93  | 562879   | 250.0         | 271.0           |       |
| \$ 6 1,2-Dichloroethane-d4 (Sur | 65  | 6.936        | 6.931            | 0.005            | 0   | 751925   | 250.0         | 263.6           |       |
| \$ 7 Toluene-d8 (Surr)          | 98  | 8.938        | 8.939            | -0.001           | 94  | 2103482  | 250.0         | 231.5           |       |
| \$ 8 4-Bromofluorobenzene (Surr | 95  | 11.572       | 11.573           | -0.001           | 86  | 854277   | 250.0         | 249.2           |       |
| 11 Dichlorodifluoromethane      | 85  | 1.619        | 1.614            | 0.005            | 99  | 585297   | 250.0         | 245.0           |       |
| 12 Chloromethane                | 50  | 1.765        | 1.766            | -0.001           | 99  | 886889   | 250.0         | 252.8           |       |
| 13 Vinyl chloride               | 62  | 1.905        | 1.894            | 0.011            | 99  | 782206   | 250.0         | 251.3           |       |
| 14 Butadiene                    | 39  | 1.935        | 1.937            | -0.002           | 96  | 893578   | 250.0         | 243.1           |       |
| 15 Bromomethane                 | 94  | 2.234        | 2.247            | -0.013           | 90  | 333317   | 250.0         | 263.2           |       |
| 16 Chloroethane                 | 64  | 2.380        | 2.387            | -0.007           | 99  | 465079   | 250.0         | 247.7           |       |
| 17 Dichlorofluoromethane        | 67  | 2.665        | 2.661            | 0.004            | 98  | 986298   | 250.0         | 247.6           |       |
| 18 Trichlorofluoromethane       | 101 | 2.702        | 2.667            | 0.035            | 96  | 739174   | 250.0         | 248.1           | M     |
| 20 Ethyl ether                  | 59  | 3.043        | 3.050            | -0.007           | 97  | 750491   | 250.0         | 271.8           |       |
| 21 Acrolein                     | 56  | 3.225        | 3.232            | -0.007           | 99  | 127965   | 275.0         | 311.1           |       |
| 22 1,1-Dichloroethene           | 96  | 3.341        | 3.348            | -0.007           | 95  | 627614   | 250.0         | 266.5           |       |
| 23 1,1,2-Trichloro-1,2,2-trif   | 101 | 3.408        | 3.403            | 0.005            | 93  | 629046   | 250.0         | 252.1           |       |
| 24 Acetone                      | 43  | 3.438        | 3.445            | -0.007           | 99  | 457819   | 500.0         | 536.5           |       |
| 25 Iodomethane                  | 142 | 3.535        | 3.543            | -0.008           | 99  | 963985   | 250.0         | 274.6           |       |
| 26 Carbon disulfide             | 76  | 3.627        | 3.628            | -0.001           | 100 | 1607306  | 250.0         | 293.9           |       |
| 28 3-Chloro-1-propene           | 76  | 3.913        | 3.920            | -0.007           | 89  | 399041   | 250.0         | 299.1           |       |
| 30 Methyl acetate               | 43  | 3.937        | 3.938            | -0.001           | 98  | 3450277  | 1250.0        | 1353.2          |       |
| 31 Methylene Chloride           | 84  | 4.132        | 4.139            | -0.007           | 98  | 715184   | 250.0         | 284.3           |       |
| 32 2-Methyl-2-propanol          | 59  | 4.405        | 4.407            | -0.002           | 91  | 514360   | 2500.0        | 2559.4          |       |
| 33 Acrylonitrile                | 53  | 4.521        | 4.522            | -0.001           | 97  | 3337347  | 2500.0        | 2697.5          |       |
| 34 trans-1,2-Dichloroethene     | 96  | 4.563        | 4.565            | -0.002           | 95  | 687878   | 250.0         | 269.0           |       |
| 35 Methyl tert-butyl ether      | 73  | 4.576        | 4.577            | -0.001           | 98  | 1750025  | 250.0         | 295.6           |       |

| Compound                       | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 36 Hexane                      | 57  | 4.989     | 4.997         | -0.008        | 97 | 1125958  | 250.0      | 262.3        |       |
| 37 1,1-Dichloroethane          | 63  | 5.202     | 5.204         | -0.002        | 96 | 1377944  | 250.0      | 273.5        |       |
| 38 Vinyl acetate               | 43  | 5.245     | 5.252         | -0.007        | 97 | 1072494  | 250.0      | 283.7        |       |
| 45 cis-1,2-Dichloroethene      | 96  | 5.951     | 5.952         | -0.001        | 85 | 760457   | 250.0      | 278.3        |       |
| 44 2,2-Dichloropropane         | 77  | 5.944     | 5.952         | -0.008        | 84 | 564524   | 250.0      | 279.6        |       |
| 46 2-Butanone (MEK)            | 43  | 5.957     | 5.964         | -0.007        | 99 | 698551   | 500.0      | 544.9        |       |
| 49 Chlorobromomethane          | 128 | 6.236     | 6.238         | -0.002        | 92 | 336595   | 250.0      | 280.6        |       |
| 51 Tetrahydrofuran             | 42  | 6.249     | 6.250         | -0.001        | 93 | 561739   | 500.0      | 546.2        |       |
| 52 Chloroform                  | 83  | 6.382     | 6.384         | -0.002        | 96 | 1166838  | 250.0      | 268.1        |       |
| 53 1,1,1-Trichloroethane       | 97  | 6.541     | 6.542         | -0.001        | 97 | 898258   | 250.0      | 279.1        |       |
| 54 Cyclohexane                 | 56  | 6.614     | 6.615         | -0.001        | 96 | 1451032  | 250.0      | 269.4        |       |
| 56 Carbon tetrachloride        | 117 | 6.711     | 6.718         | -0.007        | 95 | 764597   | 250.0      | 279.0        |       |
| 55 1,1-Dichloropropene         | 75  | 6.729     | 6.730         | -0.001        | 91 | 975802   | 250.0      | 274.2        |       |
| 57 Isobutyl alcohol            | 41  | 6.924     | 6.925         | -0.001        | 94 | 588608   | 6250.0     | 7308.6       |       |
| 58 Benzene                     | 78  | 6.942     | 6.943         | -0.001        | 99 | 2707324  | 250.0      | 259.6        |       |
| 59 1,2-Dichloroethane          | 62  | 7.021     | 7.022         | -0.001        | 96 | 987010   | 250.0      | 273.7        |       |
| 62 n-Heptane                   | 43  | 7.307     | 7.308         | -0.001        | 96 | 1040377  | 250.0      | 266.8        |       |
| 64 Trichloroethene             | 130 | 7.678     | 7.679         | -0.001        | 97 | 693909   | 250.0      | 272.0        |       |
| 66 Methylcyclohexane           | 83  | 7.915     | 7.917         | -0.002        | 95 | 1114866  | 250.0      | 277.3        |       |
| 67 1,2-Dichloropropane         | 63  | 7.946     | 7.947         | -0.001        | 94 | 765352   | 250.0      | 279.7        |       |
| 70 1,4-Dioxane                 | 88  | 8.031     | 8.026         | 0.005         | 42 | 111802   | 5000.0     | 5926.6       |       |
| 68 Dibromomethane              | 93  | 8.037     | 8.038         | -0.001        | 97 | 386058   | 250.0      | 278.0        |       |
| 71 Dichlorobromomethane        | 83  | 8.232     | 8.233         | -0.001        | 98 | 812136   | 250.0      | 295.5        |       |
| 74 cis-1,3-Dichloropropene     | 75  | 8.676     | 8.677         | -0.001        | 91 | 1033255  | 250.0      | 320.9        |       |
| 75 4-Methyl-2-pentanone (MIBK) | 43  | 8.828     | 8.829         | -0.001        | 98 | 1599371  | 500.0      | 551.1        |       |
| 76 Toluene                     | 91  | 9.004     | 9.006         | -0.002        | 96 | 2681762  | 250.0      | 230.0        |       |
| 77 trans-1,3-Dichloropropene   | 75  | 9.248     | 9.249         | -0.001        | 99 | 891401   | 250.0      | 292.9        |       |
| 78 Ethyl methacrylate          | 69  | 9.309     | 9.310         | -0.001        | 94 | 862044   | 250.0      | 292.9        |       |
| 79 1,1,2-Trichloroethane       | 97  | 9.442     | 9.444         | -0.002        | 94 | 557982   | 250.0      | 251.6        |       |
| 80 Tetrachloroethene           | 164 | 9.515     | 9.517         | -0.002        | 94 | 530215   | 250.0      | 234.2        |       |
| 81 1,3-Dichloropropane         | 76  | 9.601     | 9.602         | -0.001        | 98 | 1030200  | 250.0      | 250.2        |       |
| 82 2-Hexanone                  | 43  | 9.655     | 9.657         | -0.002        | 98 | 1123041  | 500.0      | 536.1        |       |
| 84 Chlorodibromomethane        | 129 | 9.814     | 9.815         | -0.001        | 91 | 542940   | 250.0      | 282.7        |       |
| 85 Ethylene Dibromide          | 107 | 9.929     | 9.930         | -0.001        | 98 | 553588   | 250.0      | 259.0        |       |
| 86 3-Chlorobenzotrifluoride    | 180 | 10.391    | 10.387        | 0.004         | 92 | 813323   | 250.0      | 217.0        |       |
| 87 Chlorobenzene               | 112 | 10.416    | 10.417        | -0.001        | 91 | 1793475  | 250.0      | 238.9        |       |
| 88 4-Chlorobenzotrifluoride    | 180 | 10.477    | 10.478        | -0.001        | 96 | 781989   | 250.0      | 220.7        |       |
| 89 1,1,1,2-Tetrachloroethane   | 131 | 10.507    | 10.508        | -0.001        | 93 | 642159   | 250.0      | 262.4        |       |
| 90 Ethylbenzene                | 106 | 10.519    | 10.514        | 0.005         | 97 | 1001210  | 250.0      | 251.5        |       |
| 91 m-Xylene & p-Xylene         | 106 | 10.647    | 10.648        | -0.001        | 0  | 1238884  | 250.0      | 253.8        |       |
| 92 o-Xylene                    | 106 | 11.030    | 11.025        | 0.005         | 97 | 1203666  | 250.0      | 259.5        |       |
| 93 Styrene                     | 104 | 11.048    | 11.050        | -0.002        | 94 | 1948876  | 250.0      | 253.6        |       |
| 94 Bromoform                   | 173 | 11.231    | 11.232        | -0.001        | 95 | 317730   | 250.0      | 289.9        |       |
| 96 2-Chlorobenzotrifluoride    | 180 | 11.298    | 11.299        | -0.001        | 94 | 809757   | 250.0      | 219.6        |       |
| 97 Isopropylbenzene            | 105 | 11.395    | 11.396        | -0.001        | 98 | 2727755  | 250.0      | 240.1        |       |
| 100 Bromobenzene               | 156 | 11.705    | 11.707        | -0.002        | 95 | 743219   | 250.0      | 276.9        |       |
| 99 1,1,2,2-Tetrachloroethane   | 83  | 11.705    | 11.707        | -0.002        | 77 | 725938   | 250.0      | 242.6        |       |
| 102 trans-1,4-Dichloro-2-buten | 53  | 11.742    | 11.743        | -0.001        | 77 | 290130   | 250.0      | 299.0        |       |
| 101 1,2,3-Trichloropropane     | 110 | 11.766    | 11.762        | 0.004         | 87 | 246872   | 250.0      | 278.9        |       |
| 103 N-Propylbenzene            | 120 | 11.809    | 11.810        | -0.001        | 97 | 850210   | 250.0      | 276.7        |       |
| 104 2-Chlorotoluene            | 126 | 11.900    | 11.901        | -0.001        | 95 | 726063   | 250.0      | 278.0        |       |
| 105 3-Chlorotoluene            | 126 | 11.967    | 11.968        | -0.001        | 95 | 702342   | 250.0      | 261.7        |       |

| Compound                         | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|----------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 106 1,3,5-Trimethylbenzene       | 105 | 11.997    | 11.993        | 0.004         | 95 | 2264532  | 250.0      | 260.9        |       |
| 107 4-Chlorotoluene              | 126 | 12.022    | 12.023        | -0.001        | 98 | 778860   | 250.0      | 271.0        |       |
| 108 tert-Butylbenzene            | 119 | 12.308    | 12.309        | -0.001        | 94 | 1938716  | 250.0      | 274.7        |       |
| 110 1,2,4-Trimethylbenzene       | 105 | 12.369    | 12.370        | -0.001        | 98 | 2303042  | 250.0      | 264.8        |       |
| 111 1,2-dichloro-4-(trifluorom   | 214 | 12.411    | 12.412        | -0.001        | 97 | 580120   | 250.0      | 239.2        |       |
| 112 sec-Butylbenzene             | 105 | 12.533    | 12.534        | -0.001        | 96 | 2563359  | 250.0      | 257.3        |       |
| 113 1,3-Dichlorobenzene          | 146 | 12.648    | 12.650        | -0.002        | 96 | 1263925  | 250.0      | 264.5        |       |
| 114 4-Isopropyltoluene           | 119 | 12.691    | 12.692        | -0.001        | 95 | 2238219  | 250.0      | 265.5        |       |
| 115 1,4-Dichlorobenzene          | 146 | 12.758    | 12.753        | 0.005         | 91 | 1287906  | 250.0      | 259.1        |       |
| 116 2,4-Dichloro-1-(trifluorom   | 214 | 12.782    | 12.777        | 0.005         | 96 | 531698   | 250.0      | 236.7        |       |
| 118 2,5-Dichlorobenzotrifluori   | 214 | 12.819    | 12.820        | -0.001        | 0  | 585601   | 250.0      | 241.2        |       |
| 120 n-Butylbenzene               | 91  | 13.099    | 13.100        | -0.001        | 96 | 1909580  | 250.0      | 264.7        |       |
| 121 1,2-Dichlorobenzene          | 146 | 13.111    | 13.112        | -0.001        | 94 | 1135542  | 250.0      | 254.3        |       |
| 122 1,2-Dibromo-3-Chloropropan   | 75  | 13.902    | 13.897        | 0.005         | 92 | 105625   | 250.0      | 288.0        |       |
| 123 2,4- & 2,5- & 2,6- Dichlor   | 125 | 14.048    | 14.049        | -0.001        | 0  | 1891413  | 750.0      | 741.5        |       |
| 125 2,3- & 3,4- Dichlorotoluen   | 125 | 14.461    | 14.463        | -0.002        | 0  | 1220209  | 500.0      | 501.7        |       |
| 126 1,2,4-Trichlorobenzene       | 180 | 14.723    | 14.724        | -0.001        | 94 | 445017   | 250.0      | 256.1        |       |
| 127 Hexachlorobutadiene          | 225 | 14.869    | 14.870        | -0.001        | 98 | 196056   | 250.0      | 234.2        |       |
| 128 Naphthalene                  | 128 | 14.991    | 14.992        | -0.001        | 98 | 1235965  | 250.0      | 276.7        |       |
| 129 1,2,3-Trichlorobenzene       | 180 | 15.216    | 15.217        | -0.001        | 94 | 351787   | 250.0      | 250.1        |       |
| 131 2,4,5-Trichlorotoluene       | 159 | 15.994    | 15.990        | 0.004         | 0  | 136778   | 250.0      | 269.5        |       |
| 130 2,3,6-Trichlorotoluene       | 159 | 16.092    | 16.093        | -0.001        | 96 | 133555   | 250.0      | 291.3        |       |
| 146 2,5-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 150 2,6-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 147 2,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 149 3,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 148 2,3-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| S 133 Xylenes, Total             | 106 |           |               |               | 0  |          | 500.0      | 513.3        |       |
| S 134 1,2-Dichloroethene, Total  | 96  |           |               |               | 0  |          | 500.0      | 547.3        |       |
| S 135 1,3-Dichloropropene, Total | 1   |           |               |               | 0  |          | 500.0      | 613.8        |       |

### QC Flag Legend

#### Processing Flags

ND - Not Detected or Marked ND

#### Review Flags

M - Manually Integrated

### Reagents:

|                     |                     |           |             |
|---------------------|---------------------|-----------|-------------|
| VOA8260SURR_00040   | Amount Added: 10.00 | Units: uL |             |
| VOA8260VOAPRI_00139 | Amount Added: 10.00 | Units: uL |             |
| voaWEE1stRest_00001 | Amount Added: 10.00 | Units: uL |             |
| voaWKet1 Rest_00001 | Amount Added: 10.00 | Units: uL |             |
| VOAVAPRI_00006      | Amount Added: 10.00 | Units: uL |             |
| VOAACROLEINPR_00006 | Amount Added: 11.00 | Units: uL |             |
| VOA8260INT_00040    | Amount Added: 2.00  | Units: uL | Run Reagent |



Report Date: 27-Aug-2015 11:50:46

Chrom Revision: 2.2 23-Jul-2015 08:26:08

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D

Injection Date: 26-Aug-2015 17:52:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: IC VSTD50

Worklist Smp#: 14

Client ID:

Purge Vol: 5.000 mL

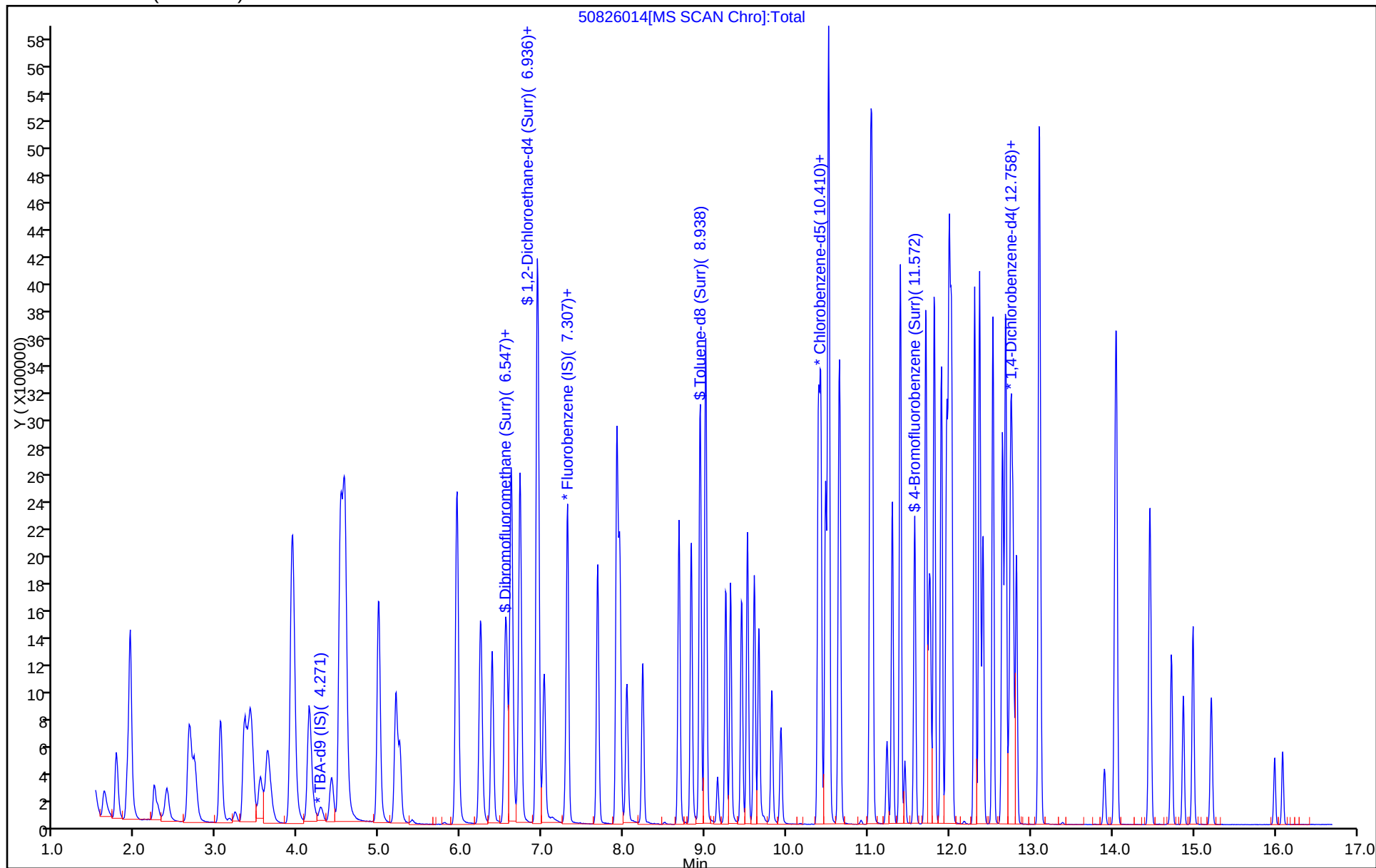
Dil. Factor: 1.0000

ALS Bottle#: 13

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D

Injection Date: 26-Aug-2015 17:52:30

Instrument ID: CHHP5

Lims ID: IC VSTD50

Client ID:

Operator ID: 001562

ALS Bottle#: 13

Worklist Smp#: 14

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C ICAL

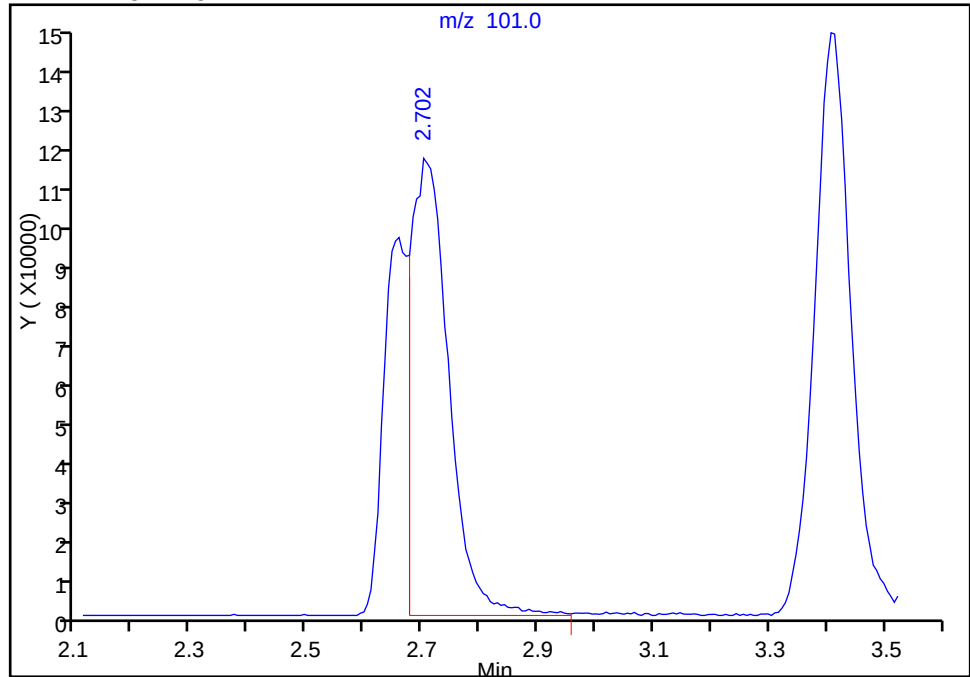
Column: DB-624 ( 0.18 mm)

Detector: MS SCAN

**18 Trichlorofluoromethane, CAS: 75-69-4**

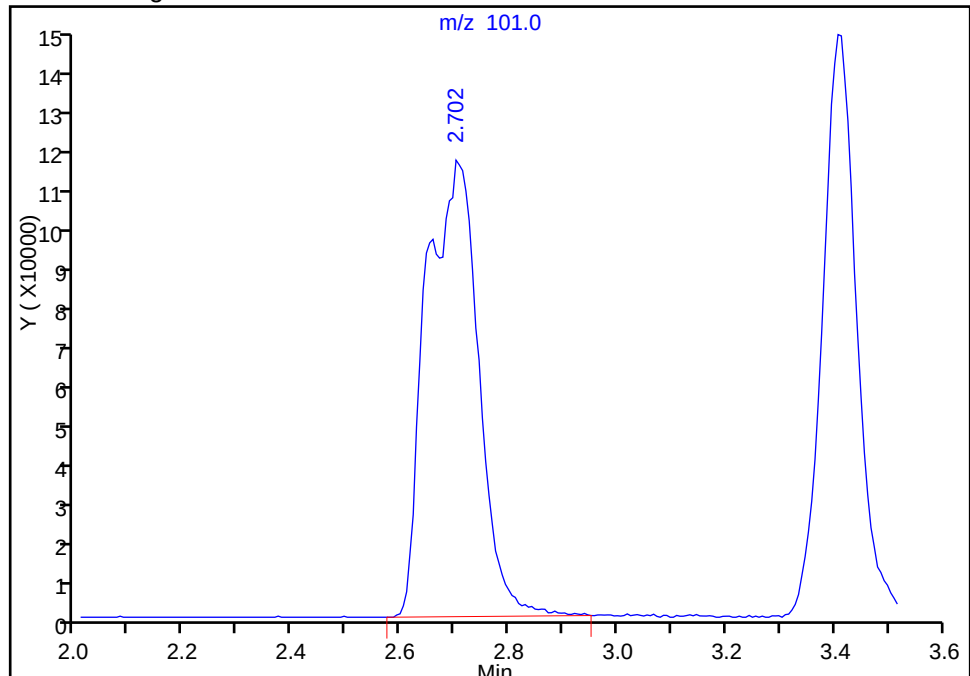
RT: 2.70  
Area: 496107  
Amount: 173.5779  
Amount Units: ng

## Processing Integration Results



RT: 2.70  
Area: 739174  
Amount: 248.0735  
Amount Units: ng

## Manual Integration Results



Reviewer: fergusond, 27-Aug-2015 10:43:05

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration



FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 149469

SDG No.: \_\_\_\_\_

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/31/2015 14:00 Calibration End Date: 07/31/2015 18:02 Calibration ID: 24897

Calibration Files:

|         |                   |              |
|---------|-------------------|--------------|
| LEVEL:  | LAB SAMPLE ID:    | LAB FILE ID: |
| Level 1 | IC 180-149469/14  | 60731014.D   |
| Level 2 | IC 180-149469/4   | 60731004.D   |
| Level 3 | ICIS 180-149469/5 | 60731005.D   |
| Level 4 | IC 180-149469/6   | 60731006.D   |
| Level 5 | IC 180-149469/7   | 60731007.D   |
| Level 6 | IC 180-149469/8   | 60731008.D   |
| Level 7 | IC 180-149469/9   | 60731009.D   |
| Level 8 | IC 180-149469/10  | 60731010.D   |

| ANALYTE                               | RRF              |                  |                  |        |        | CURVE TYPE | COEFFICIENT |        |    | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---------------------------------------|------------------|------------------|------------------|--------|--------|------------|-------------|--------|----|---|---------|------|---|----------|------------|---|----------------|
|                                       | LVL 1            | LVL 2            | LVL 3            | LVL 4  | LVL 5  |            | B           | M1     | M2 |   |         |      |   |          |            |   |                |
|                                       | LVL 6            | LVL 7            | LVL 8            |        |        |            |             |        |    |   |         |      |   |          |            |   |                |
| Dichlorodifluoromethane               | 0.3784<br>0.3460 | 0.3285<br>0.3562 | 0.3421<br>0.3286 | 0.3615 | 0.3285 | Ave        |             | 0.3462 |    |   | 0.1000  | 5.3  |   | 20.0     |            |   |                |
| Chloromethane                         | 0.3392<br>0.2834 | 0.3040<br>0.2926 | 0.3038<br>0.2799 | 0.2953 | 0.2891 | Ave        |             | 0.2984 |    |   | 0.1000  | 6.2  |   | 20.0     |            |   |                |
| Vinyl chloride                        | 0.3459<br>0.3113 | 0.3263<br>0.3277 | 0.3180<br>0.3087 | 0.3307 | 0.3028 | Ave        |             | 0.3214 |    |   | 0.1000  | 4.4  |   | 20.0     |            |   |                |
| 1,3-Butadiene                         | 0.3349<br>0.2908 | 0.3110<br>0.3014 | 0.3020<br>0.2828 | 0.3029 | 0.2847 | Ave        |             | 0.3013 |    |   | 0.0100  | 5.5  |   | 20.0     |            |   |                |
| Bromomethane                          | 0.2086<br>0.1495 | 0.1854<br>0.1475 | 0.1846<br>++++   | 0.1749 | 0.1644 | Ave        |             | 0.1735 |    |   | 0.0500  | 12.5 |   | 20.0     |            |   |                |
| Chloroethane                          | 0.2173<br>0.2164 | 0.2251<br>0.2256 | 0.2291<br>0.2095 | 0.2259 | 0.2061 | Ave        |             | 0.2194 |    |   | 0.0500  | 3.8  |   | 20.0     |            |   |                |
| Dichlorofluoromethane                 | 0.5463<br>0.4931 | 0.5444<br>0.5038 | 0.5165<br>0.4737 | 0.5267 | 0.4802 | Ave        |             | 0.5106 |    |   | 0.0100  | 5.4  |   | 20.0     |            |   |                |
| Trichlorofluoromethane                | 0.4247<br>0.4001 | 0.4150<br>0.4067 | 0.4245<br>0.3867 | 0.4197 | 0.3805 | Ave        |             | 0.4072 |    |   | 0.1000  | 4.2  |   | 20.0     |            |   |                |
| Ethyl ether                           | 0.3195<br>0.2756 | 0.2914<br>0.2931 | 0.2819<br>0.2818 | 0.2864 | 0.2793 | Ave        |             | 0.2886 |    |   | 0.0100  | 4.8  |   | 20.0     |            |   |                |
| Acrolein                              | 0.0310<br>0.0318 | 0.0309<br>0.0342 | 0.0297<br>0.0340 | 0.0320 | 0.0281 | Ave        |             | 0.0315 |    |   | 0.0100  | 6.5  |   | 20.0     |            |   |                |
| 1,1-Dichloroethene                    | 0.2600<br>0.2474 | 0.2411<br>0.2670 | 0.2447<br>0.2555 | 0.2551 | 0.2426 | Ave        |             | 0.2517 |    |   | 0.1000  | 3.7  |   | 20.0     |            |   |                |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.2893<br>0.2688 | 0.2611<br>0.2694 | 0.2602<br>0.2595 | 0.2670 | 0.2502 | Ave        |             | 0.2657 |    |   | 0.1000  | 4.3  |   | 20.0     |            |   |                |
| Acetone                               | 0.0973<br>0.0856 | 0.0931<br>0.0888 | 0.0785<br>0.0945 | 0.0834 | 0.0864 | Ave        |             | 0.0885 |    |   | 0.0500  | 7.1  |   | 20.0     |            |   |                |
| Iodomethane                           | 0.3086<br>0.3409 | 0.3325<br>0.3671 | 0.3285<br>0.3511 | 0.3438 | 0.3304 | Ave        |             | 0.3379 |    |   | 0.0100  | 5.1  |   | 20.0     |            |   |                |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 149469

SDG No.: \_\_\_\_\_

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/31/2015 14:00 Calibration End Date: 07/31/2015 18:02 Calibration ID: 24897

| ANALYTE                  | RRF              |                  |                  |        |        | CURVE<br>TYPE | COEFFICIENT |        |    | # | MIN RRF | %RSD | # | MAX<br>%RSD | R^2<br>OR COD | # | MIN R^2<br>OR COD |
|--------------------------|------------------|------------------|------------------|--------|--------|---------------|-------------|--------|----|---|---------|------|---|-------------|---------------|---|-------------------|
|                          | LVL 1<br>LVL 6   | LVL 2<br>LVL 7   | LVL 3<br>LVL 8   | LVL 4  | LVL 5  |               | B           | M1     | M2 |   |         |      |   |             |               |   |                   |
| Carbon disulfide         | 0.5727<br>0.6930 | 0.5928<br>0.7451 | 0.6074<br>0.7142 | 0.6519 | 0.6407 | Ave           |             | 0.6522 |    |   | 0.1000  | 9.4  |   | 20.0        |               |   |                   |
| Allyl chloride           | 0.1218<br>0.1547 | 0.1181<br>0.1646 | 0.1364<br>0.1606 | 0.1388 | 0.1402 | Ave           |             | 0.1419 |    |   | 0.0100  | 12.0 |   | 20.0        |               |   |                   |
| Methyl acetate           | 0.2192<br>0.2022 | 0.2017<br>0.2144 | 0.2047<br>0.2065 | 0.2072 | 0.2036 | Ave           |             | 0.2074 |    |   | 0.1000  | 3.0  |   | 20.0        |               |   |                   |
| Methylene Chloride       | 0.6631<br>0.3174 | 0.3874<br>0.3424 | 0.3361<br>0.3218 | 0.3366 | 0.3254 | Lin2          | 1.7443      | 0.3138 |    |   | 0.1000  |      |   |             | 0.9990        |   | 0.9900            |
| tert-Butyl alcohol       | 1.2140<br>1.0554 | 1.0995<br>1.1213 | 1.1428<br>1.0861 | 1.1107 | 1.1728 | Ave           |             | 1.1253 |    |   | 0.0100  | 4.5  |   | 20.0        |               |   |                   |
| Acrylonitrile            | 0.1067<br>0.1050 | 0.1002<br>0.1099 | 0.1033<br>0.1041 | 0.1042 | 0.1030 | Ave           |             | 0.1046 |    |   | 0.0100  | 2.7  |   | 20.0        |               |   |                   |
| trans-1,2-Dichloroethene | 0.2889<br>0.2884 | 0.2883<br>0.3069 | 0.2879<br>0.2909 | 0.2950 | 0.2774 | Ave           |             | 0.2905 |    |   | 0.1000  | 2.9  |   | 20.0        |               |   |                   |
| Methyl tert-butyl ether  | 0.8998<br>0.8761 | 0.8047<br>0.9451 | 0.8127<br>0.8903 | 0.8782 | 0.8559 | Ave           |             | 0.8703 |    |   | 0.1000  | 5.3  |   | 20.0        |               |   |                   |
| Hexane                   | 0.4211<br>0.4030 | 0.3676<br>0.4125 | 0.3850<br>0.3998 | 0.3938 | 0.3659 | Ave           |             | 0.3936 |    |   | 0.0100  | 5.0  |   | 20.0        |               |   |                   |
| 1,1-Dichloroethane       | 0.5075<br>0.5187 | 0.5138<br>0.5491 | 0.5187<br>0.5191 | 0.5246 | 0.5085 | Ave           |             | 0.5200 |    |   | 0.2000  | 2.5  |   | 20.0        |               |   |                   |
| Vinyl acetate            | 0.3814<br>0.4481 | 0.3469<br>0.4857 | 0.3831<br>0.4671 | 0.4180 | 0.4276 | Ave           |             | 0.4197 |    |   | 0.0100  | 11.2 |   | 20.0        |               |   |                   |
| 2,2-Dichloropropane      | 0.2106<br>0.2916 | 0.2324<br>0.2998 | 0.2516<br>0.2938 | 0.2636 | 0.2601 | Ave           |             | 0.2629 |    |   | 0.0100  | 12.0 |   | 20.0        |               |   |                   |
| cis-1,2-Dichloroethene   | 0.3288<br>0.3134 | 0.2997<br>0.3336 | 0.3121<br>0.3178 | 0.3154 | 0.3061 | Ave           |             | 0.3158 |    |   | 0.1000  | 3.5  |   | 20.0        |               |   |                   |
| 2-Butanone (MEK)         | 0.1157<br>0.1241 | 0.1112<br>0.1317 | 0.1112<br>0.1244 | 0.1274 | 0.1201 | Ave           |             | 0.1207 |    |   | 0.0500  | 6.2  |   | 20.0        |               |   |                   |
| Bromochloromethane       | 0.1341<br>0.1264 | 0.1227<br>0.1349 | 0.1194<br>0.1303 | 0.1248 | 0.1226 | Ave           |             | 0.1269 |    |   | 0.0100  | 4.5  |   | 20.0        |               |   |                   |
| Tetrahydrofuran          | 0.0899<br>0.0835 | 0.0679<br>0.0856 | 0.0729<br>0.0875 | 0.0830 | 0.0802 | Ave           |             | 0.0813 |    |   | 0.0100  | 9.2  |   | 20.0        |               |   |                   |
| Chloroform               | 0.5240<br>0.5101 | 0.5110<br>0.5372 | 0.5156<br>0.5057 | 0.5231 | 0.5023 | Ave           |             | 0.5161 |    |   | 0.2000  | 2.2  |   | 20.0        |               |   |                   |
| 1,1,1-Trichloroethane    | 0.3298<br>0.3969 | 0.3454<br>0.4238 | 0.3768<br>0.4049 | 0.3936 | 0.3797 | Ave           |             | 0.3814 |    |   | 0.1000  | 8.1  |   | 20.0        |               |   |                   |
| Cyclohexane              | 0.4970<br>0.5019 | 0.4468<br>0.5151 | 0.4891<br>0.4904 | 0.5075 | 0.4613 | Ave           |             | 0.4886 |    |   | 0.1000  | 4.8  |   | 20.0        |               |   |                   |
| Carbon tetrachloride     | 0.2286<br>0.2886 | 0.2478<br>0.3002 | 0.2596<br>0.2920 | 0.2763 | 0.2618 | Ave           |             | 0.2694 |    |   | 0.1000  | 9.1  |   | 20.0        |               |   |                   |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 149469

SDG No.: \_\_\_\_\_

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/31/2015 14:00 Calibration End Date: 07/31/2015 18:02 Calibration ID: 24897

| ANALYTE                     | RRF              |                  |                  |        |        | CURVE<br>TYPE | COEFFICIENT |        |    | # | MIN RRF | %RSD | # | MAX<br>%RSD | R^2<br>OR COD | # | MIN R^2<br>OR COD |
|-----------------------------|------------------|------------------|------------------|--------|--------|---------------|-------------|--------|----|---|---------|------|---|-------------|---------------|---|-------------------|
|                             | LVL 1<br>LVL 6   | LVL 2<br>LVL 7   | LVL 3<br>LVL 8   | LVL 4  | LVL 5  |               | B           | M1     | M2 |   |         |      |   |             |               |   |                   |
| 1,1-Dichloropropene         | 0.3926<br>0.4066 | 0.3932<br>0.4288 | 0.4179<br>0.4097 | 0.4260 | 0.4065 | Ave           |             | 0.4102 |    |   | 0.0100  | 3.3  |   | 20.0        |               |   |                   |
| Isobutyl alcohol            | 0.0064<br>0.0079 | 0.0060<br>0.0084 | 0.0067<br>0.0082 | 0.0069 | 0.0074 | Ave           |             | 0.0072 |    | * | 0.0100  | 12.0 |   | 20.0        |               |   |                   |
| Benzene                     | 1.3108<br>1.1051 | 1.1747<br>1.1573 | 1.1838<br>1.0686 | 1.1862 | 1.1360 | Ave           |             | 1.1653 |    |   | 0.5000  | 6.1  |   | 20.0        |               |   |                   |
| 1,2-Dichloroethane          | 0.5170<br>0.4491 | 0.4680<br>0.4788 | 0.4635<br>0.4465 | 0.4749 | 0.4571 | Ave           |             | 0.4694 |    |   | 0.1000  | 4.8  |   | 20.0        |               |   |                   |
| n-Heptane                   | 0.3283<br>0.3166 | 0.2930<br>0.3296 | 0.3187<br>0.3201 | 0.3273 | 0.3009 | Ave           |             | 0.3168 |    |   | 0.0100  | 4.2  |   | 20.0        |               |   |                   |
| Trichloroethene             | 0.2495<br>0.2439 | 0.2242<br>0.2580 | 0.2340<br>0.2443 | 0.2514 | 0.2390 | Ave           |             | 0.2430 |    |   | 0.2000  | 4.4  |   | 20.0        |               |   |                   |
| Methylcyclohexane           | 0.4988<br>0.5022 | 0.4670<br>0.5125 | 0.4962<br>0.4944 | 0.5026 | 0.4718 | Ave           |             | 0.4932 |    |   | 0.1000  | 3.2  |   | 20.0        |               |   |                   |
| 1,2-Dichloropropane         | 0.3004<br>0.2740 | 0.2605<br>0.2918 | 0.2603<br>0.2810 | 0.2821 | 0.2771 | Ave           |             | 0.2784 |    |   | 0.1000  | 5.0  |   | 20.0        |               |   |                   |
| 1,4-Dioxane                 | 0.0025<br>0.0030 | 0.0022<br>0.0032 | 0.0027<br>0.0030 | 0.0026 | 0.0028 | Ave           |             | 0.0027 |    | * | 0.0100  | 11.1 |   | 20.0        |               |   |                   |
| Dibromomethane              | 0.1697<br>0.1704 | 0.1570<br>0.1809 | 0.1594<br>0.1730 | 0.1722 | 0.1697 | Ave           |             | 0.1690 |    |   | 0.0100  | 4.5  |   | 20.0        |               |   |                   |
| Bromodichloromethane        | 0.2616<br>0.3321 | 0.2926<br>0.3618 | 0.2967<br>0.3476 | 0.3256 | 0.3231 | Ave           |             | 0.3176 |    |   | 0.2000  | 10.2 |   | 20.0        |               |   |                   |
| cis-1,3-Dichloropropene     | 0.2584<br>0.3913 | 0.2782<br>0.4177 | 0.3074<br>0.4064 | 0.3604 | 0.3717 | Ave           |             | 0.3489 |    |   | 0.2000  | 17.3 |   | 20.0        |               |   |                   |
| 4-Methyl-2-pentanone (MIBK) | 0.8987<br>1.0658 | 0.9802<br>1.1445 | 0.9985<br>1.0527 | 1.0544 | 1.0284 | Ave           |             | 1.0279 |    |   | 0.1000  | 7.0  |   | 20.0        |               |   |                   |
| Toluene                     | 5.9056<br>4.7537 | 5.5995<br>4.8374 | 5.4167<br>4.3396 | 5.4012 | 5.0191 | Ave           |             | 5.1591 |    |   | 0.4000  | 9.9  |   | 20.0        |               |   |                   |
| trans-1,3-Dichloropropene   | 0.8702<br>1.4914 | 1.1099<br>1.5454 | 1.1917<br>1.4764 | 1.4148 | 1.3777 | Ave           |             | 1.3097 |    |   | 0.1000  | 17.8 |   | 20.0        |               |   |                   |
| Ethyl methacrylate          | 1.0584<br>1.5306 | 1.1597<br>1.6211 | 1.2934<br>1.5074 | 1.4730 | 1.4851 | Ave           |             | 1.3911 |    |   | 0.0100  | 14.3 |   | 20.0        |               |   |                   |
| 1,1,2-Trichloroethane       | 1.1649<br>1.0331 | 1.0986<br>1.0808 | 1.0395<br>0.9995 | 1.0976 | 1.0221 | Ave           |             | 1.0670 |    |   | 0.1000  | 5.0  |   | 20.0        |               |   |                   |
| Tetrachloroethene           | 0.9697<br>0.8437 | 0.9092<br>0.8645 | 0.8932<br>0.8142 | 0.9113 | 0.8341 | Ave           |             | 0.8800 |    |   | 0.2000  | 5.8  |   | 20.0        |               |   |                   |
| 1,3-Dichloropropane         | 2.1051<br>1.8922 | 2.0770<br>1.9466 | 1.9733<br>1.8014 | 2.0412 | 1.9340 | Ave           |             | 1.9713 |    |   | 0.0100  | 5.1  |   | 20.0        |               |   |                   |
| 2-Hexanone                  | 0.5961<br>0.7048 | 0.6359<br>0.7303 | 0.6480<br>0.6962 | 0.7009 | 0.6879 | Ave           |             | 0.6750 |    |   | 0.1000  | 6.6  |   | 20.0        |               |   |                   |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 149469  
SDG No.: \_\_\_\_\_  
Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N  
Calibration Start Date: 07/31/2015 14:00 Calibration End Date: 07/31/2015 18:02 Calibration ID: 24897

| ANALYTE                     | RRF              |                  |                  |        |        | CURVE<br>TYPE | COEFFICIENT |        |    | # | MIN RRF | %RSD | # | MAX<br>%RSD | R^2<br>OR COD | # | MIN R^2<br>OR COD |
|-----------------------------|------------------|------------------|------------------|--------|--------|---------------|-------------|--------|----|---|---------|------|---|-------------|---------------|---|-------------------|
|                             | LVL 1<br>LVL 6   | LVL 2<br>LVL 7   | LVL 3<br>LVL 8   | LVL 4  | LVL 5  |               | B           | M1     | M2 |   |         |      |   |             |               |   |                   |
| Dibromochloromethane        | 0.4970<br>0.7956 | 0.6594<br>0.8501 | 0.6992<br>0.7965 | 0.7868 | 0.7414 | Ave           |             | 0.7283 |    |   | 0.1000  | 15.3 |   | 20.0        |               |   |                   |
| 1,2-Dibromoethane (EDB)     | 0.9377<br>0.9584 | 0.9062<br>1.0009 | 0.8845<br>0.9279 | 0.9777 | 0.9601 | Ave           |             | 0.9442 |    |   | 0.1000  | 4.0  |   | 20.0        |               |   |                   |
| 3-Chlorobenzotrifluoride    | 1.9346<br>1.5843 | 1.7960<br>1.5900 | 1.7022<br>1.3868 | 1.6742 | 1.5483 | Ave           |             | 1.6520 |    |   | 0.0100  | 10.1 |   | 20.0        |               |   |                   |
| Chlorobenzene               | 3.5287<br>3.0123 | 3.3662<br>3.0694 | 3.2495<br>2.7949 | 3.2738 | 3.0742 | Ave           |             | 3.1711 |    |   | 0.5000  | 7.2  |   | 20.0        |               |   |                   |
| 4-Chlorobenzotrifluoride    | 1.6752<br>1.5041 | 1.6791<br>1.5135 | 1.5757<br>1.3040 | 1.5621 | 1.4356 | Ave           |             | 1.5312 |    |   | 0.0100  | 8.1  |   | 20.0        |               |   |                   |
| 1,1,1,2-Tetrachloroethane   | 0.6900<br>0.9213 | 0.8149<br>0.9909 | 0.8591<br>0.9158 | 0.8859 | 0.8746 | Ave           |             | 0.8691 |    |   | 0.0100  | 10.2 |   | 20.0        |               |   |                   |
| Ethylbenzene                | 1.8948<br>1.7498 | 1.7825<br>1.8007 | 1.8382<br>1.6637 | 1.8404 | 1.7406 | Ave           |             | 1.7888 |    |   | 0.1000  | 4.0  |   | 20.0        |               |   |                   |
| m-Xylene & p-Xylene         | 2.2690<br>2.1710 | 2.2783<br>2.2282 | 2.2514<br>2.0794 | 2.2987 | 2.1836 | Ave           |             | 2.2200 |    |   | 0.1000  | 3.3  |   | 20.0        |               |   |                   |
| o-Xylene                    | 2.1401<br>2.1982 | 2.2838<br>2.2768 | 2.2497<br>2.0945 | 2.3260 | 2.1995 | Ave           |             | 2.2211 |    |   | 0.3000  | 3.5  |   | 20.0        |               |   |                   |
| Styrene                     | 3.0262<br>3.3999 | 3.5063<br>3.5053 | 3.5865<br>3.2169 | 3.6244 | 3.4204 | Ave           |             | 3.4107 |    |   | 0.3000  | 5.9  |   | 20.0        |               |   |                   |
| Bromoform                   | 0.2774<br>0.4245 | 0.3854<br>0.4551 | 0.3553<br>0.4390 | 0.3847 | 0.3885 | Ave           |             | 0.3887 |    |   | 0.1000  | 14.3 |   | 20.0        |               |   |                   |
| 2-Chlorobenzotrifluoride    | 1.7789<br>1.6566 | 1.8882<br>1.6800 | 1.7229<br>1.4654 | 1.7518 | 1.5913 | Ave           |             | 1.6919 |    |   | 0.0100  | 7.5  |   | 20.0        |               |   |                   |
| Isopropylbenzene            | 5.2778<br>5.0660 | 5.7181<br>5.1776 | 5.7365<br>4.6086 | 5.7208 | 5.2098 | Ave           |             | 5.3144 |    |   | 0.1000  | 7.4  |   | 20.0        |               |   |                   |
| 1,1,2,2-Tetrachloroethane   | 1.4524<br>1.4044 | 1.5283<br>1.4375 | 1.4123<br>1.3480 | 1.4533 | 1.3845 | Ave           |             | 1.4276 |    |   | 0.3000  | 3.8  |   | 20.0        |               |   |                   |
| Bromobenzene                | 0.8149<br>0.7981 | 0.7780<br>0.8354 | 0.7958<br>0.7913 | 0.8100 | 0.8070 | Ave           |             | 0.8038 |    |   | 0.0100  | 2.1  |   | 20.0        |               |   |                   |
| trans-1,4-Dichloro-2-butene | 0.2183<br>0.2782 | 0.2316<br>0.2872 | 0.2398<br>0.2842 | 0.2451 | 0.2549 | Ave           |             | 0.2549 |    |   | 0.0100  | 10.1 |   | 20.0        |               |   |                   |
| 1,2,3-Trichloropropane      | 0.3115<br>0.3095 | 0.3103<br>0.3168 | 0.2929<br>0.3057 | 0.3005 | 0.2983 | Ave           |             | 0.3057 |    |   | 0.0100  | 2.6  |   | 20.0        |               |   |                   |
| N-Propylbenzene             | 0.8326<br>0.9631 | 0.8814<br>0.9609 | 0.9454<br>0.9440 | 0.9506 | 0.9278 | Ave           |             | 0.9257 |    |   | 0.0100  | 4.9  |   | 20.0        |               |   |                   |
| 2-Chlorotoluene             | 0.7094<br>0.7751 | 0.7465<br>0.7992 | 0.7798<br>0.7755 | 0.7871 | 0.7761 | Ave           |             | 0.7686 |    |   | 0.0100  | 3.7  |   | 20.0        |               |   |                   |
| 3-Chlorotoluene             | 0.7543<br>0.8420 | 0.8134<br>0.8337 | 0.8056<br>0.7727 | 0.8118 | 0.8241 | Ave           |             | 0.8072 |    |   | 0.0100  | 3.7  |   | 20.0        |               |   |                   |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 149469

SDG No.: \_\_\_\_\_

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/31/2015 14:00 Calibration End Date: 07/31/2015 18:02 Calibration ID: 24897

| ANALYTE                            | RRF              |                  |                  |        |        | CURVE<br>TYPE | COEFFICIENT |        |    | # | MIN RRF | %RSD | # | MAX<br>%RSD | R^2<br>OR COD | # | MIN R^2<br>OR COD |
|------------------------------------|------------------|------------------|------------------|--------|--------|---------------|-------------|--------|----|---|---------|------|---|-------------|---------------|---|-------------------|
|                                    | LVL 1<br>LVL 6   | LVL 2<br>LVL 7   | LVL 3<br>LVL 8   | LVL 4  | LVL 5  |               | B           | M1     | M2 |   |         |      |   |             |               |   |                   |
| 1,3,5-Trimethylbenzene             | 2.7736<br>3.0025 | 3.0962<br>3.0472 | 3.1690<br>2.8036 | 3.1761 | 3.0091 | Ave           |             | 3.0097 |    |   | 0.0100  | 5.0  |   | 20.0        |               |   |                   |
| 4-Chlorotoluene                    | 0.7667<br>0.8064 | 0.7905<br>0.8463 | 0.8267<br>0.8136 | 0.8328 | 0.8125 | Ave           |             | 0.8119 |    |   | 0.0100  | 3.1  |   | 20.0        |               |   |                   |
| tert-Butylbenzene                  | 2.1654<br>2.4390 | 2.2766<br>2.4763 | 2.4320<br>2.3179 | 2.5249 | 2.3935 | Ave           |             | 2.3782 |    |   | 0.0100  | 5.0  |   | 20.0        |               |   |                   |
| 1,2,4-Trimethylbenzene             | 2.6641<br>3.0999 | 3.1580<br>3.1389 | 3.2410<br>2.8935 | 3.2855 | 3.1393 | Ave           |             | 3.0775 |    |   | 0.0100  | 6.6  |   | 20.0        |               |   |                   |
| 3,4-Dichlorobenzotrifluoride       | 0.9506<br>0.8837 | 0.9051<br>0.8812 | 0.8433<br>0.8086 | 0.8848 | 0.8177 | Ave           |             | 0.8719 |    |   | 0.0100  | 5.4  |   | 20.0        |               |   |                   |
| sec-Butylbenzene                   | 3.1858<br>3.5384 | 3.7184<br>3.5357 | 3.7627<br>3.2573 | 3.8203 | 3.5793 | Ave           |             | 3.5497 |    |   | 0.0100  | 6.4  |   | 20.0        |               |   |                   |
| 1,3-Dichlorobenzene                | 1.6112<br>1.5388 | 1.6196<br>1.5936 | 1.5650<br>1.5066 | 1.5844 | 1.5419 | Ave           |             | 1.5701 |    |   | 0.6000  | 2.5  |   | 20.0        |               |   |                   |
| 4-Isopropyltoluene                 | 2.5478<br>3.0138 | 2.9539<br>3.0592 | 3.1574<br>2.8450 | 3.2053 | 3.0463 | Ave           |             | 2.9786 |    |   | 0.0100  | 6.9  |   | 20.0        |               |   |                   |
| 1,4-Dichlorobenzene                | 1.6477<br>1.5662 | 1.6451<br>1.6298 | 1.6095<br>1.5306 | 1.6252 | 1.5856 | Ave           |             | 1.6050 |    |   | 0.5000  | 2.6  |   | 20.0        |               |   |                   |
| 2,4-Dichlorobenzotrifluoride       | 0.8809<br>0.9283 | 0.9010<br>0.9168 | 0.8399<br>0.7625 | 0.8415 | 0.8683 | Ave           |             | 0.8674 |    |   | 0.0100  | 6.1  |   | 20.0        |               |   |                   |
| 2,5-Dichlorobenzotrifluoride       | 1.1148<br>0.9323 | 0.9613<br>0.9470 | 0.9883<br>0.9297 | 0.9952 | 0.8812 | Ave           |             | 0.9687 |    |   | 0.0100  | 7.1  |   | 20.0        |               |   |                   |
| n-Butylbenzene                     | 2.7413<br>3.0098 | 2.9731<br>3.0263 | 3.1192<br>2.7966 | 3.1553 | 2.9714 | Ave           |             | 2.9741 |    |   | 0.0100  | 4.8  |   | 20.0        |               |   |                   |
| 1,2-Dichlorobenzene                | 1.7344<br>1.5614 | 1.6042<br>1.5872 | 1.5781<br>1.4856 | 1.5970 | 1.5347 | Ave           |             | 1.5853 |    |   | 0.4000  | 4.5  |   | 20.0        |               |   |                   |
| 1,2-Dibromo-3-Chloropropane        | 0.1041<br>0.1673 | 0.1254<br>0.1741 | 0.1287<br>0.1752 | 0.1449 | 0.1432 | Ave           |             | 0.1454 |    |   | 0.0500  | 17.6 |   | 20.0        |               |   |                   |
| 2,4- & 2,5- & 2,6- Dichlorotoluene | 1.3659<br>1.3828 | 1.4490<br>1.3691 | 1.4643<br>1.2123 | 1.4309 | 1.3634 | Ave           |             | 1.3797 |    |   | 0.0100  | 5.7  |   | 20.0        |               |   |                   |
| 2,3- & 3,4- Dichlorotoluene        | 1.4220<br>1.5594 | 1.5913<br>1.5578 | 1.5507<br>1.4014 | 1.5802 | 1.5161 | Ave           |             | 1.5224 |    |   | 0.0100  | 4.7  |   | 20.0        |               |   |                   |
| 1,2,4-Trichlorobenzene             | 1.1743<br>1.2613 | 1.2132<br>1.2999 | 1.2170<br>1.2151 | 1.2351 | 1.2123 | Ave           |             | 1.2285 |    |   | 0.2000  | 3.1  |   | 20.0        |               |   |                   |
| Hexachlorobutadiene                | 0.4483<br>0.5040 | 0.4710<br>0.5079 | 0.4894<br>0.4926 | 0.4879 | 0.4705 | Ave           |             | 0.4839 |    |   | 0.0100  | 4.1  |   | 20.0        |               |   |                   |
| Naphthalene                        | 1.9638<br>2.6901 | 2.2408<br>2.7319 | 2.4855<br>2.5560 | 2.6099 | 2.5577 | Ave           |             | 2.4795 |    |   | 0.0100  | 10.3 |   | 20.0        |               |   |                   |
| 1,2,3-Trichlorobenzene             | 1.1813<br>1.1689 | 1.1348<br>1.2045 | 1.1056<br>1.1331 | 1.1438 | 1.1242 | Ave           |             | 1.1495 |    |   | 0.0100  | 2.8  |   | 20.0        |               |   |                   |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 149469

SDG No.: \_\_\_\_\_

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/31/2015 14:00 Calibration End Date: 07/31/2015 18:02 Calibration ID: 24897

| ANALYTE                      | RRF              |                  |                  |        |        | CURVE<br>TYPE | COEFFICIENT |        |    | # | MIN RRF | %RSD | # | MAX<br>%RSD | R^2<br>OR COD | # | MIN R^2<br>OR COD |
|------------------------------|------------------|------------------|------------------|--------|--------|---------------|-------------|--------|----|---|---------|------|---|-------------|---------------|---|-------------------|
|                              | LVL 1            | LVL 2            | LVL 3            | LVL 4  | LVL 5  |               | B           | M1     | M2 |   |         |      |   |             |               |   |                   |
|                              | LVL 6            | LVL 7            | LVL 8            |        |        |               |             |        |    |   |         |      |   |             |               |   |                   |
| 2,4,5-Trichlorotoluene       | 0.6523<br>0.8517 | 0.6908<br>0.8911 | 0.7114<br>0.8098 | 0.7914 | 0.7765 | Ave           |             | 0.7719 |    |   | 0.0100  | 10.6 |   | 20.0        |               |   |                   |
| 2,3,6-Trichlorotoluene       | 0.6747<br>0.7987 | 0.6373<br>0.8256 | 0.7048<br>0.7502 | 0.7418 | 0.7252 | Ave           |             | 0.7323 |    |   | 0.0100  | 8.4  |   | 20.0        |               |   |                   |
| Dibromofluoromethane (Surr)  | 0.2580<br>0.2278 | 0.2120<br>0.2401 | 0.2284<br>0.2160 | 0.2307 | 0.2293 | Ave           |             | 0.2303 |    |   |         | 6.2  |   | 20.0        |               |   |                   |
| 1,2-Dichloroethane-d4 (Surr) | 0.4370<br>0.3580 | 0.3544<br>0.3741 | 0.3729<br>0.3410 | 0.3684 | 0.3665 | Ave           |             | 0.3715 |    |   |         | 7.7  |   | 20.0        |               |   |                   |
| Toluene-d8 (Surr)            | 4.4422<br>3.7317 | 4.0733<br>3.7760 | 4.2664<br>3.2298 | 4.1020 | 3.9291 | Ave           |             | 3.9438 |    |   |         | 9.5  |   | 20.0        |               |   |                   |
| 4-Bromofluorobenzene (Surr)  | 2.0841<br>1.7019 | 1.7074<br>1.7446 | 1.7653<br>1.5225 | 1.7965 | 1.6857 | Ave           |             | 1.7510 |    |   |         | 9.0  |   | 20.0        |               |   |                   |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 149469

SDG No.: \_\_\_\_\_

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/31/2015 14:00 Calibration End Date: 07/31/2015 18:02 Calibration ID: 24897

Calibration Files:

|         |                   |              |
|---------|-------------------|--------------|
| LEVEL:  | LAB SAMPLE ID:    | LAB FILE ID: |
| Level 1 | IC 180-149469/14  | 60731014.D   |
| Level 2 | IC 180-149469/4   | 60731004.D   |
| Level 3 | ICIS 180-149469/5 | 60731005.D   |
| Level 4 | IC 180-149469/6   | 60731006.D   |
| Level 5 | IC 180-149469/7   | 60731007.D   |
| Level 6 | IC 180-149469/8   | 60731008.D   |
| Level 7 | IC 180-149469/9   | 60731009.D   |
| Level 8 | IC 180-149469/10  | 60731010.D   |

| ANALYTE                               | IS<br>REF | CURVE<br>TYPE | RESPONSE         |                   |                   |        |        | CONCENTRATION (NG) |                |                |       |       |
|---------------------------------------|-----------|---------------|------------------|-------------------|-------------------|--------|--------|--------------------|----------------|----------------|-------|-------|
|                                       |           |               | LVL 1<br>LVL 6   | LVL 2<br>LVL 7    | LVL 3<br>LVL 8    | LVL 4  | LVL 5  | LVL 1<br>LVL 6     | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4 | LVL 5 |
| Dichlorodifluoromethane               | FB        | Ave           | 17276<br>575043  | 76046<br>636192   | 166146<br>776950  | 255750 | 316945 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Chloromethane                         | FB        | Ave           | 15485<br>470953  | 70391<br>522516   | 147560<br>661756  | 208858 | 278884 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Vinyl chloride                        | FB        | Ave           | 15792<br>517410  | 75541<br>585198   | 154423<br>729853  | 233901 | 292173 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,3-Butadiene                         | FB        | Ave           | 15290<br>483297  | 72002<br>538199   | 146675<br>668636  | 214248 | 274693 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Bromomethane                          | FB        | Ave           | 9521<br>248522   | 42916<br>263364   | 89628<br>+++++    | 123705 | 158589 | 5.00<br>175        | 25.0<br>200    | 50.0<br>+++++  | 75.0  | 100   |
| Chloroethane                          | FB        | Ave           | 9922<br>359701   | 52119<br>402907   | 111283<br>495382  | 159781 | 198857 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Dichlorofluoromethane                 | FB        | Ave           | 24941<br>819476  | 126043<br>899692  | 250823<br>1120159 | 372545 | 463283 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Trichlorofluoromethane                | FB        | Ave           | 19389<br>664854  | 96092<br>726249   | 206141<br>914267  | 296881 | 367084 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Ethyl ether                           | FB        | Ave           | 14586<br>458021  | 67458<br>523507   | 136903<br>666334  | 202583 | 269465 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Acrolein                              | FB        | Ave           | 28320<br>68050   | 35802<br>76429    | 43327<br>88331    | 52894  | 54177  | 100<br>225         | 125<br>250     | 150<br>275     | 175   | 200   |
| 1,1-Dichloroethene                    | FB        | Ave           | 11872<br>411177  | 55817<br>476887   | 118856<br>604031  | 180424 | 234083 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | FB        | Ave           | 13209<br>446711  | 60462<br>481169   | 126375<br>613669  | 188852 | 241359 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Acetone                               | FB        | Ave           | 22203<br>284563  | 43121<br>317270   | 76252<br>446823   | 117975 | 166807 | 25.0<br>350        | 50.0<br>400    | 100<br>500     | 150   | 200   |
| Iodomethane                           | FB        | Ave           | 14090<br>566533  | 76980<br>655616   | 159542<br>830188  | 243211 | 318736 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Carbon disulfide                      | FB        | Ave           | 26146<br>1151644 | 137245<br>1330649 | 294989<br>1688724 | 461167 | 618168 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 149469

SDG No.: \_\_\_\_\_

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/31/2015 14:00 Calibration End Date: 07/31/2015 18:02 Calibration ID: 24897

| ANALYTE                  | IS REF | CURVE TYPE | RESPONSE         |                   |                   |        |        | CONCENTRATION (NG) |                |                |       |       |
|--------------------------|--------|------------|------------------|-------------------|-------------------|--------|--------|--------------------|----------------|----------------|-------|-------|
|                          |        |            | LVL 1<br>LVL 6   | LVL 2<br>LVL 7    | LVL 3<br>LVL 8    | LVL 4  | LVL 5  | LVL 1<br>LVL 6     | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4 | LVL 5 |
| Allyl chloride           | FB     | Ave        | 5562<br>257112   | 27346<br>293887   | 66228<br>379717   | 98190  | 135273 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Methyl acetate           | FB     | Ave        | 50033<br>1680300 | 233460<br>1914014 | 497011<br>2441128 | 732698 | 982363 | 25.0<br>875        | 125<br>1000    | 250<br>1250    | 375   | 500   |
| Methylene Chloride       | FB     | Lin2       | 30274<br>527474  | 89699<br>611401   | 163213<br>760977  | 238130 | 313904 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| tert-Butyl alcohol       | TBA    | Ave        | 9874<br>354063   | 43837<br>426462   | 91997<br>559063   | 141735 | 198055 | 50.0<br>1750       | 250<br>2000    | 500<br>2500    | 750   | 1000  |
| Acrylonitrile            | FB     | Ave        | 48723<br>1745686 | 231943<br>1961872 | 501701<br>2461613 | 737397 | 994141 | 50.0<br>1750       | 250<br>2000    | 500<br>2500    | 750   | 1000  |
| trans-1,2-Dichloroethene | FB     | Ave        | 13191<br>479327  | 66744<br>548086   | 139824<br>687783  | 208665 | 267617 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Methyl tert-butyl ether  | FB     | Ave        | 41079<br>1455878 | 186303<br>1687770 | 394698<br>2105039 | 621185 | 825760 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Hexane                   | FB     | Ave        | 19223<br>669795  | 85113<br>736641   | 186977<br>945322  | 278592 | 352983 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,1-Dichloroethane       | FB     | Ave        | 23168<br>861981  | 118950<br>980644  | 251887<br>1227440 | 371113 | 490563 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Vinyl acetate            | FB     | Ave        | 17413<br>744628  | 80307<br>867464   | 186047<br>1104555 | 295714 | 412541 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 2,2-Dichloropropane      | FB     | Ave        | 9613<br>484574   | 53806<br>535345   | 122189<br>694588  | 186450 | 250901 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| cis-1,2-Dichloroethene   | FB     | Ave        | 15010<br>520777  | 69383<br>595718   | 151575<br>751398  | 223081 | 295290 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 2-Butanone (MEK)         | FB     | Ave        | 26408<br>412307  | 51510<br>470276   | 108037<br>588377  | 180292 | 231667 | 25.0<br>350        | 50.0<br>400    | 100<br>500     | 150   | 200   |
| Bromochloromethane       | FB     | Ave        | 6120<br>209995   | 28403<br>240962   | 58005<br>308059   | 88252  | 118290 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Tetrahydrofuran          | FB     | Ave        | 8204<br>277489   | 31436<br>305718   | 70787<br>413888   | 117489 | 154776 | 10.0<br>350        | 50.0<br>400    | 100<br>500     | 150   | 200   |
| Chloroform               | FB     | Ave        | 23924<br>847765  | 118313<br>959266  | 250393<br>1195678 | 370042 | 484585 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,1,1-Trichloroethane    | FB     | Ave        | 15055<br>659562  | 79977<br>756837   | 182973<br>957300  | 278390 | 366376 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Cyclohexane              | FB     | Ave        | 22688<br>834057  | 103455<br>919827  | 237539<br>1159567 | 359010 | 445084 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Carbon tetrachloride     | FB     | Ave        | 10435<br>479558  | 57375<br>536127   | 126096<br>690480  | 195436 | 252588 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,1-Dichloropropene      | FB     | Ave        | 17924<br>675711  | 91039<br>765806   | 202951<br>968671  | 301319 | 392146 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Isobutyl alcohol         | FB     | Ave        | 7317<br>326401   | 34707<br>375937   | 81470<br>482886   | 122452 | 178080 | 125<br>4375        | 625<br>5000    | 1250<br>6250   | 1875  | 2500  |



FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 149469

SDG No.: \_\_\_\_\_

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/31/2015 14:00 Calibration End Date: 07/31/2015 18:02 Calibration ID: 24897

| ANALYTE                     | IS<br>REF | CURVE<br>TYPE | RESPONSE         |                   |                   |        |         | CONCENTRATION (NG) |                |                |       |       |
|-----------------------------|-----------|---------------|------------------|-------------------|-------------------|--------|---------|--------------------|----------------|----------------|-------|-------|
|                             |           |               | LVL 1<br>LVL 6   | LVL 2<br>LVL 7    | LVL 3<br>LVL 8    | LVL 4  | LVL 5   | LVL 1<br>LVL 6     | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4 | LVL 5 |
| Benzene                     | FB        | Ave           | 59844<br>1836424 | 271972<br>2066671 | 574901<br>2526807 | 839117 | 1096030 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,2-Dichloroethane          | FB        | Ave           | 23604<br>746328  | 108353<br>855052  | 225116<br>1055651 | 335915 | 440984  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| n-Heptane                   | FB        | Ave           | 14990<br>526126  | 67835<br>588643   | 154761<br>756814  | 231524 | 290327  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Trichloroethene             | FB        | Ave           | 11389<br>405251  | 51907<br>460676   | 113666<br>577638  | 177868 | 230554  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Methylcyclohexane           | FB        | Ave           | 22772<br>834543  | 108113<br>915285  | 240977<br>1169092 | 355558 | 455180  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,2-Dichloropropane         | FB        | Ave           | 13712<br>455391  | 60301<br>521174   | 126414<br>664355  | 199527 | 267345  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,4-Dioxane                 | FB        | Ave           | 2321<br>98136    | 10219<br>114196   | 26388<br>139772   | 36545  | 54577   | 100<br>3500        | 500<br>4000    | 1000<br>5000   | 1500  | 2000  |
| Dibromomethane              | FB        | Ave           | 7749<br>283101   | 36346<br>323060   | 77394<br>409028   | 121844 | 163719  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Bromodichloromethane        | FB        | Ave           | 11941<br>551929  | 67754<br>646107   | 144075<br>821950  | 230314 | 311750  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| cis-1,3-Dichloropropene     | FB        | Ave           | 11797<br>650196  | 64404<br>745866   | 149301<br>960857  | 254907 | 358605  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 4-Methyl-2-pentanone (MIBK) | CBZ       | Ave           | 42150<br>808342  | 90891<br>947711   | 208546<br>1194590 | 330779 | 452681  | 25.0<br>350        | 50.0<br>400    | 100<br>500     | 150   | 200   |
| Toluene                     | CBZ       | Ave           | 55394<br>1802740 | 259618<br>2002822 | 565645<br>2462377 | 847209 | 1104648 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| trans-1,3-Dichloropropene   | CBZ       | Ave           | 8162<br>565592   | 51458<br>639831   | 124444<br>837722  | 221914 | 303226  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Ethyl methacrylate          | CBZ       | Ave           | 9928<br>580427   | 53768<br>671187   | 135064<br>855316  | 231048 | 326852  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,1,2-Trichloroethane       | CBZ       | Ave           | 10927<br>391776  | 50938<br>447467   | 108552<br>567107  | 172158 | 224945  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Tetrachloroethene           | CBZ       | Ave           | 9096<br>319955   | 42156<br>357911   | 93269<br>461983   | 142949 | 183568  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,3-Dichloropropane         | CBZ       | Ave           | 19746<br>717566  | 96298<br>805963   | 206060<br>1022129 | 320167 | 425660  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 2-Hexanone                  | CBZ       | Ave           | 27957<br>534519  | 58962<br>604727   | 135329<br>790089  | 219895 | 302805  | 25.0<br>350        | 50.0<br>400    | 100<br>500     | 150   | 200   |
| Dibromochloromethane        | CBZ       | Ave           | 4662<br>301710   | 30573<br>351983   | 73014<br>451973   | 123420 | 163175  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,2-Dibromoethane (EDB)     | CBZ       | Ave           | 8796<br>363449   | 42016<br>414395   | 92363<br>526477   | 153351 | 211303  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 3-Chlorobenzotrifluoride    | CBZ       | Ave           | 18146<br>600793  | 83271<br>658293   | 177755<br>786880  | 262608 | 340769  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 149469

SDG No.: \_\_\_\_\_

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/31/2015 14:00 Calibration End Date: 07/31/2015 18:02 Calibration ID: 24897

| ANALYTE                     | IS<br>REF | CURVE<br>TYPE | RESPONSE         |                   |                   |        |         | CONCENTRATION (NG) |                |                |       |       |
|-----------------------------|-----------|---------------|------------------|-------------------|-------------------|--------|---------|--------------------|----------------|----------------|-------|-------|
|                             |           |               | LVL 1<br>LVL 6   | LVL 2<br>LVL 7    | LVL 3<br>LVL 8    | LVL 4  | LVL 5   | LVL 1<br>LVL 6     | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4 | LVL 5 |
| Chlorobenzene               | CBZ       | Ave           | 33099<br>1142353 | 156070<br>1270819 | 339330<br>1585885 | 513514 | 676590  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 4-Chlorobenzotrifluoride    | CBZ       | Ave           | 15713<br>570403  | 77852<br>626628   | 164547<br>739908  | 245021 | 315960  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,1,1,2-Tetrachloroethane   | CBZ       | Ave           | 6472<br>349368   | 37781<br>410261   | 89710<br>519653   | 138964 | 192497  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Ethylbenzene                | CBZ       | Ave           | 17773<br>663577  | 82647<br>745552   | 191951<br>943999  | 288675 | 383099  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| m-Xylene & p-Xylene         | CBZ       | Ave           | 21283<br>823294  | 105633<br>922542  | 235109<br>1179895 | 360561 | 480587  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| o-Xylene                    | CBZ       | Ave           | 20074<br>833629  | 105888<br>942660  | 234926<br>1188451 | 364838 | 484093  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Styrene                     | CBZ       | Ave           | 28385<br>1289309 | 162570<br>1451301 | 374525<br>1825312 | 568513 | 752806  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Bromoform                   | CBZ       | Ave           | 2602<br>160966   | 17870<br>188413   | 37102<br>249108   | 60348  | 85498   | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 2-Chlorobenzotrifluoride    | CBZ       | Ave           | 16686<br>628216  | 87545<br>695569   | 179913<br>831476  | 274773 | 350232  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Isopropylbenzene            | CBZ       | Ave           | 49505<br>1921153 | 265117<br>2143689 | 599038<br>2614965 | 897341 | 1146617 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,1,2,2-Tetrachloroethane   | CBZ       | Ave           | 13623<br>532593  | 70858<br>595171   | 147479<br>764885  | 227964 | 304710  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Bromobenzene                | DCB       | Ave           | 12814<br>459843  | 61847<br>533334   | 136094<br>665597  | 203181 | 276525  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| trans-1,4-Dichloro-2-butene | DCB       | Ave           | 3433<br>160304   | 18413<br>183338   | 41001<br>239026   | 61474  | 87362   | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,2,3-Trichloropropane      | DCB       | Ave           | 4898<br>178317   | 24668<br>202262   | 50085<br>257089   | 75371  | 102213  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| N-Propylbenzene             | DCB       | Ave           | 13092<br>554932  | 70063<br>613443   | 161671<br>793964  | 238465 | 317924  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 2-Chlorotoluene             | DCB       | Ave           | 11155<br>446590  | 59338<br>510216   | 133354<br>652311  | 197431 | 265955  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 3-Chlorotoluene             | DCB       | Ave           | 11861<br>485130  | 64658<br>532252   | 137766<br>649907  | 203636 | 282386  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,3,5-Trimethylbenzene      | DCB       | Ave           | 43612<br>1730016 | 246129<br>1945327 | 541915<br>2358116 | 796704 | 1031152 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 4-Chlorotoluene             | DCB       | Ave           | 12056<br>464650  | 62837<br>540303   | 141377<br>684319  | 208897 | 278435  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| tert-Butylbenzene           | DCB       | Ave           | 34048<br>1405341 | 180978<br>1580824 | 415895<br>1949627 | 633351 | 820194  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,2,4-Trimethylbenzene      | DCB       | Ave           | 41890<br>1786151 | 251042<br>2003823 | 554224<br>2433681 | 824147 | 1075766 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 149469

SDG No.: \_\_\_\_\_

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/31/2015 14:00 Calibration End Date: 07/31/2015 18:02 Calibration ID: 24897

| ANALYTE                            | IS<br>REF | CURVE<br>TYPE | RESPONSE         |                   |                   |         |         | CONCENTRATION (NG) |                |                |       |       |
|------------------------------------|-----------|---------------|------------------|-------------------|-------------------|---------|---------|--------------------|----------------|----------------|-------|-------|
|                                    |           |               | LVL 1<br>LVL 6   | LVL 2<br>LVL 7    | LVL 3<br>LVL 8    | LVL 4   | LVL 5   | LVL 1<br>LVL 6     | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4 | LVL 5 |
| 3,4-Dichlorobenzotrifluoride       | DCB       | Ave           | 14947<br>509173  | 71946<br>562570   | 144215<br>680073  | 221955  | 280215  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| sec-Butylbenzene                   | DCB       | Ave           | 50094<br>2038837 | 295586<br>2257148 | 643438<br>2739728 | 958306  | 1226548 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,3-Dichlorobenzene                | DCB       | Ave           | 25334<br>886632  | 128745<br>1017363 | 267626<br>1267194 | 397446  | 528372  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 4-Isopropyltoluene                 | DCB       | Ave           | 40061<br>1736569 | 234813<br>1952987 | 539941<br>2392925 | 804039  | 1043904 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,4-Dichlorobenzene                | DCB       | Ave           | 25908<br>902441  | 130776<br>1040432 | 275229<br>1287354 | 407678  | 543357  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 2,4-Dichlorobenzotrifluoride       | DCB       | Ave           | 13852<br>534909  | 71623<br>585295   | 143623<br>641375  | 211084  | 297534  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 2,5-Dichlorobenzotrifluoride       | DCB       | Ave           | 17529<br>537191  | 76420<br>604585   | 169006<br>781945  | 249633  | 301973  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| n-Butylbenzene                     | DCB       | Ave           | 43104<br>1734264 | 236342<br>1931969 | 533401<br>2352259 | 791496  | 1018212 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,2-Dichlorobenzene                | DCB       | Ave           | 27271<br>899668  | 127520<br>1013269 | 269873<br>1249514 | 400593  | 525918  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,2-Dibromo-3-Chloropropane        | DCB       | Ave           | 1637<br>96376    | 9971<br>111156    | 22010<br>147337   | 36339   | 49062   | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 2,4- & 2,5- & 2,6- Dichlorotoluene | DCB       | Ave           | 64430<br>2390336 | 345570<br>2621988 | 751227<br>3058923 | 1076776 | 1401616 | 15.0<br>525        | 75.0<br>600    | 150<br>750     | 225   | 300   |
| 2,3- & 3,4- Dichlorotoluene        | DCB       | Ave           | 44720<br>1797097 | 252992<br>1989024 | 530353<br>2357462 | 792789  | 1039069 | 10.0<br>350        | 50.0<br>400    | 100<br>500     | 150   | 200   |
| 1,2,4-Trichlorobenzene             | DCB       | Ave           | 18465<br>726756  | 96442<br>829845   | 208112<br>1022001 | 309817  | 415442  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Hexachlorobutadiene                | DCB       | Ave           | 7049<br>290426   | 37440<br>324236   | 83692<br>414314   | 122376  | 161228  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Naphthalene                        | DCB       | Ave           | 30879<br>1550041 | 178131<br>1744010 | 425036<br>2149836 | 654694  | 876449  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,2,3-Trichlorobenzene             | DCB       | Ave           | 18575<br>673533  | 90206<br>768952   | 189066<br>953082  | 286920  | 385220  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 2,4,5-Trichlorotoluene             | DCB       | Ave           | 10257<br>490754  | 54916<br>568870   | 121646<br>681135  | 198517  | 266093  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 2,3,6-Trichlorotoluene             | DCB       | Ave           | 10609<br>460224  | 50658<br>527070   | 120523<br>630961  | 186087  | 248497  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Dibromofluoromethane (Surr)        | FB        | Ave           | 11777<br>378487  | 49079<br>428779   | 110929<br>510673  | 163209  | 221245  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| 1,2-Dichloroethane-d4 (Surr)       | FB        | Ave           | 19952<br>595019  | 82044<br>668015   | 181120<br>806396  | 260570  | 353626  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |
| Toluene-d8 (Surr)                  | CBZ       | Ave           | 41667<br>1415164 | 188855<br>1563368 | 445521<br>1832665 | 643420  | 864751  | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 149469

SDG No.: \_\_\_\_\_

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/31/2015 14:00 Calibration End Date: 07/31/2015 18:02 Calibration ID: 24897

| ANALYTE                     | IS<br>REF | CURVE<br>TYPE | RESPONSE        |                 |                  |        |        | CONCENTRATION (NG) |                |                |       |       |
|-----------------------------|-----------|---------------|-----------------|-----------------|------------------|--------|--------|--------------------|----------------|----------------|-------|-------|
|                             |           |               | LVL 1<br>LVL 6  | LVL 2<br>LVL 7  | LVL 3<br>LVL 8   | LVL 4  | LVL 5  | LVL 1<br>LVL 6     | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4 | LVL 5 |
| 4-Bromofluorobenzene (Surr) | CBZ       | Ave           | 19549<br>645419 | 79163<br>722308 | 184340<br>863895 | 281797 | 371000 | 5.00<br>175        | 25.0<br>200    | 50.0<br>250    | 75.0  | 100   |

Curve Type Legend:

Ave = Average ISTD

Lin2 = Linear 1/conc^2 ISTD

FORM VI  
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
READBACK PERCENT ERROR

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 149469

SDG No.: \_\_\_\_\_

Instrument ID: CHHP6 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/31/2015 14:00 Calibration End Date: 07/31/2015 18:02 Calibration ID: 24897

Calibration Files:

| LEVEL:  | LAB SAMPLE ID:    | LAB FILE ID: |
|---------|-------------------|--------------|
| Level 1 | IC 180-149469/14  | 60731014.D   |
| Level 2 | IC 180-149469/4   | 60731004.D   |
| Level 3 | ICIS 180-149469/5 | 60731005.D   |
| Level 4 | IC 180-149469/6   | 60731006.D   |
| Level 5 | IC 180-149469/7   | 60731007.D   |
| Level 6 | IC 180-149469/8   | 60731008.D   |
| Level 7 | IC 180-149469/9   | 60731009.D   |
| Level 8 | IC 180-149469/10  | 60731010.D   |

| ANALYTE            | PERCENT ERROR |         |         |         |         |         | PERCENT ERROR LIMIT |       |       |       |       |       |
|--------------------|---------------|---------|---------|---------|---------|---------|---------------------|-------|-------|-------|-------|-------|
|                    | LVL 1 #       | LVL 2 # | LVL 3 # | LVL 4 # | LVL 5 # | LVL 6 # | LVL 1               | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 6 |
|                    | LVL 7 #       | LVL 8 # |         |         |         |         | LVL 7               | LVL 8 |       |       |       |       |
| Methylene Chloride | 0.2           | 1.2     | -4.0    | -0.1    | -1.9    | -2.0    | 40                  | 40    | 40    | 40    | 40    | 40    |
|                    | 6.3           | 0.3     |         |         |         |         | 40                  | 40    |       |       |       |       |

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731004.D  
 Lims ID: IC VSTD5  
 Client ID:  
 Sample Type: IC Calib Level: 2  
 Inject. Date: 31-Jul-2015 14:00:30 ALS Bottle#: 4 Worklist Smp#: 4  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: IC VSTD5  
 Misc. Info.: 180-0007999-004  
 Operator ID: 001562 Instrument ID: CHHP6  
 Sublist: chrom-MSVOA\_LL\_CHHP6\*sub5  
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\MSVOA\_LL\_CHHP6.m  
 Limit Group: VOA 8260C ICAL  
 Last Update: 03-Aug-2015 12:15:33 Calib Date: 31-Jul-2015 18:02:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731014.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: XAWRK049

First Level Reviewer: fergusond

Date: 31-Jul-2015 16:26:45

| Compound                        | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q   | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|---------------------------------|-----|--------------|------------------|------------------|-----|----------|---------------|-----------------|-------|
| * 1 TBA-d9 (IS)                 | 65  | 4.245        | 4.248            | -0.003           | 91  | 159479   | 1000.0        | 1000.0          |       |
| * 2 Fluorobenzene (IS)          | 96  | 7.286        | 7.284            | 0.002            | 98  | 463046   | 50.0          | 50.0            |       |
| * 3 Chlorobenzene-d5            | 119 | 10.395       | 10.398           | -0.003           | 92  | 92729    | 50.0          | 50.0            |       |
| * 4 1,4-Dichlorobenzene-d4      | 152 | 12.743       | 12.747           | -0.004           | 97  | 158987   | 50.0          | 50.0            |       |
| \$ 5 Dibromofluoromethane (Surr | 113 | 6.556        | 6.554            | 0.002            | 68  | 49079    | 25.0          | 23.0            |       |
| \$ 6 1,2-Dichloroethane-d4 (Sur | 65  | 6.934        | 6.931            | 0.003            | 54  | 82044    | 25.0          | 23.8            |       |
| \$ 7 Toluene-d8 (Surr)          | 98  | 8.941        | 8.938            | 0.003            | 93  | 188855   | 25.0          | 25.8            |       |
| \$ 8 4-Bromofluorobenzene (Surr | 95  | 11.587       | 11.585           | 0.002            | 81  | 79163    | 25.0          | 24.4            |       |
| 11 Dichlorodifluoromethane      | 85  | 1.611        | 1.608            | 0.002            | 99  | 76046    | 25.0          | 23.7            |       |
| 12 Chloromethane                | 50  | 1.757        | 1.754            | 0.003            | 100 | 70391    | 25.0          | 25.5            |       |
| 13 Vinyl chloride               | 62  | 1.884        | 1.888            | -0.004           | 98  | 75541    | 25.0          | 25.4            |       |
| 14 Butadiene                    | 39  | 1.933        | 1.930            | 0.003            | 92  | 72002    | 25.0          | 25.8            |       |
| 15 Bromomethane                 | 94  | 2.231        | 2.228            | 0.003            | 91  | 42916    | 25.0          | 26.7            | M     |
| 16 Chloroethane                 | 64  | 2.377        | 2.368            | 0.009            | 98  | 52119    | 25.0          | 25.7            |       |
| 17 Dichlorofluoromethane        | 67  | 2.651        | 2.648            | 0.003            | 97  | 126043   | 25.0          | 26.7            |       |
| 18 Trichlorofluoromethane       | 101 | 2.669        | 2.660            | 0.009            | 85  | 96092    | 25.0          | 25.5            |       |
| 20 Ethyl ether                  | 59  | 3.046        | 3.049            | -0.003           | 88  | 67458    | 25.0          | 25.2            |       |
| 21 Acrolein                     | 56  | 3.223        | 3.220            | 0.003            | 97  | 35802    | 125.0         | 122.8           |       |
| 22 1,1-Dichloroethene           | 96  | 3.338        | 3.341            | -0.003           | 95  | 55817    | 25.0          | 23.9            |       |
| 23 1,1,2-Trichloro-1,2,2-trif   | 101 | 3.393        | 3.390            | 0.003            | 94  | 60462    | 25.0          | 24.6            |       |
| 24 Acetone                      | 43  | 3.429        | 3.421            | 0.008            | 99  | 43121    | 50.0          | 52.6            |       |
| 25 Iodomethane                  | 142 | 3.539        | 3.536            | 0.003            | 97  | 76980    | 25.0          | 24.6            |       |
| 26 Carbon disulfide             | 76  | 3.636        | 3.627            | 0.009            | 100 | 137245   | 25.0          | 22.7            |       |
| 29 3-Chloro-1-propene           | 76  | 3.922        | 3.919            | 0.003            | 61  | 27346    | 25.0          | 20.8            |       |
| 30 Methyl acetate               | 43  | 3.934        | 3.926            | 0.008            | 97  | 233460   | 125.0         | 121.5           |       |
| 31 Methylene Chloride           | 84  | 4.135        | 4.132            | 0.003            | 92  | 89699    | 25.0          | 25.3            |       |
| 32 2-Methyl-2-propanol          | 59  | 4.366        | 4.370            | -0.004           | 93  | 43837    | 250.0         | 244.3           |       |
| 33 Acrylonitrile                | 53  | 4.500        | 4.503            | -0.003           | 100 | 231943   | 250.0         | 239.5           |       |
| 34 trans-1,2-Dichloroethene     | 96  | 4.555        | 4.564            | -0.009           | 95  | 66744    | 25.0          | 24.8            |       |
| 35 Methyl tert-butyl ether      | 73  | 4.573        | 4.576            | -0.003           | 97  | 186303   | 25.0          | 23.1            |       |

| Compound                       | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 36 Hexane                      | 57  | 4.987     | 4.990         | -0.003        | 94 | 85113    | 25.0       | 23.4         |       |
| 37 1,1-Dichloroethane          | 63  | 5.206     | 5.197         | 0.009         | 97 | 118950   | 25.0       | 24.7         |       |
| 38 Vinyl acetate               | 43  | 5.236     | 5.240         | -0.004        | 97 | 80307    | 25.0       | 20.7         |       |
| 43 cis-1,2-Dichloroethene      | 96  | 5.948     | 5.939         | 0.009         | 84 | 69383    | 25.0       | 23.7         |       |
| 44 2-Butanone (MEK)            | 43  | 5.948     | 5.945         | 0.003         | 56 | 51510    | 50.0       | 46.1         |       |
| 42 2,2-Dichloropropane         | 77  | 5.942     | 5.945         | -0.003        | 59 | 53806    | 25.0       | 22.1         |       |
| 48 Chlorobromomethane          | 128 | 6.228     | 6.231         | -0.003        | 94 | 28403    | 25.0       | 24.2         |       |
| 49 Tetrahydrofuran             | 42  | 6.240     | 6.249         | -0.009        | 81 | 31436    | 50.0       | 41.7         |       |
| 50 Chloroform                  | 83  | 6.368     | 6.371         | -0.003        | 93 | 118313   | 25.0       | 24.8         |       |
| 51 1,1,1-Trichloroethane       | 97  | 6.538     | 6.541         | -0.003        | 96 | 79977    | 25.0       | 22.6         |       |
| 52 Cyclohexane                 | 56  | 6.611     | 6.620         | -0.009        | 93 | 103455   | 25.0       | 22.9         |       |
| 53 Carbon tetrachloride        | 117 | 6.708     | 6.718         | -0.010        | 98 | 57375    | 25.0       | 23.0         |       |
| 54 1,1-Dichloropropene         | 75  | 6.727     | 6.724         | 0.003         | 94 | 91039    | 25.0       | 24.0         |       |
| 55 Isobutyl alcohol            | 41  | 6.903     | 6.900         | 0.003         | 95 | 34707    | 625.0      | 518.1        |       |
| 56 Benzene                     | 78  | 6.940     | 6.943         | -0.003        | 97 | 271972   | 25.0       | 25.2         |       |
| 57 1,2-Dichloroethane          | 62  | 7.019     | 7.016         | 0.003         | 98 | 108353   | 25.0       | 24.9         |       |
| 59 n-Heptane                   | 43  | 7.311     | 7.308         | 0.003         | 89 | 67835    | 25.0       | 23.1         |       |
| 61 Trichloroethene             | 130 | 7.676     | 7.679         | -0.003        | 92 | 51907    | 25.0       | 23.1         |       |
| 63 Methylcyclohexane           | 83  | 7.925     | 7.922         | 0.003         | 91 | 108113   | 25.0       | 23.7         |       |
| 64 1,2-Dichloropropane         | 63  | 7.949     | 7.953         | -0.004        | 95 | 60301    | 25.0       | 23.4         |       |
| 65 1,4-Dioxane                 | 88  | 8.029     | 8.032         | -0.003        | 40 | 10219    | 500.0      | 401.6        | M     |
| 67 Dibromomethane              | 93  | 8.035     | 8.038         | -0.003        | 91 | 36346    | 25.0       | 23.2         |       |
| 68 Dichlorobromomethane        | 83  | 8.235     | 8.227         | 0.008         | 98 | 67754    | 25.0       | 23.0         |       |
| 71 cis-1,3-Dichloropropene     | 75  | 8.673     | 8.677         | -0.004        | 92 | 64404    | 25.0       | 19.9         |       |
| 72 4-Methyl-2-pentanone (MIBK) | 43  | 8.826     | 8.823         | 0.003         | 95 | 90891    | 50.0       | 47.7         |       |
| 73 Toluene                     | 91  | 9.008     | 9.011         | -0.003        | 97 | 259618   | 25.0       | 27.1         |       |
| 74 trans-1,3-Dichloropropene   | 75  | 9.257     | 9.255         | 0.002         | 97 | 51458    | 25.0       | 21.2         |       |
| 75 Ethyl methacrylate          | 69  | 9.312     | 9.315         | -0.003        | 86 | 53768    | 25.0       | 20.8         |       |
| 76 1,1,2-Trichloroethane       | 97  | 9.446     | 9.449         | -0.003        | 96 | 50938    | 25.0       | 25.7         |       |
| 77 Tetrachloroethene           | 164 | 9.525     | 9.522         | 0.003         | 92 | 42156    | 25.0       | 25.8         |       |
| 78 1,3-Dichloropropane         | 76  | 9.604     | 9.607         | -0.003        | 92 | 96298    | 25.0       | 26.3         |       |
| 79 2-Hexanone                  | 43  | 9.659     | 9.656         | 0.003         | 97 | 58962    | 50.0       | 47.1         |       |
| 81 Chlorodibromomethane        | 129 | 9.817     | 9.826         | -0.009        | 92 | 30573    | 25.0       | 22.6         |       |
| 82 Ethylene Dibromide          | 107 | 9.939     | 9.942         | -0.003        | 97 | 42016    | 25.0       | 24.0         |       |
| 83 3-Chlorobenzotrifluoride    | 180 | 10.395    | 10.392        | 0.003         | 89 | 83271    | 25.0       | 27.2         |       |
| 84 Chlorobenzene               | 112 | 10.425    | 10.429        | -0.004        | 91 | 156070   | 25.0       | 26.5         |       |
| 85 4-Chlorobenzotrifluoride    | 180 | 10.480    | 10.483        | -0.003        | 95 | 77852    | 25.0       | 27.4         |       |
| 86 1,1,1,2-Tetrachloroethane   | 131 | 10.523    | 10.520        | 0.003         | 87 | 37781    | 25.0       | 23.4         |       |
| 87 Ethylbenzene                | 106 | 10.529    | 10.526        | 0.003         | 99 | 82647    | 25.0       | 24.9         |       |
| 88 m-Xylene & p-Xylene         | 106 | 10.657    | 10.660        | -0.003        | 99 | 105633   | 25.0       | 25.7         |       |
| 89 o-Xylene                    | 106 | 11.040    | 11.043        | -0.003        | 98 | 105888   | 25.0       | 25.7         |       |
| 90 Styrene                     | 104 | 11.058    | 11.061        | -0.003        | 94 | 162570   | 25.0       | 25.7         |       |
| 91 Bromoform                   | 173 | 11.241    | 11.244        | -0.003        | 94 | 17870    | 25.0       | 24.8         |       |
| 92 2-Chlorobenzotrifluoride    | 180 | 11.308    | 11.305        | 0.003         | 95 | 87545    | 25.0       | 27.9         |       |
| 93 Isopropylbenzene            | 105 | 11.405    | 11.408        | -0.003        | 97 | 265117   | 25.0       | 26.9         |       |
| 96 1,1,2,2-Tetrachloroethane   | 83  | 11.715    | 11.712        | 0.003         | 94 | 70858    | 25.0       | 26.8         |       |
| 95 Bromobenzene                | 156 | 11.721    | 11.725        | -0.004        | 97 | 61847    | 25.0       | 24.2         |       |
| 97 trans-1,4-Dichloro-2-buten  | 53  | 11.752    | 11.749        | 0.003         | 66 | 18413    | 25.0       | 22.7         |       |
| 98 1,2,3-Trichloropropane      | 110 | 11.770    | 11.767        | 0.003         | 86 | 24668    | 25.0       | 25.4         |       |
| 99 N-Propylbenzene             | 120 | 11.825    | 11.828        | -0.003        | 99 | 70063    | 25.0       | 23.8         |       |
| 100 2-Chlorotoluene            | 126 | 11.916    | 11.913        | 0.003         | 94 | 59338    | 25.0       | 24.3         |       |
| 101 3-Chlorotoluene            | 126 | 11.977    | 11.980        | -0.003        | 97 | 64658    | 25.0       | 25.2         |       |

| Compound                         | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|----------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 102 1,3,5-Trimethylbenzene       | 105 | 12.007    | 12.010        | -0.003        | 92 | 246129   | 25.0       | 25.7         |       |
| 103 4-Chlorotoluene              | 126 | 12.038    | 12.041        | -0.003        | 98 | 62837    | 25.0       | 24.3         |       |
| 104 tert-Butylbenzene            | 119 | 12.323    | 12.321        | 0.002         | 90 | 180978   | 25.0       | 23.9         |       |
| 106 1,2,4-Trimethylbenzene       | 105 | 12.384    | 12.382        | 0.002         | 97 | 251042   | 25.0       | 25.7         |       |
| 107 1,2-dichloro-4-(trifluorom   | 214 | 12.421    | 12.418        | 0.003         | 95 | 71946    | 25.0       | 26.0         |       |
| 108 sec-Butylbenzene             | 105 | 12.549    | 12.546        | 0.003         | 96 | 295586   | 25.0       | 26.2         |       |
| 109 1,3-Dichlorobenzene          | 146 | 12.664    | 12.667        | -0.003        | 93 | 128745   | 25.0       | 25.8         |       |
| 110 4-Isopropyltoluene           | 119 | 12.707    | 12.704        | 0.003         | 96 | 234813   | 25.0       | 24.8         |       |
| 111 1,4-Dichlorobenzene          | 146 | 12.768    | 12.771        | -0.003        | 89 | 130776   | 25.0       | 25.6         |       |
| 113 2,4-Dichloro-1-(trifluorom   | 214 | 12.792    | 12.789        | 0.003         | 94 | 71623    | 25.0       | 26.0         |       |
| 114 2,5-Dichlorobenzotrifluori   | 214 | 12.828    | 12.832        | -0.004        | 96 | 76420    | 25.0       | 24.8         |       |
| 116 n-Butylbenzene               | 91  | 13.114    | 13.112        | 0.002         | 98 | 236342   | 25.0       | 25.0         |       |
| 117 1,2-Dichlorobenzene          | 146 | 13.120    | 13.124        | -0.004        | 91 | 127520   | 25.0       | 25.3         |       |
| 118 1,2-Dibromo-3-Chloropropan   | 75  | 13.911    | 13.921        | -0.010        | 62 | 9971     | 25.0       | 21.6         |       |
| 119 2,4- & 2,5- & 2,6- Dichlor   | 125 | 14.063    | 14.061        | 0.002         | 98 | 345570   | 75.0       | 78.8         |       |
| 121 2,3- & 3,4- Dichlorotoluen   | 125 | 14.471    | 14.474        | -0.003        | 99 | 252992   | 50.0       | 52.3         |       |
| 122 1,2,4-Trichlorobenzene       | 180 | 14.745    | 14.736        | 0.009         | 92 | 96442    | 25.0       | 24.7         |       |
| 123 Hexachlorobutadiene          | 225 | 14.891    | 14.888        | 0.003         | 96 | 37440    | 25.0       | 24.3         |       |
| 124 Naphthalene                  | 128 | 15.006    | 15.004        | 0.002         | 98 | 178131   | 25.0       | 22.6         |       |
| 125 1,2,3-Trichlorobenzene       | 180 | 15.231    | 15.229        | 0.002         | 95 | 90206    | 25.0       | 24.7         |       |
| 126 2,4,5-Trichlorotoluene       | 159 | 16.004    | 16.007        | -0.003        | 0  | 54916    | 25.0       | 22.4         |       |
| 127 2,3,6-Trichlorotoluene       | 159 | 16.107    | 16.111        | -0.004        | 91 | 50658    | 25.0       | 21.8         |       |
| 146 3,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 147 2,6-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 143 2,5-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 145 2,3-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 144 2,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| S 130 1,2-Dichloroethene, Total  | 96  |           |               |               | 0  |          | 50.0       | 48.5         |       |
| S 131 Xylenes, Total             | 106 |           |               |               | 0  |          | 50.0       | 51.4         |       |
| S 132 1,3-Dichloropropene, Total | 1   |           |               |               | 0  |          | 50.0       | 41.1         |       |

### QC Flag Legend

#### Processing Flags

ND - Not Detected or Marked ND

#### Review Flags

M - Manually Integrated

### Reagents:

|                     |                    |           |             |
|---------------------|--------------------|-----------|-------------|
| VOA8260SURR_00039   | Amount Added: 1.00 | Units: uL |             |
| voaWket1Reste_00001 | Amount Added: 1.00 | Units: uL |             |
| voaWeemix1Res_00001 | Amount Added: 1.00 | Units: uL |             |
| voaWVA1st Res_00003 | Amount Added: 1.00 | Units: uL |             |
| VOA8260VOAPRI_00134 | Amount Added: 1.00 | Units: uL |             |
| voaWAcro2nd R_00006 | Amount Added: 5.00 | Units: uL |             |
| VOA8260INT_00039    | Amount Added: 2.00 | Units: uL | Run Reagent |



## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731004.D

Injection Date: 31-Jul-2015 14:00:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: IC VSTD5

Worklist Smp#: 4

Client ID:

Purge Vol: 5.000 mL

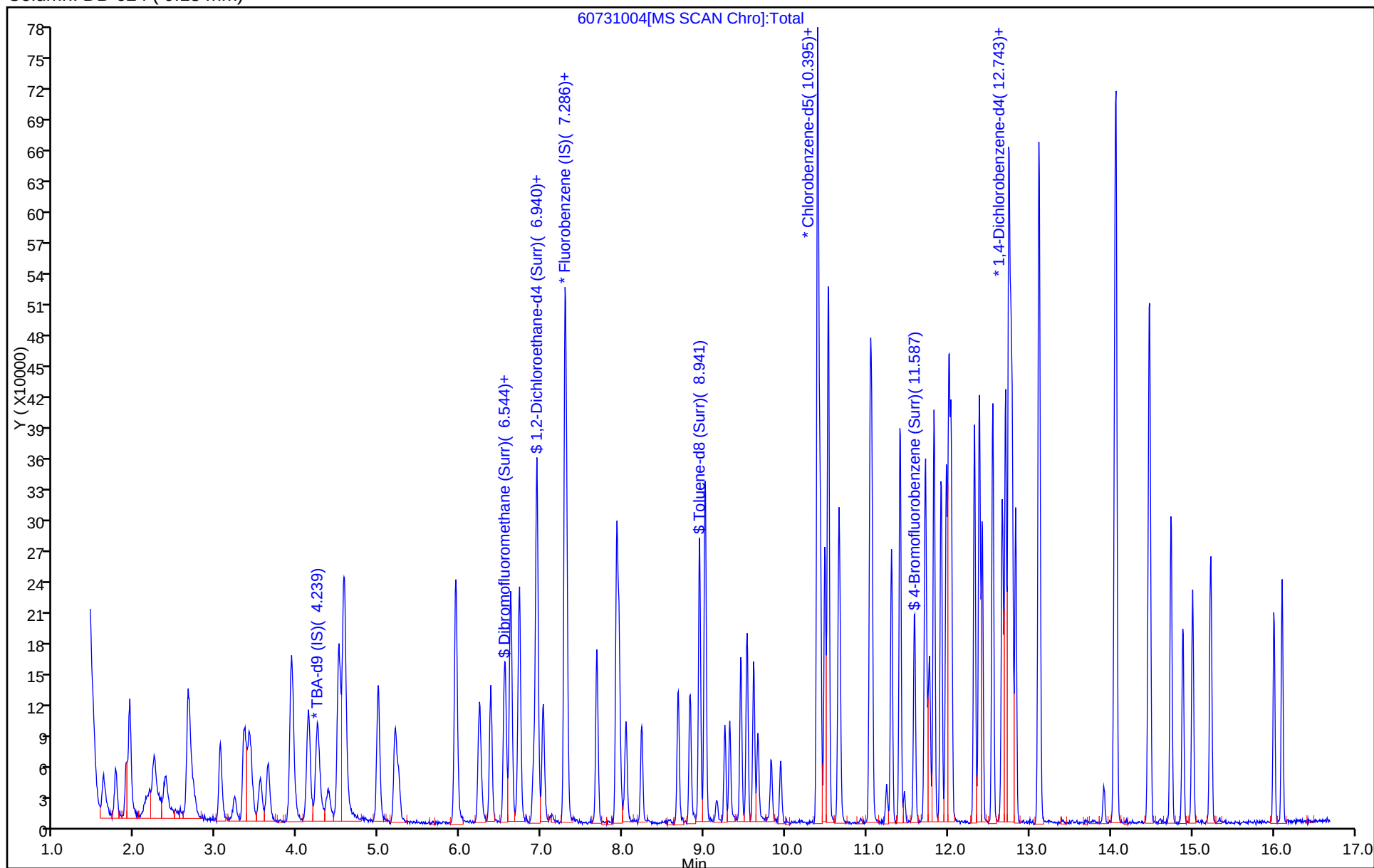
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: MSVOA\_LL\_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731004.D

Injection Date: 31-Jul-2015 14:00:30

Instrument ID: CHHP6

Lims ID: IC VSTD5

Client ID:

Operator ID: 001562

ALS Bottle#:

4

Worklist Smp#: 4

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: MSVOA\_LL\_CHHP6

Limit Group:

VOA 8260C ICAL

Column: DB-624 ( 0.18 mm)

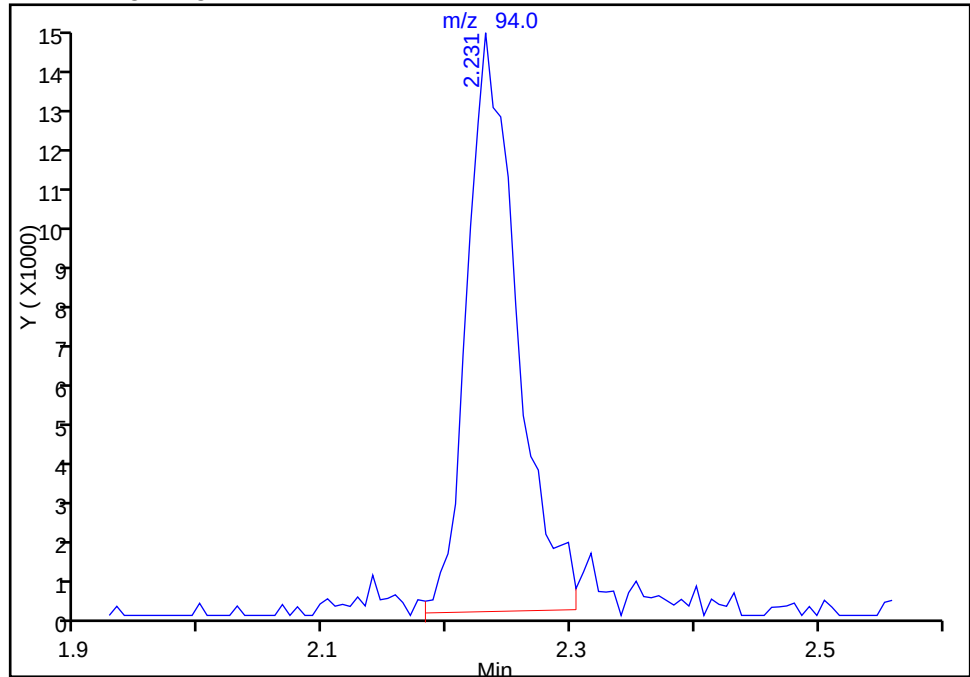
Detector

MS SCAN

**15 Bromomethane, CAS: 74-83-9**

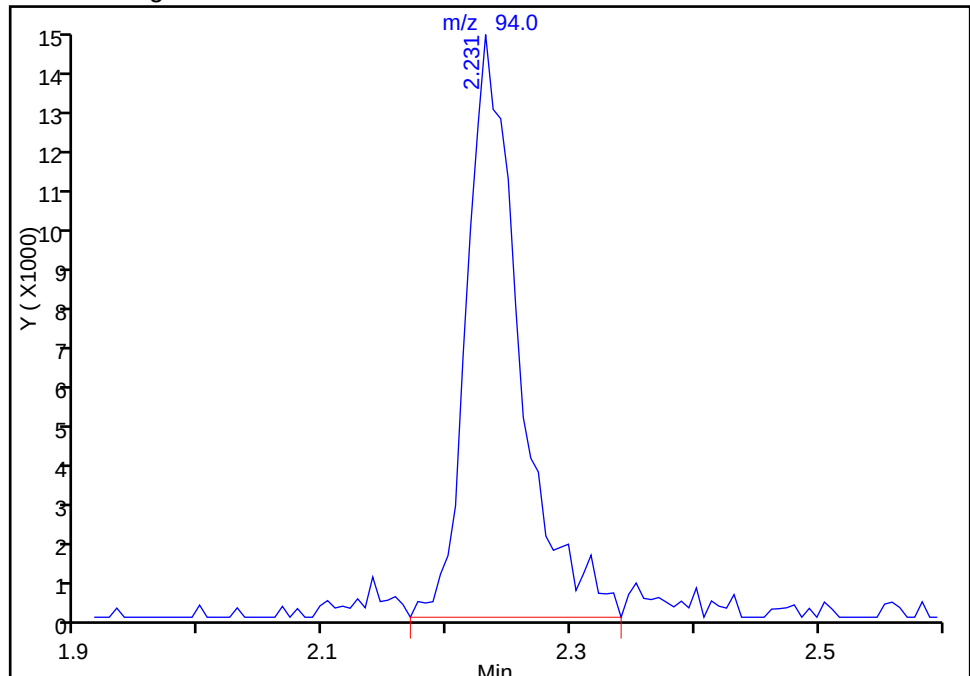
RT: 2.23  
Area: 40394  
Amount: 23.319863  
Amount Units: ng

## Processing Integration Results



RT: 2.23  
Area: 42916  
Amount: 26.704234  
Amount Units: ng

## Manual Integration Results



Reviewer: fergusond, 03-Aug-2015 10:46:01

Audit Action: Manually Integrated

Audit Reason: Incomplete Integration

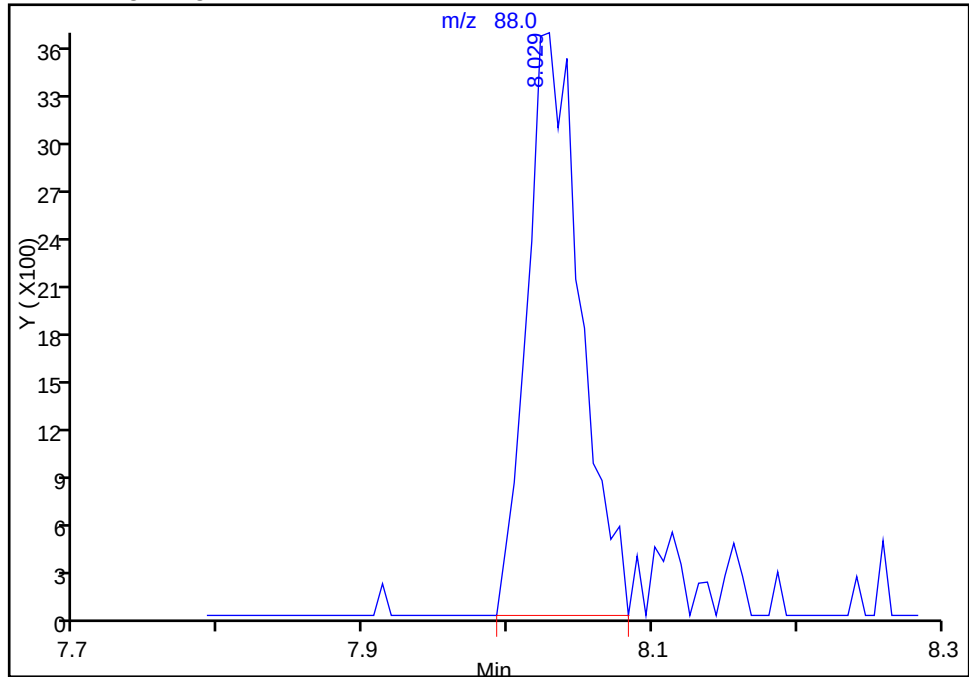
## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731004.D  
Injection Date: 31-Jul-2015 14:00:30 Instrument ID: CHHP6  
Lims ID: IC VSTD5  
Client ID:  
Operator ID: 001562 ALS Bottle#: 4 Worklist Smp#: 4  
Purge Vol: 5.000 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP6 Limit Group: VOA 8260C ICAL  
Column: DB-624 ( 0.18 mm) Detector: MS SCAN

## 65 1,4-Dioxane, CAS: 123-91-1

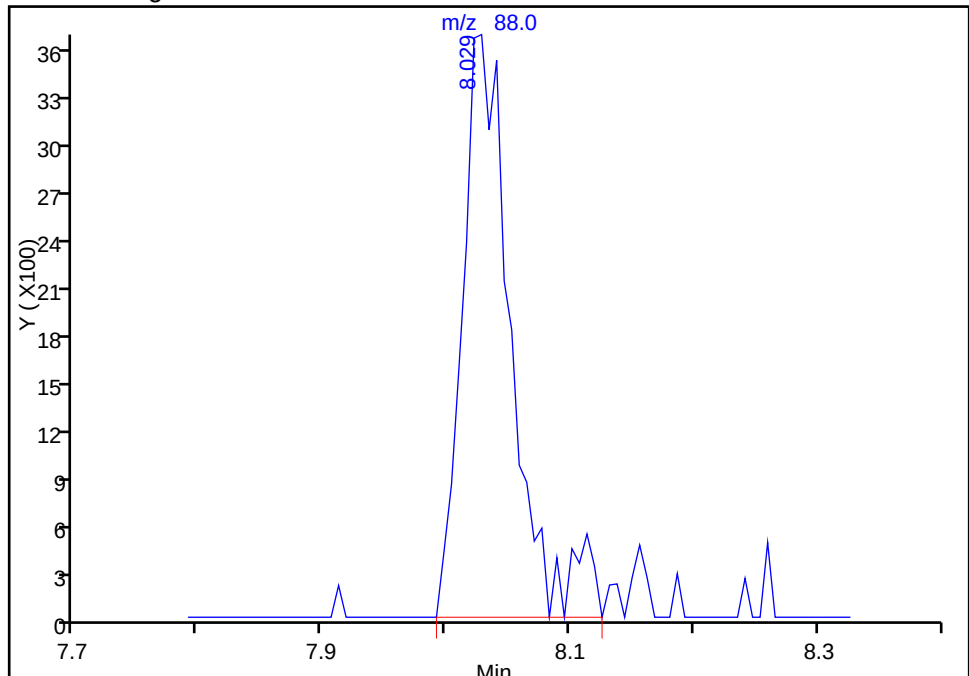
RT: 8.03  
Area: 9488  
Amount: 365.3313  
Amount Units: ng

## Processing Integration Results



RT: 8.03  
Area: 10219  
Amount: 401.5715  
Amount Units: ng

## Manual Integration Results



Reviewer: fergusond, 03-Aug-2015 10:46:01  
Audit Action: Manually Integrated  
Audit Reason: Incomplete Integration

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731005.D  
 Lims ID: ICIS VSTD10  
 Client ID:  
 Sample Type: ICIS Calib Level: 3  
 Inject. Date: 31-Jul-2015 14:24:30 ALS Bottle#: 5 Worklist Smp#: 5  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: ICIS VSTD10  
 Misc. Info.: 180-0007999-005  
 Operator ID: 001562 Instrument ID: CHHP6  
 Sublist: chrom-MSVOA\_LL\_CHHP6\*sub5  
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\MSVOA\_LL\_CHHP6.m  
 Limit Group: VOA 8260C ICAL  
 Last Update: 03-Aug-2015 12:56:50 Calib Date: 31-Jul-2015 18:02:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731014.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: XAWRK049

First Level Reviewer: fergusond

Date: 03-Aug-2015 12:15:08

| Compound                        | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q   | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|---------------------------------|-----|--------------|------------------|------------------|-----|----------|---------------|-----------------|-------|
| * 1 TBA-d9 (IS)                 | 65  | 4.248        | 4.248            | 0.000            | 92  | 161009   | 1000.0        | 1000.0          |       |
| * 2 Fluorobenzene (IS)          | 96  | 7.284        | 7.284            | 0.000            | 98  | 485657   | 50.0          | 50.0            |       |
| * 3 Chlorobenzene-d5            | 119 | 10.398       | 10.398           | 0.000            | 91  | 104426   | 50.0          | 50.0            |       |
| * 4 1,4-Dichlorobenzene-d4      | 152 | 12.747       | 12.747           | 0.000            | 94  | 171006   | 50.0          | 50.0            |       |
| \$ 5 Dibromofluoromethane (Surr | 113 | 6.554        | 6.554            | 0.000            | 92  | 110929   | 50.0          | 49.6            |       |
| \$ 6 1,2-Dichloroethane-d4 (Sur | 65  | 6.931        | 6.931            | 0.000            | 71  | 181120   | 50.0          | 50.2            |       |
| \$ 7 Toluene-d8 (Surr)          | 98  | 8.938        | 8.938            | 0.000            | 94  | 445521   | 50.0          | 54.1            |       |
| \$ 8 4-Bromofluorobenzene (Surr | 95  | 11.585       | 11.585           | 0.000            | 80  | 184340   | 50.0          | 50.4            |       |
| 11 Dichlorodifluoromethane      | 85  | 1.608        | 1.608            | 0.000            | 99  | 166146   | 50.0          | 49.4            |       |
| 12 Chloromethane                | 50  | 1.754        | 1.754            | 0.000            | 100 | 147560   | 50.0          | 50.9            |       |
| 13 Vinyl chloride               | 62  | 1.888        | 1.888            | 0.000            | 99  | 154423   | 50.0          | 49.5            |       |
| 14 Butadiene                    | 39  | 1.930        | 1.930            | 0.000            | 90  | 146675   | 50.0          | 50.1            |       |
| 15 Bromomethane                 | 94  | 2.228        | 2.228            | 0.000            | 90  | 89628    | 50.0          | 53.2            |       |
| 16 Chloroethane                 | 64  | 2.368        | 2.368            | 0.000            | 99  | 111283   | 50.0          | 52.2            |       |
| 17 Dichlorofluoromethane        | 67  | 2.648        | 2.648            | 0.000            | 96  | 250823   | 50.0          | 50.6            |       |
| 18 Trichlorofluoromethane       | 101 | 2.660        | 2.660            | 0.000            | 73  | 206141   | 50.0          | 52.1            |       |
| 20 Ethyl ether                  | 59  | 3.049        | 3.049            | 0.000            | 90  | 136903   | 50.0          | 48.8            |       |
| 21 Acrolein                     | 56  | 3.220        | 3.220            | 0.000            | 97  | 43327    | 150.0         | 141.7           |       |
| 22 1,1-Dichloroethene           | 96  | 3.341        | 3.341            | 0.000            | 96  | 118856   | 50.0          | 48.6            |       |
| 23 1,1,2-Trichloro-1,2,2-trif   | 101 | 3.390        | 3.390            | 0.000            | 95  | 126375   | 50.0          | 49.0            |       |
| 24 Acetone                      | 43  | 3.421        | 3.421            | 0.000            | 98  | 76252    | 100.0         | 88.7            |       |
| 25 Iodomethane                  | 142 | 3.536        | 3.536            | 0.000            | 98  | 159542   | 50.0          | 48.6            |       |
| 26 Carbon disulfide             | 76  | 3.627        | 3.627            | 0.000            | 100 | 294989   | 50.0          | 46.6            |       |
| 29 3-Chloro-1-propene           | 76  | 3.919        | 3.919            | 0.000            | 61  | 66228    | 50.0          | 48.1            |       |
| 30 Methyl acetate               | 43  | 3.926        | 3.926            | 0.000            | 96  | 497011   | 250.0         | 246.7           |       |
| 31 Methylene Chloride           | 84  | 4.132        | 4.132            | 0.000            | 93  | 163213   | 50.0          | 48.0            |       |
| 32 2-Methyl-2-propanol          | 59  | 4.370        | 4.370            | 0.000            | 93  | 91997    | 500.0         | 507.7           |       |
| 33 Acrylonitrile                | 53  | 4.503        | 4.503            | 0.000            | 98  | 501701   | 500.0         | 494.0           |       |
| 34 trans-1,2-Dichloroethene     | 96  | 4.564        | 4.564            | 0.000            | 96  | 139824   | 50.0          | 49.6            |       |
| 35 Methyl tert-butyl ether      | 73  | 4.576        | 4.576            | 0.000            | 97  | 394698   | 50.0          | 46.7            |       |

| Compound                       | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 36 Hexane                      | 57  | 4.990     | 4.990         | 0.000         | 93 | 186977   | 50.0       | 48.9         |       |
| 37 1,1-Dichloroethane          | 63  | 5.197     | 5.197         | 0.000         | 97 | 251887   | 50.0       | 49.9         |       |
| 38 Vinyl acetate               | 43  | 5.240     | 5.240         | 0.000         | 98 | 186047   | 50.0       | 45.6         |       |
| 43 cis-1,2-Dichloroethene      | 96  | 5.939     | 5.939         | 0.000         | 85 | 151575   | 50.0       | 49.4         |       |
| 44 2-Butanone (MEK)            | 43  | 5.945     | 5.945         | 0.000         | 60 | 108037   | 100.0      | 92.1         |       |
| 42 2,2-Dichloropropane         | 77  | 5.945     | 5.945         | 0.000         | 61 | 122189   | 50.0       | 47.8         |       |
| 48 Chlorobromomethane          | 128 | 6.231     | 6.231         | 0.000         | 96 | 58005    | 50.0       | 47.1         |       |
| 49 Tetrahydrofuran             | 42  | 6.249     | 6.249         | 0.000         | 87 | 70787    | 100.0      | 89.6         |       |
| 50 Chloroform                  | 83  | 6.371     | 6.371         | 0.000         | 94 | 250393   | 50.0       | 49.9         |       |
| 51 1,1,1-Trichloroethane       | 97  | 6.541     | 6.541         | 0.000         | 97 | 182973   | 50.0       | 49.4         |       |
| 52 Cyclohexane                 | 56  | 6.620     | 6.620         | 0.000         | 93 | 237539   | 50.0       | 50.0         |       |
| 53 Carbon tetrachloride        | 117 | 6.718     | 6.718         | 0.000         | 95 | 126096   | 50.0       | 48.2         |       |
| 54 1,1-Dichloropropene         | 75  | 6.724     | 6.724         | 0.000         | 95 | 202951   | 50.0       | 50.9         |       |
| 55 Isobutyl alcohol            | 41  | 6.900     | 6.900         | 0.000         | 88 | 81470    | 1250.0     | 1159.5       |       |
| 56 Benzene                     | 78  | 6.943     | 6.943         | 0.000         | 97 | 574901   | 50.0       | 50.8         |       |
| 57 1,2-Dichloroethane          | 62  | 7.016     | 7.016         | 0.000         | 99 | 225116   | 50.0       | 49.4         |       |
| 59 n-Heptane                   | 43  | 7.308     | 7.308         | 0.000         | 88 | 154761   | 50.0       | 50.3         |       |
| 61 Trichloroethene             | 130 | 7.679     | 7.679         | 0.000         | 92 | 113666   | 50.0       | 48.2         |       |
| 63 Methylcyclohexane           | 83  | 7.922     | 7.922         | 0.000         | 92 | 240977   | 50.0       | 50.3         |       |
| 64 1,2-Dichloropropane         | 63  | 7.953     | 7.953         | 0.000         | 87 | 126414   | 50.0       | 46.8         |       |
| 65 1,4-Dioxane                 | 88  | 8.032     | 8.032         | 0.000         | 44 | 26388    | 1000.0     | 988.7        | M     |
| 67 Dibromomethane              | 93  | 8.038     | 8.038         | 0.000         | 94 | 77394    | 50.0       | 47.1         |       |
| 68 Dichlorobromomethane        | 83  | 8.227     | 8.227         | 0.000         | 98 | 144075   | 50.0       | 46.7         |       |
| 71 cis-1,3-Dichloropropene     | 75  | 8.677     | 8.677         | 0.000         | 92 | 149301   | 50.0       | 44.1         |       |
| 72 4-Methyl-2-pentanone (MIBK) | 43  | 8.823     | 8.823         | 0.000         | 96 | 208546   | 100.0      | 97.1         |       |
| 73 Toluene                     | 91  | 9.011     | 9.011         | 0.000         | 98 | 565645   | 50.0       | 52.5         |       |
| 74 trans-1,3-Dichloropropene   | 75  | 9.255     | 9.255         | 0.000         | 95 | 124444   | 50.0       | 45.5         |       |
| 75 Ethyl methacrylate          | 69  | 9.315     | 9.315         | 0.000         | 88 | 135064   | 50.0       | 46.5         |       |
| 76 1,1,2-Trichloroethane       | 97  | 9.449     | 9.449         | 0.000         | 94 | 108552   | 50.0       | 48.7         |       |
| 77 Tetrachloroethene           | 164 | 9.522     | 9.522         | 0.000         | 93 | 93269    | 50.0       | 50.7         |       |
| 78 1,3-Dichloropropane         | 76  | 9.607     | 9.607         | 0.000         | 91 | 206060   | 50.0       | 50.0         |       |
| 79 2-Hexanone                  | 43  | 9.656     | 9.656         | 0.000         | 95 | 135329   | 100.0      | 96.0         |       |
| 81 Chlorodibromomethane        | 129 | 9.826     | 9.826         | 0.000         | 91 | 73014    | 50.0       | 48.0         |       |
| 82 Ethylene Dibromide          | 107 | 9.942     | 9.942         | 0.000         | 97 | 92363    | 50.0       | 46.8         |       |
| 83 3-Chlorobenzotrifluoride    | 180 | 10.392    | 10.392        | 0.000         | 87 | 177755   | 50.0       | 51.5         |       |
| 84 Chlorobenzene               | 112 | 10.429    | 10.429        | 0.000         | 91 | 339330   | 50.0       | 51.2         |       |
| 85 4-Chlorobenzotrifluoride    | 180 | 10.483    | 10.483        | 0.000         | 96 | 164547   | 50.0       | 51.5         |       |
| 86 1,1,1,2-Tetrachloroethane   | 131 | 10.520    | 10.520        | 0.000         | 85 | 89710    | 50.0       | 49.4         |       |
| 87 Ethylbenzene                | 106 | 10.526    | 10.526        | 0.000         | 99 | 191951   | 50.0       | 51.4         |       |
| 88 m-Xylene & p-Xylene         | 106 | 10.660    | 10.660        | 0.000         | 99 | 235109   | 50.0       | 50.7         |       |
| 89 o-Xylene                    | 106 | 11.043    | 11.043        | 0.000         | 98 | 234926   | 50.0       | 50.6         |       |
| 90 Styrene                     | 104 | 11.061    | 11.061        | 0.000         | 94 | 374525   | 50.0       | 52.6         |       |
| 91 Bromoform                   | 173 | 11.244    | 11.244        | 0.000         | 92 | 37102    | 50.0       | 45.7         |       |
| 92 2-Chlorobenzotrifluoride    | 180 | 11.305    | 11.305        | 0.000         | 94 | 179913   | 50.0       | 50.9         |       |
| 93 Isopropylbenzene            | 105 | 11.408    | 11.408        | 0.000         | 98 | 599038   | 50.0       | 54.0         |       |
| 96 1,1,2,2-Tetrachloroethane   | 83  | 11.712    | 11.712        | 0.000         | 95 | 147479   | 50.0       | 49.5         |       |
| 95 Bromobenzene                | 156 | 11.725    | 11.725        | 0.000         | 96 | 136094   | 50.0       | 49.5         |       |
| 97 trans-1,4-Dichloro-2-buten  | 53  | 11.749    | 11.749        | 0.000         | 77 | 41001    | 50.0       | 47.0         |       |
| 98 1,2,3-Trichloropropane      | 110 | 11.767    | 11.767        | 0.000         | 87 | 50085    | 50.0       | 47.9         |       |
| 99 N-Propylbenzene             | 120 | 11.828    | 11.828        | 0.000         | 99 | 161671   | 50.0       | 51.1         |       |
| 100 2-Chlorotoluene            | 126 | 11.913    | 11.913        | 0.000         | 93 | 133354   | 50.0       | 50.7         |       |
| 101 3-Chlorotoluene            | 126 | 11.980    | 11.980        | 0.000         | 97 | 137766   | 50.0       | 49.9         |       |

| Compound                         | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|----------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 102 1,3,5-Trimethylbenzene       | 105 | 12.010    | 12.010        | 0.000         | 95 | 541915   | 50.0       | 52.6         |       |
| 103 4-Chlorotoluene              | 126 | 12.041    | 12.041        | 0.000         | 98 | 141377   | 50.0       | 50.9         |       |
| 104 tert-Butylbenzene            | 119 | 12.321    | 12.321        | 0.000         | 91 | 415895   | 50.0       | 51.1         |       |
| 106 1,2,4-Trimethylbenzene       | 105 | 12.382    | 12.382        | 0.000         | 99 | 554224   | 50.0       | 52.7         |       |
| 107 1,2-dichloro-4-(trifluorom   | 214 | 12.418    | 12.418        | 0.000         | 96 | 144215   | 50.0       | 48.4         |       |
| 108 sec-Butylbenzene             | 105 | 12.546    | 12.546        | 0.000         | 96 | 643438   | 50.0       | 53.0         |       |
| 109 1,3-Dichlorobenzene          | 146 | 12.667    | 12.667        | 0.000         | 93 | 267626   | 50.0       | 49.8         |       |
| 110 4-Isopropyltoluene           | 119 | 12.704    | 12.704        | 0.000         | 96 | 539941   | 50.0       | 53.0         |       |
| 111 1,4-Dichlorobenzene          | 146 | 12.771    | 12.771        | 0.000         | 88 | 275229   | 50.0       | 50.1         |       |
| 113 2,4-Dichloro-1-(trifluorom   | 214 | 12.789    | 12.789        | 0.000         | 95 | 143623   | 50.0       | 48.4         |       |
| 114 2,5-Dichlorobenzotrifluori   | 214 | 12.832    | 12.832        | 0.000         | 98 | 169006   | 50.0       | 51.0         |       |
| 116 n-Butylbenzene               | 91  | 13.112    | 13.112        | 0.000         | 99 | 533401   | 50.0       | 52.4         |       |
| 117 1,2-Dichlorobenzene          | 146 | 13.124    | 13.124        | 0.000         | 91 | 269873   | 50.0       | 49.8         |       |
| 118 1,2-Dibromo-3-Chloropropan   | 75  | 13.915    | 13.921        | -0.006        | 68 | 22010    | 50.0       | 44.3         |       |
| 119 2,4- & 2,5- & 2,6- Dichlor   | 125 | 14.061    | 14.061        | 0.000         | 98 | 751227   | 150.0      | 159.2        |       |
| 121 2,3- & 3,4- Dichlorotoluen   | 125 | 14.474    | 14.474        | 0.000         | 99 | 530353   | 100.0      | 101.9        |       |
| 122 1,2,4-Trichlorobenzene       | 180 | 14.736    | 14.736        | 0.000         | 92 | 208112   | 50.0       | 49.5         |       |
| 123 Hexachlorobutadiene          | 225 | 14.888    | 14.888        | 0.000         | 95 | 83692    | 50.0       | 50.6         |       |
| 124 Naphthalene                  | 128 | 15.004    | 15.004        | 0.000         | 99 | 425036   | 50.0       | 50.1         |       |
| 125 1,2,3-Trichlorobenzene       | 180 | 15.229    | 15.229        | 0.000         | 91 | 189066   | 50.0       | 48.1         |       |
| 126 2,4,5-Trichlorotoluene       | 159 | 16.007    | 16.007        | 0.000         | 0  | 121646   | 50.0       | 46.1         |       |
| 127 2,3,6-Trichlorotoluene       | 159 | 16.111    | 16.111        | 0.000         | 92 | 120523   | 50.0       | 48.1         |       |
| 145 2,3-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 147 2,6-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 146 3,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 144 2,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 143 2,5-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| S 130 1,2-Dichloroethene, Total  | 96  |           |               |               | 0  |          | 100.0      | 99.0         |       |
| S 131 Xylenes, Total             | 106 |           |               |               | 0  |          | 100.0      | 101.4        |       |
| S 132 1,3-Dichloropropene, Total | 1   |           |               |               | 0  |          | 100.0      | 89.5         |       |

### QC Flag Legend

#### Processing Flags

ND - Not Detected or Marked ND

#### Review Flags

M - Manually Integrated

### Reagents:

|                     |                    |           |             |
|---------------------|--------------------|-----------|-------------|
| VOA8260SURR_00039   | Amount Added: 2.00 | Units: uL |             |
| voaWket1Reste_00001 | Amount Added: 2.00 | Units: uL |             |
| voaWeemix1Res_00001 | Amount Added: 2.00 | Units: uL |             |
| VOA8260VOAPRI_00134 | Amount Added: 2.00 | Units: uL |             |
| voaWVA1st Res_00003 | Amount Added: 2.00 | Units: uL |             |
| voaWAcro2nd R_00006 | Amount Added: 6.00 | Units: uL |             |
| VOA8260INT_00039    | Amount Added: 2.00 | Units: uL | Run Reagent |

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731005.D

Injection Date: 31-Jul-2015 14:24:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: ICIS VSTD10

Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL

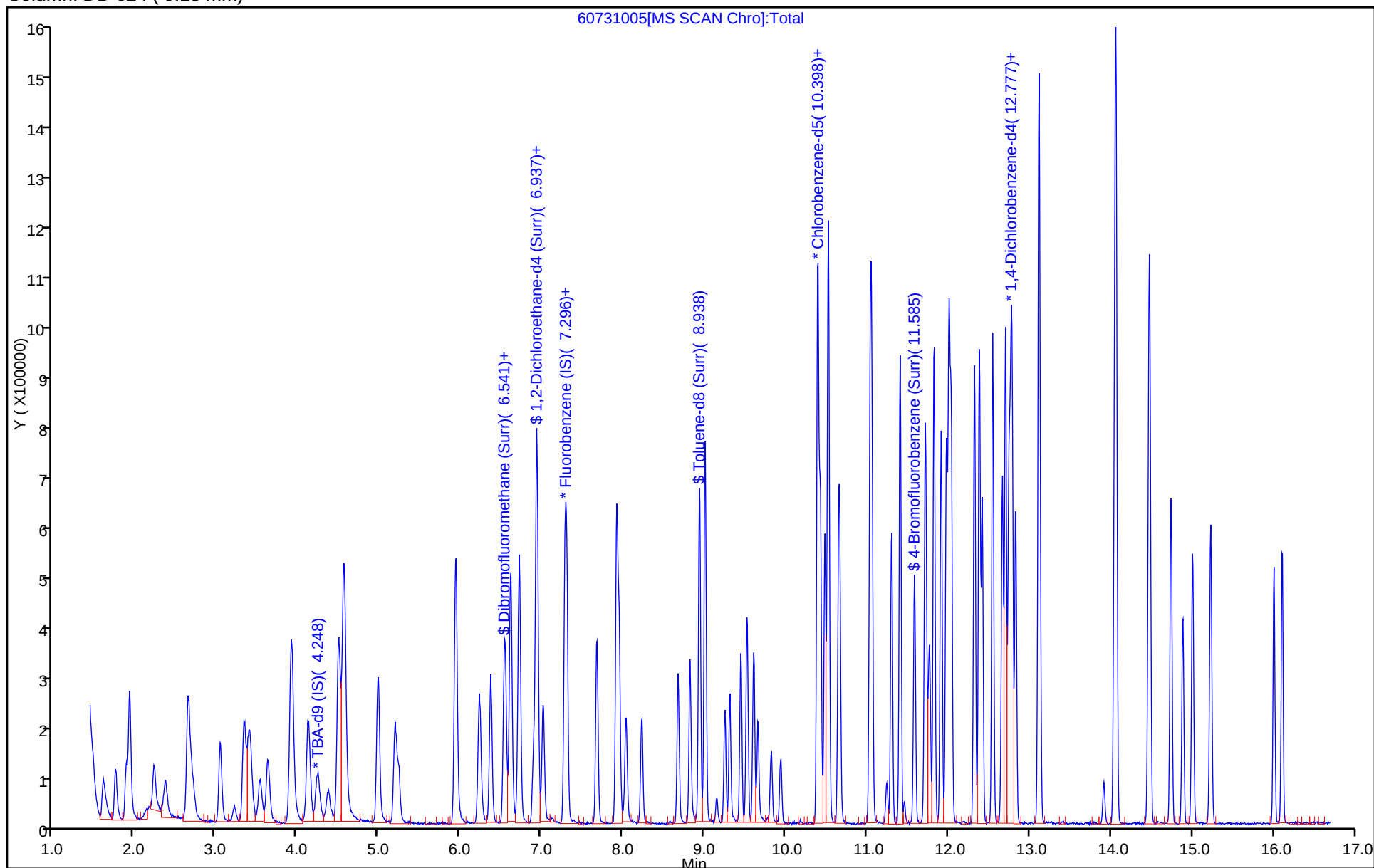
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: MSVOA\_LL\_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731005.D

Injection Date: 31-Jul-2015 14:24:30

Instrument ID: CHHP6

Lims ID: ICIS VSTD10

Client ID:

Operator ID: 001562

ALS Bottle#:

5

Worklist Smp#: 5

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP6

Limit Group: VOA 8260C ICAL

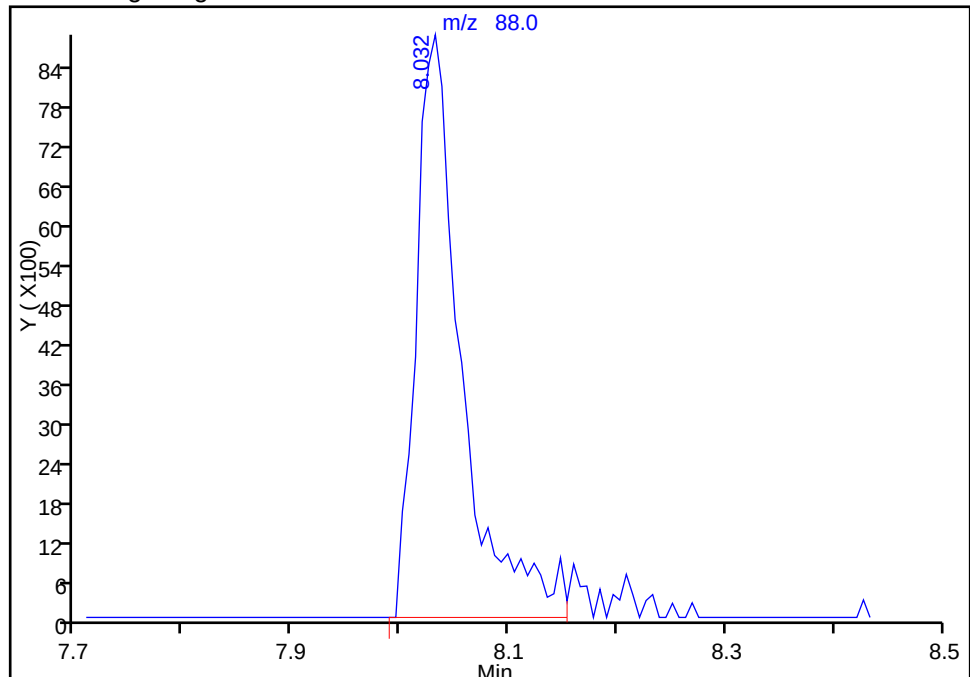
Column: DB-624 ( 0.18 mm)

Detector: MS SCAN

## 65 1,4-Dioxane, CAS: 123-91-1

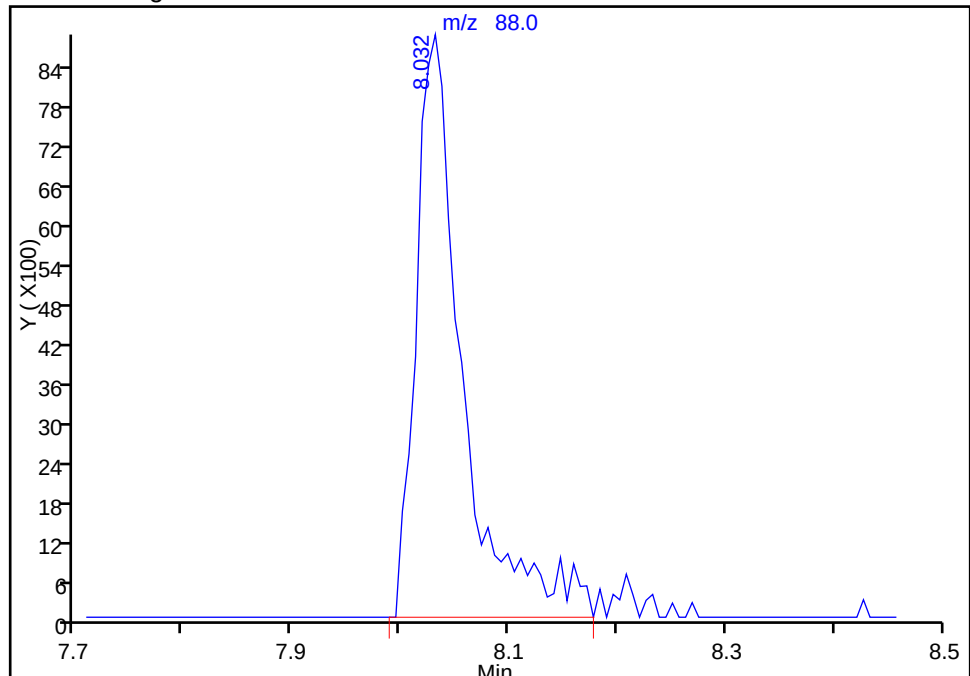
RT: 8.03  
Area: 25747  
Amount: 938.6160  
Amount Units: ng

## Processing Integration Results



RT: 8.03  
Area: 26388  
Amount: 988.6792  
Amount Units: ng

## Manual Integration Results



Reviewer: fergusond, 03-Aug-2015 10:47:28

Audit Action: Manually Integrated

Audit Reason: Peak Tail



TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731006.D  
 Lims ID: IC VSTD15  
 Client ID:  
 Sample Type: IC Calib Level: 4  
 Inject. Date: 31-Jul-2015 14:49:30 ALS Bottle#: 6 Worklist Smp#: 6  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: IC VSTD15  
 Misc. Info.: 180-0007999-006  
 Operator ID: 001562 Instrument ID: CHHP6  
 Sublist: chrom-MSVOA\_LL\_CHHP6\*sub5  
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\MSVOA\_LL\_CHHP6.m  
 Limit Group: VOA 8260C ICAL  
 Last Update: 03-Aug-2015 12:15:42 Calib Date: 31-Jul-2015 18:02:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731014.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: XAWRK049

First Level Reviewer: fergusond

Date: 03-Aug-2015 10:29:25

| Compound                        | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q   | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|---------------------------------|-----|--------------|------------------|------------------|-----|----------|---------------|-----------------|-------|
| * 1 TBA-d9 (IS)                 | 65  | 4.247        | 4.247            | 0.000            | 90  | 170149   | 1000.0        | 1000.0          |       |
| * 2 Fluorobenzene (IS)          | 96  | 7.289        | 7.289            | 0.000            | 98  | 471581   | 50.0          | 50.0            |       |
| * 3 Chlorobenzene-d5            | 119 | 10.398       | 10.398           | 0.000            | 92  | 104570   | 50.0          | 50.0            |       |
| * 4 1,4-Dichlorobenzene-d4      | 152 | 12.746       | 12.746           | 0.000            | 95  | 167231   | 50.0          | 50.0            |       |
| \$ 5 Dibromofluoromethane (Surr | 113 | 6.553        | 6.553            | 0.000            | 92  | 163209   | 75.0          | 75.1            |       |
| \$ 6 1,2-Dichloroethane-d4 (Sur | 65  | 6.930        | 6.930            | 0.000            | 71  | 260570   | 75.0          | 74.4            |       |
| \$ 7 Toluene-d8 (Surr)          | 98  | 8.938        | 8.938            | 0.000            | 94  | 643420   | 75.0          | 78.0            |       |
| \$ 8 4-Bromofluorobenzene (Surr | 95  | 11.584       | 11.584           | 0.000            | 80  | 281797   | 75.0          | 77.0            |       |
| 11 Dichlorodifluoromethane      | 85  | 1.607        | 1.607            | 0.000            | 98  | 255750   | 75.0          | 78.3            |       |
| 12 Chloromethane                | 50  | 1.759        | 1.759            | 0.000            | 99  | 208858   | 75.0          | 74.2            |       |
| 13 Vinyl chloride               | 62  | 1.893        | 1.893            | 0.000            | 84  | 233901   | 75.0          | 77.2            |       |
| 14 Butadiene                    | 39  | 1.930        | 1.930            | 0.000            | 90  | 214248   | 75.0          | 75.4            |       |
| 15 Bromomethane                 | 94  | 2.228        | 2.228            | 0.000            | 89  | 123705   | 75.0          | 75.6            |       |
| 16 Chloroethane                 | 64  | 2.374        | 2.374            | 0.000            | 99  | 159781   | 75.0          | 77.2            |       |
| 17 Dichlorofluoromethane        | 67  | 2.654        | 2.654            | 0.000            | 99  | 372545   | 75.0          | 77.4            |       |
| 18 Trichlorofluoromethane       | 101 | 2.678        | 2.678            | 0.000            | 84  | 296881   | 75.0          | 77.3            |       |
| 20 Ethyl ether                  | 59  | 3.043        | 3.043            | 0.000            | 89  | 202583   | 75.0          | 74.4            |       |
| 21 Acrolein                     | 56  | 3.213        | 3.213            | 0.000            | 99  | 52894    | 175.0         | 178.1           |       |
| 22 1,1-Dichloroethene           | 96  | 3.341        | 3.341            | 0.000            | 96  | 180424   | 75.0          | 76.0            |       |
| 23 1,1,2-Trichloro-1,2,2-trif   | 101 | 3.402        | 3.402            | 0.000            | 96  | 188852   | 75.0          | 75.4            |       |
| 24 Acetone                      | 43  | 3.432        | 3.432            | 0.000            | 99  | 117975   | 150.0         | 141.4           |       |
| 25 Iodomethane                  | 142 | 3.530        | 3.530            | 0.000            | 99  | 243211   | 75.0          | 76.3            |       |
| 26 Carbon disulfide             | 76  | 3.633        | 3.633            | 0.000            | 100 | 461167   | 75.0          | 75.0            |       |
| 29 3-Chloro-1-propene           | 76  | 3.913        | 3.913            | 0.000            | 89  | 98190    | 75.0          | 73.4            |       |
| 30 Methyl acetate               | 43  | 3.925        | 3.925            | 0.000            | 97  | 732698   | 375.0         | 374.5           |       |
| 31 Methylene Chloride           | 84  | 4.132        | 4.132            | 0.000            | 93  | 238130   | 75.0          | 74.9            |       |
| 32 2-Methyl-2-propanol          | 59  | 4.369        | 4.369            | 0.000            | 92  | 141735   | 750.0         | 740.2           |       |
| 33 Acrylonitrile                | 53  | 4.497        | 4.497            | 0.000            | 99  | 737397   | 750.0         | 747.7           |       |
| 34 trans-1,2-Dichloroethene     | 96  | 4.564        | 4.564            | 0.000            | 71  | 208665   | 75.0          | 76.2            |       |
| 35 Methyl tert-butyl ether      | 73  | 4.576        | 4.576            | 0.000            | 97  | 621185   | 75.0          | 75.7            |       |

| Compound                       | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 36 Hexane                      | 57  | 4.990     | 4.990         | 0.000         | 94 | 278592   | 75.0       | 75.0         |       |
| 37 1,1-Dichloroethane          | 63  | 5.196     | 5.196         | 0.000         | 97 | 371113   | 75.0       | 75.7         |       |
| 38 Vinyl acetate               | 43  | 5.239     | 5.239         | 0.000         | 98 | 295714   | 75.0       | 74.7         |       |
| 43 cis-1,2-Dichloroethene      | 96  | 5.939     | 5.939         | 0.000         | 85 | 223081   | 75.0       | 74.9         |       |
| 44 2-Butanone (MEK)            | 43  | 5.945     | 5.945         | 0.000         | 61 | 180292   | 150.0      | 158.3        |       |
| 42 2,2-Dichloropropane         | 77  | 5.945     | 5.945         | 0.000         | 61 | 186450   | 75.0       | 75.2         |       |
| 48 Chlorobromomethane          | 128 | 6.225     | 6.225         | 0.000         | 97 | 88252    | 75.0       | 73.7         |       |
| 49 Tetrahydrofuran             | 42  | 6.237     | 6.237         | 0.000         | 85 | 117489   | 150.0      | 153.2        |       |
| 50 Chloroform                  | 83  | 6.371     | 6.371         | 0.000         | 96 | 370042   | 75.0       | 76.0         |       |
| 51 1,1,1-Trichloroethane       | 97  | 6.541     | 6.541         | 0.000         | 97 | 278390   | 75.0       | 77.4         |       |
| 52 Cyclohexane                 | 56  | 6.620     | 6.620         | 0.000         | 91 | 359010   | 75.0       | 77.9         |       |
| 53 Carbon tetrachloride        | 117 | 6.717     | 6.717         | 0.000         | 97 | 195436   | 75.0       | 76.9         |       |
| 54 1,1-Dichloropropene         | 75  | 6.730     | 6.730         | 0.000         | 95 | 301319   | 75.0       | 77.9         |       |
| 55 Isobutyl alcohol            | 41  | 6.900     | 6.900         | 0.000         | 90 | 122452   | 1875.0     | 1794.8       |       |
| 56 Benzene                     | 78  | 6.942     | 6.942         | 0.000         | 97 | 839117   | 75.0       | 76.3         |       |
| 57 1,2-Dichloroethane          | 62  | 7.015     | 7.015         | 0.000         | 99 | 335915   | 75.0       | 75.9         |       |
| 59 n-Heptane                   | 43  | 7.307     | 7.307         | 0.000         | 88 | 231524   | 75.0       | 77.5         |       |
| 61 Trichloroethene             | 130 | 7.679     | 7.679         | 0.000         | 92 | 177868   | 75.0       | 77.6         |       |
| 63 Methylcyclohexane           | 83  | 7.922     | 7.922         | 0.000         | 91 | 355558   | 75.0       | 76.4         |       |
| 64 1,2-Dichloropropane         | 63  | 7.952     | 7.952         | 0.000         | 94 | 199527   | 75.0       | 76.0         |       |
| 65 1,4-Dioxane                 | 88  | 8.031     | 8.031         | 0.000         | 40 | 36545    | 1500.0     | 1410.1       |       |
| 67 Dibromomethane              | 93  | 8.037     | 8.037         | 0.000         | 90 | 121844   | 75.0       | 76.4         |       |
| 68 Dichlorobromomethane        | 83  | 8.226     | 8.226         | 0.000         | 98 | 230314   | 75.0       | 76.9         |       |
| 71 cis-1,3-Dichloropropene     | 75  | 8.676     | 8.676         | 0.000         | 93 | 254907   | 75.0       | 77.5         |       |
| 72 4-Methyl-2-pentanone (MIBK) | 43  | 8.822     | 8.822         | 0.000         | 94 | 330779   | 150.0      | 153.9        |       |
| 73 Toluene                     | 91  | 9.011     | 9.011         | 0.000         | 98 | 847209   | 75.0       | 78.5         |       |
| 74 trans-1,3-Dichloropropene   | 75  | 9.254     | 9.254         | 0.000         | 97 | 221914   | 75.0       | 81.0         |       |
| 75 Ethyl methacrylate          | 69  | 9.315     | 9.315         | 0.000         | 88 | 231048   | 75.0       | 79.4         |       |
| 76 1,1,2-Trichloroethane       | 97  | 9.449     | 9.449         | 0.000         | 95 | 172158   | 75.0       | 77.1         |       |
| 77 Tetrachloroethene           | 164 | 9.528     | 9.528         | 0.000         | 94 | 142949   | 75.0       | 77.7         |       |
| 78 1,3-Dichloropropane         | 76  | 9.607     | 9.607         | 0.000         | 92 | 320167   | 75.0       | 77.7         |       |
| 79 2-Hexanone                  | 43  | 9.656     | 9.656         | 0.000         | 96 | 219895   | 150.0      | 155.8        |       |
| 81 Chlorodibromomethane        | 129 | 9.826     | 9.826         | 0.000         | 89 | 123420   | 75.0       | 81.0         |       |
| 82 Ethylene Dibromide          | 107 | 9.936     | 9.936         | 0.000         | 97 | 153351   | 75.0       | 77.7         |       |
| 83 3-Chlorobenzotrifluoride    | 180 | 10.392    | 10.392        | 0.000         | 91 | 262608   | 75.0       | 76.0         |       |
| 84 Chlorobenzene               | 112 | 10.428    | 10.428        | 0.000         | 91 | 513514   | 75.0       | 77.4         |       |
| 85 4-Chlorobenzotrifluoride    | 180 | 10.483    | 10.483        | 0.000         | 96 | 245021   | 75.0       | 76.5         |       |
| 86 1,1,1,2-Tetrachloroethane   | 131 | 10.520    | 10.520        | 0.000         | 87 | 138964   | 75.0       | 76.5         |       |
| 87 Ethylbenzene                | 106 | 10.526    | 10.526        | 0.000         | 99 | 288675   | 75.0       | 77.2         |       |
| 88 m-Xylene & p-Xylene         | 106 | 10.659    | 10.659        | 0.000         | 99 | 360561   | 75.0       | 77.7         |       |
| 89 o-Xylene                    | 106 | 11.037    | 11.037        | 0.000         | 98 | 364838   | 75.0       | 78.5         |       |
| 90 Styrene                     | 104 | 11.061    | 11.061        | 0.000         | 94 | 568513   | 75.0       | 79.7         |       |
| 91 Bromoform                   | 173 | 11.243    | 11.243        | 0.000         | 93 | 60348    | 75.0       | 74.2         |       |
| 92 2-Chlorobenzotrifluoride    | 180 | 11.304    | 11.304        | 0.000         | 96 | 274773   | 75.0       | 77.7         |       |
| 93 Isopropylbenzene            | 105 | 11.408    | 11.408        | 0.000         | 98 | 897341   | 75.0       | 80.7         |       |
| 96 1,1,2,2-Tetrachloroethane   | 83  | 11.712    | 11.712        | 0.000         | 97 | 227964   | 75.0       | 76.4         |       |
| 95 Bromobenzene                | 156 | 11.724    | 11.724        | 0.000         | 97 | 203181   | 75.0       | 75.6         |       |
| 97 trans-1,4-Dichloro-2-buten  | 53  | 11.748    | 11.748        | 0.000         | 68 | 61474    | 75.0       | 72.1         |       |
| 98 1,2,3-Trichloropropane      | 110 | 11.773    | 11.773        | 0.000         | 86 | 75371    | 75.0       | 73.7         |       |
| 99 N-Propylbenzene             | 120 | 11.827    | 11.827        | 0.000         | 99 | 238465   | 75.0       | 77.0         |       |
| 100 2-Chlorotoluene            | 126 | 11.913    | 11.913        | 0.000         | 93 | 197431   | 75.0       | 76.8         |       |
| 101 3-Chlorotoluene            | 126 | 11.980    | 11.980        | 0.000         | 97 | 203636   | 75.0       | 75.4         |       |

| Compound                         | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|----------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 102 1,3,5-Trimethylbenzene       | 105 | 12.010    | 12.010        | 0.000         | 92 | 796704   | 75.0       | 79.1         |       |
| 103 4-Chlorotoluene              | 126 | 12.034    | 12.034        | 0.000         | 99 | 208897   | 75.0       | 76.9         |       |
| 104 tert-Butylbenzene            | 119 | 12.320    | 12.320        | 0.000         | 91 | 633351   | 75.0       | 79.6         |       |
| 106 1,2,4-Trimethylbenzene       | 105 | 12.381    | 12.381        | 0.000         | 99 | 824147   | 75.0       | 80.1         |       |
| 107 1,2-dichloro-4-(trifluorom   | 214 | 12.418    | 12.418        | 0.000         | 96 | 221955   | 75.0       | 76.1         |       |
| 108 sec-Butylbenzene             | 105 | 12.545    | 12.545        | 0.000         | 96 | 958306   | 75.0       | 80.7         |       |
| 109 1,3-Dichlorobenzene          | 146 | 12.667    | 12.667        | 0.000         | 93 | 397446   | 75.0       | 75.7         |       |
| 110 4-Isopropyltoluene           | 119 | 12.703    | 12.703        | 0.000         | 96 | 804039   | 75.0       | 80.7         |       |
| 111 1,4-Dichlorobenzene          | 146 | 12.770    | 12.770        | 0.000         | 92 | 407678   | 75.0       | 75.9         |       |
| 113 2,4-Dichloro-1-(trifluorom   | 214 | 12.789    | 12.789        | 0.000         | 95 | 211084   | 75.0       | 72.8         |       |
| 114 2,5-Dichlorobenzotrifluori   | 214 | 12.831    | 12.831        | 0.000         | 99 | 249633   | 75.0       | 77.0         |       |
| 116 n-Butylbenzene               | 91  | 13.111    | 13.111        | 0.000         | 98 | 791496   | 75.0       | 79.6         |       |
| 117 1,2-Dichlorobenzene          | 146 | 13.123    | 13.123        | 0.000         | 90 | 400593   | 75.0       | 75.6         |       |
| 118 1,2-Dibromo-3-Chloropropan   | 75  | 13.914    | 13.920        | -0.006        | 70 | 36339    | 75.0       | 74.7         |       |
| 119 2,4- & 2,5- & 2,6- Dichlor   | 125 | 14.060    | 14.060        | 0.000         | 98 | 1076776  | 225.0      | 233.3        |       |
| 121 2,3- & 3,4- Dichlorotoluen   | 125 | 14.474    | 14.474        | 0.000         | 98 | 792789   | 150.0      | 155.7        |       |
| 122 1,2,4-Trichlorobenzene       | 180 | 14.741    | 14.741        | 0.000         | 92 | 309817   | 75.0       | 75.4         |       |
| 123 Hexachlorobutadiene          | 225 | 14.887    | 14.887        | 0.000         | 96 | 122376   | 75.0       | 75.6         |       |
| 124 Naphthalene                  | 128 | 15.003    | 15.003        | 0.000         | 99 | 654694   | 75.0       | 78.9         |       |
| 125 1,2,3-Trichlorobenzene       | 180 | 15.228    | 15.228        | 0.000         | 93 | 286920   | 75.0       | 74.6         |       |
| 126 2,4,5-Trichlorotoluene       | 159 | 16.007    | 16.007        | 0.000         | 0  | 198517   | 75.0       | 76.9         |       |
| 127 2,3,6-Trichlorotoluene       | 159 | 16.110    | 16.110        | 0.000         | 93 | 186087   | 75.0       | 76.0         |       |
| 143 2,5-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 147 2,6-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 144 2,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 145 2,3-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 146 3,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| S 130 1,2-Dichloroethene, Total  | 96  |           |               |               | 0  |          | 150.0      | 151.1        |       |
| S 131 Xylenes, Total             | 106 |           |               |               | 0  |          | 150.0      | 156.2        |       |
| S 132 1,3-Dichloropropene, Total | 1   |           |               |               | 0  |          | 150.0      | 158.5        |       |

### QC Flag Legend

#### Processing Flags

ND - Not Detected or Marked ND

### Reagents:

|                     |                    |           |             |
|---------------------|--------------------|-----------|-------------|
| VOA8260SURR_00039   | Amount Added: 3.00 | Units: uL |             |
| voaWket1Reste_00001 | Amount Added: 3.00 | Units: uL |             |
| voaWeemix1Res_00001 | Amount Added: 3.00 | Units: uL |             |
| voaWVA1st Res_00003 | Amount Added: 3.00 | Units: uL |             |
| VOA8260VOAPRI_00134 | Amount Added: 3.00 | Units: uL |             |
| voaWAcro2nd R_00006 | Amount Added: 7.00 | Units: uL |             |
| VOA8260INT_00039    | Amount Added: 2.00 | Units: uL | Run Reagent |

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731006.D

Injection Date: 31-Jul-2015 14:49:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: IC VSTD15

Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL

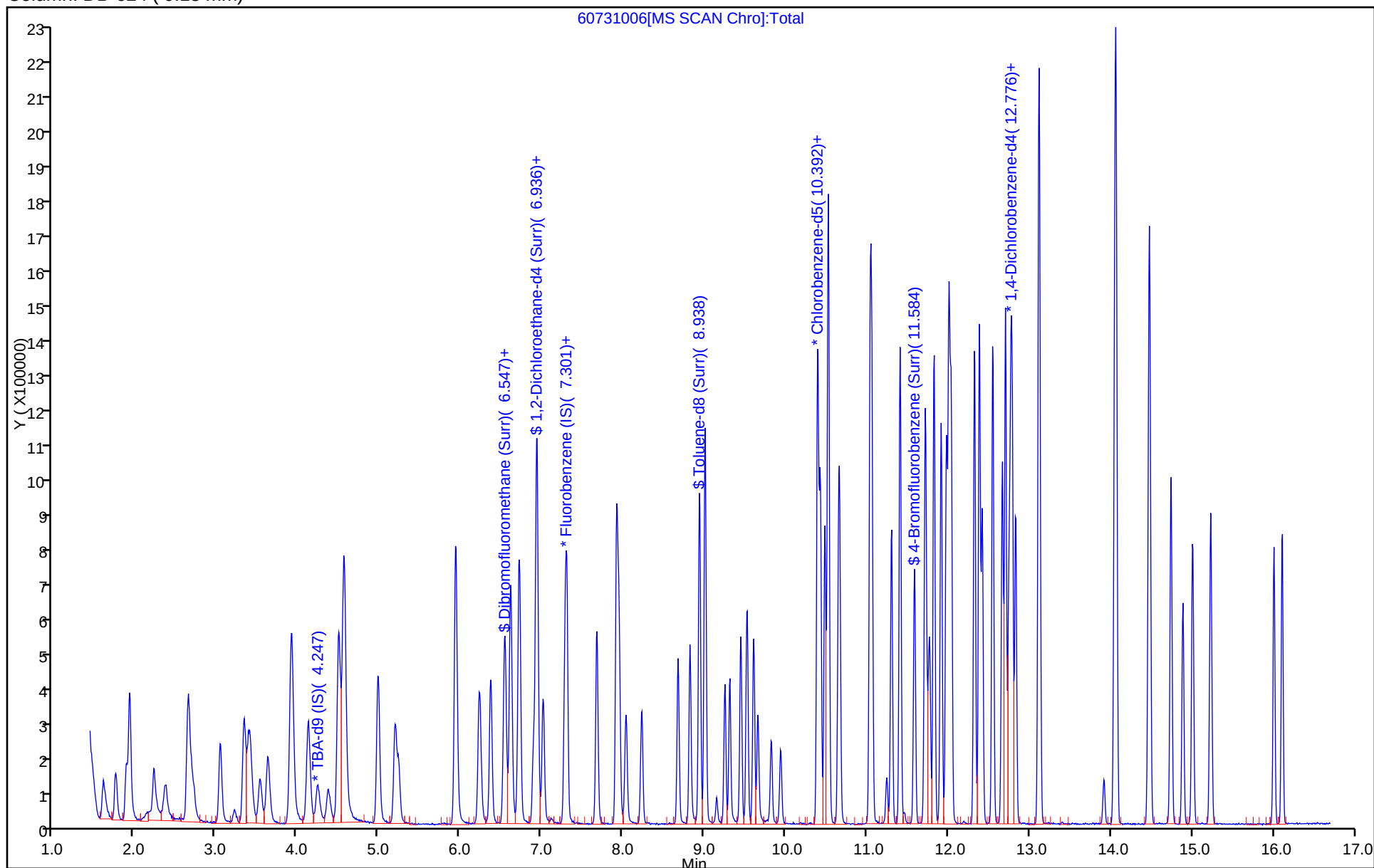
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: MSVOA\_LL\_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731007.D  
 Lims ID: IC VSTD20  
 Client ID:  
 Sample Type: IC Calib Level: 5  
 Inject. Date: 31-Jul-2015 15:13:30 ALS Bottle#: 7 Worklist Smp#: 7  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: IC VSTD20  
 Misc. Info.: 180-0007999-007  
 Operator ID: 001562 Instrument ID: CHHP6  
 Sublist: chrom-MSVOA\_LL\_CHHP6\*sub5  
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\MSVOA\_LL\_CHHP6.m  
 Limit Group: VOA 8260C ICAL  
 Last Update: 03-Aug-2015 12:15:51 Calib Date: 31-Jul-2015 18:02:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731014.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: XAWRK049

First Level Reviewer: fergusond

Date: 03-Aug-2015 10:27:52

| Compound                        | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q   | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|---------------------------------|-----|--------------|------------------|------------------|-----|----------|---------------|-----------------|-------|
| * 1 TBA-d9 (IS)                 | 65  | 4.241        | 4.247            | -0.006           | 92  | 168874   | 1000.0        | 1000.0          |       |
| * 2 Fluorobenzene (IS)          | 96  | 7.283        | 7.289            | -0.006           | 98  | 482403   | 50.0          | 50.0            |       |
| * 3 Chlorobenzene-d5            | 119 | 10.398       | 10.398           | 0.000            | 91  | 110045   | 50.0          | 50.0            |       |
| * 4 1,4-Dichlorobenzene-d4      | 152 | 12.746       | 12.746           | 0.000            | 94  | 171338   | 50.0          | 50.0            |       |
| \$ 5 Dibromofluoromethane (Surr | 113 | 6.553        | 6.553            | 0.000            | 93  | 221245   | 100.0         | 99.6            |       |
| \$ 6 1,2-Dichloroethane-d4 (Sur | 65  | 6.930        | 6.930            | 0.000            | 70  | 353626   | 100.0         | 98.6            |       |
| \$ 7 Toluene-d8 (Surr)          | 98  | 8.938        | 8.938            | 0.000            | 95  | 864751   | 100.0         | 99.6            |       |
| \$ 8 4-Bromofluorobenzene (Surr | 95  | 11.584       | 11.584           | 0.000            | 81  | 371000   | 100.0         | 96.3            |       |
| 11 Dichlorodifluoromethane      | 85  | 1.607        | 1.607            | 0.000            | 100 | 316945   | 100.0         | 94.9            |       |
| 12 Chloromethane                | 50  | 1.759        | 1.759            | 0.000            | 99  | 278884   | 100.0         | 96.9            |       |
| 13 Vinyl chloride               | 62  | 1.887        | 1.893            | -0.006           | 99  | 292173   | 100.0         | 94.2            |       |
| 14 Butadiene                    | 39  | 1.930        | 1.930            | 0.000            | 90  | 274693   | 100.0         | 94.5            |       |
| 15 Bromomethane                 | 94  | 2.234        | 2.228            | 0.006            | 91  | 158589   | 100.0         | 94.7            |       |
| 16 Chloroethane                 | 64  | 2.368        | 2.374            | -0.006           | 99  | 198857   | 100.0         | 93.9            |       |
| 17 Dichlorofluoromethane        | 67  | 2.647        | 2.654            | -0.007           | 98  | 463283   | 100.0         | 94.0            |       |
| 18 Trichlorofluoromethane       | 101 | 2.672        | 2.678            | -0.006           | 99  | 367084   | 100.0         | 93.4            |       |
| 20 Ethyl ether                  | 59  | 3.043        | 3.043            | 0.000            | 90  | 269465   | 100.0         | 96.8            |       |
| 21 Acrolein                     | 56  | 3.219        | 3.213            | 0.006            | 98  | 54177    | 200.0         | 178.4           |       |
| 22 1,1-Dichloroethene           | 96  | 3.335        | 3.341            | -0.006           | 96  | 234083   | 100.0         | 96.4            |       |
| 23 1,1,2-Trichloro-1,2,2-trif   | 101 | 3.396        | 3.402            | -0.006           | 96  | 241359   | 100.0         | 94.2            |       |
| 24 Acetone                      | 43  | 3.426        | 3.432            | -0.006           | 99  | 166807   | 200.0         | 195.5           |       |
| 25 Iodomethane                  | 142 | 3.536        | 3.530            | 0.006            | 98  | 318736   | 100.0         | 97.8            |       |
| 26 Carbon disulfide             | 76  | 3.633        | 3.633            | 0.000            | 100 | 618168   | 100.0         | 98.2            |       |
| 29 3-Chloro-1-propene           | 76  | 3.907        | 3.913            | -0.006           | 88  | 135273   | 100.0         | 98.8            |       |
| 30 Methyl acetate               | 43  | 3.925        | 3.925            | 0.000            | 97  | 982363   | 500.0         | 490.9           |       |
| 31 Methylene Chloride           | 84  | 4.132        | 4.132            | 0.000            | 92  | 313904   | 100.0         | 98.1            |       |
| 32 2-Methyl-2-propanol          | 59  | 4.369        | 4.369            | 0.000            | 92  | 198055   | 1000.0        | 1042.2          |       |
| 33 Acrylonitrile                | 53  | 4.503        | 4.497            | 0.006            | 99  | 994141   | 1000.0        | 985.4           |       |
| 34 trans-1,2-Dichloroethene     | 96  | 4.564        | 4.564            | 0.000            | 97  | 267617   | 100.0         | 95.5            |       |
| 35 Methyl tert-butyl ether      | 73  | 4.576        | 4.576            | 0.000            | 97  | 825760   | 100.0         | 98.3            |       |

| Compound                       | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q   | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|-----|----------|------------|--------------|-------|
| 36 Hexane                      | 57  | 4.983     | 4.990         | -0.007        | 93  | 352983   | 100.0      | 93.0         |       |
| 37 1,1-Dichloroethane          | 63  | 5.196     | 5.196         | 0.000         | 97  | 490563   | 100.0      | 97.8         |       |
| 38 Vinyl acetate               | 43  | 5.239     | 5.239         | 0.000         | 97  | 412541   | 100.0      | 101.9        |       |
| 43 cis-1,2-Dichloroethene      | 96  | 5.945     | 5.939         | 0.006         | 85  | 295290   | 100.0      | 96.9         |       |
| 44 2-Butanone (MEK)            | 43  | 5.945     | 5.945         | 0.000         | 60  | 231667   | 200.0      | 198.9        |       |
| 42 2,2-Dichloropropane         | 77  | 5.945     | 5.945         | 0.000         | 62  | 250901   | 100.0      | 98.9         |       |
| 48 Chlorobromomethane          | 128 | 6.231     | 6.225         | 0.006         | 97  | 118290   | 100.0      | 96.6         |       |
| 49 Tetrahydrofuran             | 42  | 6.249     | 6.237         | 0.012         | 85  | 154776   | 200.0      | 197.3        |       |
| 50 Chloroform                  | 83  | 6.370     | 6.371         | -0.001        | 96  | 484585   | 100.0      | 97.3         |       |
| 51 1,1,1-Trichloroethane       | 97  | 6.535     | 6.541         | -0.006        | 98  | 366376   | 100.0      | 99.6         |       |
| 52 Cyclohexane                 | 56  | 6.614     | 6.620         | -0.006        | 92  | 445084   | 100.0      | 94.4         |       |
| 53 Carbon tetrachloride        | 117 | 6.717     | 6.717         | 0.000         | 98  | 252588   | 100.0      | 97.2         |       |
| 54 1,1-Dichloropropene         | 75  | 6.729     | 6.730         | -0.001        | 94  | 392146   | 100.0      | 99.1         |       |
| 55 Isobutyl alcohol            | 41  | 6.900     | 6.900         | 0.000         | 92  | 178080   | 2500.0     | 2551.6       |       |
| 56 Benzene                     | 78  | 6.942     | 6.942         | 0.000         | 98  | 1096030  | 100.0      | 97.5         |       |
| 57 1,2-Dichloroethane          | 62  | 7.015     | 7.015         | 0.000         | 99  | 440984   | 100.0      | 97.4         |       |
| 59 n-Heptane                   | 43  | 7.307     | 7.307         | 0.000         | 85  | 290327   | 100.0      | 95.0         |       |
| 61 Trichloroethene             | 130 | 7.678     | 7.679         | -0.001        | 93  | 230554   | 100.0      | 98.3         |       |
| 63 Methylcyclohexane           | 83  | 7.922     | 7.922         | 0.000         | 91  | 455180   | 100.0      | 95.7         |       |
| 64 1,2-Dichloropropane         | 63  | 7.952     | 7.952         | 0.000         | 94  | 267345   | 100.0      | 99.5         |       |
| 65 1,4-Dioxane                 | 88  | 8.031     | 8.031         | 0.000         | 41  | 54577    | 2000.0     | 2058.6       | M     |
| 67 Dibromomethane              | 93  | 8.037     | 8.037         | 0.000         | 92  | 163719   | 100.0      | 100.4        |       |
| 68 Dichlorobromomethane        | 83  | 8.232     | 8.226         | 0.006         | 99  | 311750   | 100.0      | 101.7        |       |
| 71 cis-1,3-Dichloropropene     | 75  | 8.676     | 8.676         | 0.000         | 93  | 358605   | 100.0      | 106.5        |       |
| 72 4-Methyl-2-pentanone (MIBK) | 43  | 8.822     | 8.822         | 0.000         | 95  | 452681   | 200.0      | 200.1        |       |
| 73 Toluene                     | 91  | 9.011     | 9.011         | 0.000         | 98  | 1104648  | 100.0      | 97.3         |       |
| 74 trans-1,3-Dichloropropene   | 75  | 9.254     | 9.254         | 0.000         | 97  | 303226   | 100.0      | 105.2        |       |
| 75 Ethyl methacrylate          | 69  | 9.315     | 9.315         | 0.000         | 88  | 326852   | 100.0      | 106.8        |       |
| 76 1,1,2-Trichloroethane       | 97  | 9.449     | 9.449         | 0.000         | 95  | 224945   | 100.0      | 95.8         |       |
| 77 Tetrachloroethene           | 164 | 9.528     | 9.528         | 0.000         | 94  | 183568   | 100.0      | 94.8         |       |
| 78 1,3-Dichloropropane         | 76  | 9.607     | 9.607         | 0.000         | 92  | 425660   | 100.0      | 98.1         |       |
| 79 2-Hexanone                  | 43  | 9.656     | 9.656         | 0.000         | 95  | 302805   | 200.0      | 203.8        |       |
| 81 Chlorodibromomethane        | 129 | 9.826     | 9.826         | 0.000         | 90  | 163175   | 100.0      | 101.8        |       |
| 82 Ethylene Dibromide          | 107 | 9.941     | 9.936         | 0.005         | 96  | 211303   | 100.0      | 101.7        |       |
| 83 3-Chlorobenzotrifluoride    | 180 | 10.392    | 10.392        | 0.000         | 91  | 340769   | 100.0      | 93.7         |       |
| 84 Chlorobenzene               | 112 | 10.428    | 10.428        | 0.000         | 91  | 676590   | 100.0      | 96.9         |       |
| 85 4-Chlorobenzotrifluoride    | 180 | 10.483    | 10.483        | 0.000         | 96  | 315960   | 100.0      | 93.8         |       |
| 86 1,1,1,2-Tetrachloroethane   | 131 | 10.525    | 10.520        | 0.005         | 88  | 192497   | 100.0      | 100.6        |       |
| 87 Ethylbenzene                | 106 | 10.525    | 10.526        | -0.001        | 99  | 383099   | 100.0      | 97.3         |       |
| 88 m-Xylene & p-Xylene         | 106 | 10.659    | 10.659        | 0.000         | 100 | 480587   | 100.0      | 98.4         |       |
| 89 o-Xylene                    | 106 | 11.036    | 11.037        | -0.001        | 98  | 484093   | 100.0      | 99.0         |       |
| 90 Styrene                     | 104 | 11.061    | 11.061        | 0.000         | 94  | 752806   | 100.0      | 100.3        |       |
| 91 Bromoform                   | 173 | 11.243    | 11.243        | 0.000         | 93  | 85498    | 100.0      | 99.9         |       |
| 92 2-Chlorobenzotrifluoride    | 180 | 11.304    | 11.304        | 0.000         | 93  | 350232   | 100.0      | 94.1         |       |
| 93 Isopropylbenzene            | 105 | 11.408    | 11.408        | 0.000         | 98  | 1146617  | 100.0      | 98.0         |       |
| 96 1,1,2,2-Tetrachloroethane   | 83  | 11.718    | 11.712        | 0.006         | 96  | 304710   | 100.0      | 97.0         |       |
| 95 Bromobenzene                | 156 | 11.724    | 11.724        | 0.000         | 97  | 276525   | 100.0      | 100.4        |       |
| 97 trans-1,4-Dichloro-2-buten  | 53  | 11.748    | 11.748        | 0.000         | 80  | 87362    | 100.0      | 100.0        |       |
| 98 1,2,3-Trichloropropane      | 110 | 11.773    | 11.773        | 0.000         | 86  | 102213   | 100.0      | 97.6         |       |
| 99 N-Propylbenzene             | 120 | 11.827    | 11.827        | 0.000         | 98  | 317924   | 100.0      | 100.2        |       |
| 100 2-Chlorotoluene            | 126 | 11.913    | 11.913        | -0.001        | 93  | 265955   | 100.0      | 101.0        |       |
| 101 3-Chlorotoluene            | 126 | 11.979    | 11.980        | -0.001        | 97  | 282386   | 100.0      | 102.1        |       |



| Compound                         | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q   | Response | Cal Amt ng | OnCol Amt ng | Flags |
|----------------------------------|-----|-----------|---------------|---------------|-----|----------|------------|--------------|-------|
| 102 1,3,5-Trimethylbenzene       | 105 | 12.010    | 12.010        | 0.000         | 94  | 1031152  | 100.0      | 100.0        |       |
| 103 4-Chlorotoluene              | 126 | 12.034    | 12.034        | 0.000         | 100 | 278435   | 100.0      | 100.1        |       |
| 104 tert-Butylbenzene            | 119 | 12.326    | 12.320        | 0.006         | 91  | 820194   | 100.0      | 100.6        |       |
| 106 1,2,4-Trimethylbenzene       | 105 | 12.381    | 12.381        | 0.000         | 99  | 1075766  | 100.0      | 102.0        |       |
| 107 1,2-dichloro-4-(trifluorom   | 214 | 12.417    | 12.418        | -0.001        | 95  | 280215   | 100.0      | 93.8         |       |
| 108 sec-Butylbenzene             | 105 | 12.545    | 12.545        | 0.000         | 97  | 1226548  | 100.0      | 100.8        |       |
| 109 1,3-Dichlorobenzene          | 146 | 12.667    | 12.667        | 0.000         | 93  | 528372   | 100.0      | 98.2         |       |
| 110 4-Isopropyltoluene           | 119 | 12.703    | 12.703        | 0.000         | 95  | 1043904  | 100.0      | 102.3        |       |
| 111 1,4-Dichlorobenzene          | 146 | 12.770    | 12.770        | 0.000         | 90  | 543357   | 100.0      | 98.8         |       |
| 113 2,4-Dichloro-1-(trifluorom   | 214 | 12.789    | 12.789        | 0.000         | 97  | 297534   | 100.0      | 100.1        |       |
| 114 2,5-Dichlorobenzotrifluori   | 214 | 12.831    | 12.831        | 0.000         | 98  | 301973   | 100.0      | 91.0         |       |
| 116 n-Butylbenzene               | 91  | 13.111    | 13.111        | 0.000         | 97  | 1018212  | 100.0      | 99.9         |       |
| 117 1,2-Dichlorobenzene          | 146 | 13.123    | 13.123        | 0.000         | 92  | 525918   | 100.0      | 96.8         |       |
| 118 1,2-Dibromo-3-Chloropropan   | 75  | 13.914    | 13.920        | -0.006        | 68  | 49062    | 100.0      | 98.5         |       |
| 119 2,4- & 2,5- & 2,6- Dichlor   | 125 | 14.060    | 14.060        | 0.000         | 98  | 1401616  | 300.0      | 296.5        |       |
| 121 2,3- & 3,4- Dichlorotoluen   | 125 | 14.474    | 14.474        | 0.000         | 98  | 1039069  | 200.0      | 199.2        |       |
| 122 1,2,4-Trichlorobenzene       | 180 | 14.741    | 14.741        | 0.000         | 92  | 415442   | 100.0      | 98.7         |       |
| 123 Hexachlorobutadiene          | 225 | 14.887    | 14.887        | 0.000         | 97  | 161228   | 100.0      | 97.2         |       |
| 124 Naphthalene                  | 128 | 15.003    | 15.003        | 0.000         | 99  | 876449   | 100.0      | 103.2        |       |
| 125 1,2,3-Trichlorobenzene       | 180 | 15.228    | 15.228        | 0.000         | 92  | 385220   | 100.0      | 97.8         |       |
| 126 2,4,5-Trichlorotoluene       | 159 | 16.007    | 16.007        | 0.000         | 0   | 266093   | 100.0      | 100.6        |       |
| 127 2,3,6-Trichlorotoluene       | 159 | 16.110    | 16.110        | 0.000         | 93  | 248497   | 100.0      | 99.0         |       |
| 144 2,4-Dichlorotoluene          | 1   |           | 0.000         |               |     |          | ND         | ND           |       |
| 147 2,6-Dichlorotoluene          | 1   |           | 0.000         |               |     |          | ND         | ND           |       |
| 145 2,3-Dichlorotoluene          | 1   |           | 0.000         |               |     |          | ND         | ND           |       |
| 146 3,4-Dichlorotoluene          | 1   |           | 0.000         |               |     |          | ND         | ND           |       |
| 143 2,5-Dichlorotoluene          | 1   |           | 0.000         |               |     |          | ND         | ND           |       |
| S 130 1,2-Dichloroethene, Total  | 96  |           |               |               | 0   |          | 200.0      | 192.4        |       |
| S 131 Xylenes, Total             | 106 |           |               |               | 0   |          | 200.0      | 197.4        |       |
| S 132 1,3-Dichloropropene, Total | 1   |           |               |               | 0   |          | 200.0      | 211.7        |       |

### QC Flag Legend

#### Processing Flags

ND - Not Detected or Marked ND

#### Review Flags

M - Manually Integrated

### Reagents:

|                     |                    |           |             |
|---------------------|--------------------|-----------|-------------|
| VOA8260SURR_00039   | Amount Added: 4.00 | Units: uL |             |
| voaWket1Reste_00001 | Amount Added: 4.00 | Units: uL |             |
| voaWeemix1Res_00001 | Amount Added: 4.00 | Units: uL |             |
| voaWVA1st Res_00003 | Amount Added: 4.00 | Units: uL |             |
| VOA8260VOAPRI_00134 | Amount Added: 4.00 | Units: uL |             |
| voaWAcro2nd R_00006 | Amount Added: 8.00 | Units: uL |             |
| VOA8260INT_00039    | Amount Added: 2.00 | Units: uL | Run Reagent |

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731007.D

Injection Date: 31-Jul-2015 15:13:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: IC VSTD20

Worklist Smp#: 7

Client ID:

Purge Vol: 5.000 mL

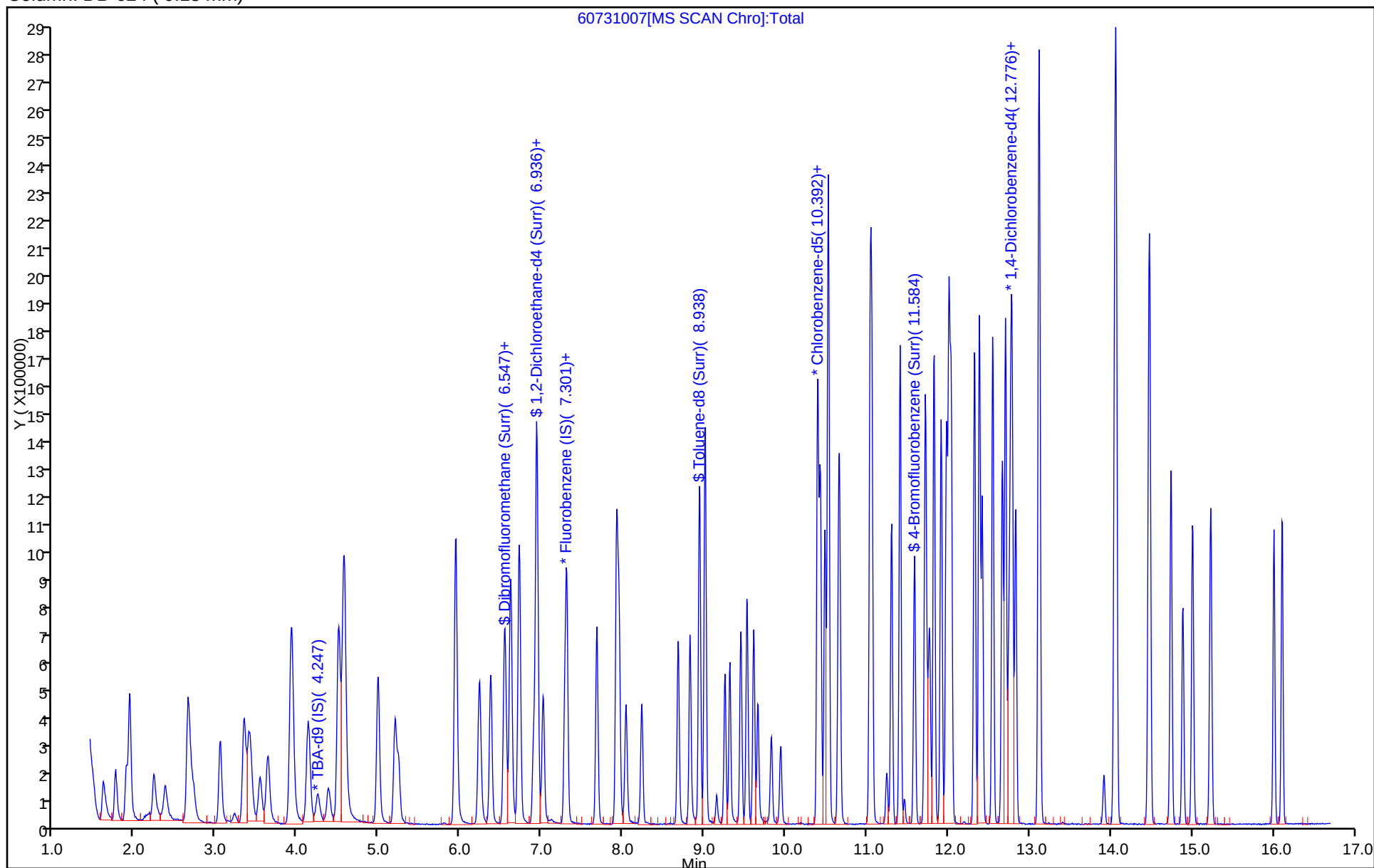
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: MSVOA\_LL\_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)





## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731007.D

Injection Date: 31-Jul-2015 15:13:30

Instrument ID: CHHP6

Lims ID: IC VSTD20

Client ID:

Operator ID: 001562

ALS Bottle#:

7

Worklist Smp#: 7

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: MSVOA\_LL\_CHHP6

Limit Group:

VOA 8260C ICAL

Column: DB-624 ( 0.18 mm)

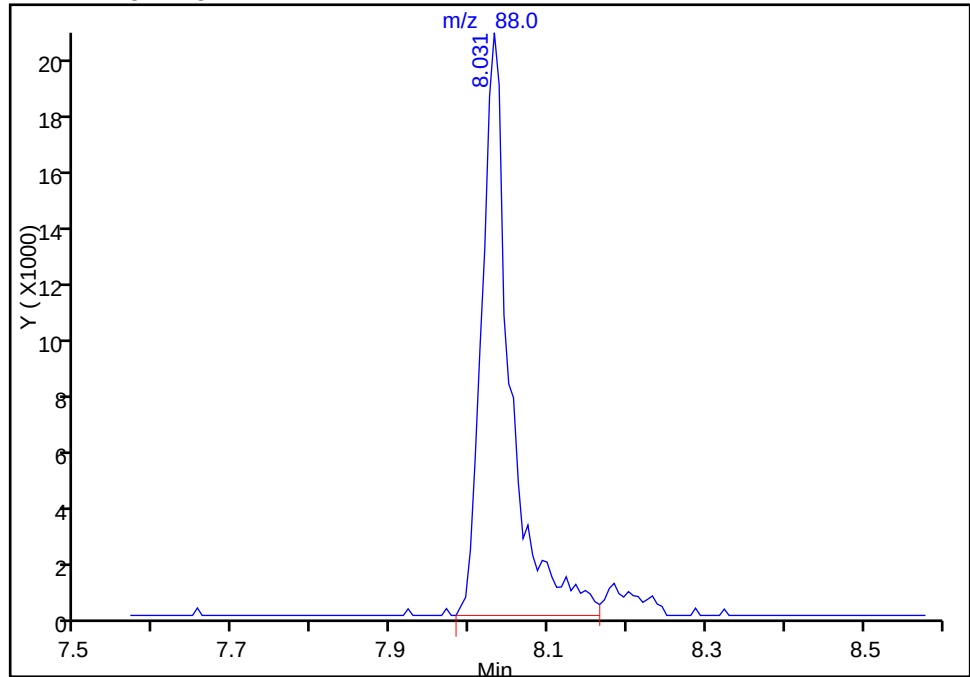
Detector

MS SCAN

## 65 1,4-Dioxane, CAS: 123-91-1

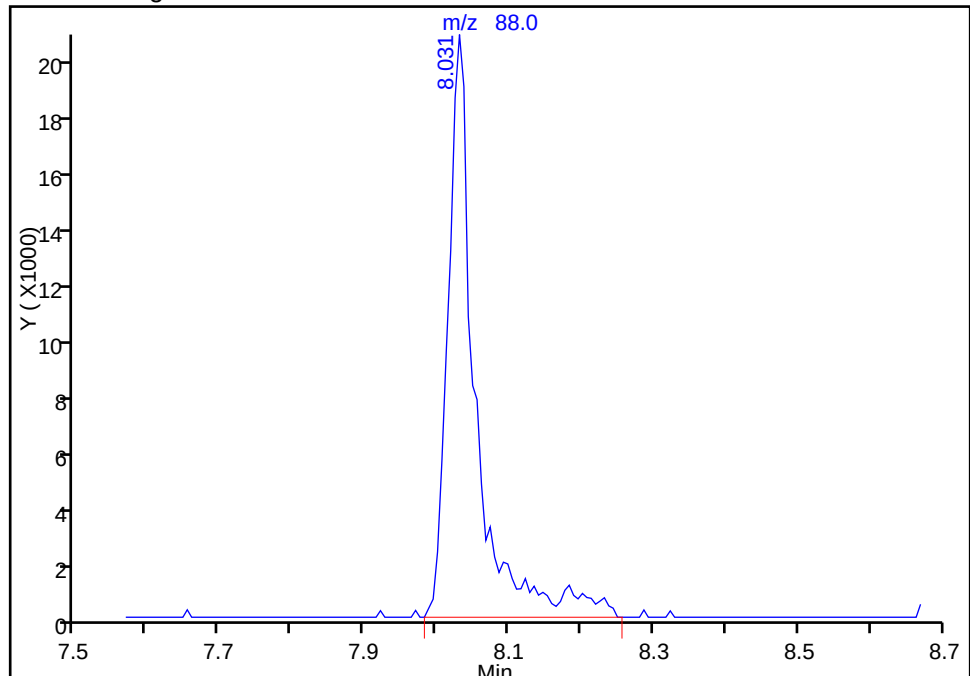
RT: 8.03  
Area: 51451  
Amount: 1915.4354  
Amount Units: ng

## Processing Integration Results



RT: 8.03  
Area: 54577  
Amount: 2058.6297  
Amount Units: ng

## Manual Integration Results



Reviewer: fergusond, 03-Aug-2015 10:27:52

Audit Action: Manually Integrated

Audit Reason: Peak Tail

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731008.D  
 Lims ID: IC VSTD35  
 Client ID:  
 Sample Type: IC Calib Level: 6  
 Inject. Date: 31-Jul-2015 15:37:30 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: IC VSTD35  
 Misc. Info.: 180-0007999-008  
 Operator ID: 001562 Instrument ID: CHHP6  
 Sublist: chrom-MSVOA\_LL\_CHHP6\*sub5  
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\MSVOA\_LL\_CHHP6.m  
 Limit Group: VOA 8260C ICAL  
 Last Update: 03-Aug-2015 12:16:01 Calib Date: 31-Jul-2015 18:02:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731014.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: XAWRK049

First Level Reviewer: fergusond

Date: 31-Jul-2015 16:23:22

| Compound                        | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q   | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|---------------------------------|-----|--------------|------------------|------------------|-----|----------|---------------|-----------------|-------|
| * 1 TBA-d9 (IS)                 | 65  | 4.254        | 4.247            | 0.007            | 92  | 191694   | 1000.0        | 1000.0          |       |
| * 2 Fluorobenzene (IS)          | 96  | 7.283        | 7.289            | -0.006           | 98  | 474812   | 50.0          | 50.0            |       |
| * 3 Chlorobenzene-d5            | 119 | 10.398       | 10.398           | 0.000            | 91  | 108350   | 50.0          | 50.0            |       |
| * 4 1,4-Dichlorobenzene-d4      | 152 | 12.746       | 12.746           | 0.000            | 96  | 164628   | 50.0          | 50.0            |       |
| \$ 5 Dibromofluoromethane (Surr | 113 | 6.553        | 6.553            | 0.000            | 92  | 378487   | 175.0         | 173.1           |       |
| \$ 6 1,2-Dichloroethane-d4 (Sur | 65  | 6.931        | 6.930            | 0.001            | 71  | 595019   | 175.0         | 168.6           |       |
| \$ 7 Toluene-d8 (Surr)          | 98  | 8.938        | 8.938            | 0.000            | 94  | 1415164  | 175.0         | 165.6           |       |
| \$ 8 4-Bromofluorobenzene (Surr | 95  | 11.584       | 11.584           | 0.000            | 80  | 645419   | 175.0         | 170.1           |       |
| 11 Dichlorodifluoromethane      | 85  | 1.601        | 1.607            | -0.006           | 99  | 575043   | 175.0         | 174.9           |       |
| 12 Chloromethane                | 50  | 1.754        | 1.759            | -0.005           | 99  | 470953   | 175.0         | 166.2           |       |
| 13 Vinyl chloride               | 62  | 1.887        | 1.893            | -0.006           | 99  | 517410   | 175.0         | 169.5           |       |
| 14 Butadiene                    | 39  | 1.924        | 1.930            | -0.006           | 90  | 483297   | 175.0         | 168.9           |       |
| 15 Bromomethane                 | 94  | 2.222        | 2.228            | -0.006           | 90  | 248522   | 175.0         | 150.8           |       |
| 16 Chloroethane                 | 64  | 2.356        | 2.374            | -0.018           | 99  | 359701   | 175.0         | 172.7           |       |
| 17 Dichlorofluoromethane        | 67  | 2.642        | 2.654            | -0.012           | 97  | 819476   | 175.0         | 169.0           |       |
| 18 Trichlorofluoromethane       | 101 | 2.654        | 2.678            | -0.024           | 76  | 664854   | 175.0         | 171.9           |       |
| 20 Ethyl ether                  | 59  | 3.043        | 3.043            | 0.000            | 89  | 458021   | 175.0         | 167.1           |       |
| 21 Acrolein                     | 56  | 3.220        | 3.213            | 0.007            | 99  | 68050    | 225.0         | 227.6           |       |
| 22 1,1-Dichloroethene           | 96  | 3.335        | 3.341            | -0.006           | 96  | 411177   | 175.0         | 172.0           |       |
| 23 1,1,2-Trichloro-1,2,2-trif   | 101 | 3.390        | 3.402            | -0.012           | 95  | 446711   | 175.0         | 177.0           |       |
| 24 Acetone                      | 43  | 3.426        | 3.432            | -0.006           | 100 | 284563   | 350.0         | 338.8           |       |
| 25 Iodomethane                  | 142 | 3.536        | 3.530            | 0.006            | 99  | 566533   | 175.0         | 176.6           |       |
| 26 Carbon disulfide             | 76  | 3.627        | 3.633            | -0.006           | 100 | 1151644  | 175.0         | 185.9           |       |
| 29 3-Chloro-1-propene           | 76  | 3.913        | 3.913            | 0.000            | 89  | 257112   | 175.0         | 190.8           |       |
| 30 Methyl acetate               | 43  | 3.925        | 3.925            | 0.000            | 96  | 1680300  | 875.0         | 853.1           |       |
| 31 Methylene Chloride           | 84  | 4.132        | 4.132            | 0.000            | 91  | 527474   | 175.0         | 171.5           |       |
| 32 2-Methyl-2-propanol          | 59  | 4.382        | 4.369            | 0.013            | 93  | 354063   | 1750.0        | 1641.3          |       |
| 33 Acrylonitrile                | 53  | 4.503        | 4.497            | 0.006            | 98  | 1745686  | 1750.0        | 1758.1          |       |
| 34 trans-1,2-Dichloroethene     | 96  | 4.558        | 4.564            | -0.006           | 98  | 479327   | 175.0         | 173.8           |       |
| 35 Methyl tert-butyl ether      | 73  | 4.570        | 4.576            | -0.006           | 97  | 1455878  | 175.0         | 176.2           |       |

| Compound                       | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 36 Hexane                      | 57  | 4.984     | 4.990         | -0.006        | 92 | 669795   | 175.0      | 179.2        |       |
| 37 1,1-Dichloroethane          | 63  | 5.191     | 5.196         | -0.005        | 97 | 861981   | 175.0      | 174.6        |       |
| 38 Vinyl acetate               | 43  | 5.239     | 5.239         | 0.000         | 97 | 744628   | 175.0      | 186.8        |       |
| 43 cis-1,2-Dichloroethene      | 96  | 5.939     | 5.939         | 0.000         | 87 | 520777   | 175.0      | 173.6        |       |
| 44 2-Butanone (MEK)            | 43  | 5.945     | 5.945         | 0.000         | 87 | 412307   | 350.0      | 359.6        |       |
| 42 2,2-Dichloropropane         | 77  | 5.945     | 5.945         | 0.000         | 79 | 484574   | 175.0      | 194.1        |       |
| 48 Chlorobromomethane          | 128 | 6.231     | 6.225         | 0.006         | 97 | 209995   | 175.0      | 174.3        |       |
| 49 Tetrahydrofuran             | 42  | 6.249     | 6.237         | 0.012         | 86 | 277489   | 350.0      | 359.4        |       |
| 50 Chloroform                  | 83  | 6.371     | 6.371         | 0.000         | 94 | 847765   | 175.0      | 173.0        |       |
| 51 1,1,1-Trichloroethane       | 97  | 6.535     | 6.541         | -0.006        | 97 | 659562   | 175.0      | 182.1        |       |
| 52 Cyclohexane                 | 56  | 6.614     | 6.620         | -0.006        | 92 | 834057   | 175.0      | 179.7        |       |
| 53 Carbon tetrachloride        | 117 | 6.718     | 6.717         | 0.001         | 97 | 479558   | 175.0      | 187.5        |       |
| 54 1,1-Dichloropropene         | 75  | 6.724     | 6.730         | -0.006        | 95 | 675711   | 175.0      | 173.5        |       |
| 55 Isobutyl alcohol            | 41  | 6.900     | 6.900         | 0.000         | 89 | 326401   | 4375.0     | 4751.5       |       |
| 56 Benzene                     | 78  | 6.943     | 6.942         | 0.001         | 98 | 1836424  | 175.0      | 166.0        |       |
| 57 1,2-Dichloroethane          | 62  | 7.016     | 7.015         | 0.001         | 98 | 746328   | 175.0      | 167.4        |       |
| 59 n-Heptane                   | 43  | 7.308     | 7.307         | 0.001         | 86 | 526126   | 175.0      | 174.9        |       |
| 61 Trichloroethene             | 130 | 7.679     | 7.679         | 0.000         | 93 | 405251   | 175.0      | 175.6        |       |
| 63 Methylcyclohexane           | 83  | 7.922     | 7.922         | 0.000         | 91 | 834543   | 175.0      | 178.2        |       |
| 64 1,2-Dichloropropane         | 63  | 7.953     | 7.952         | 0.001         | 86 | 455391   | 175.0      | 172.3        |       |
| 65 1,4-Dioxane                 | 88  | 8.032     | 8.031         | 0.001         | 47 | 98136    | 3500.0     | 3760.8       | M     |
| 67 Dibromomethane              | 93  | 8.038     | 8.037         | 0.001         | 92 | 283101   | 175.0      | 176.4        |       |
| 68 Dichlorobromomethane        | 83  | 8.226     | 8.226         | 0.000         | 98 | 551929   | 175.0      | 183.0        |       |
| 71 cis-1,3-Dichloropropene     | 75  | 8.677     | 8.676         | 0.001         | 93 | 650196   | 175.0      | 196.2        |       |
| 72 4-Methyl-2-pentanone (MIBK) | 43  | 8.823     | 8.822         | 0.001         | 93 | 808342   | 350.0      | 362.9        |       |
| 73 Toluene                     | 91  | 9.011     | 9.011         | 0.000         | 98 | 1802740  | 175.0      | 161.2        |       |
| 74 trans-1,3-Dichloropropene   | 75  | 9.254     | 9.254         | 0.000         | 96 | 565592   | 175.0      | 199.3        |       |
| 75 Ethyl methacrylate          | 69  | 9.315     | 9.315         | 0.000         | 87 | 580427   | 175.0      | 192.5        |       |
| 76 1,1,2-Trichloroethane       | 97  | 9.449     | 9.449         | 0.000         | 94 | 391776   | 175.0      | 169.4        |       |
| 77 Tetrachloroethene           | 164 | 9.528     | 9.528         | 0.000         | 95 | 319955   | 175.0      | 167.8        |       |
| 78 1,3-Dichloropropane         | 76  | 9.607     | 9.607         | 0.000         | 93 | 717566   | 175.0      | 168.0        |       |
| 79 2-Hexanone                  | 43  | 9.656     | 9.656         | 0.000         | 94 | 534519   | 350.0      | 365.4        |       |
| 81 Chlorodibromomethane        | 129 | 9.820     | 9.826         | -0.006        | 90 | 301710   | 175.0      | 191.2        |       |
| 82 Ethylene Dibromide          | 107 | 9.936     | 9.936         | 0.000         | 97 | 363449   | 175.0      | 177.6        |       |
| 83 3-Chlorobenzotrifluoride    | 180 | 10.392    | 10.392        | 0.000         | 92 | 600793   | 175.0      | 167.8        |       |
| 84 Chlorobenzene               | 112 | 10.429    | 10.428        | 0.001         | 89 | 1142353  | 175.0      | 166.2        |       |
| 85 4-Chlorobenzotrifluoride    | 180 | 10.483    | 10.483        | 0.000         | 96 | 570403   | 175.0      | 171.9        |       |
| 86 1,1,1,2-Tetrachloroethane   | 131 | 10.520    | 10.520        | 0.000         | 89 | 349368   | 175.0      | 185.5        |       |
| 87 Ethylbenzene                | 106 | 10.526    | 10.526        | 0.000         | 98 | 663577   | 175.0      | 171.2        |       |
| 88 m-Xylene & p-Xylene         | 106 | 10.660    | 10.659        | 0.001         | 99 | 823294   | 175.0      | 171.1        |       |
| 89 o-Xylene                    | 106 | 11.037    | 11.037        | 0.000         | 96 | 833629   | 175.0      | 173.2        |       |
| 90 Styrene                     | 104 | 11.061    | 11.061        | 0.000         | 92 | 1289309  | 175.0      | 174.4        |       |
| 91 Bromoform                   | 173 | 11.244    | 11.243        | 0.001         | 93 | 160966   | 175.0      | 191.1        |       |
| 92 2-Chlorobenzotrifluoride    | 180 | 11.305    | 11.304        | 0.001         | 94 | 628216   | 175.0      | 171.3        |       |
| 93 Isopropylbenzene            | 105 | 11.408    | 11.408        | 0.000         | 99 | 1921153  | 175.0      | 166.8        |       |
| 96 1,1,2,2-Tetrachloroethane   | 83  | 11.712    | 11.712        | 0.000         | 96 | 532593   | 175.0      | 172.2        |       |
| 95 Bromobenzene                | 156 | 11.724    | 11.724        | 0.000         | 98 | 459843   | 175.0      | 173.7        |       |
| 97 trans-1,4-Dichloro-2-buten  | 53  | 11.749    | 11.748        | 0.001         | 80 | 160304   | 175.0      | 191.0        |       |
| 98 1,2,3-Trichloropropane      | 110 | 11.773    | 11.773        | 0.000         | 84 | 178317   | 175.0      | 177.2        |       |
| 99 N-Propylbenzene             | 120 | 11.828    | 11.827        | 0.001         | 98 | 554932   | 175.0      | 182.1        |       |
| 100 2-Chlorotoluene            | 126 | 11.913    | 11.913        | 0.000         | 93 | 446590   | 175.0      | 176.5        |       |
| 101 3-Chlorotoluene            | 126 | 11.980    | 11.980        | 0.000         | 96 | 485130   | 175.0      | 182.5        |       |

| Compound                         | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q   | Response | Cal Amt ng | OnCol Amt ng | Flags |
|----------------------------------|-----|-----------|---------------|---------------|-----|----------|------------|--------------|-------|
| 102 1,3,5-Trimethylbenzene       | 105 | 12.010    | 12.010        | 0.000         | 93  | 1730016  | 175.0      | 174.6        |       |
| 103 4-Chlorotoluene              | 126 | 12.041    | 12.034        | 0.007         | 100 | 464650   | 175.0      | 173.8        |       |
| 104 tert-Butylbenzene            | 119 | 12.327    | 12.320        | 0.007         | 90  | 1405341  | 175.0      | 179.5        |       |
| 106 1,2,4-Trimethylbenzene       | 105 | 12.381    | 12.381        | 0.000         | 98  | 1786151  | 175.0      | 176.3        |       |
| 107 1,2-dichloro-4-(trifluorom   | 214 | 12.418    | 12.418        | 0.000         | 95  | 509173   | 175.0      | 177.4        |       |
| 108 sec-Butylbenzene             | 105 | 12.546    | 12.545        | 0.001         | 97  | 2038837  | 175.0      | 174.4        |       |
| 109 1,3-Dichlorobenzene          | 146 | 12.667    | 12.667        | 0.000         | 92  | 886632   | 175.0      | 171.5        |       |
| 110 4-Isopropyltoluene           | 119 | 12.704    | 12.703        | 0.001         | 94  | 1736569  | 175.0      | 177.1        |       |
| 111 1,4-Dichlorobenzene          | 146 | 12.771    | 12.770        | 0.001         | 92  | 902441   | 175.0      | 170.8        |       |
| 113 2,4-Dichloro-1-(trifluorom   | 214 | 12.789    | 12.789        | 0.000         | 94  | 534909   | 175.0      | 187.3        |       |
| 114 2,5-Dichlorobenzotrifluori   | 214 | 12.832    | 12.831        | 0.001         | 96  | 537191   | 175.0      | 168.4        |       |
| 116 n-Butylbenzene               | 91  | 13.111    | 13.111        | 0.000         | 97  | 1734264  | 175.0      | 177.1        |       |
| 117 1,2-Dichlorobenzene          | 146 | 13.124    | 13.123        | 0.001         | 89  | 899668   | 175.0      | 172.4        |       |
| 118 1,2-Dibromo-3-Chloropropan   | 75  | 13.914    | 13.920        | -0.006        | 71  | 96376    | 175.0      | 201.4        |       |
| 119 2,4- & 2,5- & 2,6- Dichlor   | 125 | 14.060    | 14.060        | 0.000         | 95  | 2390336  | 525.0      | 526.2        |       |
| 121 2,3- & 3,4- Dichlorotoluen   | 125 | 14.474    | 14.474        | 0.000         | 97  | 1797097  | 350.0      | 358.5        |       |
| 122 1,2,4-Trichlorobenzene       | 180 | 14.742    | 14.741        | 0.001         | 92  | 726756   | 175.0      | 179.7        |       |
| 123 Hexachlorobutadiene          | 225 | 14.888    | 14.887        | 0.001         | 97  | 290426   | 175.0      | 182.3        |       |
| 124 Naphthalene                  | 128 | 15.003    | 15.003        | 0.000         | 99  | 1550041  | 175.0      | 189.9        |       |
| 125 1,2,3-Trichlorobenzene       | 180 | 15.228    | 15.228        | 0.000         | 93  | 673533   | 175.0      | 178.0        |       |
| 126 2,4,5-Trichlorotoluene       | 159 | 16.007    | 16.007        | 0.000         | 0   | 490754   | 175.0      | 193.1        |       |
| 127 2,3,6-Trichlorotoluene       | 159 | 16.111    | 16.110        | 0.000         | 94  | 460224   | 175.0      | 190.9        |       |
| 145 2,3-Dichlorotoluene          | 1   |           | 0.000         |               |     |          | ND         | ND           |       |
| 147 2,6-Dichlorotoluene          | 1   |           | 0.000         |               |     |          | ND         | ND           |       |
| 146 3,4-Dichlorotoluene          | 1   |           | 0.000         |               |     |          | ND         | ND           |       |
| 144 2,4-Dichlorotoluene          | 1   |           | 0.000         |               |     |          | ND         | ND           |       |
| 143 2,5-Dichlorotoluene          | 1   |           | 0.000         |               |     |          | ND         | ND           |       |
| S 130 1,2-Dichloroethene, Total  | 96  |           |               |               | 0   |          | 350.0      | 347.4        |       |
| S 131 Xylenes, Total             | 106 |           |               |               | 0   |          | 350.0      | 344.3        |       |
| S 132 1,3-Dichloropropene, Total | 1   |           |               |               | 0   |          | 350.0      | 395.5        |       |

### QC Flag Legend

#### Processing Flags

ND - Not Detected or Marked ND

#### Review Flags

M - Manually Integrated

### Reagents:

|                     |                    |           |             |
|---------------------|--------------------|-----------|-------------|
| VOA8260SURR_00039   | Amount Added: 7.00 | Units: uL |             |
| voaWket1Reste_00001 | Amount Added: 7.00 | Units: uL |             |
| voaWeemix1Res_00001 | Amount Added: 7.00 | Units: uL |             |
| VOA8260VOAPRI_00134 | Amount Added: 7.00 | Units: uL |             |
| voaWVA1st Res_00003 | Amount Added: 7.00 | Units: uL |             |
| voaWAcro2nd R_00006 | Amount Added: 9.00 | Units: uL |             |
| VOA8260INT_00039    | Amount Added: 2.00 | Units: uL | Run Reagent |

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731008.D

Injection Date: 31-Jul-2015 15:37:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: IC VSTD35

Worklist Smp#: 8

Client ID:

Purge Vol: 5.000 mL

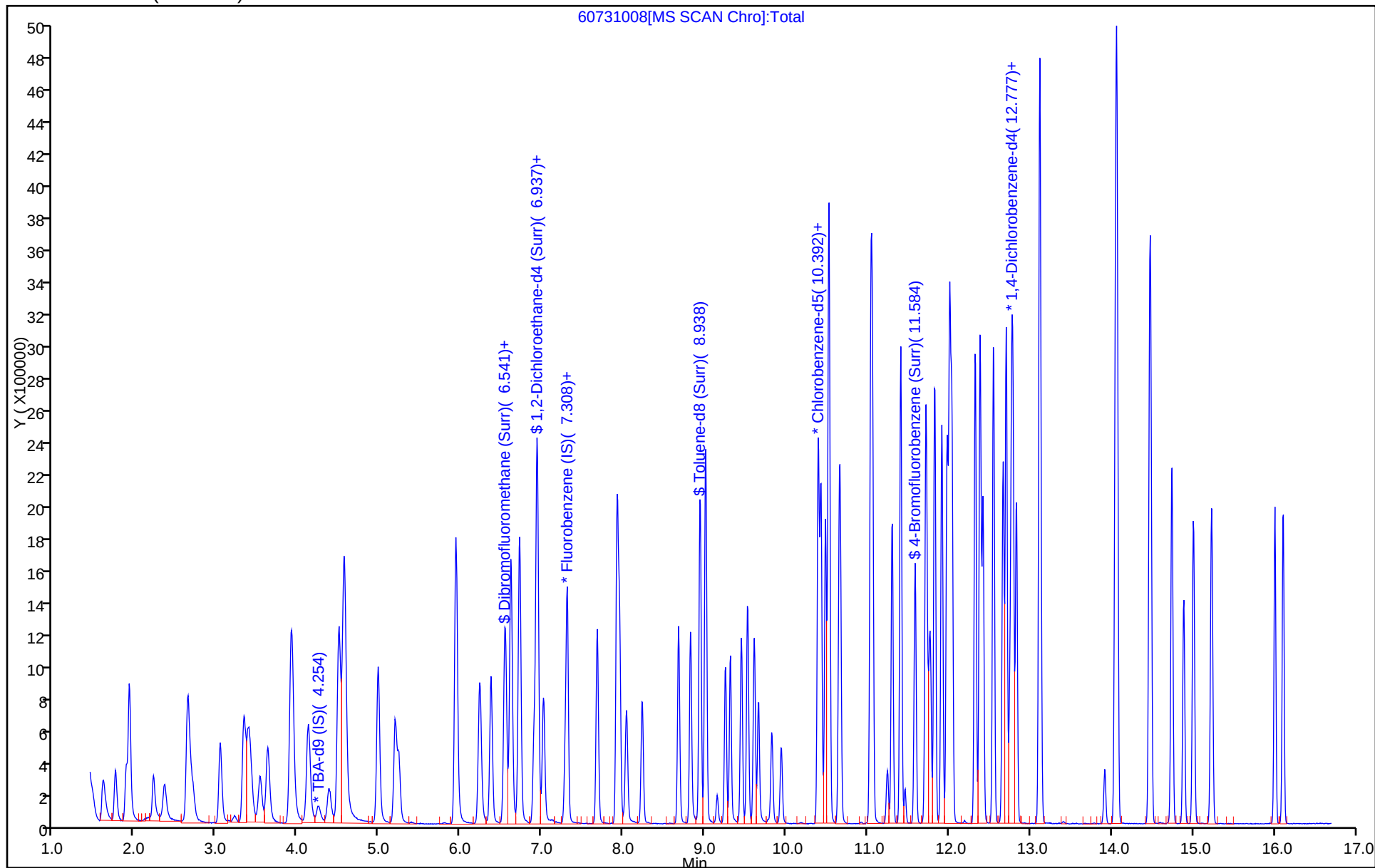
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: MSVOA\_LL\_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731008.D

Injection Date: 31-Jul-2015 15:37:30

Instrument ID: CHHP6

Lims ID: IC VSTD35

Client ID:

Operator ID: 001562

ALS Bottle#:

8

Worklist Smp#: 8

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP6

Limit Group: VOA 8260C ICAL

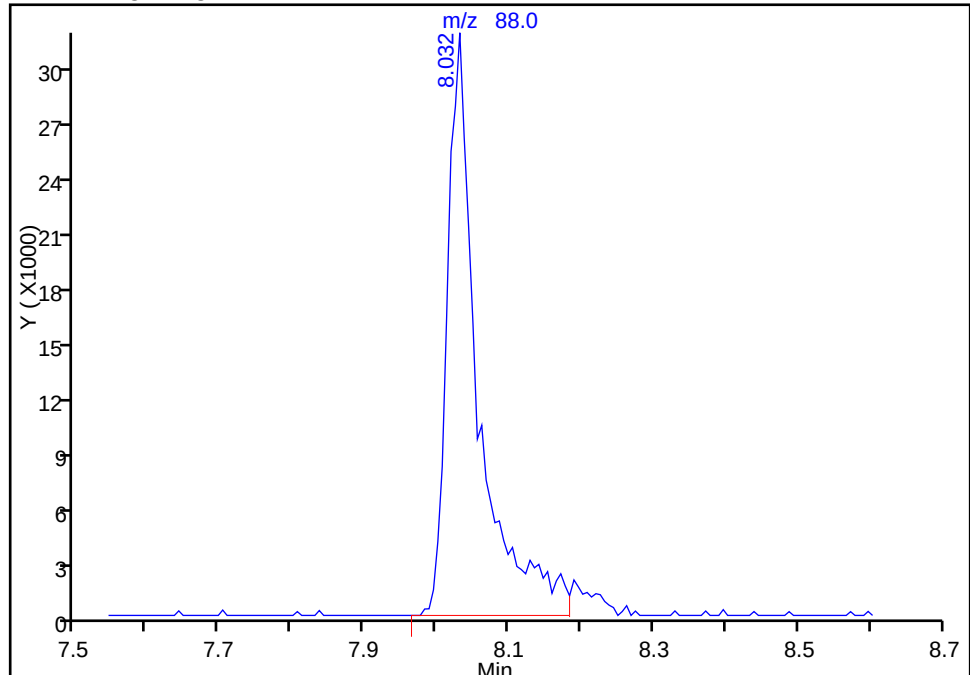
Column: DB-624 ( 0.18 mm)

Detector: MS SCAN

## 65 1,4-Dioxane, CAS: 123-91-1

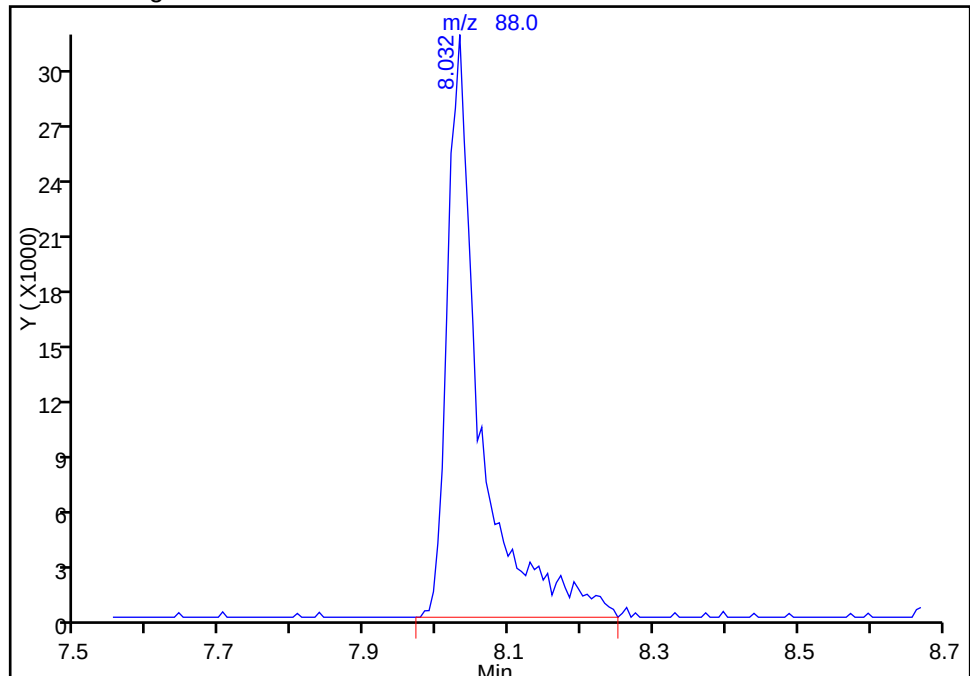
RT: 8.03  
Area: 94184  
Amount: 3581.4908  
Amount Units: ng

## Processing Integration Results



RT: 8.03  
Area: 98136  
Amount: 3760.8433  
Amount Units: ng

## Manual Integration Results



Reviewer: fergusond, 03-Aug-2015 10:13:21

Audit Action: Manually Integrated

Audit Reason: Peak Tail

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731009.D  
 Lims ID: IC VSTD40  
 Client ID:  
 Sample Type: IC Calib Level: 7  
 Inject. Date: 31-Jul-2015 16:01:30 ALS Bottle#: 9 Worklist Smp#: 9  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: IC VSTD40  
 Misc. Info.: 180-0007999-009  
 Operator ID: 001562 Instrument ID: CHHP6  
 Sublist: chrom-MSVOA\_LL\_CHHP6\*sub5  
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\MSVOA\_LL\_CHHP6.m  
 Limit Group: VOA 8260C ICAL  
 Last Update: 03-Aug-2015 12:16:10 Calib Date: 31-Jul-2015 18:02:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731014.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: XAWRK049

First Level Reviewer: fergusond

Date: 03-Aug-2015 10:06:32

| Compound                        | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q   | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|---------------------------------|-----|--------------|------------------|------------------|-----|----------|---------------|-----------------|-------|
| * 1 TBA-d9 (IS)                 | 65  | 4.253        | 4.247            | 0.006            | 92  | 190170   | 1000.0        | 1000.0          |       |
| * 2 Fluorobenzene (IS)          | 96  | 7.289        | 7.289            | 0.000            | 98  | 446456   | 50.0          | 50.0            |       |
| * 3 Chlorobenzene-d5            | 119 | 10.398       | 10.398           | 0.000            | 89  | 103508   | 50.0          | 50.0            |       |
| * 4 1,4-Dichlorobenzene-d4      | 152 | 12.746       | 12.746           | 0.000            | 95  | 159598   | 50.0          | 50.0            |       |
| \$ 5 Dibromofluoromethane (Surr | 113 | 6.553        | 6.553            | 0.000            | 92  | 428779   | 200.0         | 208.5           |       |
| \$ 6 1,2-Dichloroethane-d4 (Sur | 65  | 6.930        | 6.930            | 0.000            | 72  | 668015   | 200.0         | 201.4           |       |
| \$ 7 Toluene-d8 (Surr)          | 98  | 8.944        | 8.938            | 0.006            | 94  | 1563368  | 200.0         | 191.5           |       |
| \$ 8 4-Bromofluorobenzene (Surr | 95  | 11.584       | 11.584           | 0.000            | 81  | 722308   | 200.0         | 199.3           |       |
| 11 Dichlorodifluoromethane      | 85  | 1.613        | 1.607            | 0.006            | 99  | 636192   | 200.0         | 205.8           |       |
| 12 Chloromethane                | 50  | 1.759        | 1.759            | 0.000            | 99  | 522516   | 200.0         | 196.1           |       |
| 13 Vinyl chloride               | 62  | 1.893        | 1.893            | 0.000            | 98  | 585198   | 200.0         | 203.9           |       |
| 14 Butadiene                    | 39  | 1.935        | 1.930            | 0.005            | 92  | 538199   | 200.0         | 200.0           |       |
| 15 Bromomethane                 | 94  | 2.233        | 2.228            | 0.005            | 91  | 263364   | 200.0         | 170.0           |       |
| 16 Chloroethane                 | 64  | 2.373        | 2.374            | -0.001           | 99  | 402907   | 200.0         | 205.7           |       |
| 17 Dichlorofluoromethane        | 67  | 2.647        | 2.654            | -0.007           | 98  | 899692   | 200.0         | 197.3           |       |
| 18 Trichlorofluoromethane       | 101 | 2.672        | 2.678            | -0.006           | 99  | 726249   | 200.0         | 199.7           |       |
| 20 Ethyl ether                  | 59  | 3.049        | 3.043            | 0.006            | 89  | 523507   | 200.0         | 203.1           |       |
| 21 Acrolein                     | 56  | 3.225        | 3.213            | 0.012            | 96  | 76429    | 250.0         | 271.9           |       |
| 22 1,1-Dichloroethene           | 96  | 3.341        | 3.341            | 0.000            | 99  | 476887   | 200.0         | 212.2           |       |
| 23 1,1,2-Trichloro-1,2,2-trif   | 101 | 3.395        | 3.402            | -0.007           | 95  | 481169   | 200.0         | 202.8           |       |
| 24 Acetone                      | 43  | 3.432        | 3.432            | 0.000            | 100 | 317270   | 400.0         | 401.7           |       |
| 25 Iodomethane                  | 142 | 3.529        | 3.530            | -0.001           | 99  | 655616   | 200.0         | 217.3           |       |
| 26 Carbon disulfide             | 76  | 3.627        | 3.633            | -0.006           | 100 | 1330649  | 200.0         | 228.5           |       |
| 29 3-Chloro-1-propene           | 76  | 3.906        | 3.913            | -0.007           | 88  | 293887   | 200.0         | 231.9           |       |
| 30 Methyl acetate               | 43  | 3.925        | 3.925            | 0.000            | 96  | 1914014  | 1000.0        | 1033.4          |       |
| 31 Methylene Chloride           | 84  | 4.125        | 4.132            | -0.007           | 91  | 611401   | 200.0         | 212.7           |       |
| 32 2-Methyl-2-propanol          | 59  | 4.381        | 4.369            | 0.012            | 93  | 426462   | 2000.0        | 1992.8          |       |
| 33 Acrylonitrile                | 53  | 4.503        | 4.497            | 0.006            | 97  | 1961872  | 2000.0        | 2101.3          |       |
| 34 trans-1,2-Dichloroethene     | 96  | 4.563        | 4.564            | -0.001           | 97  | 548086   | 200.0         | 211.3           |       |
| 35 Methyl tert-butyl ether      | 73  | 4.576        | 4.576            | 0.000            | 98  | 1687770  | 200.0         | 217.2           |       |



| Compound                       | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 36 Hexane                      | 57  | 4.989     | 4.990         | -0.001        | 91 | 736641   | 200.0      | 209.6        |       |
| 37 1,1-Dichloroethane          | 63  | 5.196     | 5.196         | 0.000         | 97 | 980644   | 200.0      | 211.2        |       |
| 38 Vinyl acetate               | 43  | 5.239     | 5.239         | 0.000         | 97 | 867464   | 200.0      | 231.4        |       |
| 43 cis-1,2-Dichloroethene      | 96  | 5.944     | 5.939         | 0.005         | 85 | 595718   | 200.0      | 211.2        |       |
| 44 2-Butanone (MEK)            | 43  | 5.944     | 5.945         | -0.001        | 98 | 470276   | 400.0      | 436.3        |       |
| 42 2,2-Dichloropropane         | 77  | 5.944     | 5.945         | -0.001        | 66 | 535345   | 200.0      | 228.0        |       |
| 48 Chlorobromomethane          | 128 | 6.230     | 6.225         | 0.005         | 97 | 240962   | 200.0      | 212.7        |       |
| 49 Tetrahydrofuran             | 42  | 6.243     | 6.237         | 0.005         | 83 | 305718   | 400.0      | 421.1        |       |
| 50 Chloroform                  | 83  | 6.376     | 6.371         | 0.005         | 94 | 959266   | 200.0      | 208.2        |       |
| 51 1,1,1-Trichloroethane       | 97  | 6.541     | 6.541         | 0.000         | 98 | 756837   | 200.0      | 222.3        |       |
| 52 Cyclohexane                 | 56  | 6.620     | 6.620         | 0.000         | 92 | 919827   | 200.0      | 210.8        |       |
| 53 Carbon tetrachloride        | 117 | 6.717     | 6.717         | 0.000         | 97 | 536127   | 200.0      | 222.9        |       |
| 54 1,1-Dichloropropene         | 75  | 6.729     | 6.730         | -0.001        | 94 | 765806   | 200.0      | 209.1        |       |
| 55 Isobutyl alcohol            | 41  | 6.906     | 6.900         | 0.006         | 92 | 375937   | 5000.0     | 5820.2       |       |
| 56 Benzene                     | 78  | 6.942     | 6.942         | 0.000         | 99 | 2066671  | 200.0      | 198.6        |       |
| 57 1,2-Dichloroethane          | 62  | 7.015     | 7.015         | 0.000         | 98 | 855052   | 200.0      | 204.0        |       |
| 59 n-Heptane                   | 43  | 7.307     | 7.307         | 0.000         | 87 | 588643   | 200.0      | 208.1        |       |
| 61 Trichloroethene             | 130 | 7.678     | 7.679         | -0.001        | 92 | 460676   | 200.0      | 212.3        |       |
| 63 Methylcyclohexane           | 83  | 7.922     | 7.922         | 0.000         | 91 | 915285   | 200.0      | 207.8        |       |
| 64 1,2-Dichloropropane         | 63  | 7.952     | 7.952         | 0.000         | 84 | 521174   | 200.0      | 209.7        |       |
| 65 1,4-Dioxane                 | 88  | 8.031     | 8.031         | 0.000         | 44 | 114196   | 4000.0     | 4654.3       | M     |
| 67 Dibromomethane              | 93  | 8.037     | 8.037         | 0.000         | 92 | 323060   | 200.0      | 214.0        |       |
| 68 Dichlorobromomethane        | 83  | 8.232     | 8.226         | 0.006         | 99 | 646107   | 200.0      | 227.8        |       |
| 71 cis-1,3-Dichloropropene     | 75  | 8.676     | 8.676         | 0.000         | 94 | 745866   | 200.0      | 239.4        |       |
| 72 4-Methyl-2-pentanone (MIBK) | 43  | 8.822     | 8.822         | 0.000         | 93 | 947711   | 400.0      | 445.4        |       |
| 73 Toluene                     | 91  | 9.010     | 9.011         | -0.001        | 97 | 2002822  | 200.0      | 187.5        |       |
| 74 trans-1,3-Dichloropropene   | 75  | 9.254     | 9.254         | 0.000         | 96 | 639831   | 200.0      | 236.0        |       |
| 75 Ethyl methacrylate          | 69  | 9.315     | 9.315         | 0.000         | 88 | 671187   | 200.0      | 233.1        |       |
| 76 1,1,2-Trichloroethane       | 97  | 9.448     | 9.449         | -0.001        | 94 | 447467   | 200.0      | 202.6        |       |
| 77 Tetrachloroethene           | 164 | 9.528     | 9.528         | 0.000         | 93 | 357911   | 200.0      | 196.5        |       |
| 78 1,3-Dichloropropane         | 76  | 9.607     | 9.607         | 0.000         | 93 | 805963   | 200.0      | 197.5        |       |
| 79 2-Hexanone                  | 43  | 9.655     | 9.656         | -0.001        | 95 | 604727   | 400.0      | 432.8        |       |
| 81 Chlorodibromomethane        | 129 | 9.826     | 9.826         | 0.000         | 91 | 351983   | 200.0      | 233.5        |       |
| 82 Ethylene Dibromide          | 107 | 9.941     | 9.936         | 0.005         | 98 | 414395   | 200.0      | 212.0        |       |
| 83 3-Chlorobenzotrifluoride    | 180 | 10.398    | 10.392        | 0.006         | 93 | 658293   | 200.0      | 192.5        |       |
| 84 Chlorobenzene               | 112 | 10.428    | 10.428        | 0.000         | 90 | 1270819  | 200.0      | 193.6        |       |
| 85 4-Chlorobenzotrifluoride    | 180 | 10.483    | 10.483        | 0.000         | 96 | 626628   | 200.0      | 197.7        |       |
| 86 1,1,1,2-Tetrachloroethane   | 131 | 10.519    | 10.520        | -0.001        | 90 | 410261   | 200.0      | 228.0        |       |
| 87 Ethylbenzene                | 106 | 10.525    | 10.526        | -0.001        | 98 | 745552   | 200.0      | 201.3        |       |
| 88 m-Xylene & p-Xylene         | 106 | 10.659    | 10.659        | 0.000         | 99 | 922542   | 200.0      | 200.7        |       |
| 89 o-Xylene                    | 106 | 11.042    | 11.037        | 0.005         | 96 | 942660   | 200.0      | 205.0        |       |
| 90 Styrene                     | 104 | 11.061    | 11.061        | 0.000         | 91 | 1451301  | 200.0      | 205.5        |       |
| 91 Bromoform                   | 173 | 11.243    | 11.243        | 0.000         | 93 | 188413   | 200.0      | 234.1        |       |
| 92 2-Chlorobenzotrifluoride    | 180 | 11.304    | 11.304        | 0.000         | 94 | 695569   | 200.0      | 198.6        |       |
| 93 Isopropylbenzene            | 105 | 11.407    | 11.408        | -0.001        | 99 | 2143689  | 200.0      | 194.9        |       |
| 96 1,1,2,2-Tetrachloroethane   | 83  | 11.712    | 11.712        | 0.000         | 97 | 595171   | 200.0      | 201.4        |       |
| 95 Bromobenzene                | 156 | 11.724    | 11.724        | 0.000         | 98 | 533334   | 200.0      | 207.9        |       |
| 97 trans-1,4-Dichloro-2-buten  | 53  | 11.754    | 11.748        | 0.006         | 78 | 183338   | 200.0      | 225.3        |       |
| 98 1,2,3-Trichloropropane      | 110 | 11.772    | 11.773        | -0.001        | 84 | 202262   | 200.0      | 207.3        |       |
| 99 N-Propylbenzene             | 120 | 11.827    | 11.827        | 0.000         | 98 | 613443   | 200.0      | 207.6        |       |
| 100 2-Chlorotoluene            | 126 | 11.912    | 11.913        | -0.001        | 93 | 510216   | 200.0      | 208.0        |       |
| 101 3-Chlorotoluene            | 126 | 11.979    | 11.980        | -0.001        | 97 | 532252   | 200.0      | 206.6        |       |



| Compound                         | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q   | Response | Cal Amt ng | OnCol Amt ng | Flags |
|----------------------------------|-----|-----------|---------------|---------------|-----|----------|------------|--------------|-------|
| 102 1,3,5-Trimethylbenzene       | 105 | 12.010    | 12.010        | 0.000         | 94  | 1945327  | 200.0      | 202.5        |       |
| 103 4-Chlorotoluene              | 126 | 12.040    | 12.034        | 0.006         | 100 | 540303   | 200.0      | 208.5        |       |
| 104 tert-Butylbenzene            | 119 | 12.326    | 12.320        | 0.006         | 90  | 1580824  | 200.0      | 208.2        |       |
| 106 1,2,4-Trimethylbenzene       | 105 | 12.381    | 12.381        | 0.000         | 98  | 2003823  | 200.0      | 204.0        |       |
| 107 1,2-dichloro-4-(trifluorom   | 214 | 12.423    | 12.418        | 0.005         | 96  | 562570   | 200.0      | 202.1        |       |
| 108 sec-Butylbenzene             | 105 | 12.551    | 12.545        | 0.006         | 97  | 2257148  | 200.0      | 199.2        |       |
| 109 1,3-Dichlorobenzene          | 146 | 12.667    | 12.667        | 0.000         | 92  | 1017363  | 200.0      | 203.0        |       |
| 110 4-Isopropyltoluene           | 119 | 12.703    | 12.703        | 0.000         | 94  | 1952987  | 200.0      | 205.4        |       |
| 111 1,4-Dichlorobenzene          | 146 | 12.770    | 12.770        | 0.000         | 91  | 1040432  | 200.0      | 203.1        |       |
| 113 2,4-Dichloro-1-(trifluorom   | 214 | 12.788    | 12.789        | -0.001        | 93  | 585295   | 200.0      | 211.4        |       |
| 114 2,5-Dichlorobenzotrifluori   | 214 | 12.831    | 12.831        | 0.000         | 97  | 604585   | 200.0      | 195.5        |       |
| 116 n-Butylbenzene               | 91  | 13.111    | 13.111        | 0.000         | 96  | 1931969  | 200.0      | 203.5        |       |
| 117 1,2-Dichlorobenzene          | 146 | 13.123    | 13.123        | 0.000         | 93  | 1013269  | 200.0      | 200.2        |       |
| 118 1,2-Dibromo-3-Chloropropan   | 75  | 13.914    | 13.920        | -0.006        | 74  | 111156   | 200.0      | 239.6        |       |
| 119 2,4- & 2,5- & 2,6- Dichlor   | 125 | 14.060    | 14.060        | 0.000         | 95  | 2621988  | 600.0      | 595.4        |       |
| 121 2,3- & 3,4- Dichlorotoluen   | 125 | 14.473    | 14.474        | -0.001        | 96  | 1989024  | 400.0      | 409.3        |       |
| 122 1,2,4-Trichlorobenzene       | 180 | 14.741    | 14.741        | 0.000         | 92  | 829845   | 200.0      | 211.6        |       |
| 123 Hexachlorobutadiene          | 225 | 14.887    | 14.887        | 0.000         | 97  | 324236   | 200.0      | 209.9        |       |
| 124 Naphthalene                  | 128 | 15.009    | 15.003        | 0.006         | 99  | 1744010  | 200.0      | 220.4        |       |
| 125 1,2,3-Trichlorobenzene       | 180 | 15.228    | 15.228        | 0.000         | 92  | 768952   | 200.0      | 209.6        |       |
| 126 2,4,5-Trichlorotoluene       | 159 | 16.006    | 16.007        | -0.001        | 0   | 568870   | 200.0      | 230.9        |       |
| 127 2,3,6-Trichlorotoluene       | 159 | 16.110    | 16.110        | 0.000         | 94  | 527070   | 200.0      | 225.5        |       |
| 146 3,4-Dichlorotoluene          | 1   |           | 0.000         |               |     |          | ND         | ND           |       |
| 147 2,6-Dichlorotoluene          | 1   |           | 0.000         |               |     |          | ND         | ND           |       |
| 143 2,5-Dichlorotoluene          | 1   |           | 0.000         |               |     |          | ND         | ND           |       |
| 145 2,3-Dichlorotoluene          | 1   |           | 0.000         |               |     |          | ND         | ND           |       |
| 144 2,4-Dichlorotoluene          | 1   |           | 0.000         |               |     |          | ND         | ND           |       |
| S 130 1,2-Dichloroethene, Total  | 96  |           |               |               | 0   |          | 400.0      | 422.6        |       |
| S 131 Xylenes, Total             | 106 |           |               |               | 0   |          | 400.0      | 405.8        |       |
| S 132 1,3-Dichloropropene, Total | 1   |           |               |               | 0   |          | 400.0      | 475.4        |       |

### QC Flag Legend

#### Processing Flags

ND - Not Detected or Marked ND

#### Review Flags

M - Manually Integrated

### Reagents:

|                     |                     |           |             |
|---------------------|---------------------|-----------|-------------|
| VOA8260SURR_00039   | Amount Added: 8.00  | Units: uL |             |
| voaWAcro2nd R_00006 | Amount Added: 10.00 | Units: uL |             |
| voaWket1Reste_00001 | Amount Added: 8.00  | Units: uL |             |
| voaWeemix1Res_00001 | Amount Added: 8.00  | Units: uL |             |
| voaWVA1st Res_00003 | Amount Added: 8.00  | Units: uL |             |
| VOA8260VOAPRI_00134 | Amount Added: 8.00  | Units: uL |             |
| VOA8260INT_00039    | Amount Added: 2.00  | Units: uL | Run Reagent |

Report Date: 03-Aug-2015 12:16:13

Chrom Revision: 2.2 09-Jul-2015 10:16:20

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731009.D

Injection Date: 31-Jul-2015 16:01:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: IC VSTD40

Worklist Smp#: 9

Client ID:

Purge Vol: 5.000 mL

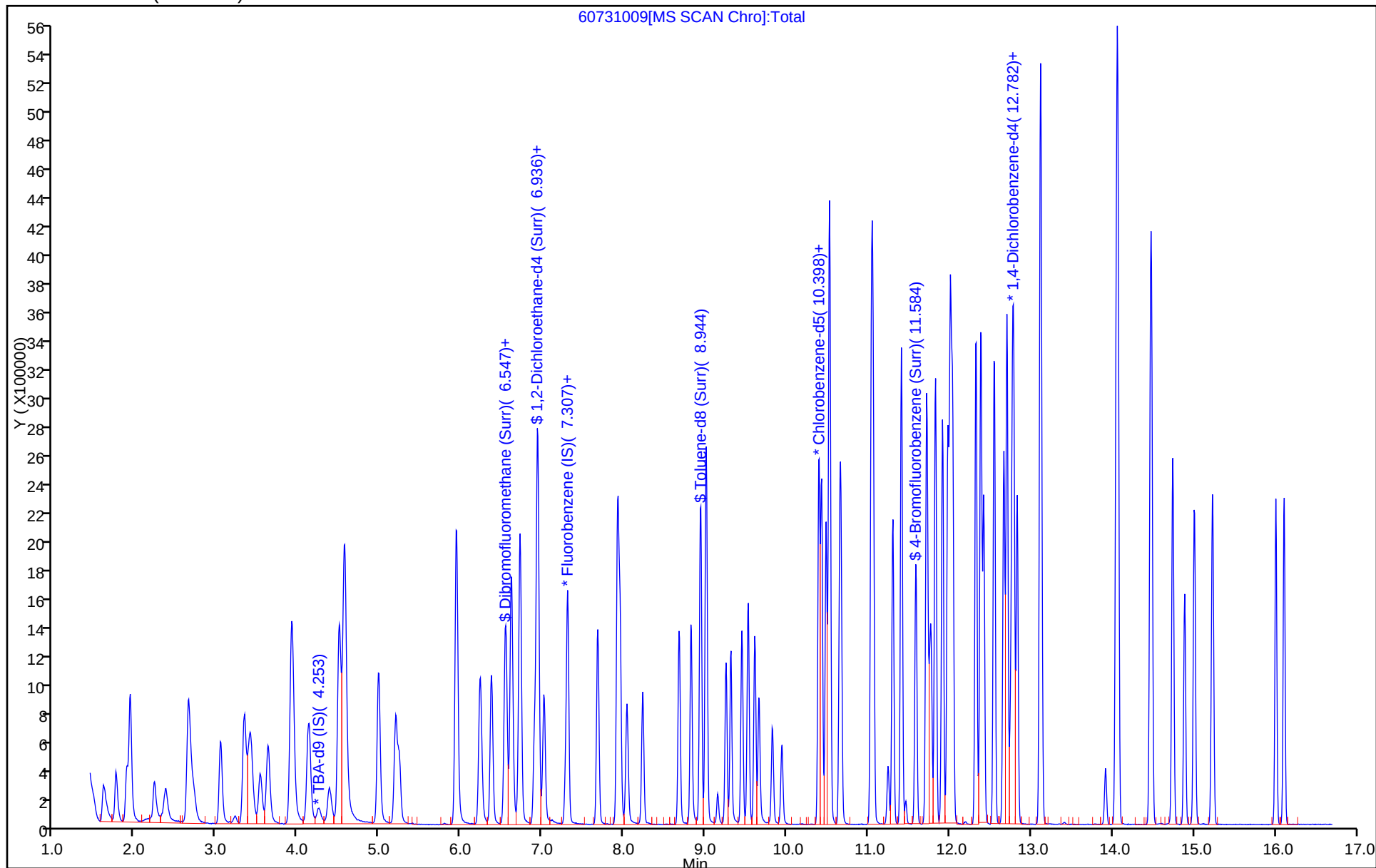
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: MSVOA\_LL\_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731009.D

Injection Date: 31-Jul-2015 16:01:30

Instrument ID: CHHP6

Lims ID: IC VSTD40

Client ID:

Operator ID: 001562

ALS Bottle#:

9

Worklist Smp#: 9

Purge Vol: 5.000 mL

Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP6

Limit Group: VOA 8260C ICAL

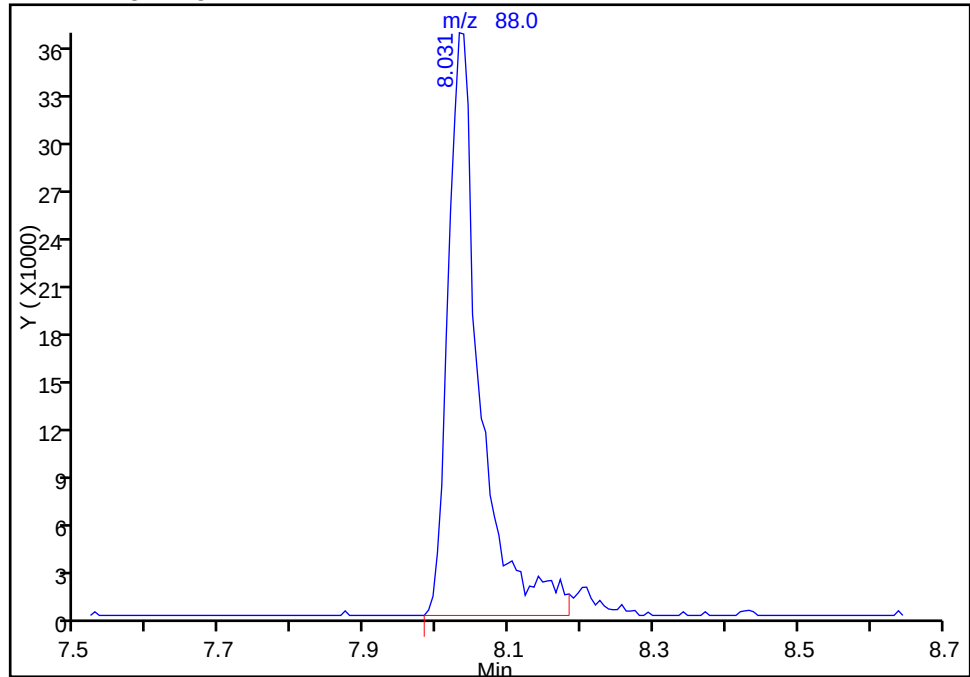
Column: DB-624 ( 0.18 mm)

Detector: MS SCAN

## 65 1,4-Dioxane, CAS: 123-91-1

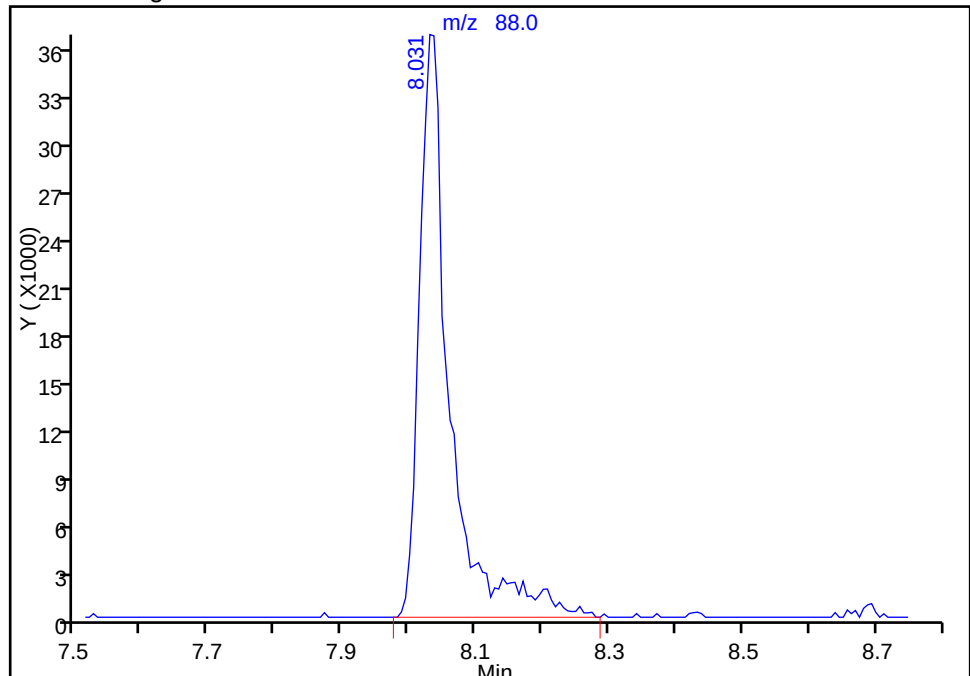
RT: 8.03  
Area: 109899  
Amount: 4509.0182  
Amount Units: ng

## Processing Integration Results



RT: 8.03  
Area: 114196  
Amount: 4654.2617  
Amount Units: ng

## Manual Integration Results



Reviewer: fergusond, 03-Aug-2015 10:06:32

Audit Action: Manually Integrated

Audit Reason: Peak Tail

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731010.D  
 Lims ID: IC VSTD50  
 Client ID:  
 Sample Type: IC Calib Level: 8  
 Inject. Date: 31-Jul-2015 16:25:30 ALS Bottle#: 10 Worklist Smp#: 10  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: IC VSTD50  
 Misc. Info.: 180-0007999-010  
 Operator ID: 001562 Instrument ID: CHHP6  
 Sublist: chrom-MSVOA\_LL\_CHHP6\*sub5  
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\MSVOA\_LL\_CHHP6.m  
 Limit Group: VOA 8260C ICAL  
 Last Update: 03-Aug-2015 12:16:19 Calib Date: 31-Jul-2015 18:02:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731014.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: XAWRK049

First Level Reviewer: fergusond

Date: 03-Aug-2015 10:08:16

| Compound                        | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q   | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|---------------------------------|-----|--------------|------------------|------------------|-----|----------|---------------|-----------------|-------|
| * 1 TBA-d9 (IS)                 | 65  | 4.266        | 4.247            | 0.019            | 94  | 205888   | 1000.0        | 1000.0          |       |
| * 2 Fluorobenzene (IS)          | 96  | 7.283        | 7.289            | -0.006           | 98  | 472902   | 50.0          | 50.0            |       |
| * 3 Chlorobenzene-d5            | 119 | 10.398       | 10.398           | 0.000            | 91  | 113483   | 50.0          | 50.0            |       |
| * 4 1,4-Dichlorobenzene-d4      | 152 | 12.746       | 12.746           | 0.000            | 92  | 168220   | 50.0          | 50.0            |       |
| \$ 5 Dibromofluoromethane (Surr | 113 | 6.553        | 6.553            | 0.000            | 92  | 510673   | 250.0         | 234.5           |       |
| \$ 6 1,2-Dichloroethane-d4 (Sur | 65  | 6.930        | 6.930            | 0.000            | 73  | 806396   | 250.0         | 229.5           |       |
| \$ 7 Toluene-d8 (Surr)          | 98  | 8.938        | 8.938            | 0.000            | 94  | 1832665  | 250.0         | 204.7           |       |
| \$ 8 4-Bromofluorobenzene (Surr | 95  | 11.584       | 11.584           | 0.000            | 80  | 863895   | 250.0         | 217.4           |       |
| 11 Dichlorodifluoromethane      | 85  | 1.607        | 1.607            | 0.000            | 100 | 776950   | 250.0         | 237.3           |       |
| 12 Chloromethane                | 50  | 1.759        | 1.759            | 0.000            | 99  | 661756   | 250.0         | 234.5           |       |
| 13 Vinyl chloride               | 62  | 1.893        | 1.893            | 0.000            | 99  | 729853   | 250.0         | 240.1           |       |
| 14 Butadiene                    | 39  | 1.936        | 1.930            | 0.006            | 90  | 668636   | 250.0         | 234.6           |       |
| 15 Bromomethane                 | 94  | 2.228        | 2.228            | 0.000            | 91  | 301175   | 250.0         | 183.5           |       |
| 16 Chloroethane                 | 64  | 2.362        | 2.374            | -0.012           | 98  | 495382   | 250.0         | 238.7           |       |
| 17 Dichlorofluoromethane        | 67  | 2.647        | 2.654            | -0.007           | 97  | 1120159  | 250.0         | 232.0           |       |
| 18 Trichlorofluoromethane       | 101 | 2.660        | 2.678            | -0.018           | 74  | 914267   | 250.0         | 237.4           |       |
| 20 Ethyl ether                  | 59  | 3.043        | 3.043            | 0.000            | 89  | 666334   | 250.0         | 244.1           |       |
| 21 Acrolein                     | 56  | 3.225        | 3.213            | 0.012            | 98  | 88331    | 275.0         | 296.7           |       |
| 22 1,1-Dichloroethene           | 96  | 3.335        | 3.341            | -0.006           | 98  | 604031   | 250.0         | 253.7           |       |
| 23 1,1,2-Trichloro-1,2,2-trif   | 101 | 3.396        | 3.402            | -0.006           | 95  | 613669   | 250.0         | 244.2           |       |
| 24 Acetone                      | 43  | 3.432        | 3.432            | 0.000            | 100 | 446823   | 500.0         | 534.1           |       |
| 25 Iodomethane                  | 142 | 3.530        | 3.530            | 0.000            | 99  | 830188   | 250.0         | 259.8           |       |
| 26 Carbon disulfide             | 76  | 3.627        | 3.633            | -0.006           | 100 | 1688724  | 250.0         | 273.8           |       |
| 29 3-Chloro-1-propene           | 76  | 3.913        | 3.913            | 0.000            | 87  | 379717   | 250.0         | 282.9           |       |
| 30 Methyl acetate               | 43  | 3.925        | 3.925            | 0.000            | 96  | 2441128  | 1250.0        | 1244.3          |       |
| 31 Methylene Chloride           | 84  | 4.126        | 4.132            | -0.006           | 90  | 760977   | 250.0         | 250.8           |       |
| 32 2-Methyl-2-propanol          | 59  | 4.387        | 4.369            | 0.018            | 93  | 559063   | 2500.0        | 2413.0          |       |
| 33 Acrylonitrile                | 53  | 4.503        | 4.497            | 0.006            | 97  | 2461613  | 2500.0        | 2489.1          |       |
| 34 trans-1,2-Dichloroethene     | 96  | 4.564        | 4.564            | 0.000            | 97  | 687783   | 250.0         | 250.4           |       |
| 35 Methyl tert-butyl ether      | 73  | 4.576        | 4.576            | 0.000            | 98  | 2105039  | 250.0         | 255.7           |       |

| Compound                       | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 36 Hexane                      | 57  | 4.984     | 4.990         | -0.006        | 92 | 945322   | 250.0      | 253.9        |       |
| 37 1,1-Dichloroethane          | 63  | 5.196     | 5.196         | 0.000         | 96 | 1227440  | 250.0      | 249.6        |       |
| 38 Vinyl acetate               | 43  | 5.239     | 5.239         | 0.000         | 97 | 1104555  | 250.0      | 278.2        |       |
| 43 cis-1,2-Dichloroethene      | 96  | 5.945     | 5.939         | 0.006         | 83 | 751398   | 250.0      | 251.5        |       |
| 44 2-Butanone (MEK)            | 43  | 5.945     | 5.945         | 0.000         | 98 | 588377   | 500.0      | 515.3        |       |
| 42 2,2-Dichloropropane         | 77  | 5.939     | 5.945         | -0.006        | 66 | 694588   | 250.0      | 279.3        |       |
| 48 Chlorobromomethane          | 128 | 6.225     | 6.225         | 0.000         | 97 | 308059   | 250.0      | 256.7        |       |
| 49 Tetrahydrofuran             | 42  | 6.243     | 6.237         | 0.006         | 83 | 413888   | 500.0      | 538.2        |       |
| 50 Chloroform                  | 83  | 6.371     | 6.371         | 0.000         | 95 | 1195678  | 250.0      | 244.9        |       |
| 51 1,1,1-Trichloroethane       | 97  | 6.535     | 6.541         | -0.006        | 98 | 957300   | 250.0      | 265.4        |       |
| 52 Cyclohexane                 | 56  | 6.614     | 6.620         | -0.006        | 91 | 1159567  | 250.0      | 250.9        |       |
| 53 Carbon tetrachloride        | 117 | 6.717     | 6.717         | 0.000         | 89 | 690480   | 250.0      | 271.0        |       |
| 54 1,1-Dichloropropene         | 75  | 6.729     | 6.730         | -0.001        | 93 | 968671   | 250.0      | 249.7        |       |
| 55 Isobutyl alcohol            | 41  | 6.900     | 6.900         | 0.000         | 91 | 482886   | 6250.0     | 7057.9       |       |
| 56 Benzene                     | 78  | 6.942     | 6.942         | 0.000         | 99 | 2526807  | 250.0      | 229.3        |       |
| 57 1,2-Dichloroethane          | 62  | 7.015     | 7.015         | 0.000         | 98 | 1055651  | 250.0      | 237.8        |       |
| 59 n-Heptane                   | 43  | 7.307     | 7.307         | 0.000         | 87 | 756814   | 250.0      | 252.6        |       |
| 61 Trichloroethene             | 130 | 7.678     | 7.679         | -0.001        | 93 | 577638   | 250.0      | 251.3        |       |
| 63 Methylcyclohexane           | 83  | 7.922     | 7.922         | 0.000         | 91 | 1169092  | 250.0      | 250.6        |       |
| 64 1,2-Dichloropropane         | 63  | 7.952     | 7.952         | 0.000         | 86 | 664355   | 250.0      | 252.3        |       |
| 65 1,4-Dioxane                 | 88  | 8.031     | 8.031         | 0.000         | 44 | 139772   | 5000.0     | 5378.1       | M     |
| 67 Dibromomethane              | 93  | 8.037     | 8.037         | 0.000         | 93 | 409028   | 250.0      | 255.8        |       |
| 68 Dichlorobromomethane        | 83  | 8.232     | 8.226         | 0.006         | 99 | 821950   | 250.0      | 273.6        |       |
| 71 cis-1,3-Dichloropropene     | 75  | 8.676     | 8.676         | 0.000         | 93 | 960857   | 250.0      | 291.2        |       |
| 72 4-Methyl-2-pentanone (MIBK) | 43  | 8.822     | 8.822         | 0.000         | 93 | 1194590  | 500.0      | 512.0        |       |
| 73 Toluene                     | 91  | 9.011     | 9.011         | 0.000         | 97 | 2462377  | 250.0      | 210.3        |       |
| 74 trans-1,3-Dichloropropene   | 75  | 9.254     | 9.254         | 0.000         | 96 | 837722   | 250.0      | 281.8        |       |
| 75 Ethyl methacrylate          | 69  | 9.315     | 9.315         | 0.000         | 88 | 855316   | 250.0      | 270.9        |       |
| 76 1,1,2-Trichloroethane       | 97  | 9.449     | 9.449         | 0.000         | 93 | 567107   | 250.0      | 234.2        |       |
| 77 Tetrachloroethene           | 164 | 9.522     | 9.528         | -0.006        | 92 | 461983   | 250.0      | 231.3        |       |
| 78 1,3-Dichloropropane         | 76  | 9.607     | 9.607         | 0.000         | 92 | 1022129  | 250.0      | 228.4        |       |
| 79 2-Hexanone                  | 43  | 9.656     | 9.656         | 0.000         | 93 | 790089   | 500.0      | 515.7        |       |
| 81 Chlorodibromomethane        | 129 | 9.820     | 9.826         | -0.006        | 90 | 451973   | 250.0      | 273.4        |       |
| 82 Ethylene Dibromide          | 107 | 9.942     | 9.936         | 0.006         | 98 | 526477   | 250.0      | 245.7        |       |
| 83 3-Chlorobenzotrifluoride    | 180 | 10.392    | 10.392        | 0.000         | 92 | 786880   | 250.0      | 209.9        |       |
| 84 Chlorobenzene               | 112 | 10.428    | 10.428        | 0.000         | 89 | 1585885  | 250.0      | 220.3        |       |
| 85 4-Chlorobenzotrifluoride    | 180 | 10.483    | 10.483        | 0.000         | 96 | 739908   | 250.0      | 212.9        |       |
| 86 1,1,1,2-Tetrachloroethane   | 131 | 10.519    | 10.520        | -0.001        | 49 | 519653   | 250.0      | 263.5        |       |
| 87 Ethylbenzene                | 106 | 10.526    | 10.526        | 0.000         | 97 | 943999   | 250.0      | 232.5        |       |
| 88 m-Xylene & p-Xylene         | 106 | 10.659    | 10.659        | 0.000         | 97 | 1179895  | 250.0      | 234.2        |       |
| 89 o-Xylene                    | 106 | 11.043    | 11.037        | 0.006         | 96 | 1188451  | 250.0      | 235.8        |       |
| 90 Styrene                     | 104 | 11.061    | 11.061        | 0.000         | 93 | 1825312  | 250.0      | 235.8        |       |
| 91 Bromoform                   | 173 | 11.243    | 11.243        | 0.000         | 93 | 249108   | 250.0      | 282.3        |       |
| 92 2-Chlorobenzotrifluoride    | 180 | 11.304    | 11.304        | 0.000         | 94 | 831476   | 250.0      | 216.5        |       |
| 93 Isopropylbenzene            | 105 | 11.408    | 11.408        | 0.000         | 99 | 2614965  | 250.0      | 216.8        |       |
| 96 1,1,2,2-Tetrachloroethane   | 83  | 11.712    | 11.712        | 0.000         | 97 | 764885   | 250.0      | 236.1        |       |
| 95 Bromobenzene                | 156 | 11.724    | 11.724        | 0.000         | 98 | 665597   | 250.0      | 246.1        |       |
| 97 trans-1,4-Dichloro-2-buten  | 53  | 11.754    | 11.748        | 0.006         | 83 | 239026   | 250.0      | 278.7        |       |
| 98 1,2,3-Trichloropropane      | 110 | 11.773    | 11.773        | 0.000         | 85 | 257089   | 250.0      | 250.0        |       |
| 99 N-Propylbenzene             | 120 | 11.827    | 11.827        | 0.000         | 96 | 793964   | 250.0      | 254.9        |       |
| 100 2-Chlorotoluene            | 126 | 11.913    | 11.913        | 0.000         | 93 | 652311   | 250.0      | 252.3        |       |
| 101 3-Chlorotoluene            | 126 | 11.979    | 11.980        | -0.001        | 96 | 649907   | 250.0      | 239.3        |       |

| Compound                         | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|----------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 102 1,3,5-Trimethylbenzene       | 105 | 12.010    | 12.010        | 0.000         | 96 | 2358116  | 250.0      | 232.9        |       |
| 103 4-Chlorotoluene              | 126 | 12.034    | 12.034        | 0.000         | 99 | 684319   | 250.0      | 250.5        |       |
| 104 tert-Butylbenzene            | 119 | 12.326    | 12.320        | 0.006         | 90 | 1949627  | 250.0      | 243.7        |       |
| 106 1,2,4-Trimethylbenzene       | 105 | 12.381    | 12.381        | 0.000         | 97 | 2433681  | 250.0      | 235.0        |       |
| 107 1,2-dichloro-4-(trifluorom   | 214 | 12.418    | 12.418        | 0.000         | 95 | 680073   | 250.0      | 231.8        |       |
| 108 sec-Butylbenzene             | 105 | 12.545    | 12.545        | 0.000         | 96 | 2739728  | 250.0      | 229.4        |       |
| 109 1,3-Dichlorobenzene          | 146 | 12.667    | 12.667        | 0.000         | 92 | 1267194  | 250.0      | 239.9        |       |
| 110 4-Isopropyltoluene           | 119 | 12.703    | 12.703        | 0.000         | 93 | 2392925  | 250.0      | 238.8        |       |
| 111 1,4-Dichlorobenzene          | 146 | 12.770    | 12.770        | 0.000         | 92 | 1287354  | 250.0      | 238.4        |       |
| 113 2,4-Dichloro-1-(trifluorom   | 214 | 12.789    | 12.789        | 0.000         | 96 | 641375   | 250.0      | 219.8        |       |
| 114 2,5-Dichlorobenzotrifluori   | 214 | 12.831    | 12.831        | 0.000         | 97 | 781945   | 250.0      | 239.9        |       |
| 116 n-Butylbenzene               | 91  | 13.111    | 13.111        | 0.000         | 95 | 2352259  | 250.0      | 235.1        |       |
| 117 1,2-Dichlorobenzene          | 146 | 13.123    | 13.123        | 0.000         | 95 | 1249514  | 250.0      | 234.3        |       |
| 118 1,2-Dibromo-3-Chloropropan   | 75  | 13.914    | 13.920        | -0.006        | 73 | 147337   | 250.0      | 301.3        |       |
| 119 2,4- & 2,5- & 2,6- Dichlor   | 125 | 14.060    | 14.060        | 0.000         | 93 | 3058923  | 750.0      | 659.0        |       |
| 121 2,3- & 3,4- Dichlorotoluen   | 125 | 14.474    | 14.474        | 0.000         | 95 | 2357462  | 500.0      | 460.3        |       |
| 122 1,2,4-Trichlorobenzene       | 180 | 14.741    | 14.741        | 0.000         | 92 | 1022001  | 250.0      | 247.3        |       |
| 123 Hexachlorobutadiene          | 225 | 14.887    | 14.887        | 0.000         | 97 | 414314   | 250.0      | 254.5        |       |
| 124 Naphthalene                  | 128 | 15.003    | 15.003        | 0.000         | 98 | 2149836  | 250.0      | 257.7        |       |
| 125 1,2,3-Trichlorobenzene       | 180 | 15.228    | 15.228        | 0.000         | 92 | 953082   | 250.0      | 246.4        |       |
| 126 2,4,5-Trichlorotoluene       | 159 | 16.007    | 16.007        | 0.000         | 0  | 681135   | 250.0      | 262.3        |       |
| 127 2,3,6-Trichlorotoluene       | 159 | 16.110    | 16.110        | 0.000         | 93 | 630961   | 250.0      | 256.1        |       |
| 143 2,5-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 147 2,6-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 144 2,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 145 2,3-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 146 3,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| S 130 1,2-Dichloroethene, Total  | 96  |           |               |               | 0  |          | 500.0      | 501.9        |       |
| S 131 Xylenes, Total             | 106 |           |               |               | 0  |          | 500.0      | 469.9        |       |
| S 132 1,3-Dichloropropene, Total | 1   |           |               |               | 0  |          | 500.0      | 573.0        |       |

### QC Flag Legend

#### Processing Flags

ND - Not Detected or Marked ND

#### Review Flags

M - Manually Integrated

### Reagents:

|                     |                     |           |             |
|---------------------|---------------------|-----------|-------------|
| VOA8260SURR_00039   | Amount Added: 10.00 | Units: uL |             |
| voaWVA1st Res_00003 | Amount Added: 10.00 | Units: uL |             |
| voaWket1Reste_00001 | Amount Added: 10.00 | Units: uL |             |
| voaWeemix1Res_00001 | Amount Added: 10.00 | Units: uL |             |
| VOA8260VOAPRI_00134 | Amount Added: 10.00 | Units: uL |             |
| voaWAcro2nd R_00006 | Amount Added: 11.00 | Units: uL |             |
| VOA8260INT_00039    | Amount Added: 2.00  | Units: uL | Run Reagent |

Report Date: 03-Aug-2015 12:16:21

Chrom Revision: 2.2 09-Jul-2015 10:16:20

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731010.D

Injection Date: 31-Jul-2015 16:25:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: IC VSTD50

Worklist Smp#: 10

Client ID:

Purge Vol: 5.000 mL

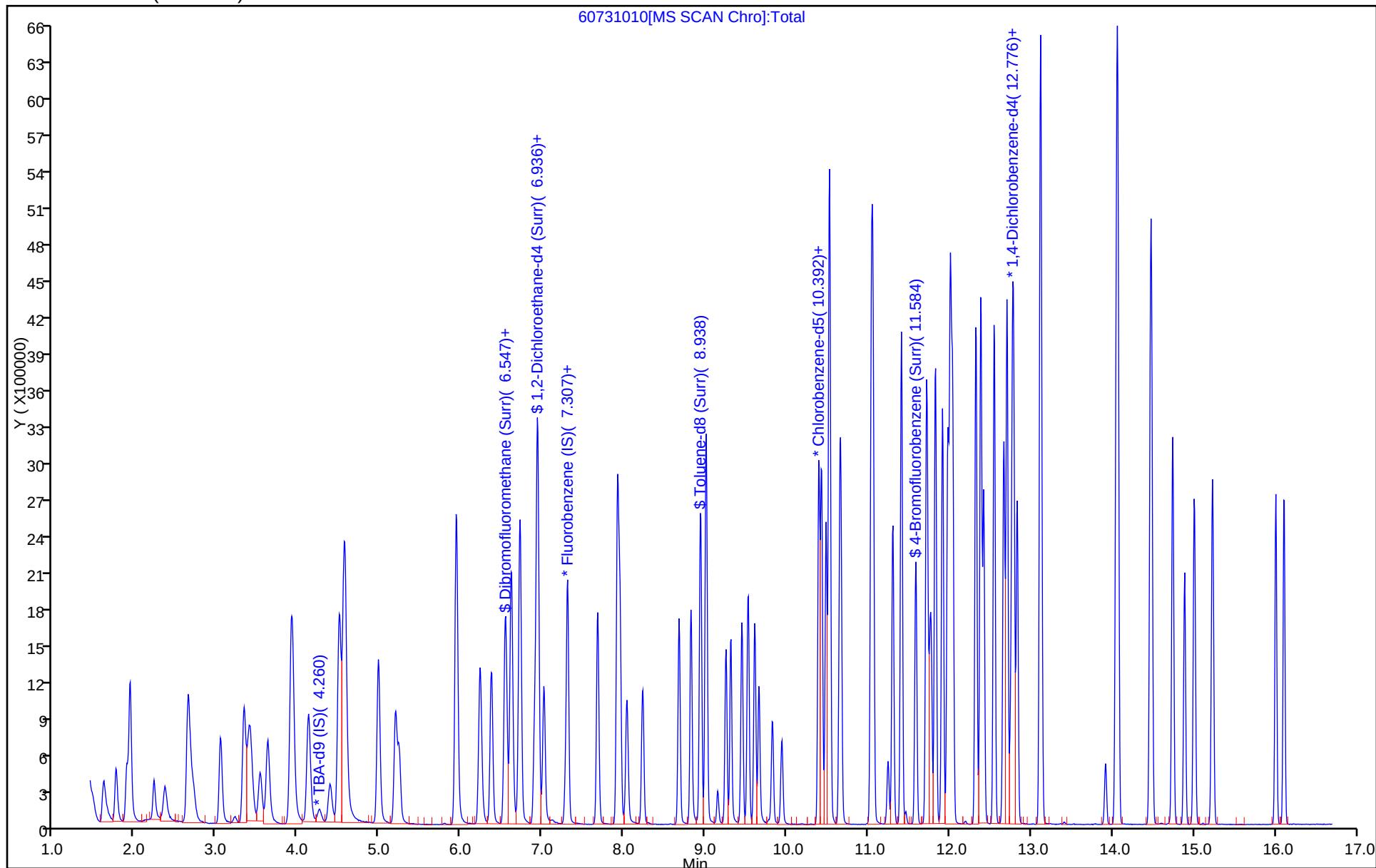
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: MSVOA\_LL\_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



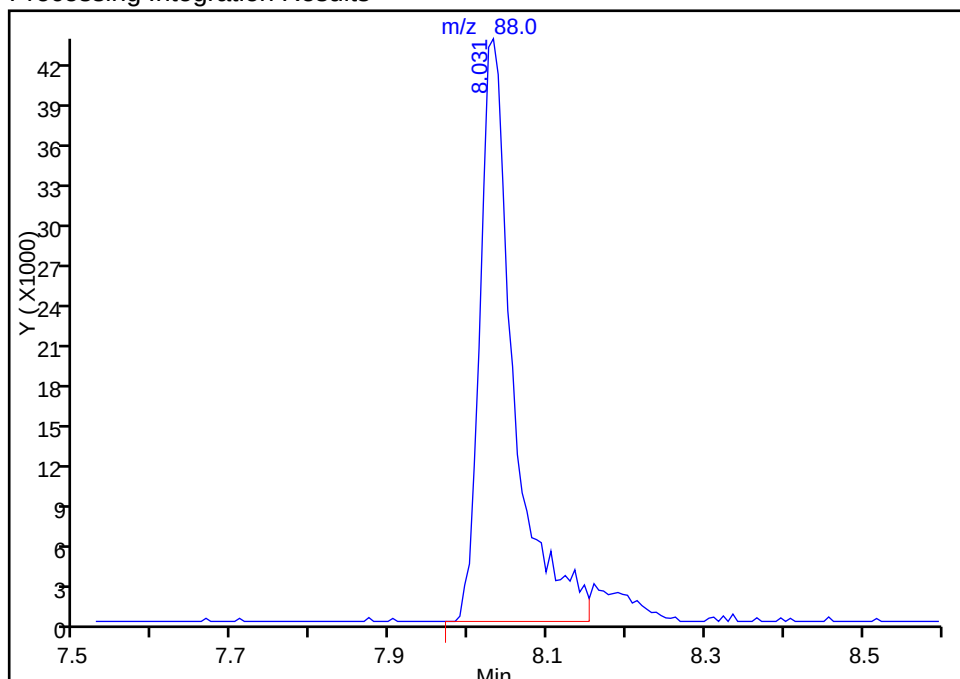
## TestAmerica Pittsburgh

|                 |                                                                 |                |                      |
|-----------------|-----------------------------------------------------------------|----------------|----------------------|
| Data File:      | \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731010.D |                |                      |
| Injection Date: | 31-Jul-2015 16:25:30                                            | Instrument ID: | CHHP6                |
| Lims ID:        | IC VSTD50                                                       |                |                      |
| Client ID:      |                                                                 |                |                      |
| Operator ID:    | 001562                                                          | ALS Bottle#:   | 10 Worklist Smp#: 10 |
| Purge Vol:      | 5.000 mL                                                        | Dil. Factor:   | 1.0000               |
| Method:         | MSVOA_LL_CHHP6                                                  | Limit Group:   | VOA 8260C ICAL       |
| Column:         | DB-624 ( 0.18 mm)                                               | Detector       | MS SCAN              |

## 65 1,4-Dioxane, CAS: 123-91-1

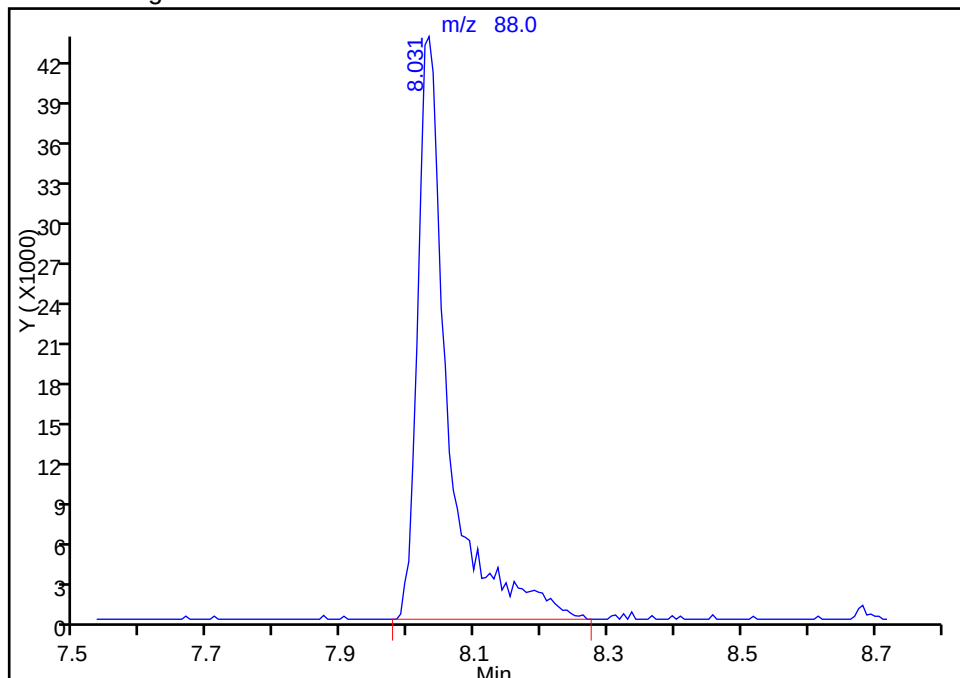
RT: 8.03  
Area: 130472  
Amount: 5026.0517  
Amount Units: ng

## Processing Integration Results



RT: 8.03  
Area: 139772  
Amount: 5378.0842  
Amount Units: ng

## Manual Integration Results



Reviewer: fergusond, 03-Aug-2015 10:08:16  
Audit Action: Manually Integrated  
Audit Reason: Peak Tail



TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731014.D  
 Lims ID: IC VSTD1  
 Client ID:  
 Sample Type: IC Calib Level: 1  
 Inject. Date: 31-Jul-2015 18:02:30 ALS Bottle#: 14 Worklist Smp#: 14  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: IC VSTD1  
 Misc. Info.: 180-0007999-014  
 Operator ID: 001562 Instrument ID: CHHP6  
 Sublist: chrom-MSVOA\_LL\_CHHP6\*sub5  
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\MSVOA\_LL\_CHHP6.m  
 Limit Group: VOA 8260C ICAL  
 Last Update: 03-Aug-2015 12:57:05 Calib Date: 31-Jul-2015 18:02:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731014.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: XAWRK049

First Level Reviewer: fergusond

Date: 03-Aug-2015 11:05:58

| Compound                        | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|---------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| * 1 TBA-d9 (IS)                 | 65  | 4.242     | 4.248         | -0.006        | 92 | 162667   | 1000.0     | 1000.0       |       |
| * 2 Fluorobenzene (IS)          | 96  | 7.284     | 7.284         | 0.000         | 98 | 456532   | 50.0       | 50.0         |       |
| * 3 Chlorobenzene-d5            | 119 | 10.398    | 10.398        | 0.000         | 92 | 93799    | 50.0       | 50.0         |       |
| * 4 1,4-Dichlorobenzene-d4      | 152 | 12.746    | 12.747        | -0.001        | 97 | 157240   | 50.0       | 50.0         |       |
| \$ 5 Dibromofluoromethane (Surr | 113 | 6.553     | 6.554         | -0.001        | 89 | 11777    | 5.00       | 5.60         |       |
| \$ 6 1,2-Dichloroethane-d4 (Sur | 65  | 6.931     | 6.931         | 0.000         | 54 | 19952    | 5.00       | 5.88         |       |
| \$ 7 Toluene-d8 (Surr)          | 98  | 8.938     | 8.938         | 0.000         | 94 | 41667    | 5.00       | 5.63         |       |
| \$ 8 4-Bromofluorobenzene (Surr | 95  | 11.585    | 11.585        | 0.000         | 77 | 19549    | 5.00       | 5.95         |       |
| 11 Dichlorodifluoromethane      | 85  | 1.614     | 1.608         | 0.006         | 97 | 17276    | 5.00       | 5.46         |       |
| 12 Chloromethane                | 50  | 1.754     | 1.754         | 0.000         | 99 | 15485    | 5.00       | 5.68         |       |
| 13 Vinyl chloride               | 62  | 1.887     | 1.888         | -0.001        | 62 | 15792    | 5.00       | 5.38         |       |
| 14 Butadiene                    | 39  | 1.930     | 1.930         | 0.000         | 93 | 15290    | 5.00       | 5.56         |       |
| 15 Bromomethane                 | 94  | 2.234     | 2.228         | 0.006         | 96 | 9521     | 5.00       | 6.01         |       |
| 16 Chloroethane                 | 64  | 2.356     | 2.368         | -0.012        | 92 | 9922     | 5.00       | 4.95         |       |
| 17 Dichlorofluoromethane        | 67  | 2.648     | 2.648         | 0.000         | 96 | 24941    | 5.00       | 5.35         |       |
| 18 Trichlorofluoromethane       | 101 | 2.684     | 2.660         | 0.024         | 51 | 19389    | 5.00       | 5.21         | M     |
| 20 Ethyl ether                  | 59  | 3.037     | 3.049         | -0.012        | 90 | 14586    | 5.00       | 5.53         |       |
| 21 Acrolein                     | 56  | 3.220     | 3.220         | 0.000         | 99 | 28320    | 100.0      | 98.5         |       |
| 22 1,1-Dichloroethene           | 96  | 3.335     | 3.341         | -0.006        | 95 | 11872    | 5.00       | 5.17         |       |
| 23 1,1,2-Trichloro-1,2,2-trif   | 101 | 3.396     | 3.390         | 0.006         | 53 | 13209    | 5.00       | 5.44         |       |
| 24 Acetone                      | 43  | 3.421     | 3.421         | -0.001        | 99 | 22203    | 25.0       | 27.5         | M     |
| 25 Iodomethane                  | 142 | 3.542     | 3.536         | 0.006         | 81 | 14090    | 5.00       | 4.57         |       |
| 26 Carbon disulfide             | 76  | 3.633     | 3.627         | 0.006         | 99 | 26146    | 5.00       | 4.39         |       |
| 29 3-Chloro-1-propene           | 76  | 3.919     | 3.919         | 0.000         | 86 | 5562     | 5.00       | 4.29         |       |
| 30 Methyl acetate               | 43  | 3.932     | 3.926         | 0.006         | 98 | 50033    | 25.0       | 26.4         |       |
| 31 Methylene Chloride           | 84  | 4.132     | 4.132         | 0.000         | 94 | 30274    | 5.00       | 5.01         |       |
| 32 2-Methyl-2-propanol          | 59  | 4.363     | 4.370         | -0.007        | 86 | 9874     | 50.0       | 53.9         |       |
| 33 Acrylonitrile                | 53  | 4.509     | 4.503         | 0.006         | 99 | 48723    | 50.0       | 51.0         | M     |
| 34 trans-1,2-Dichloroethene     | 96  | 4.558     | 4.564         | -0.006        | 70 | 13191    | 5.00       | 4.97         |       |
| 35 Methyl tert-butyl ether      | 73  | 4.564     | 4.576         | -0.012        | 98 | 41079    | 5.00       | 5.17         |       |

| Compound                       | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 36 Hexane                      | 57  | 4.984     | 4.990         | -0.006        | 91 | 19223    | 5.00       | 5.35         |       |
| 37 1,1-Dichloroethane          | 63  | 5.197     | 5.197         | 0.000         | 89 | 23168    | 5.00       | 4.88         |       |
| 38 Vinyl acetate               | 43  | 5.246     | 5.240         | 0.006         | 96 | 17413    | 5.00       | 4.54         |       |
| 43 cis-1,2-Dichloroethene      | 96  | 5.951     | 5.939         | 0.012         | 83 | 15010    | 5.00       | 5.20         |       |
| 44 2-Butanone (MEK)            | 43  | 5.945     | 5.945         | 0.000         | 97 | 26408    | 25.0       | 24.0         |       |
| 42 2,2-Dichloropropane         | 77  | 5.939     | 5.945         | -0.006        | 57 | 9613     | 5.00       | 4.00         |       |
| 48 Chlorobromomethane          | 128 | 6.231     | 6.231         | 0.000         | 95 | 6120     | 5.00       | 5.28         |       |
| 49 Tetrahydrofuran             | 42  | 6.249     | 6.249         | 0.000         | 82 | 8204     | 10.0       | 11.1         |       |
| 50 Chloroform                  | 83  | 6.371     | 6.371         | 0.000         | 94 | 23924    | 5.00       | 5.08         |       |
| 51 1,1,1-Trichloroethane       | 97  | 6.547     | 6.541         | 0.006         | 96 | 15055    | 5.00       | 4.32         | M     |
| 52 Cyclohexane                 | 56  | 6.608     | 6.620         | -0.012        | 88 | 22688    | 5.00       | 5.09         |       |
| 53 Carbon tetrachloride        | 117 | 6.712     | 6.718         | -0.006        | 92 | 10435    | 5.00       | 4.24         |       |
| 54 1,1-Dichloropropene         | 75  | 6.724     | 6.724         | 0.000         | 90 | 17924    | 5.00       | 4.79         |       |
| 55 Isobutyl alcohol            | 41  | 6.900     | 6.900         | 0.000         | 80 | 7317     | 125.0      | 110.8        | M     |
| 56 Benzene                     | 78  | 6.943     | 6.943         | 0.000         | 96 | 59844    | 5.00       | 5.62         |       |
| 57 1,2-Dichloroethane          | 62  | 7.016     | 7.016         | 0.000         | 98 | 23604    | 5.00       | 5.51         |       |
| 59 n-Heptane                   | 43  | 7.302     | 7.308         | -0.006        | 86 | 14990    | 5.00       | 5.18         |       |
| 61 Trichloroethene             | 130 | 7.679     | 7.679         | 0.000         | 89 | 11389    | 5.00       | 5.13         |       |
| 63 Methylcyclohexane           | 83  | 7.916     | 7.922         | -0.006        | 88 | 22772    | 5.00       | 5.06         |       |
| 64 1,2-Dichloropropane         | 63  | 7.947     | 7.953         | -0.006        | 86 | 13712    | 5.00       | 5.39         |       |
| 65 1,4-Dioxane                 | 88  | 8.026     | 8.032         | -0.006        | 39 | 2321     | 100.0      | 92.5         |       |
| 67 Dibromomethane              | 93  | 8.032     | 8.038         | -0.006        | 92 | 7749     | 5.00       | 5.02         |       |
| 68 Dichlorobromomethane        | 83  | 8.226     | 8.227         | -0.001        | 96 | 11941    | 5.00       | 4.12         |       |
| 71 cis-1,3-Dichloropropene     | 75  | 8.683     | 8.677         | 0.006         | 90 | 11797    | 5.00       | 3.70         |       |
| 72 4-Methyl-2-pentanone (MIBK) | 43  | 8.829     | 8.823         | 0.006         | 96 | 42150    | 25.0       | 21.9         |       |
| 73 Toluene                     | 91  | 9.011     | 9.011         | 0.000         | 98 | 55394    | 5.00       | 5.72         |       |
| 74 trans-1,3-Dichloropropene   | 75  | 9.255     | 9.255         | 0.000         | 97 | 8162     | 5.00       | 3.32         |       |
| 75 Ethyl methacrylate          | 69  | 9.315     | 9.315         | 0.000         | 87 | 9928     | 5.00       | 3.80         |       |
| 76 1,1,2-Trichloroethane       | 97  | 9.449     | 9.449         | 0.000         | 91 | 10927    | 5.00       | 5.46         |       |
| 77 Tetrachloroethene           | 164 | 9.528     | 9.522         | 0.006         | 90 | 9096     | 5.00       | 5.51         |       |
| 78 1,3-Dichloropropane         | 76  | 9.607     | 9.607         | 0.000         | 91 | 19746    | 5.00       | 5.34         |       |
| 79 2-Hexanone                  | 43  | 9.656     | 9.656         | 0.000         | 96 | 27957    | 25.0       | 22.1         |       |
| 81 Chlorodibromomethane        | 129 | 9.826     | 9.826         | 0.000         | 88 | 4662     | 5.00       | 3.41         |       |
| 82 Ethylene Dibromide          | 107 | 9.942     | 9.942         | 0.000         | 93 | 8796     | 5.00       | 4.97         |       |
| 83 3-Chlorobenzotrifluoride    | 180 | 10.392    | 10.392        | 0.000         | 56 | 18146    | 5.00       | 5.86         |       |
| 84 Chlorobenzene               | 112 | 10.429    | 10.429        | 0.000         | 93 | 33099    | 5.00       | 5.56         |       |
| 85 4-Chlorobenzotrifluoride    | 180 | 10.490    | 10.483        | 0.007         | 96 | 15713    | 5.00       | 5.47         |       |
| 86 1,1,1,2-Tetrachloroethane   | 131 | 10.514    | 10.520        | -0.006        | 40 | 6472     | 5.00       | 3.97         |       |
| 87 Ethylbenzene                | 106 | 10.532    | 10.526        | 0.006         | 98 | 17773    | 5.00       | 5.30         |       |
| 88 m-Xylene & p-Xylene         | 106 | 10.654    | 10.660        | -0.006        | 97 | 21283    | 5.00       | 5.11         |       |
| 89 o-Xylene                    | 106 | 11.037    | 11.043        | -0.006        | 96 | 20074    | 5.00       | 4.82         |       |
| 90 Styrene                     | 104 | 11.061    | 11.061        | 0.000         | 93 | 28385    | 5.00       | 4.44         |       |
| 91 Bromoform                   | 173 | 11.244    | 11.244        | 0.000         | 35 | 2602     | 5.00       | 3.57         |       |
| 92 2-Chlorobenzotrifluoride    | 180 | 11.305    | 11.305        | 0.000         | 92 | 16686    | 5.00       | 5.26         |       |
| 93 Isopropylbenzene            | 105 | 11.408    | 11.408        | 0.000         | 96 | 49505    | 5.00       | 4.97         |       |
| 96 1,1,2,2-Tetrachloroethane   | 83  | 11.712    | 11.712        | 0.000         | 73 | 13623    | 5.00       | 5.09         |       |
| 95 Bromobenzene                | 156 | 11.724    | 11.725        | -0.001        | 96 | 12814    | 5.00       | 5.07         |       |
| 97 trans-1,4-Dichloro-2-buten  | 53  | 11.749    | 11.749        | 0.000         | 51 | 3433     | 5.00       | 4.28         |       |
| 98 1,2,3-Trichloropropane      | 110 | 11.773    | 11.767        | 0.006         | 83 | 4898     | 5.00       | 5.10         |       |
| 99 N-Propylbenzene             | 120 | 11.822    | 11.828        | -0.006        | 99 | 13092    | 5.00       | 4.50         |       |
| 100 2-Chlorotoluene            | 126 | 11.919    | 11.913        | 0.006         | 93 | 11155    | 5.00       | 4.62         |       |
| 101 3-Chlorotoluene            | 126 | 11.980    | 11.980        | 0.000         | 97 | 11861    | 5.00       | 4.67         |       |

| Compound                         | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|----------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 102 1,3,5-Trimethylbenzene       | 105 | 12.010    | 12.010        | 0.000         | 93 | 43612    | 5.00       | 4.61         |       |
| 103 4-Chlorotoluene              | 126 | 12.035    | 12.041        | -0.006        | 98 | 12056    | 5.00       | 4.72         |       |
| 104 tert-Butylbenzene            | 119 | 12.321    | 12.321        | 0.000         | 92 | 34048    | 5.00       | 4.55         |       |
| 106 1,2,4-Trimethylbenzene       | 105 | 12.381    | 12.382        | -0.001        | 98 | 41890    | 5.00       | 4.33         |       |
| 107 1,2-dichloro-4-(trifluorom   | 214 | 12.418    | 12.418        | 0.000         | 96 | 14947    | 5.00       | 5.45         |       |
| 108 sec-Butylbenzene             | 105 | 12.546    | 12.546        | 0.000         | 96 | 50094    | 5.00       | 4.49         |       |
| 109 1,3-Dichlorobenzene          | 146 | 12.661    | 12.667        | -0.006        | 88 | 25334    | 5.00       | 5.13         |       |
| 110 4-Isopropyltoluene           | 119 | 12.704    | 12.704        | 0.000         | 95 | 40061    | 5.00       | 4.28         |       |
| 111 1,4-Dichlorobenzene          | 146 | 12.771    | 12.771        | 0.000         | 88 | 25908    | 5.00       | 5.13         |       |
| 113 2,4-Dichloro-1-(trifluorom   | 214 | 12.789    | 12.789        | 0.000         | 92 | 13852    | 5.00       | 5.08         |       |
| 114 2,5-Dichlorobenzotrifluori   | 214 | 12.832    | 12.832        | 0.000         | 94 | 17529    | 5.00       | 5.75         |       |
| 116 n-Butylbenzene               | 91  | 13.111    | 13.112        | -0.001        | 98 | 43104    | 5.00       | 4.61         |       |
| 117 1,2-Dichlorobenzene          | 146 | 13.130    | 13.124        | 0.006         | 93 | 27271    | 5.00       | 5.47         |       |
| 118 1,2-Dibromo-3-Chloropropan   | 75  | 13.921    | 13.921        | 0.000         | 62 | 1637     | 5.00       | 3.58         |       |
| 119 2,4- & 2,5- & 2,6- Dichlor   | 125 | 14.054    | 14.061        | -0.007        | 98 | 64430    | 15.0       | 14.8         |       |
| 121 2,3- & 3,4- Dichlorotoluen   | 125 | 14.480    | 14.474        | 0.006         | 97 | 44720    | 10.0       | 9.34         |       |
| 122 1,2,4-Trichlorobenzene       | 180 | 14.742    | 14.736        | 0.006         | 88 | 18465    | 5.00       | 4.78         |       |
| 123 Hexachlorobutadiene          | 225 | 14.888    | 14.888        | 0.000         | 91 | 7049     | 5.00       | 4.63         |       |
| 124 Naphthalene                  | 128 | 15.010    | 15.004        | 0.006         | 97 | 30879    | 5.00       | 3.96         |       |
| 125 1,2,3-Trichlorobenzene       | 180 | 15.229    | 15.229        | 0.000         | 92 | 18575    | 5.00       | 5.14         |       |
| 126 2,4,5-Trichlorotoluene       | 159 | 16.013    | 16.007        | 0.006         | 0  | 10257    | 5.00       | 4.23         |       |
| 127 2,3,6-Trichlorotoluene       | 159 | 16.111    | 16.111        | 0.000         | 93 | 10609    | 5.00       | 4.61         |       |
| 146 3,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 147 2,6-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 143 2,5-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 145 2,3-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 144 2,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| S 130 1,2-Dichloroethene, Total  | 96  |           |               |               | 0  |          | 10.0       | 10.2         |       |
| S 131 Xylenes, Total             | 106 |           |               |               | 0  |          | 10.0       | 9.93         |       |
| S 132 1,3-Dichloropropene, Total | 1   |           |               |               | 0  |          | 10.0       | 7.03         |       |

### QC Flag Legend

#### Processing Flags

ND - Not Detected or Marked ND

#### Review Flags

M - Manually Integrated

### Reagents:

|                     |                    |           |             |
|---------------------|--------------------|-----------|-------------|
| VOA8260SURR_00039   | Amount Added: 0.20 | Units: uL |             |
| VOA8260VOAPRI_00134 | Amount Added: 0.20 | Units: uL |             |
| voaWVA1st Res_00003 | Amount Added: 0.20 | Units: uL |             |
| voaWeemix1Res_00001 | Amount Added: 0.20 | Units: uL |             |
| voaWket1Reste_00001 | Amount Added: 0.80 | Units: uL |             |
| voaWAcro2nd R_00006 | Amount Added: 4.00 | Units: uL |             |
| VOA8260INT_00039    | Amount Added: 2.00 | Units: uL | Run Reagent |

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731014.D

Injection Date: 31-Jul-2015 18:02:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: IC VSTD1

Worklist Smp#: 14

Client ID:

Purge Vol: 5.000 mL

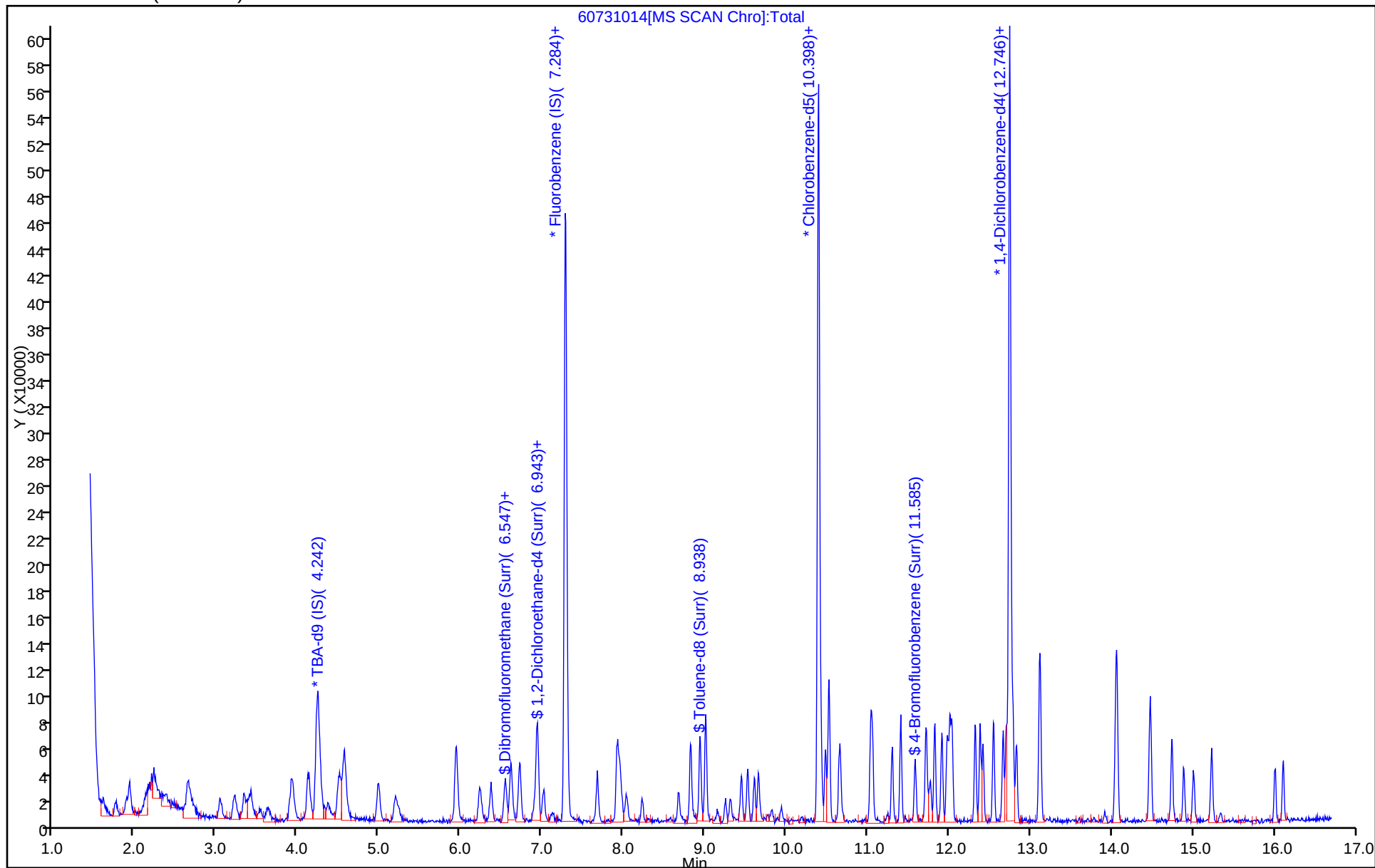
Dil. Factor: 1.0000

ALS Bottle#: 14

Method: MSVOA\_LL\_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731014.D

Injection Date: 31-Jul-2015 18:02:30

Instrument ID: CHHP6

Lims ID: IC VSTD1

Client ID:

Operator ID: 001562

ALS Bottle#:

14

Worklist Smp#: 14

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: MSVOA\_LL\_CHHP6

Limit Group:

VOA 8260C ICAL

Column: DB-624 (0.18 mm)

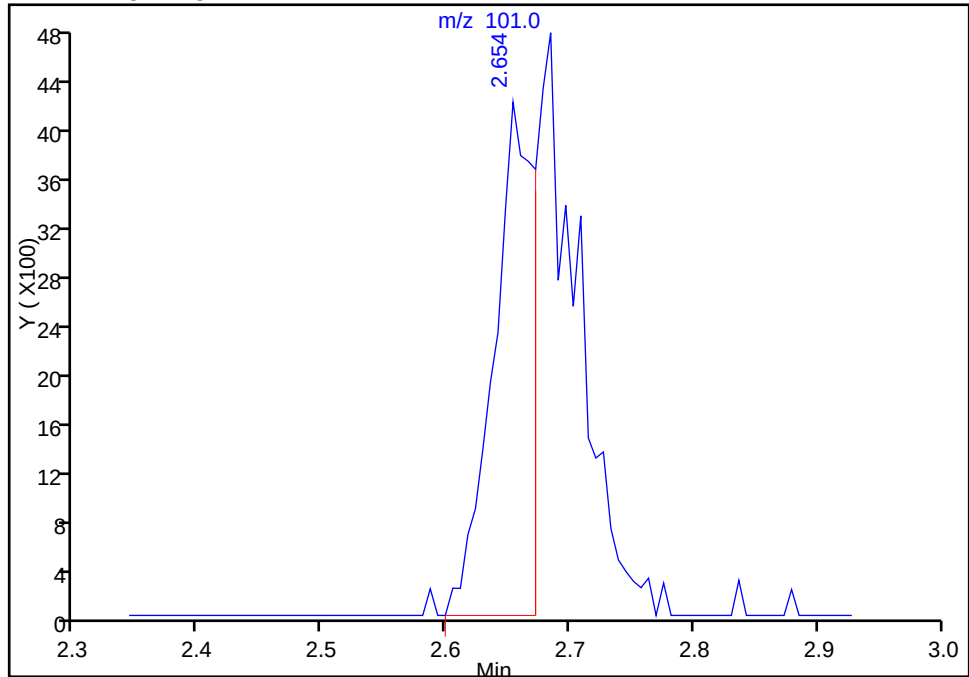
Detector

MS SCAN

**18 Trichlorofluoromethane, CAS: 75-69-4**

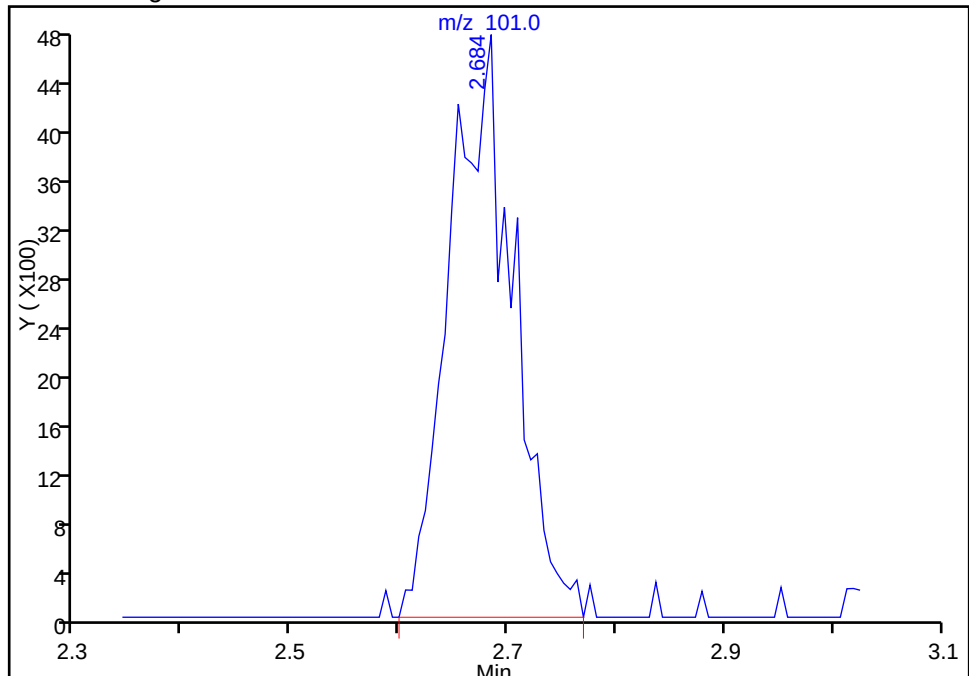
RT: 2.65  
Area: 9483  
Amount: 2.504798  
Amount Units: ng

## Processing Integration Results



RT: 2.68  
Area: 19389  
Amount: 5.214616  
Amount Units: ng

## Manual Integration Results



Reviewer: fergusond, 03-Aug-2015 11:05:58

Audit Action: Manually Integrated

Audit Reason: Poor chromatography

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731014.D

Injection Date: 31-Jul-2015 18:02:30

Instrument ID: CHHP6

Lims ID: IC VSTD1

Client ID:

Operator ID: 001562

ALS Bottle#:

14

Worklist Smp#: 14

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: MSVOA\_LL\_CHHP6

Limit Group:

VOA 8260C ICAL

Column: DB-624 ( 0.18 mm)

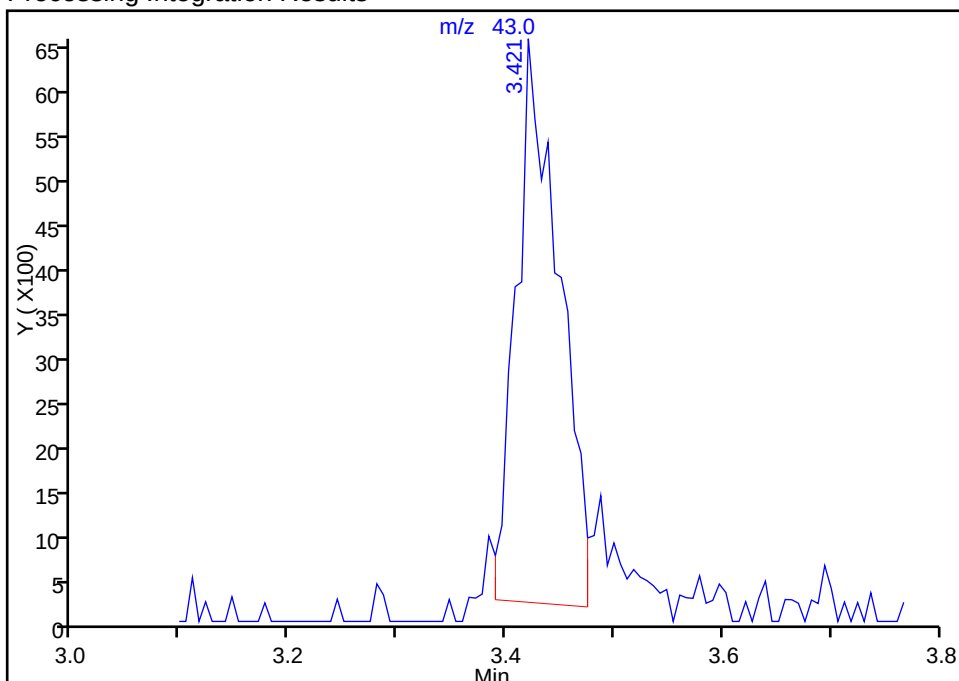
Detector

MS SCAN

## 24 Acetone, CAS: 67-64-1

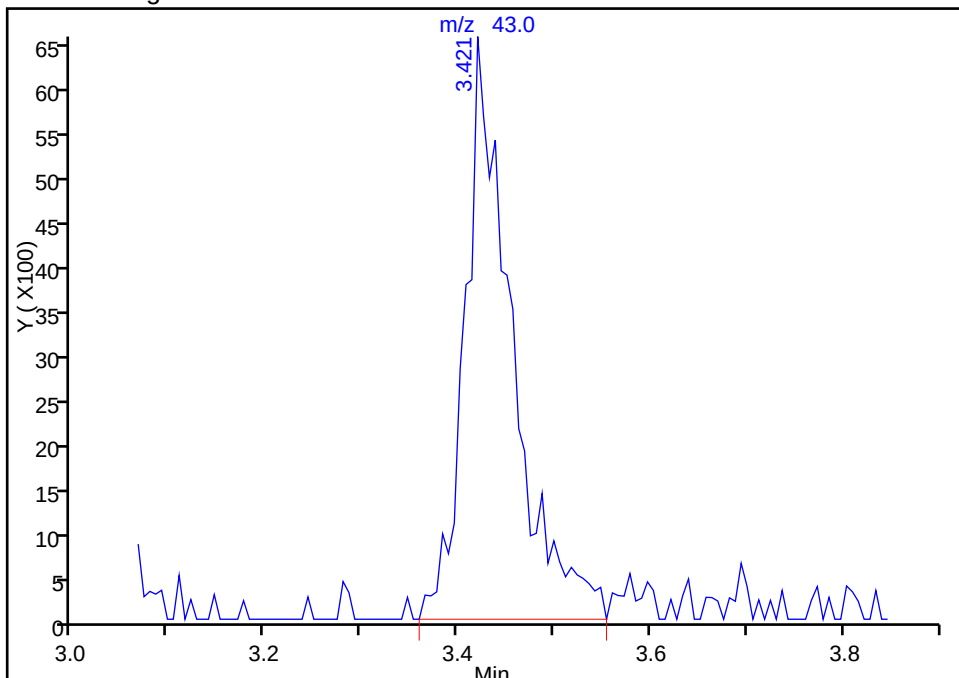
RT: 3.42  
Area: 17621  
Amount: 21.931508  
Amount Units: ng

## Processing Integration Results



RT: 3.42  
Area: 22203  
Amount: 27.489890  
Amount Units: ng

## Manual Integration Results



Reviewer: fergusond, 03-Aug-2015 11:05:58

Audit Action: Manually Integrated

Audit Reason: Poor chromatography

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731014.D

Injection Date: 31-Jul-2015 18:02:30

Instrument ID: CHHP6

Lims ID: IC VSTD1

Client ID:

Operator ID: 001562

ALS Bottle#:

14

Worklist Smp#: 14

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: MSVOA\_LL\_CHHP6

Limit Group:

VOA 8260C ICAL

Column: DB-624 ( 0.18 mm)

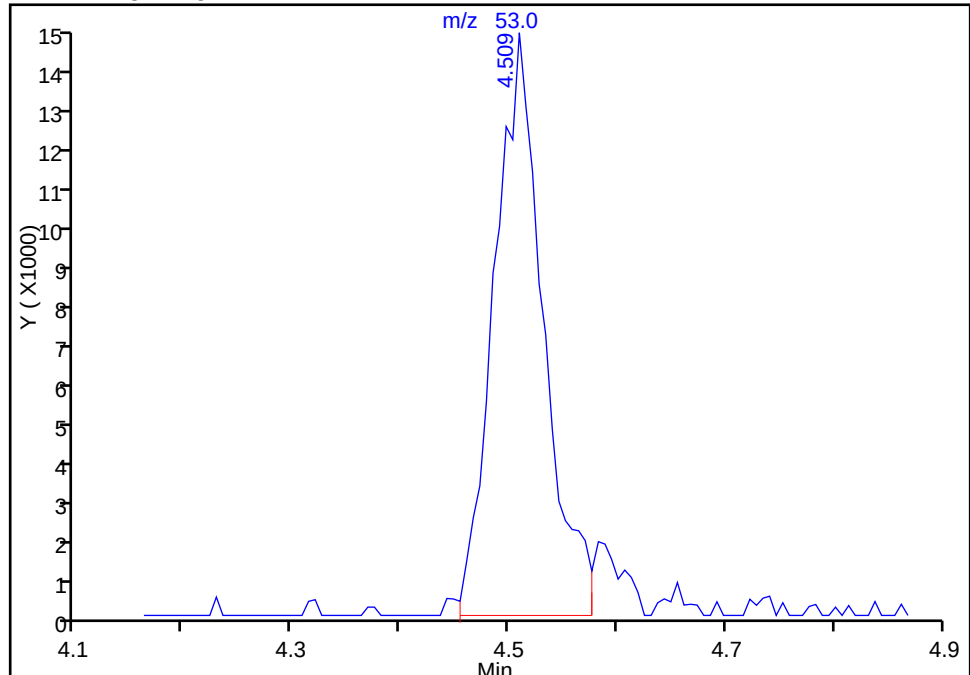
Detector

MS SCAN

## 33 Acrylonitrile, CAS: 107-13-1

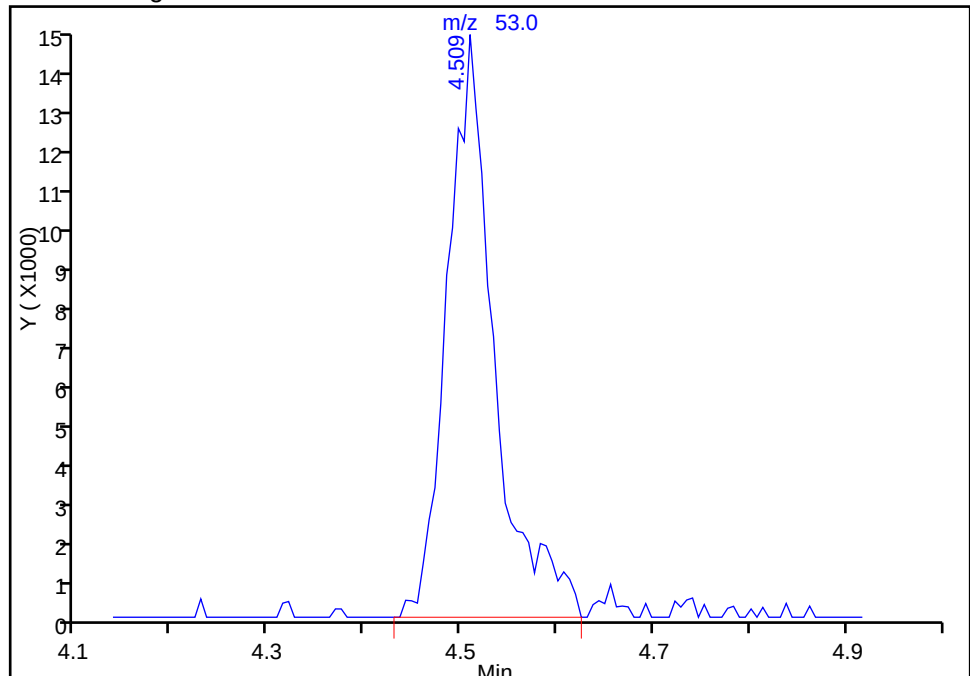
RT: 4.51  
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Amount: 48.323975  
Amount Units: ng

## Processing Integration Results



RT: 4.51  
Area: 48723  
Amount: 51.033411  
Amount Units: ng

## Manual Integration Results



Reviewer: fergusond, 03-Aug-2015 11:05:58

Audit Action: Manually Integrated

Audit Reason: Poor chromatography

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731014.D

Injection Date: 31-Jul-2015 18:02:30

Instrument ID: CHHP6

Lims ID: IC VSTD1

Client ID:

Operator ID: 001562

ALS Bottle#:

14

Worklist Smp#: 14

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: MSVOA\_LL\_CHHP6

Limit Group:

VOA 8260C ICAL

Column: DB-624 ( 0.18 mm)

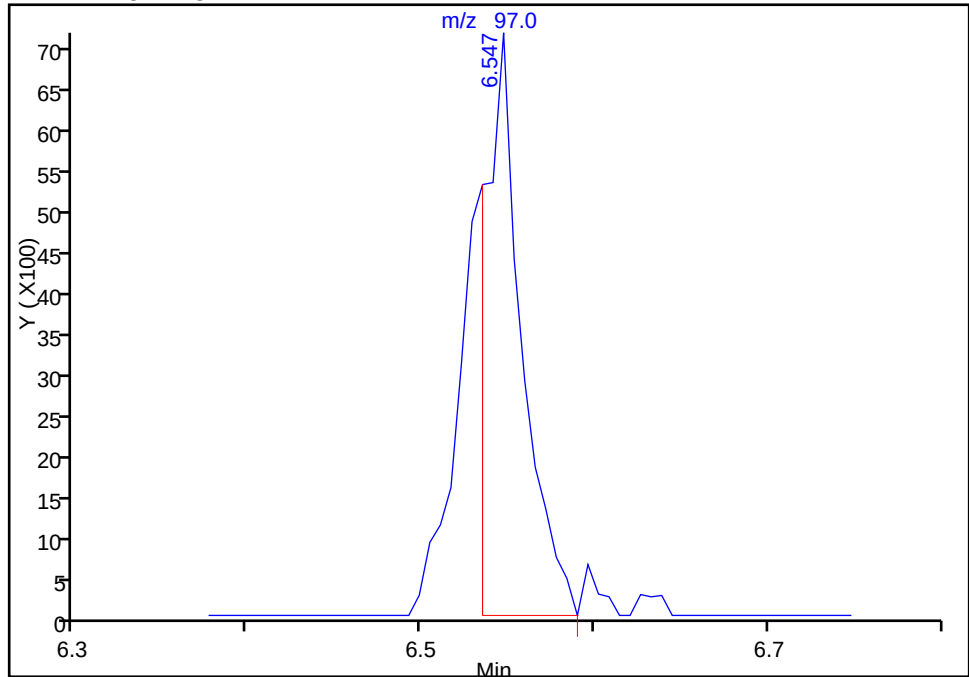
Detector

MS SCAN

## 51 1,1,1-Trichloroethane, CAS: 71-55-6

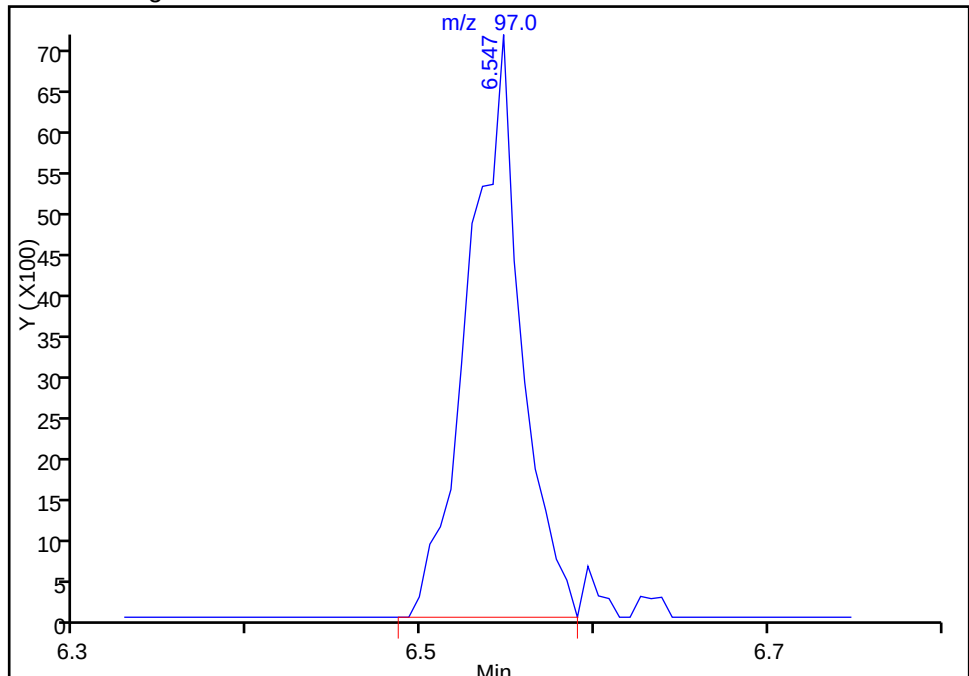
RT: 6.55  
Area: 10745  
Amount: 3.045023  
Amount Units: ng

## Processing Integration Results



RT: 6.55  
Area: 15055  
Amount: 4.323691  
Amount Units: ng

## Manual Integration Results



Reviewer: fergusond, 03-Aug-2015 11:05:58

Audit Action: Manually Integrated

Audit Reason: Poor chromatography



## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731014.D

Injection Date: 31-Jul-2015 18:02:30

Instrument ID: CHHP6

Lims ID: IC VSTD1

Client ID:

Operator ID: 001562

ALS Bottle#:

14

Worklist Smp#: 14

Purge Vol: 5.000 mL

Dil. Factor:

1.0000

Method: MSVOA\_LL\_CHHP6

Limit Group:

VOA 8260C ICAL

Column: DB-624 ( 0.18 mm)

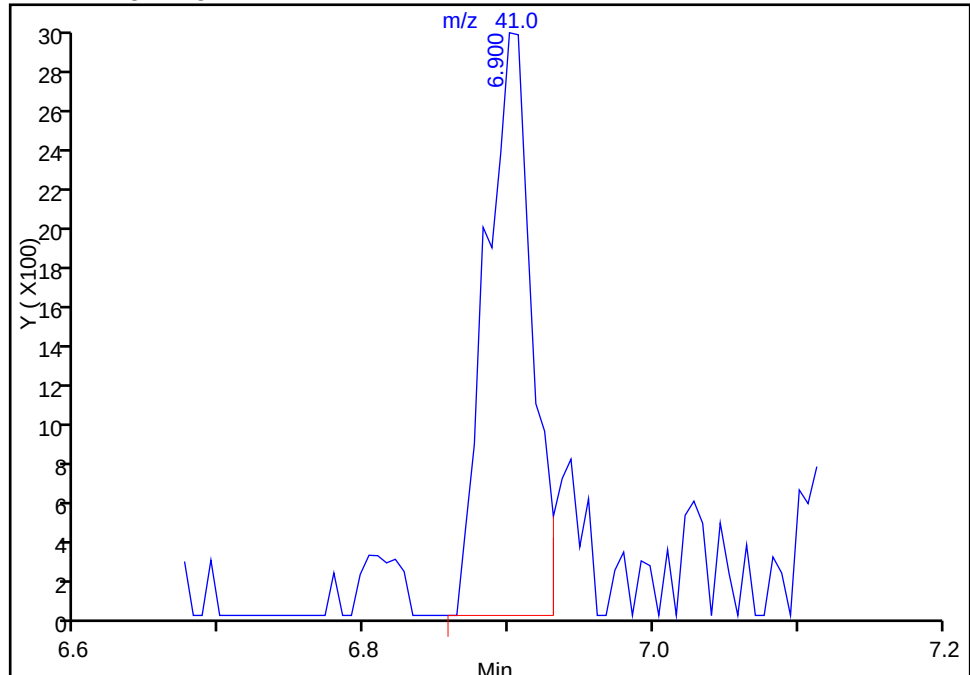
Detector

MS SCAN

**55 Isobutyl alcohol, CAS: 78-83-1**

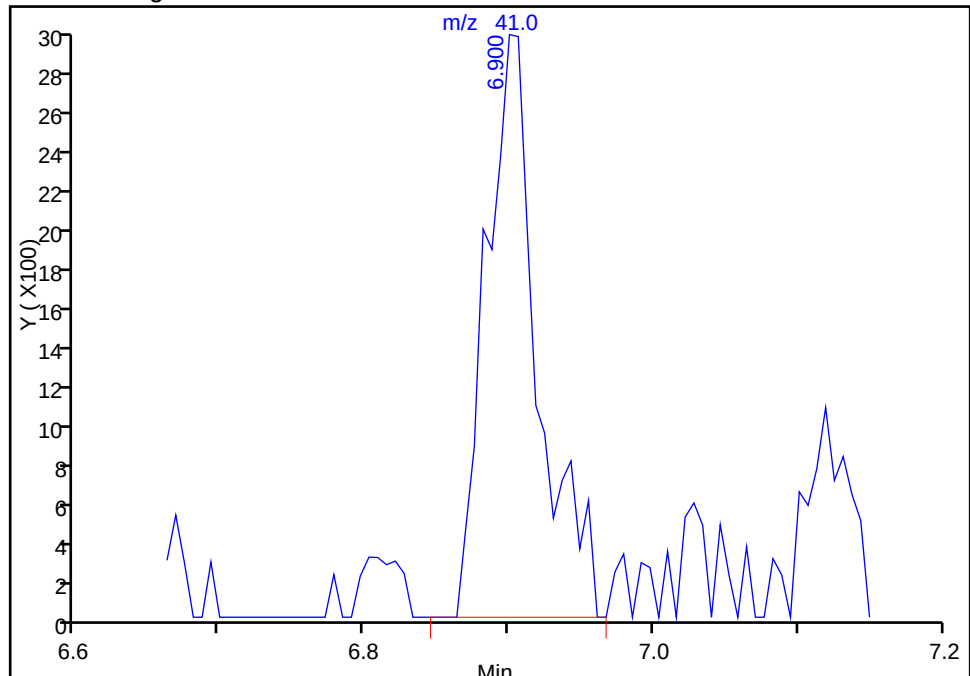
RT: 6.90  
Area: 6443  
Amount: 97.511814  
Amount Units: ng

## Processing Integration Results



RT: 6.90  
Area: 7317  
Amount: 110.7809  
Amount Units: ng

## Manual Integration Results



Reviewer: fergusond, 03-Aug-2015 11:05:58

Audit Action: Manually Integrated

Audit Reason: Poor chromatography

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
SDG No.: \_\_\_\_\_  
Lab Sample ID: CCVIS 180-156309/5 Calibration Date: 10/08/2015 12:33  
Instrument ID: CHHP5 Calib Start Date: 03/18/2015 13:31  
GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 03/18/2015 16:19  
Lab File ID: 51008005.D Conc. Units: ug/L Heated Purge: (Y/N) N

| ANALYTE                   | CURVE<br>TYPE | AVE RRF | RRF    | MIN RRF | CALC<br>AMOUNT | SPIKE<br>AMOUNT | %D  | MAX<br>%D |
|---------------------------|---------------|---------|--------|---------|----------------|-----------------|-----|-----------|
| 2-Chloroethyl vinyl ether | Ave           | 0.1652  | 0.1803 | 0.0100  | 21.8           | 20.0            | 9.1 | 20.0      |

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\51008005.D  
 Lims ID: CCVIS  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 08-Oct-2015 12:33:30 ALS Bottle#: 3 Worklist Smp#: 5  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: CCVIS  
 Misc. Info.: 180-0008892-005  
 Operator ID: 001562 Instrument ID: CHHP5  
 Sublist: chrom-MSVOA\_LL\_CHHP5\*sub12  
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C ICAL  
 Last Update: 08-Oct-2015 13:15:55 Calib Date: 26-Aug-2015 17:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: XAWRK015

First Level Reviewer: fergusond

Date: 08-Oct-2015 13:09:11

| Compound                        | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q   | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|---------------------------------|-----|--------------|------------------|------------------|-----|----------|---------------|-----------------|-------|
| * 1 TBA-d9 (IS)                 | 65  | 4.269        | 4.269            | 0.000            | 0   | 123647   | 1000.0        | 1000.0          |       |
| * 2 Fluorobenzene (IS)          | 96  | 7.286        | 7.286            | 0.000            | 98  | 342398   | 50.0          | 50.0            |       |
| * 3 Chlorobenzene-d5            | 119 | 10.389       | 10.389           | 0.000            | 87  | 85766    | 50.0          | 50.0            |       |
| * 4 1,4-Dichlorobenzene-d4      | 152 | 12.731       | 12.731           | 0.000            | 92  | 125555   | 50.0          | 50.0            |       |
| \$ 5 Dibromofluoromethane (Surr | 113 | 6.562        | 6.562            | 0.000            | 94  | 78853    | 50.0          | 46.9            |       |
| \$ 6 1,2-Dichloroethane-d4 (Sur | 65  | 6.934        | 6.934            | 0.000            | 0   | 96515    | 50.0          | 41.8            |       |
| \$ 7 Toluene-d8 (Surr)          | 98  | 8.935        | 8.935            | 0.000            | 94  | 323942   | 50.0          | 49.0            |       |
| \$ 8 4-Bromofluorobenzene (Surr | 95  | 11.569       | 11.569           | 0.000            | 91  | 113930   | 50.0          | 45.6            |       |
| 11 Dichlorodifluoromethane      | 85  | 1.598        | 1.598            | 0.000            | 98  | 101212   | 50.0          | 52.3            |       |
| 12 Chloromethane                | 50  | 1.769        | 1.769            | 0.000            | 99  | 116389   | 50.0          | 41.0            |       |
| 13 Vinyl chloride               | 62  | 1.909        | 1.909            | 0.000            | 97  | 94016    | 50.0          | 37.3            |       |
| 14 Butadiene                    | 39  | 1.945        | 1.945            | 0.000            | 98  | 126209   | 50.0          | 42.4            |       |
| 15 Bromomethane                 | 94  | 2.255        | 2.255            | 0.000            | 89  | 38790    | 50.0          | 37.8            |       |
| 16 Chloroethane                 | 64  | 2.395        | 2.395            | 0.000            | 98  | 46570    | 50.0          | 30.6            |       |
| 17 Dichlorofluoromethane        | 67  | 2.669        | 2.669            | 0.000            | 97  | 115360   | 50.0          | 35.8            |       |
| 18 Trichlorofluoromethane       | 101 | 2.706        | 2.706            | 0.000            | 98  | 107714   | 50.0          | 44.6            |       |
| 20 Ethyl ether                  | 59  | 3.046        | 3.046            | 0.000            | 95  | 85438    | 50.0          | 38.2            |       |
| 21 Acrolein                     | 56  | 3.235        | 3.235            | 0.000            | 98  | 42911    | 150.0         | 128.8           |       |
| 22 1,1-Dichloroethene           | 96  | 3.338        | 3.338            | 0.000            | 96  | 88789    | 50.0          | 46.6            |       |
| 23 1,1,2-Trichloro-1,2,2-trif   | 101 | 3.423        | 3.423            | 0.000            | 92  | 96148    | 50.0          | 47.6            |       |
| 24 Acetone                      | 43  | 3.448        | 3.448            | 0.000            | 94  | 73160    | 100.0         | 105.9           |       |
| 25 Iodomethane                  | 142 | 3.539        | 3.539            | 0.000            | 98  | 136545   | 50.0          | 48.0            |       |
| 26 Carbon disulfide             | 76  | 3.630        | 3.630            | 0.000            | 100 | 201549   | 50.0          | 45.5            |       |
| 28 3-Chloro-1-propene           | 76  | 3.916        | 3.916            | 0.000            | 88  | 45805    | 50.0          | 42.4            |       |
| 30 Methyl acetate               | 43  | 3.940        | 3.940            | 0.000            | 100 | 513576   | 250.0         | 248.8           |       |
| 31 Methylene Chloride           | 84  | 4.135        | 4.135            | 0.000            | 98  | 106278   | 50.0          | 47.1            |       |
| 32 2-Methyl-2-propanol          | 59  | 4.397        | 4.397            | 0.000            | 90  | 73361    | 500.0         | 527.1           |       |
| 33 Acrylonitrile                | 53  | 4.525        | 4.525            | 0.000            | 98  | 481698   | 500.0         | 480.9           |       |
| 34 trans-1,2-Dichloroethene     | 96  | 4.561        | 4.561            | 0.000            | 96  | 93247    | 50.0          | 45.0            |       |
| 35 Methyl tert-butyl ether      | 73  | 4.573        | 4.573            | 0.000            | 96  | 218863   | 50.0          | 45.7            |       |

| Compound                       | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 36 Hexane                      | 57  | 4.987     | 4.987         | 0.000         | 96 | 168682   | 50.0       | 48.5         |       |
| 37 1,1-Dichloroethane          | 63  | 5.200     | 5.200         | 0.000         | 96 | 180795   | 50.0       | 44.3         |       |
| 38 Vinyl acetate               | 43  | 5.255     | 5.255         | 0.000         | 98 | 159946   | 50.0       | 52.3         |       |
| 44 2,2-Dichloropropane         | 77  | 5.942     | 5.942         | 0.000         | 59 | 71742    | 50.0       | 43.9         |       |
| 45 cis-1,2-Dichloroethene      | 96  | 5.954     | 5.954         | 0.000         | 83 | 101613   | 50.0       | 45.9         |       |
| 46 2-Butanone (MEK)            | 43  | 5.960     | 5.960         | 0.000         | 82 | 106925   | 100.0      | 103.0        |       |
| 49 Chlorobromomethane          | 128 | 6.234     | 6.234         | 0.000         | 95 | 49537    | 50.0       | 51.0         |       |
| 51 Tetrahydrofuran             | 42  | 6.246     | 6.246         | 0.000         | 91 | 75220    | 100.0      | 90.3         |       |
| 52 Chloroform                  | 83  | 6.380     | 6.380         | 0.000         | 94 | 159892   | 50.0       | 45.4         |       |
| 53 1,1,1-Trichloroethane       | 97  | 6.538     | 6.538         | 0.000         | 97 | 117170   | 50.0       | 45.0         |       |
| 54 Cyclohexane                 | 56  | 6.611     | 6.611         | 0.000         | 98 | 195272   | 50.0       | 44.8         |       |
| 56 Carbon tetrachloride        | 117 | 6.715     | 6.715         | 0.000         | 96 | 106908   | 50.0       | 48.2         |       |
| 55 1,1-Dichloropropene         | 75  | 6.733     | 6.733         | 0.000         | 90 | 129065   | 50.0       | 44.8         |       |
| 57 Isobutyl alcohol            | 41  | 6.927     | 6.927         | 0.000         | 94 | 103323   | 1250.0     | 1584.6       |       |
| 58 Benzene                     | 78  | 6.946     | 6.946         | 0.000         | 97 | 390350   | 50.0       | 46.2         |       |
| 59 1,2-Dichloroethane          | 62  | 7.025     | 7.025         | 0.000         | 96 | 124702   | 50.0       | 42.7         |       |
| 62 n-Heptane                   | 43  | 7.311     | 7.311         | 0.000         | 97 | 153258   | 50.0       | 48.5         |       |
| 64 Trichloroethene             | 130 | 7.676     | 7.676         | 0.000         | 96 | 105784   | 50.0       | 51.2         |       |
| 66 Methylcyclohexane           | 83  | 7.913     | 7.913         | 0.000         | 95 | 157272   | 50.0       | 48.3         |       |
| 67 1,2-Dichloropropane         | 63  | 7.949     | 7.949         | 0.000         | 97 | 101955   | 50.0       | 46.0         |       |
| 70 1,4-Dioxane                 | 88  | 8.029     | 8.029         | 0.000         | 39 | 19727    | 1000.0     | 1291.6       | M     |
| 68 Dibromomethane              | 93  | 8.035     | 8.035         | 0.000         | 91 | 52653    | 50.0       | 46.8         |       |
| 71 Dichlorobromomethane        | 83  | 8.235     | 8.235         | 0.000         | 98 | 104259   | 50.0       | 46.9         |       |
| 73 2-Chloroethyl vinyl ether   | 63  | 8.527     | 8.527         | 0.000         | 91 | 123440   | 100.0      | 109.1        |       |
| 74 cis-1,3-Dichloropropene     | 75  | 8.673     | 8.673         | 0.000         | 90 | 121544   | 50.0       | 46.6         |       |
| 75 4-Methyl-2-pentanone (MIBK) | 43  | 8.826     | 8.826         | 0.000         | 99 | 201662   | 100.0      | 95.4         |       |
| 76 Toluene                     | 91  | 9.002     | 9.002         | 0.000         | 98 | 415148   | 50.0       | 48.9         |       |
| 77 trans-1,3-Dichloropropene   | 75  | 9.251     | 9.251         | 0.000         | 98 | 102185   | 50.0       | 46.1         |       |
| 78 Ethyl methacrylate          | 69  | 9.312     | 9.312         | 0.000         | 95 | 103845   | 50.0       | 48.5         |       |
| 79 1,1,2-Trichloroethane       | 97  | 9.446     | 9.446         | 0.000         | 92 | 81354    | 50.0       | 50.4         |       |
| 80 Tetrachloroethene           | 164 | 9.519     | 9.519         | 0.000         | 97 | 90454    | 50.0       | 54.9         |       |
| 81 1,3-Dichloropropane         | 76  | 9.604     | 9.604         | 0.000         | 98 | 140370   | 50.0       | 46.8         |       |
| 82 2-Hexanone                  | 43  | 9.659     | 9.659         | 0.000         | 99 | 160455   | 100.0      | 105.2        |       |
| 84 Chlorodibromomethane        | 129 | 9.811     | 9.811         | 0.000         | 93 | 71574    | 50.0       | 51.2         |       |
| 85 Ethylene Dibromide          | 107 | 9.927     | 9.927         | 0.000         | 99 | 77700    | 50.0       | 49.9         |       |
| 86 3-Chlorobenzotrifluoride    | 180 | 10.389    | 10.389        | 0.000         | 87 | 149675   | 50.0       | 54.9         |       |
| 87 Chlorobenzene               | 112 | 10.413    | 10.413        | 0.000         | 95 | 278043   | 50.0       | 50.9         |       |
| 88 4-Chlorobenzotrifluoride    | 180 | 10.474    | 10.474        | 0.000         | 95 | 141452   | 50.0       | 54.8         |       |
| 89 1,1,1,2-Tetrachloroethane   | 131 | 10.511    | 10.511        | 0.000         | 92 | 91123    | 50.0       | 51.1         |       |
| 90 Ethylbenzene                | 106 | 10.517    | 10.517        | 0.000         | 98 | 150660   | 50.0       | 52.0         |       |
| 91 m-Xylene & p-Xylene         | 106 | 10.644    | 10.644        | 0.000         | 0  | 188614   | 50.0       | 53.1         |       |
| 92 o-Xylene                    | 106 | 11.028    | 11.028        | 0.000         | 97 | 178614   | 50.0       | 52.9         |       |
| 93 Styrene                     | 104 | 11.046    | 11.046        | 0.000         | 96 | 299476   | 50.0       | 53.5         |       |
| 94 Bromoform                   | 173 | 11.235    | 11.235        | 0.000         | 95 | 41821    | 50.0       | 52.4         |       |
| 96 2-Chlorobenzotrifluoride    | 180 | 11.295    | 11.295        | 0.000         | 98 | 143760   | 50.0       | 53.5         |       |
| 97 Isopropylbenzene            | 105 | 11.399    | 11.399        | 0.000         | 96 | 447715   | 50.0       | 54.1         |       |
| 99 1,1,2,2-Tetrachloroethane   | 83  | 11.709    | 11.709        | 0.000         | 82 | 111580   | 50.0       | 51.2         |       |
| 100 Bromobenzene               | 156 | 11.709    | 11.709        | 0.000         | 90 | 114708   | 50.0       | 53.2         |       |
| 102 trans-1,4-Dichloro-2-buten | 53  | 11.746    | 11.746        | 0.000         | 80 | 22112    | 50.0       | 28.4         |       |
| 101 1,2,3-Trichloropropane     | 110 | 11.764    | 11.764        | 0.000         | 86 | 38717    | 50.0       | 54.5         |       |
| 103 N-Propylbenzene            | 120 | 11.812    | 11.812        | 0.000         | 99 | 127958   | 50.0       | 51.9         |       |
| 104 2-Chlorotoluene            | 126 | 11.898    | 11.898        | 0.000         | 97 | 112790   | 50.0       | 53.8         |       |

| Compound                         | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|----------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 105 3-Chlorotoluene              | 126 | 11.965    | 11.965        | 0.000         | 94 | 112828   | 50.0       | 52.3         |       |
| 106 1,3,5-Trimethylbenzene       | 105 | 11.995    | 11.995        | 0.000         | 97 | 371701   | 50.0       | 53.3         |       |
| 107 4-Chlorotoluene              | 126 | 12.019    | 12.019        | 0.000         | 98 | 120300   | 50.0       | 52.1         |       |
| 108 tert-Butylbenzene            | 119 | 12.311    | 12.311        | 0.000         | 93 | 309709   | 50.0       | 54.6         |       |
| 110 1,2,4-Trimethylbenzene       | 105 | 12.366    | 12.366        | 0.000         | 97 | 368983   | 50.0       | 52.8         |       |
| 111 1,2-dichloro-4-(trifluorom   | 214 | 12.415    | 12.415        | 0.000         | 98 | 97594    | 50.0       | 50.1         |       |
| 112 sec-Butylbenzene             | 105 | 12.530    | 12.530        | 0.000         | 94 | 436489   | 50.0       | 54.6         |       |
| 113 1,3-Dichlorobenzene          | 146 | 12.646    | 12.646        | 0.000         | 99 | 216793   | 50.0       | 56.5         |       |
| 114 4-Isopropyltoluene           | 119 | 12.689    | 12.689        | 0.000         | 97 | 373922   | 50.0       | 55.2         |       |
| 115 1,4-Dichlorobenzene          | 146 | 12.755    | 12.755        | 0.000         | 97 | 222613   | 50.0       | 55.8         |       |
| 116 2,4-Dichloro-1-(trifluorom   | 214 | 12.780    | 12.780        | 0.000         | 96 | 87990    | 50.0       | 48.8         |       |
| 118 2,5-Dichlorobenzotrifluori   | 214 | 12.822    | 12.822        | 0.000         | 0  | 103261   | 50.0       | 53.0         |       |
| 120 n-Butylbenzene               | 91  | 13.096    | 13.096        | 0.000         | 98 | 291467   | 50.0       | 50.3         |       |
| 121 1,2-Dichlorobenzene          | 146 | 13.108    | 13.108        | 0.000         | 98 | 198185   | 50.0       | 55.3         |       |
| 122 1,2-Dibromo-3-Chloropropan   | 75  | 13.899    | 13.899        | 0.000         | 83 | 15651    | 50.0       | 53.1         |       |
| 123 2,4- & 2,5- & 2,6- Dichlor   | 125 | 14.045    | 14.045        | 0.000         | 0  | 333043   | 150.0      | 162.6        |       |
| 125 2,3- & 3,4- Dichlorotoluen   | 125 | 14.459    | 14.459        | 0.000         | 0  | 211622   | 100.0      | 108.4        |       |
| 126 1,2,4-Trichlorobenzene       | 180 | 14.726    | 14.726        | 0.000         | 95 | 78390    | 50.0       | 56.2         |       |
| 127 Hexachlorobutadiene          | 225 | 14.872    | 14.872        | 0.000         | 97 | 38050    | 50.0       | 56.6         |       |
| 128 Naphthalene                  | 128 | 14.988    | 14.988        | 0.000         | 97 | 231837   | 50.0       | 64.6         |       |
| 129 1,2,3-Trichlorobenzene       | 180 | 15.213    | 15.213        | 0.000         | 95 | 68497    | 50.0       | 60.6         |       |
| 131 2,4,5-Trichlorotoluene       | 159 | 15.992    | 15.992        | 0.000         | 0  | 22987    | 50.0       | 56.4         |       |
| 130 2,3,6-Trichlorotoluene       | 159 | 16.089    | 16.089        | 0.000         | 97 | 23514    | 50.0       | 62.6         |       |
| 148 2,3-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 146 2,5-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 150 2,6-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 149 3,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 147 2,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| S 133 Xylenes, Total             | 106 |           |               |               | 0  |          | 100.0      | 106.0        |       |
| S 134 1,2-Dichloroethene, Total  | 96  |           |               |               | 0  |          | 100.0      | 91.0         |       |
| S 135 1,3-Dichloropropene, Total | 1   |           |               |               | 0  |          | 100.0      | 92.7         |       |

**QC Flag Legend**

## Processing Flags

ND - Not Detected or Marked ND

## Review Flags

M - Manually Integrated

**Reagents:**

|                     |                    |           |             |
|---------------------|--------------------|-----------|-------------|
| VOA8260VOAPRI_00147 | Amount Added: 2.00 | Units: uL |             |
| voaWKet1stRes_00001 | Amount Added: 2.00 | Units: uL |             |
| voaWEEpri Res_00006 | Amount Added: 2.00 | Units: uL |             |
| voaWVA2nd Res_00010 | Amount Added: 2.00 | Units: uL |             |
| VOACEVEPRI_00012    | Amount Added: 2.00 | Units: uL |             |
| voaWAcro1stRe_00001 | Amount Added: 6.00 | Units: uL |             |
| VOA8260INT_00042    | Amount Added: 2.00 | Units: uL | Run Reagent |
| VOA8260SURR_00042   | Amount Added: 2.00 | Units: uL | Run Reagent |

Report Date: 08-Oct-2015 13:15:56

Chrom Revision: 2.2 08-Sep-2015 13:41:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\51008005.D

Injection Date: 08-Oct-2015 12:33:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: CCVIS

Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL

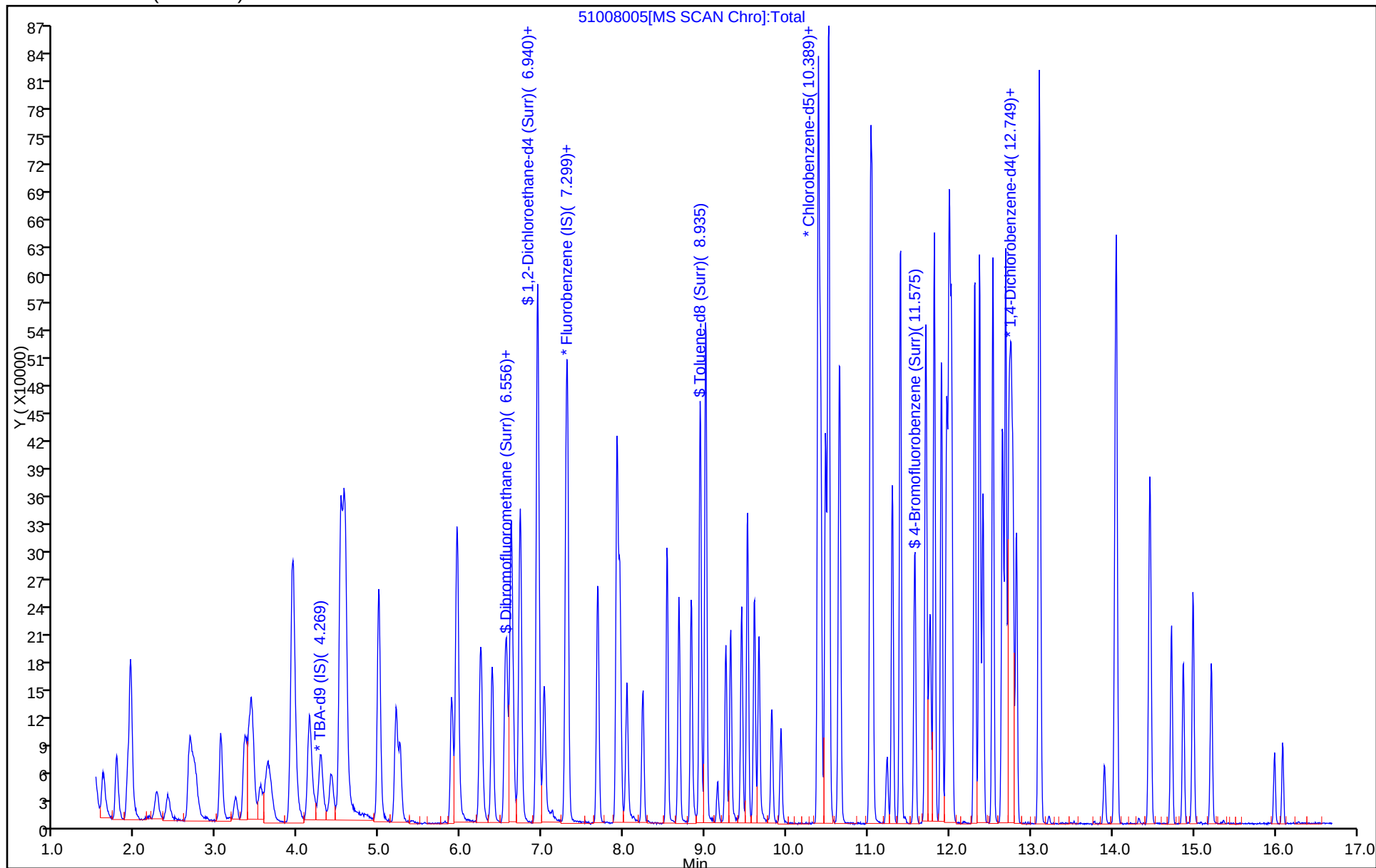
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCVIS 180-156309/5 Calibration Date: 10/08/2015 12:33

Instrument ID: CHHP5 Calib Start Date: 08/26/2015 15:04

GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/26/2015 17:52

Lab File ID: 51008005.D Conc. Units: ug/L Heated Purge: (Y/N) N

| ANALYTE                               | CURVE<br>TYPE | AVE RRF | RRF    | MIN RRF | CALC<br>AMOUNT | SPIKE<br>AMOUNT | %D     | MAX<br>%D |
|---------------------------------------|---------------|---------|--------|---------|----------------|-----------------|--------|-----------|
| Dichlorodifluoromethane               | Ave           | 0.2825  | 0.2956 | 0.1000  | 10.5           | 10.0            | 4.6    | 20.0      |
| Chloromethane                         | Ave           | 0.4148  | 0.3399 | 0.1000  | 8.20           | 10.0            | -18.0  | 20.0      |
| Vinyl chloride                        | Ave           | 0.3679  | 0.2746 | 0.1000  | 7.46           | 10.0            | -25.4* | 20.0      |
| 1,3-Butadiene                         | Ave           | 0.4345  | 0.3686 | 0.0100  | 8.48           | 10.0            | -15.2  | 20.0      |
| Bromomethane                          | Ave           | 0.1497  | 0.1133 | 0.0500  | 7.57           | 10.0            | -24.3* | 20.0      |
| Chloroethane                          | Ave           | 0.2220  | 0.1360 | 0.0500  | 6.13           | 10.0            | -38.7* | 20.0      |
| Dichlorofluoromethane                 | Ave           | 0.4709  | 0.3369 | 0.0100  | 7.15           | 10.0            | -28.5* | 20.0      |
| Trichlorofluoromethane                | Ave           | 0.3523  | 0.3146 | 0.1000  | 8.93           | 10.0            | -10.7  | 20.0      |
| Ethyl ether                           | Ave           | 0.3265  | 0.2495 | 0.0100  | 7.64           | 10.0            | -23.6* | 20.0      |
| Acrolein                              | Ave           | 0.0486  | 0.0418 | 0.0100  | 25.8           | 30.0            | -14.1  | 20.0      |
| 1,1-Dichloroethene                    | Ave           | 0.2785  | 0.2593 | 0.1000  | 9.31           | 10.0            | -6.9   | 20.0      |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | Ave           | 0.2951  | 0.2808 | 0.1000  | 9.52           | 10.0            | -4.8   | 20.0      |
| Acetone                               | Ave           | 0.1009  | 0.1068 | 0.0500  | 21.2           | 20.0            | 5.9    | 20.0      |
| Iodomethane                           | Ave           | 0.4150  | 0.3988 | 0.0100  | 9.61           | 10.0            | -3.9   | 20.0      |
| Carbon disulfide                      | Ave           | 0.6466  | 0.5886 | 0.1000  | 9.10           | 10.0            | -9.0   | 20.0      |
| Allyl chloride                        | Ave           | 0.1577  | 0.1338 | 0.0100  | 8.48           | 10.0            | -15.2  | 20.0      |
| Methyl acetate                        | Ave           | 0.3015  | 0.3000 | 0.1000  | 49.8           | 50.0            | -0.5   | 20.0      |
| Methylene Chloride                    | Lin2          |         | 0.3104 | 0.1000  | 9.42           | 10.0            | -5.8   | 20.0      |
| tert-Butyl alcohol                    | Ave           | 1.126   | 1.187  | 0.0100  | 105            | 100             | 5.4    | 20.0      |
| Acrylonitrile                         | Ave           | 0.1463  | 0.1407 | 0.0100  | 96.2           | 100             | -3.8   | 20.0      |
| trans-1,2-Dichloroethene              | Ave           | 0.3024  | 0.2723 | 0.1000  | 9.01           | 10.0            | -9.9   | 20.0      |
| Methyl tert-butyl ether               | Ave           | 0.6999  | 0.6392 | 0.1000  | 9.13           | 10.0            | -8.7   | 20.0      |
| Hexane                                | Ave           | 0.5076  | 0.4927 | 0.0100  | 9.71           | 10.0            | -2.9   | 20.0      |
| 1,1-Dichloroethane                    | Ave           | 0.5957  | 0.5280 | 0.2000  | 8.86           | 10.0            | -11.4  | 20.0      |
| Vinyl acetate                         | Ave           | 0.4469  | 0.4671 | 0.0100  | 10.5           | 10.0            | 4.5    | 20.0      |
| 2,2-Dichloropropane                   | Ave           | 0.2387  | 0.2095 | 0.0100  | 8.78           | 10.0            | -12.2  | 20.0      |
| cis-1,2-Dichloroethene                | Ave           | 0.3230  | 0.2968 | 0.1000  | 9.19           | 10.0            | -8.1   | 20.0      |
| 2-Butanone (MEK)                      | Ave           | 0.1516  | 0.1561 | 0.0500  | 20.6           | 20.0            | 3.0    | 20.0      |
| Bromochloromethane                    | Ave           | 0.1418  | 0.1447 | 0.0100  | 10.2           | 10.0            | 2.0    | 20.0      |
| Tetrahydrofuran                       | Ave           | 0.1216  | 0.1098 | 0.0100  | 18.1           | 20.0            | -9.7   | 20.0      |
| Chloroform                            | Ave           | 0.5146  | 0.4670 | 0.2000  | 9.07           | 10.0            | -9.3   | 20.0      |
| 1,1,1-Trichloroethane                 | Ave           | 0.3805  | 0.3422 | 0.1000  | 8.99           | 10.0            | -10.1  | 20.0      |
| Cyclohexane                           | Ave           | 0.6367  | 0.5703 | 0.1000  | 8.96           | 10.0            | -10.4  | 20.0      |
| Carbon tetrachloride                  | Ave           | 0.3240  | 0.3122 | 0.1000  | 9.64           | 10.0            | -3.6   | 20.0      |
| 1,1-Dichloropropene                   | Ave           | 0.4208  | 0.3769 | 0.0100  | 8.96           | 10.0            | -10.4  | 20.0      |
| Isobutyl alcohol                      | Ave           | 0.0095  | 0.0121 | 0.0100  | 317            | 250             | 26.8*  | 20.0      |
| Benzene                               | Ave           | 1.233   | 1.140  | 0.5000  | 9.25           | 10.0            | -7.5   | 20.0      |
| 1,2-Dichloroethane                    | Ave           | 0.4264  | 0.3642 | 0.1000  | 8.54           | 10.0            | -14.6  | 20.0      |
| n-Heptane                             | Ave           | 0.4611  | 0.4476 | 0.0100  | 9.71           | 10.0            | -2.9   | 20.0      |
| Trichloroethene                       | Ave           | 0.3016  | 0.3090 | 0.2000  | 10.2           | 10.0            | 2.4    | 20.0      |

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCVIS 180-156309/5 Calibration Date: 10/08/2015 12:33

Instrument ID: CHHP5 Calib Start Date: 08/26/2015 15:04

GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/26/2015 17:52

Lab File ID: 51008005.D Conc. Units: ug/L Heated Purge: (Y/N) N

| ANALYTE                      | CURVE<br>TYPE | AVE RRF | RRF     | MIN RRF | CALC<br>AMOUNT | SPIKE<br>AMOUNT | %D     | MAX<br>%D |
|------------------------------|---------------|---------|---------|---------|----------------|-----------------|--------|-----------|
| Methylcyclohexane            | Ave           | 0.4753  | 0.4593  | 0.1000  | 9.66           | 10.0            | -3.4   | 20.0      |
| 1,2-Dichloropropane          | Ave           | 0.3235  | 0.2978  | 0.1000  | 9.20           | 10.0            | -8.0   | 20.0      |
| 1,4-Dioxane                  | Ave           | 0.0022  | 0.0029* | 0.0100  | 258            | 200             | 29.2*  | 20.0      |
| Dibromomethane               | Ave           | 0.1642  | 0.1538  | 0.0100  | 9.37           | 10.0            | -6.3   | 20.0      |
| Bromodichloromethane         | Ave           | 0.3249  | 0.3045  | 0.2000  | 9.37           | 10.0            | -6.3   | 20.0      |
| cis-1,3-Dichloropropene      | Ave           | 0.3807  | 0.3550  | 0.2000  | 9.32           | 10.0            | -6.8   | 20.0      |
| 4-Methyl-2-pentanone (MIBK)  | Ave           | 1.232   | 1.176   | 0.1000  | 19.1           | 20.0            | -4.6   | 20.0      |
| Toluene                      | Ave           | 4.950   | 4.840   | 0.4000  | 9.78           | 10.0            | -2.2   | 20.0      |
| trans-1,3-Dichloropropene    | Ave           | 1.292   | 1.191   | 0.1000  | 9.22           | 10.0            | -7.8   | 20.0      |
| Ethyl methacrylate           | Ave           | 1.249   | 1.211   | 0.0100  | 9.69           | 10.0            | -3.1   | 20.0      |
| 1,1,2-Trichloroethane        | Ave           | 0.9416  | 0.9486  | 0.1000  | 10.1           | 10.0            | 0.7    | 20.0      |
| Tetrachloroethene            | Ave           | 0.9609  | 1.055   | 0.2000  | 11.0           | 10.0            | 9.8    | 20.0      |
| 1,3-Dichloropropane          | Ave           | 1.748   | 1.637   | 0.0100  | 9.36           | 10.0            | -6.4   | 20.0      |
| 2-Hexanone                   | Ave           | 0.8893  | 0.9354  | 0.1000  | 21.0           | 20.0            | 5.2    | 20.0      |
| Dibromochloromethane         | Ave           | 0.8152  | 0.8345  | 0.1000  | 10.2           | 10.0            | 2.4    | 20.0      |
| 1,2-Dibromoethane (EDB)      | Ave           | 0.9073  | 0.9060  | 0.1000  | 9.98           | 10.0            | -0.2   | 20.0      |
| 3-Chlorobenzotrifluoride     | Ave           | 1.591   | 1.745   | 0.0100  | 11.0           | 10.0            | 9.7    | 20.0      |
| Chlorobenzene                | Ave           | 3.187   | 3.242   | 0.5000  | 10.2           | 10.0            | 1.7    | 20.0      |
| 4-Chlorobenzotrifluoride     | Ave           | 1.504   | 1.649   | 0.0100  | 11.0           | 10.0            | 9.7    | 20.0      |
| 1,1,1,2-Tetrachloroethane    | Ave           | 1.039   | 1.062   | 0.0100  | 10.2           | 10.0            | 2.3    | 20.0      |
| Ethylbenzene                 | Ave           | 1.690   | 1.757   | 0.1000  | 10.4           | 10.0            | 4.0    | 20.0      |
| m-Xylene & p-Xylene          | Ave           | 2.072   | 2.199   | 0.1000  | 10.6           | 10.0            | 6.2    | 20.0      |
| o-Xylene                     | Ave           | 1.969   | 2.083   | 0.3000  | 10.6           | 10.0            | 5.8    | 20.0      |
| Styrene                      | Ave           | 3.262   | 3.492   | 0.3000  | 10.7           | 10.0            | 7.1    | 20.0      |
| Bromoform                    | Ave           | 0.4652  | 0.4876  | 0.1000  | 10.5           | 10.0            | 4.8    | 20.0      |
| 2-Chlorobenzotrifluoride     | Ave           | 1.565   | 1.676   | 0.0100  | 10.7           | 10.0            | 7.1    | 20.0      |
| Isopropylbenzene             | Ave           | 4.822   | 5.220   | 0.1000  | 10.8           | 10.0            | 8.3    | 20.0      |
| 1,1,2,2-Tetrachloroethane    | Ave           | 1.270   | 1.301   | 0.3000  | 10.2           | 10.0            | 2.4    | 20.0      |
| Bromobenzene                 | Ave           | 0.8583  | 0.9136  | 0.0100  | 10.6           | 10.0            | 6.4    | 20.0      |
| trans-1,4-Dichloro-2-butene  | Ave           | 0.3103  | 0.1761  | 0.0100  | 5.68           | 10.0            | -43.2* | 20.0      |
| 1,2,3-Trichloropropane       | Ave           | 0.2831  | 0.3084  | 0.0100  | 10.9           | 10.0            | 8.9    | 20.0      |
| N-Propylbenzene              | Ave           | 0.9825  | 1.019   | 0.0100  | 10.4           | 10.0            | 3.7    | 20.0      |
| 2-Chlorotoluene              | Ave           | 0.8351  | 0.8983  | 0.0100  | 10.8           | 10.0            | 7.6    | 20.0      |
| 3-Chlorotoluene              | Ave           | 0.8583  | 0.8986  | 0.0100  | 10.5           | 10.0            | 4.7    | 20.0      |
| 1,3,5-Trimethylbenzene       | Ave           | 2.776   | 2.960   | 0.0100  | 10.7           | 10.0            | 6.6    | 20.0      |
| 4-Chlorotoluene              | Ave           | 0.9190  | 0.9582  | 0.0100  | 10.4           | 10.0            | 4.3    | 20.0      |
| tert-Butylbenzene            | Ave           | 2.257   | 2.467   | 0.0100  | 10.9           | 10.0            | 9.3    | 20.0      |
| 1,2,4-Trimethylbenzene       | Ave           | 2.781   | 2.939   | 0.0100  | 10.6           | 10.0            | 5.7    | 20.0      |
| 3,4-Dichlorobenzotrifluoride | Ave           | 0.7754  | 0.7773  | 0.0100  | 10.0           | 10.0            | 0.2    | 20.0      |
| sec-Butylbenzene             | Ave           | 3.187   | 3.476   | 0.0100  | 10.9           | 10.0            | 9.1    | 20.0      |
| 1,3-Dichlorobenzene          | Ave           | 1.528   | 1.727   | 0.6000  | 11.3           | 10.0            | 13.0   | 20.0      |



FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCVIS 180-156309/5 Calibration Date: 10/08/2015 12:33  
 Instrument ID: CHHP5 Calib Start Date: 08/26/2015 15:04  
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/26/2015 17:52  
 Lab File ID: 51008005.D Conc. Units: ug/L Heated Purge: (Y/N) N

| ANALYTE                               | CURVE<br>TYPE | AVE RRF | RRF    | MIN RRF | CALC<br>AMOUNT | SPIKE<br>AMOUNT | %D    | MAX<br>%D |
|---------------------------------------|---------------|---------|--------|---------|----------------|-----------------|-------|-----------|
| 4-Isopropyltoluene                    | Ave           | 2.696   | 2.978  | 0.0100  | 11.0           | 10.0            | 10.5  | 20.0      |
| 1,4-Dichlorobenzene                   | Ave           | 1.590   | 1.773  | 0.5000  | 11.2           | 10.0            | 11.5  | 20.0      |
| 2,4-Dichlorobenzotrifluoride          | Ave           | 0.7185  | 0.7008 | 0.0100  | 9.75           | 10.0            | -2.5  | 20.0      |
| 2,5-Dichlorobenzotrifluoride          | Ave           | 0.7765  | 0.8224 | 0.0100  | 10.6           | 10.0            | 5.9   | 20.0      |
| n-Butylbenzene                        | Ave           | 2.307   | 2.321  | 0.0100  | 10.1           | 10.0            | 0.6   | 20.0      |
| 1,2-Dichlorobenzene                   | Ave           | 1.428   | 1.578  | 0.4000  | 11.1           | 10.0            | 10.5  | 20.0      |
| 1,2-Dibromo-3-Chloropropane           | Ave           | 0.1173  | 0.1247 | 0.0500  | 10.6           | 10.0            | 6.3   | 20.0      |
| 2,4- & 2,5- & 2,6-<br>Dichlorotoluene | Ave           | 0.8157  | 0.8842 | 0.0100  | 32.5           | 30.0            | 8.4   | 20.0      |
| 2,3- & 3,4- Dichlorotoluene           | Ave           | 0.7778  | 0.8428 | 0.0100  | 21.7           | 20.0            | 8.4   | 20.0      |
| 1,2,4-Trichlorobenzene                | Ave           | 0.5557  | 0.6244 | 0.2000  | 11.2           | 10.0            | 12.4  | 20.0      |
| Hexachlorobutadiene                   | Ave           | 0.2677  | 0.3031 | 0.0100  | 11.3           | 10.0            | 13.2  | 20.0      |
| Naphthalene                           | Ave           | 1.428   | 1.847  | 0.0100  | 12.9           | 10.0            | 29.3* | 20.0      |
| 1,2,3-Trichlorobenzene                | Ave           | 0.4498  | 0.5456 | 0.0100  | 12.1           | 10.0            | 21.3* | 20.0      |
| 2,4,5-Trichlorotoluene                | Ave           | 0.1623  | 0.1831 | 0.0100  | 11.3           | 10.0            | 12.8  | 20.0      |
| 2,3,6-Trichlorotoluene                | Ave           | 0.1496  | 0.1873 | 0.0100  | 12.5           | 10.0            | 25.1* | 20.0      |
| Dibromofluoromethane (Surr)           | Ave           | 0.2455  | 0.2303 |         | 9.38           | 10.0            | -6.2  | 20.0      |
| 1,2-Dichloroethane-d4 (Surr)          | Ave           | 0.3373  | 0.2819 |         | 8.36           | 10.0            | -16.4 | 20.0      |
| Toluene-d8 (Surr)                     | Ave           | 3.857   | 3.777  |         | 9.79           | 10.0            | -2.1  | 20.0      |
| 4-Bromofluorobenzene (Surr)           | Ave           | 1.455   | 1.328  |         | 9.13           | 10.0            | -8.7  | 20.0      |

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\51008005.D  
 Lims ID: CCVIS  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 08-Oct-2015 12:33:30 ALS Bottle#: 3 Worklist Smp#: 5  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: CCVIS  
 Misc. Info.: 180-0008892-005  
 Operator ID: 001562 Instrument ID: CHHP5  
 Sublist: chrom-MSVOA\_LL\_CHHP5\*sub12  
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C ICAL  
 Last Update: 08-Oct-2015 13:15:55 Calib Date: 26-Aug-2015 17:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: XAWRK015

First Level Reviewer: fergusond

Date: 08-Oct-2015 13:09:11

| Compound                        | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q   | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|---------------------------------|-----|--------------|------------------|------------------|-----|----------|---------------|-----------------|-------|
| * 1 TBA-d9 (IS)                 | 65  | 4.269        | 4.269            | 0.000            | 0   | 123647   | 1000.0        | 1000.0          |       |
| * 2 Fluorobenzene (IS)          | 96  | 7.286        | 7.286            | 0.000            | 98  | 342398   | 50.0          | 50.0            |       |
| * 3 Chlorobenzene-d5            | 119 | 10.389       | 10.389           | 0.000            | 87  | 85766    | 50.0          | 50.0            |       |
| * 4 1,4-Dichlorobenzene-d4      | 152 | 12.731       | 12.731           | 0.000            | 92  | 125555   | 50.0          | 50.0            |       |
| \$ 5 Dibromofluoromethane (Surr | 113 | 6.562        | 6.562            | 0.000            | 94  | 78853    | 50.0          | 46.9            |       |
| \$ 6 1,2-Dichloroethane-d4 (Sur | 65  | 6.934        | 6.934            | 0.000            | 0   | 96515    | 50.0          | 41.8            |       |
| \$ 7 Toluene-d8 (Surr)          | 98  | 8.935        | 8.935            | 0.000            | 94  | 323942   | 50.0          | 49.0            |       |
| \$ 8 4-Bromofluorobenzene (Surr | 95  | 11.569       | 11.569           | 0.000            | 91  | 113930   | 50.0          | 45.6            |       |
| 11 Dichlorodifluoromethane      | 85  | 1.598        | 1.598            | 0.000            | 98  | 101212   | 50.0          | 52.3            |       |
| 12 Chloromethane                | 50  | 1.769        | 1.769            | 0.000            | 99  | 116389   | 50.0          | 41.0            |       |
| 13 Vinyl chloride               | 62  | 1.909        | 1.909            | 0.000            | 97  | 94016    | 50.0          | 37.3            |       |
| 14 Butadiene                    | 39  | 1.945        | 1.945            | 0.000            | 98  | 126209   | 50.0          | 42.4            |       |
| 15 Bromomethane                 | 94  | 2.255        | 2.255            | 0.000            | 89  | 38790    | 50.0          | 37.8            |       |
| 16 Chloroethane                 | 64  | 2.395        | 2.395            | 0.000            | 98  | 46570    | 50.0          | 30.6            |       |
| 17 Dichlorofluoromethane        | 67  | 2.669        | 2.669            | 0.000            | 97  | 115360   | 50.0          | 35.8            |       |
| 18 Trichlorofluoromethane       | 101 | 2.706        | 2.706            | 0.000            | 98  | 107714   | 50.0          | 44.6            |       |
| 20 Ethyl ether                  | 59  | 3.046        | 3.046            | 0.000            | 95  | 85438    | 50.0          | 38.2            |       |
| 21 Acrolein                     | 56  | 3.235        | 3.235            | 0.000            | 98  | 42911    | 150.0         | 128.8           |       |
| 22 1,1-Dichloroethene           | 96  | 3.338        | 3.338            | 0.000            | 96  | 88789    | 50.0          | 46.6            |       |
| 23 1,1,2-Trichloro-1,2,2-trif   | 101 | 3.423        | 3.423            | 0.000            | 92  | 96148    | 50.0          | 47.6            |       |
| 24 Acetone                      | 43  | 3.448        | 3.448            | 0.000            | 94  | 73160    | 100.0         | 105.9           |       |
| 25 Iodomethane                  | 142 | 3.539        | 3.539            | 0.000            | 98  | 136545   | 50.0          | 48.0            |       |
| 26 Carbon disulfide             | 76  | 3.630        | 3.630            | 0.000            | 100 | 201549   | 50.0          | 45.5            |       |
| 28 3-Chloro-1-propene           | 76  | 3.916        | 3.916            | 0.000            | 88  | 45805    | 50.0          | 42.4            |       |
| 30 Methyl acetate               | 43  | 3.940        | 3.940            | 0.000            | 100 | 513576   | 250.0         | 248.8           |       |
| 31 Methylene Chloride           | 84  | 4.135        | 4.135            | 0.000            | 98  | 106278   | 50.0          | 47.1            |       |
| 32 2-Methyl-2-propanol          | 59  | 4.397        | 4.397            | 0.000            | 90  | 73361    | 500.0         | 527.1           |       |
| 33 Acrylonitrile                | 53  | 4.525        | 4.525            | 0.000            | 98  | 481698   | 500.0         | 480.9           |       |
| 34 trans-1,2-Dichloroethene     | 96  | 4.561        | 4.561            | 0.000            | 96  | 93247    | 50.0          | 45.0            |       |
| 35 Methyl tert-butyl ether      | 73  | 4.573        | 4.573            | 0.000            | 96  | 218863   | 50.0          | 45.7            |       |

| Compound                       | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 36 Hexane                      | 57  | 4.987     | 4.987         | 0.000         | 96 | 168682   | 50.0       | 48.5         |       |
| 37 1,1-Dichloroethane          | 63  | 5.200     | 5.200         | 0.000         | 96 | 180795   | 50.0       | 44.3         |       |
| 38 Vinyl acetate               | 43  | 5.255     | 5.255         | 0.000         | 98 | 159946   | 50.0       | 52.3         |       |
| 44 2,2-Dichloropropane         | 77  | 5.942     | 5.942         | 0.000         | 59 | 71742    | 50.0       | 43.9         |       |
| 45 cis-1,2-Dichloroethene      | 96  | 5.954     | 5.954         | 0.000         | 83 | 101613   | 50.0       | 45.9         |       |
| 46 2-Butanone (MEK)            | 43  | 5.960     | 5.960         | 0.000         | 82 | 106925   | 100.0      | 103.0        |       |
| 49 Chlorobromomethane          | 128 | 6.234     | 6.234         | 0.000         | 95 | 49537    | 50.0       | 51.0         |       |
| 51 Tetrahydrofuran             | 42  | 6.246     | 6.246         | 0.000         | 91 | 75220    | 100.0      | 90.3         |       |
| 52 Chloroform                  | 83  | 6.380     | 6.380         | 0.000         | 94 | 159892   | 50.0       | 45.4         |       |
| 53 1,1,1-Trichloroethane       | 97  | 6.538     | 6.538         | 0.000         | 97 | 117170   | 50.0       | 45.0         |       |
| 54 Cyclohexane                 | 56  | 6.611     | 6.611         | 0.000         | 98 | 195272   | 50.0       | 44.8         |       |
| 56 Carbon tetrachloride        | 117 | 6.715     | 6.715         | 0.000         | 96 | 106908   | 50.0       | 48.2         |       |
| 55 1,1-Dichloropropene         | 75  | 6.733     | 6.733         | 0.000         | 90 | 129065   | 50.0       | 44.8         |       |
| 57 Isobutyl alcohol            | 41  | 6.927     | 6.927         | 0.000         | 94 | 103323   | 1250.0     | 1584.6       |       |
| 58 Benzene                     | 78  | 6.946     | 6.946         | 0.000         | 97 | 390350   | 50.0       | 46.2         |       |
| 59 1,2-Dichloroethane          | 62  | 7.025     | 7.025         | 0.000         | 96 | 124702   | 50.0       | 42.7         |       |
| 62 n-Heptane                   | 43  | 7.311     | 7.311         | 0.000         | 97 | 153258   | 50.0       | 48.5         |       |
| 64 Trichloroethene             | 130 | 7.676     | 7.676         | 0.000         | 96 | 105784   | 50.0       | 51.2         |       |
| 66 Methylcyclohexane           | 83  | 7.913     | 7.913         | 0.000         | 95 | 157272   | 50.0       | 48.3         |       |
| 67 1,2-Dichloropropane         | 63  | 7.949     | 7.949         | 0.000         | 97 | 101955   | 50.0       | 46.0         |       |
| 70 1,4-Dioxane                 | 88  | 8.029     | 8.029         | 0.000         | 39 | 19727    | 1000.0     | 1291.6       | M     |
| 68 Dibromomethane              | 93  | 8.035     | 8.035         | 0.000         | 91 | 52653    | 50.0       | 46.8         |       |
| 71 Dichlorobromomethane        | 83  | 8.235     | 8.235         | 0.000         | 98 | 104259   | 50.0       | 46.9         |       |
| 73 2-Chloroethyl vinyl ether   | 63  | 8.527     | 8.527         | 0.000         | 91 | 123440   | 100.0      | 109.1        |       |
| 74 cis-1,3-Dichloropropene     | 75  | 8.673     | 8.673         | 0.000         | 90 | 121544   | 50.0       | 46.6         |       |
| 75 4-Methyl-2-pentanone (MIBK) | 43  | 8.826     | 8.826         | 0.000         | 99 | 201662   | 100.0      | 95.4         |       |
| 76 Toluene                     | 91  | 9.002     | 9.002         | 0.000         | 98 | 415148   | 50.0       | 48.9         |       |
| 77 trans-1,3-Dichloropropene   | 75  | 9.251     | 9.251         | 0.000         | 98 | 102185   | 50.0       | 46.1         |       |
| 78 Ethyl methacrylate          | 69  | 9.312     | 9.312         | 0.000         | 95 | 103845   | 50.0       | 48.5         |       |
| 79 1,1,2-Trichloroethane       | 97  | 9.446     | 9.446         | 0.000         | 92 | 81354    | 50.0       | 50.4         |       |
| 80 Tetrachloroethene           | 164 | 9.519     | 9.519         | 0.000         | 97 | 90454    | 50.0       | 54.9         |       |
| 81 1,3-Dichloropropane         | 76  | 9.604     | 9.604         | 0.000         | 98 | 140370   | 50.0       | 46.8         |       |
| 82 2-Hexanone                  | 43  | 9.659     | 9.659         | 0.000         | 99 | 160455   | 100.0      | 105.2        |       |
| 84 Chlorodibromomethane        | 129 | 9.811     | 9.811         | 0.000         | 93 | 71574    | 50.0       | 51.2         |       |
| 85 Ethylene Dibromide          | 107 | 9.927     | 9.927         | 0.000         | 99 | 77700    | 50.0       | 49.9         |       |
| 86 3-Chlorobenzotrifluoride    | 180 | 10.389    | 10.389        | 0.000         | 87 | 149675   | 50.0       | 54.9         |       |
| 87 Chlorobenzene               | 112 | 10.413    | 10.413        | 0.000         | 95 | 278043   | 50.0       | 50.9         |       |
| 88 4-Chlorobenzotrifluoride    | 180 | 10.474    | 10.474        | 0.000         | 95 | 141452   | 50.0       | 54.8         |       |
| 89 1,1,1,2-Tetrachloroethane   | 131 | 10.511    | 10.511        | 0.000         | 92 | 91123    | 50.0       | 51.1         |       |
| 90 Ethylbenzene                | 106 | 10.517    | 10.517        | 0.000         | 98 | 150660   | 50.0       | 52.0         |       |
| 91 m-Xylene & p-Xylene         | 106 | 10.644    | 10.644        | 0.000         | 0  | 188614   | 50.0       | 53.1         |       |
| 92 o-Xylene                    | 106 | 11.028    | 11.028        | 0.000         | 97 | 178614   | 50.0       | 52.9         |       |
| 93 Styrene                     | 104 | 11.046    | 11.046        | 0.000         | 96 | 299476   | 50.0       | 53.5         |       |
| 94 Bromoform                   | 173 | 11.235    | 11.235        | 0.000         | 95 | 41821    | 50.0       | 52.4         |       |
| 96 2-Chlorobenzotrifluoride    | 180 | 11.295    | 11.295        | 0.000         | 98 | 143760   | 50.0       | 53.5         |       |
| 97 Isopropylbenzene            | 105 | 11.399    | 11.399        | 0.000         | 96 | 447715   | 50.0       | 54.1         |       |
| 99 1,1,2,2-Tetrachloroethane   | 83  | 11.709    | 11.709        | 0.000         | 82 | 111580   | 50.0       | 51.2         |       |
| 100 Bromobenzene               | 156 | 11.709    | 11.709        | 0.000         | 90 | 114708   | 50.0       | 53.2         |       |
| 102 trans-1,4-Dichloro-2-buten | 53  | 11.746    | 11.746        | 0.000         | 80 | 22112    | 50.0       | 28.4         |       |
| 101 1,2,3-Trichloropropane     | 110 | 11.764    | 11.764        | 0.000         | 86 | 38717    | 50.0       | 54.5         |       |
| 103 N-Propylbenzene            | 120 | 11.812    | 11.812        | 0.000         | 99 | 127958   | 50.0       | 51.9         |       |
| 104 2-Chlorotoluene            | 126 | 11.898    | 11.898        | 0.000         | 97 | 112790   | 50.0       | 53.8         |       |

| Compound                         | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|----------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 105 3-Chlorotoluene              | 126 | 11.965    | 11.965        | 0.000         | 94 | 112828   | 50.0       | 52.3         |       |
| 106 1,3,5-Trimethylbenzene       | 105 | 11.995    | 11.995        | 0.000         | 97 | 371701   | 50.0       | 53.3         |       |
| 107 4-Chlorotoluene              | 126 | 12.019    | 12.019        | 0.000         | 98 | 120300   | 50.0       | 52.1         |       |
| 108 tert-Butylbenzene            | 119 | 12.311    | 12.311        | 0.000         | 93 | 309709   | 50.0       | 54.6         |       |
| 110 1,2,4-Trimethylbenzene       | 105 | 12.366    | 12.366        | 0.000         | 97 | 368983   | 50.0       | 52.8         |       |
| 111 1,2-dichloro-4-(trifluorom   | 214 | 12.415    | 12.415        | 0.000         | 98 | 97594    | 50.0       | 50.1         |       |
| 112 sec-Butylbenzene             | 105 | 12.530    | 12.530        | 0.000         | 94 | 436489   | 50.0       | 54.6         |       |
| 113 1,3-Dichlorobenzene          | 146 | 12.646    | 12.646        | 0.000         | 99 | 216793   | 50.0       | 56.5         |       |
| 114 4-Isopropyltoluene           | 119 | 12.689    | 12.689        | 0.000         | 97 | 373922   | 50.0       | 55.2         |       |
| 115 1,4-Dichlorobenzene          | 146 | 12.755    | 12.755        | 0.000         | 97 | 222613   | 50.0       | 55.8         |       |
| 116 2,4-Dichloro-1-(trifluorom   | 214 | 12.780    | 12.780        | 0.000         | 96 | 87990    | 50.0       | 48.8         |       |
| 118 2,5-Dichlorobenzotrifluori   | 214 | 12.822    | 12.822        | 0.000         | 0  | 103261   | 50.0       | 53.0         |       |
| 120 n-Butylbenzene               | 91  | 13.096    | 13.096        | 0.000         | 98 | 291467   | 50.0       | 50.3         |       |
| 121 1,2-Dichlorobenzene          | 146 | 13.108    | 13.108        | 0.000         | 98 | 198185   | 50.0       | 55.3         |       |
| 122 1,2-Dibromo-3-Chloropropan   | 75  | 13.899    | 13.899        | 0.000         | 83 | 15651    | 50.0       | 53.1         |       |
| 123 2,4- & 2,5- & 2,6- Dichlor   | 125 | 14.045    | 14.045        | 0.000         | 0  | 333043   | 150.0      | 162.6        |       |
| 125 2,3- & 3,4- Dichlorotoluen   | 125 | 14.459    | 14.459        | 0.000         | 0  | 211622   | 100.0      | 108.4        |       |
| 126 1,2,4-Trichlorobenzene       | 180 | 14.726    | 14.726        | 0.000         | 95 | 78390    | 50.0       | 56.2         |       |
| 127 Hexachlorobutadiene          | 225 | 14.872    | 14.872        | 0.000         | 97 | 38050    | 50.0       | 56.6         |       |
| 128 Naphthalene                  | 128 | 14.988    | 14.988        | 0.000         | 97 | 231837   | 50.0       | 64.6         |       |
| 129 1,2,3-Trichlorobenzene       | 180 | 15.213    | 15.213        | 0.000         | 95 | 68497    | 50.0       | 60.6         |       |
| 131 2,4,5-Trichlorotoluene       | 159 | 15.992    | 15.992        | 0.000         | 0  | 22987    | 50.0       | 56.4         |       |
| 130 2,3,6-Trichlorotoluene       | 159 | 16.089    | 16.089        | 0.000         | 97 | 23514    | 50.0       | 62.6         |       |
| 148 2,3-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 146 2,5-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 150 2,6-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 149 3,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 147 2,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| S 133 Xylenes, Total             | 106 |           |               |               | 0  |          | 100.0      | 106.0        |       |
| S 134 1,2-Dichloroethene, Total  | 96  |           |               |               | 0  |          | 100.0      | 91.0         |       |
| S 135 1,3-Dichloropropene, Total | 1   |           |               |               | 0  |          | 100.0      | 92.7         |       |

**QC Flag Legend**

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

**Reagents:**

|                     |                    |           |             |
|---------------------|--------------------|-----------|-------------|
| VOA8260VOAPRI_00147 | Amount Added: 2.00 | Units: uL |             |
| voaWKet1stRes_00001 | Amount Added: 2.00 | Units: uL |             |
| voaWEEpri Res_00006 | Amount Added: 2.00 | Units: uL |             |
| voaWVA2nd Res_00010 | Amount Added: 2.00 | Units: uL |             |
| VOACEVEPRI_00012    | Amount Added: 2.00 | Units: uL |             |
| voaWAcro1stRe_00001 | Amount Added: 6.00 | Units: uL |             |
| VOA8260INT_00042    | Amount Added: 2.00 | Units: uL | Run Reagent |
| VOA8260SURR_00042   | Amount Added: 2.00 | Units: uL | Run Reagent |

Report Date: 08-Oct-2015 13:15:56

Chrom Revision: 2.2 08-Sep-2015 13:41:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\51008005.D

Injection Date: 08-Oct-2015 12:33:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: CCVIS

Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL

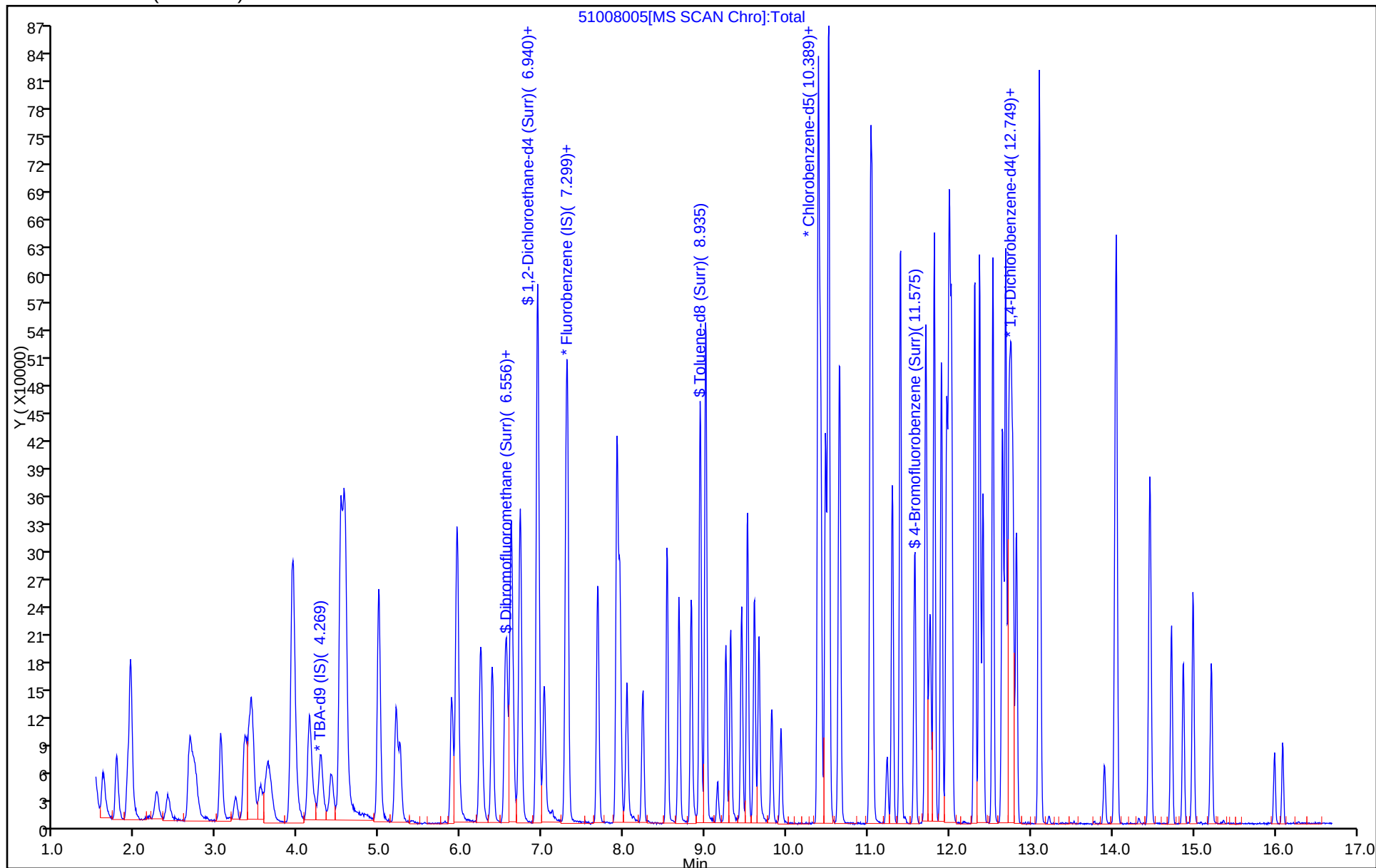
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



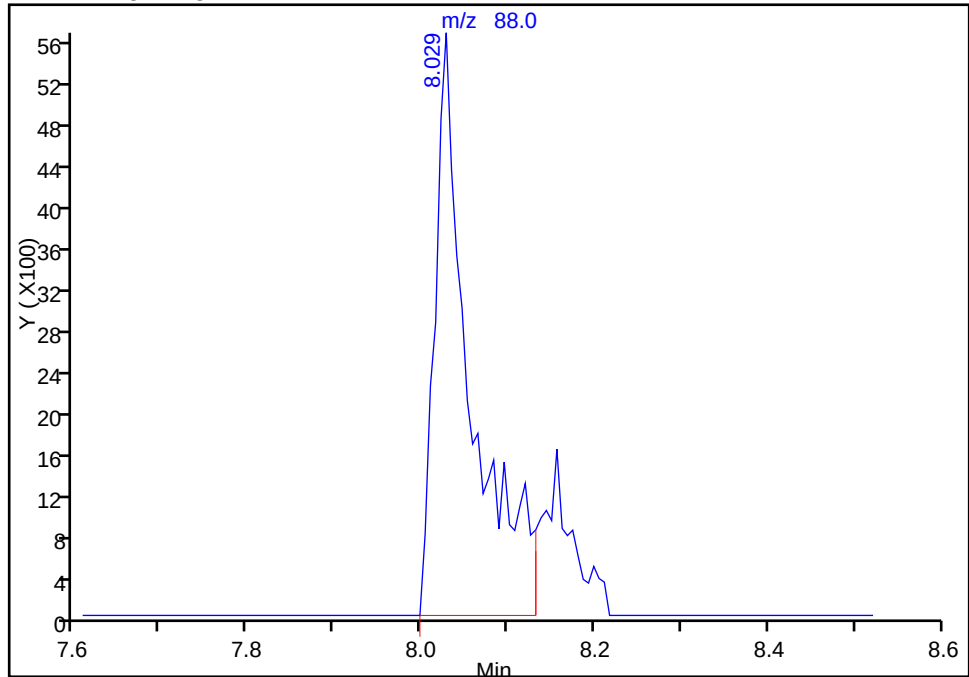
## TestAmerica Pittsburgh

|                 |                                                                 |                |                |
|-----------------|-----------------------------------------------------------------|----------------|----------------|
| Data File:      | \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\51008005.D |                |                |
| Injection Date: | 08-Oct-2015 12:33:30                                            | Instrument ID: | CHHP5          |
| Lims ID:        | CCVIS                                                           |                |                |
| Client ID:      |                                                                 |                |                |
| Operator ID:    | 001562                                                          | ALS Bottle#:   | 3              |
| Purge Vol:      | 5.000 mL                                                        | Dil. Factor:   | 1.0000         |
| Method:         | MSVOA_LL_CHHP5                                                  | Limit Group:   | VOA 8260C ICAL |
| Column:         | DB-624 ( 0.18 mm)                                               | Detector       | MS SCAN        |
|                 |                                                                 | Worklist Smp#: | 5              |

## 70 1,4-Dioxane, CAS: 123-91-1

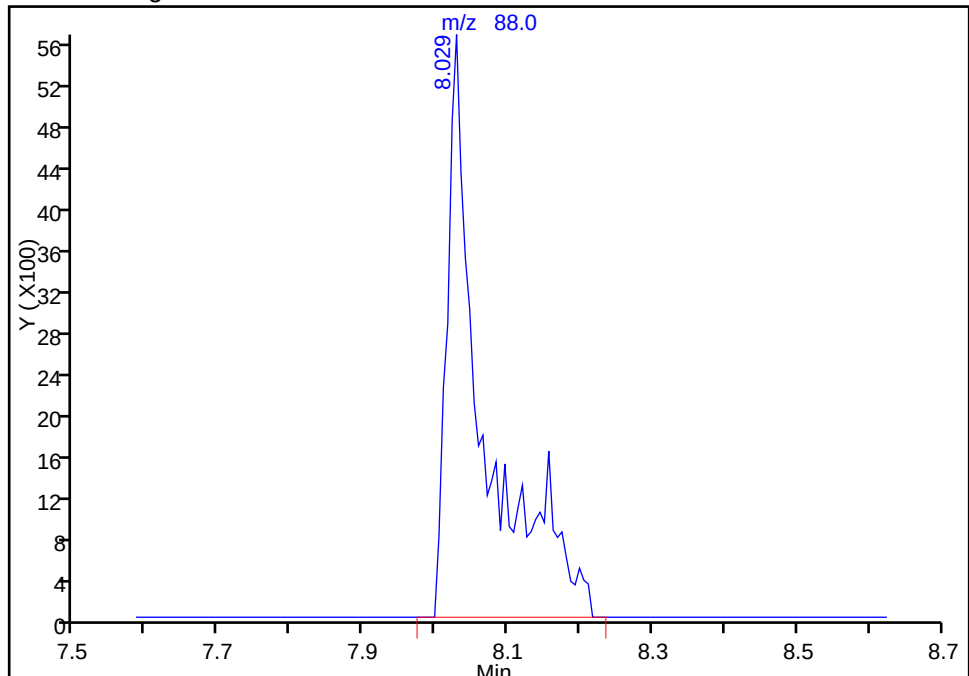
RT: 8.03  
Area: 16313  
Amount: 1068.0816  
Amount Units: ng

## Processing Integration Results



RT: 8.03  
Area: 19727  
Amount: 1291.6107  
Amount Units: ng

## Manual Integration Results



Reviewer: fergusond, 08-Oct-2015 13:09:11  
Audit Action: Manually Integrated  
Audit Reason: Incomplete Integration

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCVIS 180-156189/2 Calibration Date: 10/07/2015 12:51

Instrument ID: CHHP6 Calib Start Date: 07/31/2015 14:00

GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 07/31/2015 18:02

Lab File ID: 61007002.D Conc. Units: ug/L Heated Purge: (Y/N) N

| ANALYTE                               | CURVE<br>TYPE | AVE RRF | RRF     | MIN RRF | CALC<br>AMOUNT | SPIKE<br>AMOUNT | %D     | MAX<br>%D |
|---------------------------------------|---------------|---------|---------|---------|----------------|-----------------|--------|-----------|
| Dichlorodifluoromethane               | Ave           | 0.3462  | 0.3170  | 0.1000  | 9.15           | 10.0            | -8.5   | 20.0      |
| Chloromethane                         | Ave           | 0.2984  | 0.3476  | 0.1000  | 11.6           | 10.0            | 16.5   | 20.0      |
| Vinyl chloride                        | Ave           | 0.3214  | 0.3296  | 0.1000  | 10.3           | 10.0            | 2.5    | 20.0      |
| 1,3-Butadiene                         | Ave           | 0.3013  | 0.3533  | 0.0100  | 11.7           | 10.0            | 17.3   | 20.0      |
| Bromomethane                          | Ave           | 0.1735  | 0.1357  | 0.0500  | 7.82           | 10.0            | -21.8* | 20.0      |
| Chloroethane                          | Ave           | 0.2194  | 0.2083  | 0.0500  | 9.49           | 10.0            | -5.1   | 20.0      |
| Dichlorofluoromethane                 | Ave           | 0.5106  | 0.4946  | 0.0100  | 9.69           | 10.0            | -3.1   | 20.0      |
| Trichlorofluoromethane                | Ave           | 0.4072  | 0.3592  | 0.1000  | 8.82           | 10.0            | -11.8  | 20.0      |
| Ethyl ether                           | Ave           | 0.2886  | 0.3154  | 0.0100  | 10.9           | 10.0            | 9.3    | 20.0      |
| Acrolein                              | Ave           | 0.0315  | 0.0291  | 0.0100  | 27.7           | 30.0            | -7.5   | 20.0      |
| 1,1-Dichloroethene                    | Ave           | 0.2517  | 0.2446  | 0.1000  | 9.72           | 10.0            | -2.8   | 20.0      |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | Ave           | 0.2657  | 0.2618  | 0.1000  | 9.85           | 10.0            | -1.5   | 20.0      |
| Acetone                               | Ave           | 0.0885  | 0.1034  | 0.0500  | 23.4           | 20.0            | 16.9   | 20.0      |
| Iodomethane                           | Ave           | 0.3379  | 0.3425  | 0.0100  | 10.1           | 10.0            | 1.4    | 20.0      |
| Carbon disulfide                      | Ave           | 0.6522  | 0.6393  | 0.1000  | 9.80           | 10.0            | -2.0   | 20.0      |
| Allyl chloride                        | Ave           | 0.1419  | 0.1347  | 0.0100  | 9.49           | 10.0            | -5.1   | 20.0      |
| Methyl acetate                        | Ave           | 0.2074  | 0.2576  | 0.1000  | 62.1           | 50.0            | 24.2*  | 20.0      |
| Methylene Chloride                    | Lin2          |         | 0.3484  | 0.1000  | 9.99           | 10.0            | -0.0   | 20.0      |
| tert-Butyl alcohol                    | Ave           | 1.125   | 1.176   | 0.0100  | 105            | 100             | 4.5    | 20.0      |
| Acrylonitrile                         | Ave           | 0.1046  | 0.1293  | 0.0100  | 124            | 100             | 23.6*  | 20.0      |
| trans-1,2-Dichloroethene              | Ave           | 0.2905  | 0.2811  | 0.1000  | 9.68           | 10.0            | -3.2   | 20.0      |
| Methyl tert-butyl ether               | Ave           | 0.8703  | 0.7819  | 0.1000  | 8.98           | 10.0            | -10.2  | 20.0      |
| Hexane                                | Ave           | 0.3936  | 0.4274  | 0.0100  | 10.9           | 10.0            | 8.6    | 20.0      |
| 1,1-Dichloroethane                    | Ave           | 0.5200  | 0.5466  | 0.2000  | 10.5           | 10.0            | 5.1    | 20.0      |
| Vinyl acetate                         | Ave           | 0.4197  | 0.4131  | 0.0100  | 9.84           | 10.0            | -1.6   | 20.0      |
| cis-1,2-Dichloroethene                | Ave           | 0.3158  | 0.3085  | 0.1000  | 9.77           | 10.0            | -2.3   | 20.0      |
| 2,2-Dichloropropane                   | Ave           | 0.2629  | 0.2419  | 0.0100  | 9.20           | 10.0            | -8.0   | 20.0      |
| 2-Butanone (MEK)                      | Ave           | 0.1207  | 0.1425  | 0.0500  | 23.6           | 20.0            | 18.1   | 20.0      |
| Bromochloromethane                    | Ave           | 0.1269  | 0.1345  | 0.0100  | 10.6           | 10.0            | 6.0    | 20.0      |
| Tetrahydrofuran                       | Ave           | 0.0813  | 0.0966  | 0.0100  | 23.8           | 20.0            | 18.8   | 20.0      |
| Chloroform                            | Ave           | 0.5161  | 0.5096  | 0.2000  | 9.87           | 10.0            | -1.3   | 20.0      |
| 1,1,1-Trichloroethane                 | Ave           | 0.3814  | 0.3706  | 0.1000  | 9.72           | 10.0            | -2.8   | 20.0      |
| Cyclohexane                           | Ave           | 0.4886  | 0.5374  | 0.1000  | 11.0           | 10.0            | 10.0   | 20.0      |
| Carbon tetrachloride                  | Ave           | 0.2694  | 0.2912  | 0.1000  | 10.8           | 10.0            | 8.1    | 20.0      |
| 1,1-Dichloropropene                   | Ave           | 0.4102  | 0.4173  | 0.0100  | 10.2           | 10.0            | 1.7    | 20.0      |
| Isobutyl alcohol                      | Ave           | 0.0072  | 0.0097* | 0.0100  | 336            | 250             | 34.4*  | 20.0      |
| Benzene                               | Ave           | 1.165   | 1.303   | 0.5000  | 11.2           | 10.0            | 11.9   | 20.0      |
| 1,2-Dichloroethane                    | Ave           | 0.4694  | 0.4792  | 0.1000  | 10.2           | 10.0            | 2.1    | 20.0      |
| n-Heptane                             | Ave           | 0.3168  | 0.4352  | 0.0100  | 13.7           | 10.0            | 37.4*  | 20.0      |
| Trichloroethene                       | Ave           | 0.2430  | 0.2719  | 0.2000  | 11.2           | 10.0            | 11.9   | 20.0      |

FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCVIS 180-156189/2 Calibration Date: 10/07/2015 12:51  
 Instrument ID: CHHP6 Calib Start Date: 07/31/2015 14:00  
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 07/31/2015 18:02  
 Lab File ID: 61007002.D Conc. Units: ug/L Heated Purge: (Y/N) N

| ANALYTE                      | CURVE<br>TYPE | AVE RRF | RRF     | MIN RRF | CALC<br>AMOUNT | SPIKE<br>AMOUNT | %D    | MAX<br>%D |
|------------------------------|---------------|---------|---------|---------|----------------|-----------------|-------|-----------|
| Methylcyclohexane            | Ave           | 0.4932  | 0.4739  | 0.1000  | 9.61           | 10.0            | -3.9  | 20.0      |
| 1,2-Dichloropropane          | Ave           | 0.2784  | 0.3318  | 0.1000  | 11.9           | 10.0            | 19.2  | 20.0      |
| 1,4-Dioxane                  | Ave           | 0.0027  | 0.0034* | 0.0100  | 250            | 200             | 24.8* | 20.0      |
| Dibromomethane               | Ave           | 0.1690  | 0.1788  | 0.0100  | 10.6           | 10.0            | 5.8   | 20.0      |
| Bromodichloromethane         | Ave           | 0.3176  | 0.3350  | 0.2000  | 10.5           | 10.0            | 5.5   | 20.0      |
| cis-1,3-Dichloropropene      | Ave           | 0.3489  | 0.3823  | 0.2000  | 11.0           | 10.0            | 9.6   | 20.0      |
| 4-Methyl-2-pentanone (MIBK)  | Ave           | 1.028   | 1.002   | 0.1000  | 19.5           | 20.0            | -2.6  | 20.0      |
| Toluene                      | Ave           | 5.159   | 5.655   | 0.4000  | 11.0           | 10.0            | 9.6   | 20.0      |
| trans-1,3-Dichloropropene    | Ave           | 1.310   | 1.466   | 0.1000  | 11.2           | 10.0            | 12.0  | 20.0      |
| Ethyl methacrylate           | Ave           | 1.391   | 1.466   | 0.0100  | 10.5           | 10.0            | 5.4   | 20.0      |
| 1,1,2-Trichloroethane        | Ave           | 1.067   | 1.177   | 0.1000  | 11.0           | 10.0            | 10.3  | 20.0      |
| Tetrachloroethene            | Ave           | 0.8800  | 1.056   | 0.2000  | 12.0           | 10.0            | 20.0  | 20.0      |
| 1,3-Dichloropropane          | Ave           | 1.971   | 2.231   | 0.0100  | 11.3           | 10.0            | 13.2  | 20.0      |
| 2-Hexanone                   | Ave           | 0.6750  | 0.8559  | 0.1000  | 25.4           | 20.0            | 26.8* | 20.0      |
| Dibromochloromethane         | Ave           | 0.7283  | 0.8685  | 0.1000  | 11.9           | 10.0            | 19.3  | 20.0      |
| 1,2-Dibromoethane (EDB)      | Ave           | 0.9442  | 1.024   | 0.1000  | 10.8           | 10.0            | 8.4   | 20.0      |
| 3-Chlorobenzotrifluoride     | Ave           | 1.652   | 1.838   | 0.0100  | 11.1           | 10.0            | 11.3  | 20.0      |
| Chlorobenzene                | Ave           | 3.171   | 3.591   | 0.5000  | 11.3           | 10.0            | 13.3  | 20.0      |
| 4-Chlorobenzotrifluoride     | Ave           | 1.531   | 1.781   | 0.0100  | 11.6           | 10.0            | 16.3  | 20.0      |
| 1,1,1,2-Tetrachloroethane    | Ave           | 0.8691  | 1.064   | 0.0100  | 12.2           | 10.0            | 22.5* | 20.0      |
| Ethylbenzene                 | Ave           | 1.789   | 2.005   | 0.1000  | 11.2           | 10.0            | 12.1  | 20.0      |
| m-Xylene & p-Xylene          | Ave           | 2.220   | 2.538   | 0.1000  | 11.4           | 10.0            | 14.3  | 20.0      |
| o-Xylene                     | Ave           | 2.221   | 2.459   | 0.3000  | 11.1           | 10.0            | 10.7  | 20.0      |
| Styrene                      | Ave           | 3.411   | 4.134   | 0.3000  | 12.1           | 10.0            | 21.2* | 20.0      |
| Bromoform                    | Ave           | 0.3887  | 0.4681  | 0.1000  | 12.0           | 10.0            | 20.4* | 20.0      |
| 2-Chlorobenzotrifluoride     | Ave           | 1.692   | 1.939   | 0.0100  | 11.5           | 10.0            | 14.6  | 20.0      |
| Isopropylbenzene             | Ave           | 5.314   | 5.863   | 0.1000  | 11.0           | 10.0            | 10.3  | 20.0      |
| 1,1,2,2-Tetrachloroethane    | Ave           | 1.428   | 1.500   | 0.3000  | 10.5           | 10.0            | 5.1   | 20.0      |
| Bromobenzene                 | Ave           | 0.8038  | 0.8144  | 0.0100  | 10.1           | 10.0            | 1.3   | 20.0      |
| trans-1,4-Dichloro-2-butene  | Ave           | 0.2549  | 0.2257  | 0.0100  | 8.86           | 10.0            | -11.4 | 20.0      |
| 1,2,3-Trichloropropane       | Ave           | 0.3057  | 0.2632  | 0.0100  | 8.61           | 10.0            | -13.9 | 20.0      |
| N-Propylbenzene              | Ave           | 0.9257  | 0.8766  | 0.0100  | 9.47           | 10.0            | -5.3  | 20.0      |
| 2-Chlorotoluene              | Ave           | 0.7686  | 0.7731  | 0.0100  | 10.1           | 10.0            | 0.6   | 20.0      |
| 3-Chlorotoluene              | Ave           | 0.8072  | 0.8027  | 0.0100  | 9.94           | 10.0            | -0.6  | 20.0      |
| 1,3,5-Trimethylbenzene       | Ave           | 3.010   | 2.853   | 0.0100  | 9.48           | 10.0            | -5.2  | 20.0      |
| 4-Chlorotoluene              | Ave           | 0.8119  | 0.8340  | 0.0100  | 10.3           | 10.0            | 2.7   | 20.0      |
| tert-Butylbenzene            | Ave           | 2.378   | 2.054   | 0.0100  | 8.64           | 10.0            | -13.6 | 20.0      |
| 1,2,4-Trimethylbenzene       | Ave           | 3.078   | 2.912   | 0.0100  | 9.46           | 10.0            | -5.4  | 20.0      |
| 3,4-Dichlorobenzotrifluoride | Ave           | 0.8719  | 0.8802  | 0.0100  | 10.1           | 10.0            | 1.0   | 20.0      |
| sec-Butylbenzene             | Ave           | 3.550   | 3.385   | 0.0100  | 9.54           | 10.0            | -4.6  | 20.0      |
| 1,3-Dichlorobenzene          | Ave           | 1.570   | 1.565   | 0.6000  | 9.97           | 10.0            | -0.3  | 20.0      |



FORM VII  
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCVIS 180-156189/2 Calibration Date: 10/07/2015 12:51  
 Instrument ID: CHHP6 Calib Start Date: 07/31/2015 14:00  
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 07/31/2015 18:02  
 Lab File ID: 61007002.D Conc. Units: ug/L Heated Purge: (Y/N) N

| ANALYTE                               | CURVE<br>TYPE | AVE RRF | RRF    | MIN RRF | CALC<br>AMOUNT | SPIKE<br>AMOUNT | %D     | MAX<br>%D |
|---------------------------------------|---------------|---------|--------|---------|----------------|-----------------|--------|-----------|
| 4-Isopropyltoluene                    | Ave           | 2.979   | 2.773  | 0.0100  | 9.31           | 10.0            | -6.9   | 20.0      |
| 1,4-Dichlorobenzene                   | Ave           | 1.605   | 1.612  | 0.5000  | 10.0           | 10.0            | 0.4    | 20.0      |
| 2,4-Dichlorobenzotrifluoride          | Ave           | 0.8674  | 0.8726 | 0.0100  | 10.1           | 10.0            | 0.6    | 20.0      |
| 2,5-Dichlorobenzotrifluoride          | Ave           | 0.9687  | 0.9408 | 0.0100  | 9.71           | 10.0            | -2.9   | 20.0      |
| n-Butylbenzene                        | Ave           | 2.974   | 2.604  | 0.0100  | 8.75           | 10.0            | -12.5  | 20.0      |
| 1,2-Dichlorobenzene                   | Ave           | 1.585   | 1.535  | 0.4000  | 9.69           | 10.0            | -3.1   | 20.0      |
| 1,2-Dibromo-3-Chloropropane           | Ave           | 0.1454  | 0.1054 | 0.0500  | 7.25           | 10.0            | -27.5* | 20.0      |
| 2,4- & 2,5- & 2,6-<br>Dichlorotoluene | Ave           | 1.380   | 1.204  | 0.0100  | 26.2           | 30.0            | -12.7  | 20.0      |
| 2,3- & 3,4- Dichlorotoluene           | Ave           | 1.522   | 1.310  | 0.0100  | 17.2           | 20.0            | -13.9  | 20.0      |
| 1,2,4-Trichlorobenzene                | Ave           | 1.229   | 1.115  | 0.2000  | 9.08           | 10.0            | -9.2   | 20.0      |
| Hexachlorobutadiene                   | Ave           | 0.4839  | 0.4705 | 0.0100  | 9.72           | 10.0            | -2.8   | 20.0      |
| Naphthalene                           | Ave           | 2.479   | 2.169  | 0.0100  | 8.75           | 10.0            | -12.5  | 20.0      |
| 1,2,3-Trichlorobenzene                | Ave           | 1.150   | 1.029  | 0.0100  | 8.95           | 10.0            | -10.5  | 20.0      |
| 2,4,5-Trichlorotoluene                | Ave           | 0.7719  | 0.5834 | 0.0100  | 7.56           | 10.0            | -24.4* | 20.0      |
| 2,3,6-Trichlorotoluene                | Ave           | 0.7323  | 0.6474 | 0.0100  | 8.84           | 10.0            | -11.6  | 20.0      |
| Dibromofluoromethane (Surr)           | Ave           | 0.2303  | 0.2377 |         | 10.3           | 10.0            | 3.2    | 20.0      |
| 1,2-Dichloroethane-d4 (Surr)          | Ave           | 0.3715  | 0.3821 |         | 10.3           | 10.0            | 2.8    | 20.0      |
| Toluene-d8 (Surr)                     | Ave           | 3.944   | 4.357  |         | 11.0           | 10.0            | 10.5   | 20.0      |
| 4-Bromofluorobenzene (Surr)           | Ave           | 1.751   | 1.704  |         | 9.73           | 10.0            | -2.7   | 20.0      |

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007002.D  
 Lims ID: CCVIS  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 07-Oct-2015 12:51:30 ALS Bottle#: 2 Worklist Smp#: 2  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: CCVIS  
 Misc. Info.: 180-0008874-002  
 Operator ID: 001562 Instrument ID: CHHP6  
 Sublist: chrom-MSVOA\_LL\_CHHP6\*sub5  
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\MSVOA\_LL\_CHHP6.m  
 Limit Group: VOA 8260C ICAL  
 Last Update: 07-Oct-2015 14:05:12 Calib Date: 14-Sep-2015 16:03:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150914-8521.b\60914006.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: XAWRK012

First Level Reviewer: fergusond

Date: 07-Oct-2015 13:57:39

| Compound                        | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q   | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|---------------------------------|-----|--------------|------------------|------------------|-----|----------|---------------|-----------------|-------|
| * 1 TBA-d9 (IS)                 | 65  | 4.245        | 4.245            | 0.000            | 88  | 168577   | 1000.0        | 1000.0          |       |
| * 2 Fluorobenzene (IS)          | 96  | 7.281        | 7.281            | 0.000            | 98  | 430181   | 50.0          | 50.0            |       |
| * 3 Chlorobenzene-d5            | 119 | 10.396       | 10.396           | 0.000            | 90  | 101182   | 50.0          | 50.0            |       |
| * 4 1,4-Dichlorobenzene-d4      | 152 | 12.750       | 12.750           | 0.000            | 96  | 190331   | 50.0          | 50.0            |       |
| \$ 5 Dibromofluoromethane (Surr | 113 | 6.551        | 6.551            | 0.000            | 93  | 102234   | 50.0          | 51.6            |       |
| \$ 6 1,2-Dichloroethane-d4 (Sur | 65  | 6.928        | 6.928            | 0.000            | 73  | 164360   | 50.0          | 51.4            |       |
| \$ 7 Toluene-d8 (Surr)          | 98  | 8.942        | 8.942            | 0.000            | 94  | 440866   | 50.0          | 55.2            |       |
| \$ 8 4-Bromofluorobenzene (Surr | 95  | 11.588       | 11.588           | 0.000            | 85  | 172430   | 50.0          | 48.7            |       |
| 11 Dichlorodifluoromethane      | 85  | 1.605        | 1.605            | 0.000            | 99  | 136346   | 50.0          | 45.8            |       |
| 12 Chloromethane                | 50  | 1.757        | 1.757            | 0.000            | 100 | 149532   | 50.0          | 58.2            |       |
| 13 Vinyl chloride               | 62  | 1.903        | 1.903            | 0.000            | 98  | 141771   | 50.0          | 51.3            |       |
| 14 Butadiene                    | 39  | 1.933        | 1.933            | 0.000            | 96  | 151983   | 50.0          | 58.6            |       |
| 15 Bromomethane                 | 94  | 2.232        | 2.232            | 0.000            | 93  | 58377    | 50.0          | 39.1            |       |
| 16 Chloroethane                 | 64  | 2.371        | 2.371            | 0.000            | 98  | 89590    | 50.0          | 47.5            |       |
| 17 Dichlorofluoromethane        | 67  | 2.651        | 2.651            | 0.000            | 98  | 212755   | 50.0          | 48.4            |       |
| 18 Trichlorofluoromethane       | 101 | 2.694        | 2.694            | 0.000            | 84  | 154533   | 50.0          | 44.1            |       |
| 20 Ethyl ether                  | 59  | 3.047        | 3.047            | 0.000            | 94  | 135685   | 50.0          | 54.6            |       |
| 21 Acrolein                     | 56  | 3.211        | 3.211            | 0.000            | 96  | 37562    | 150.0         | 138.7           |       |
| 22 1,1-Dichloroethene           | 96  | 3.339        | 3.339            | 0.000            | 95  | 105229   | 50.0          | 48.6            |       |
| 23 1,1,2-Trichloro-1,2,2-trif   | 101 | 3.412        | 3.412            | 0.000            | 93  | 112607   | 50.0          | 49.3            |       |
| 24 Acetone                      | 43  | 3.418        | 3.418            | 0.000            | 79  | 88964    | 100.0         | 116.9           |       |
| 25 Iodomethane                  | 142 | 3.533        | 3.533            | 0.000            | 100 | 147340   | 50.0          | 50.7            |       |
| 26 Carbon disulfide             | 76  | 3.625        | 3.625            | 0.000            | 100 | 275015   | 50.0          | 49.0            |       |
| 29 3-Chloro-1-propene           | 76  | 3.911        | 3.911            | 0.000            | 63  | 57924    | 50.0          | 47.4            |       |
| 30 Methyl acetate               | 43  | 3.923        | 3.923            | 0.000            | 98  | 554116   | 250.0         | 310.5           |       |
| 31 Methylene Chloride           | 84  | 4.124        | 4.124            | 0.000            | 97  | 149876   | 50.0          | 50.0            |       |
| 32 2-Methyl-2-propanol          | 59  | 4.379        | 4.379            | 0.000            | 90  | 99159    | 500.0         | 522.7           |       |
| 33 Acrylonitrile                | 53  | 4.501        | 4.501            | 0.000            | 97  | 556137   | 500.0         | 618.2           |       |
| 34 trans-1,2-Dichloroethene     | 96  | 4.568        | 4.568            | 0.000            | 91  | 120901   | 50.0          | 48.4            |       |
| 35 Methyl tert-butyl ether      | 73  | 4.574        | 4.574            | 0.000            | 96  | 336362   | 50.0          | 44.9            |       |

| Compound                       | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 36 Hexane                      | 57  | 4.981     | 4.981         | 0.000         | 94 | 183848   | 50.0       | 54.3         |       |
| 37 1,1-Dichloroethane          | 63  | 5.188     | 5.188         | 0.000         | 97 | 235134   | 50.0       | 52.6         |       |
| 38 Vinyl acetate               | 43  | 5.237     | 5.237         | 0.000         | 98 | 177716   | 50.0       | 49.2         |       |
| 43 cis-1,2-Dichloroethene      | 96  | 5.936     | 5.936         | 0.000         | 86 | 132699   | 50.0       | 48.8         |       |
| 42 2,2-Dichloropropane         | 77  | 5.942     | 5.942         | 0.000         | 58 | 104071   | 50.0       | 46.0         |       |
| 44 2-Butanone (MEK)            | 43  | 5.949     | 5.949         | 0.000         | 76 | 122624   | 100.0      | 118.1        |       |
| 48 Chlorobromomethane          | 128 | 6.222     | 6.222         | 0.000         | 95 | 57853    | 50.0       | 53.0         |       |
| 49 Tetrahydrofuran             | 42  | 6.241     | 6.241         | 0.000         | 89 | 83135    | 100.0      | 118.8        |       |
| 50 Chloroform                  | 83  | 6.368     | 6.368         | 0.000         | 95 | 219197   | 50.0       | 49.4         |       |
| 51 1,1,1-Trichloroethane       | 97  | 6.539     | 6.539         | 0.000         | 96 | 159421   | 50.0       | 48.6         |       |
| 52 Cyclohexane                 | 56  | 6.612     | 6.612         | 0.000         | 96 | 231183   | 50.0       | 55.0         |       |
| 53 Carbon tetrachloride        | 117 | 6.709     | 6.709         | 0.000         | 96 | 125255   | 50.0       | 54.0         |       |
| 54 1,1-Dichloropropene         | 75  | 6.727     | 6.727         | 0.000         | 95 | 179505   | 50.0       | 50.9         |       |
| 55 Isobutyl alcohol            | 41  | 6.904     | 6.904         | 0.000         | 89 | 104523   | 1250.0     | 1679.4       |       |
| 56 Benzene                     | 78  | 6.940     | 6.940         | 0.000         | 98 | 560720   | 50.0       | 55.9         |       |
| 57 1,2-Dichloroethane          | 62  | 7.013     | 7.013         | 0.000         | 98 | 206120   | 50.0       | 51.0         |       |
| 59 n-Heptane                   | 43  | 7.305     | 7.305         | 0.000         | 93 | 187214   | 50.0       | 68.7         |       |
| 61 Trichloroethene             | 130 | 7.676     | 7.676         | 0.000         | 96 | 116951   | 50.0       | 55.9         |       |
| 63 Methylcyclohexane           | 83  | 7.920     | 7.920         | 0.000         | 95 | 203841   | 50.0       | 48.0         |       |
| 64 1,2-Dichloropropane         | 63  | 7.950     | 7.950         | 0.000         | 94 | 142732   | 50.0       | 59.6         |       |
| 65 1,4-Dioxane                 | 88  | 8.029     | 8.029         | 0.000         | 38 | 29512    | 1000.0     | 1248.3       |       |
| 67 Dibromomethane              | 93  | 8.035     | 8.035         | 0.000         | 95 | 76908    | 50.0       | 52.9         |       |
| 68 Dichlorobromomethane        | 83  | 8.230     | 8.230         | 0.000         | 97 | 144100   | 50.0       | 52.7         |       |
| 71 cis-1,3-Dichloropropene     | 75  | 8.674     | 8.674         | 0.000         | 92 | 164461   | 50.0       | 54.8         |       |
| 72 4-Methyl-2-pentanone (MIBK) | 43  | 8.826     | 8.826         | 0.000         | 98 | 202675   | 100.0      | 97.4         |       |
| 73 Toluene                     | 91  | 9.009     | 9.009         | 0.000         | 98 | 572145   | 50.0       | 54.8         |       |
| 74 trans-1,3-Dichloropropene   | 75  | 9.252     | 9.252         | 0.000         | 98 | 148378   | 50.0       | 56.0         |       |
| 75 Ethyl methacrylate          | 69  | 9.313     | 9.313         | 0.000         | 91 | 148369   | 50.0       | 52.7         |       |
| 76 1,1,2-Trichloroethane       | 97  | 9.447     | 9.447         | 0.000         | 94 | 119053   | 50.0       | 55.1         |       |
| 77 Tetrachloroethene           | 164 | 9.526     | 9.526         | 0.000         | 97 | 106889   | 50.0       | 60.0         |       |
| 78 1,3-Dichloropropane         | 76  | 9.605     | 9.605         | 0.000         | 95 | 225744   | 50.0       | 56.6         |       |
| 79 2-Hexanone                  | 43  | 9.659     | 9.659         | 0.000         | 98 | 173195   | 100.0      | 126.8        |       |
| 81 Chlorodibromomethane        | 129 | 9.824     | 9.824         | 0.000         | 90 | 87875    | 50.0       | 59.6         |       |
| 82 Ethylene Dibromide          | 107 | 9.939     | 9.939         | 0.000         | 97 | 103578   | 50.0       | 54.2         |       |
| 83 3-Chlorobenzotrifluoride    | 180 | 10.390    | 10.390        | 0.000         | 93 | 185963   | 50.0       | 55.6         |       |
| 84 Chlorobenzene               | 112 | 10.426    | 10.426        | 0.000         | 92 | 363390   | 50.0       | 56.6         |       |
| 85 4-Chlorobenzotrifluoride    | 180 | 10.481    | 10.481        | 0.000         | 96 | 180186   | 50.0       | 58.2         |       |
| 87 Ethylbenzene                | 106 | 10.523    | 10.523        | 0.000         | 99 | 202836   | 50.0       | 56.0         |       |
| 86 1,1,1,2-Tetrachloroethane   | 131 | 10.523    | 10.523        | 0.000         | 90 | 107687   | 50.0       | 61.2         |       |
| 88 m-Xylene & p-Xylene         | 106 | 10.657    | 10.657        | 0.000         | 99 | 256794   | 50.0       | 57.2         |       |
| 89 o-Xylene                    | 106 | 11.040    | 11.040        | 0.000         | 97 | 248791   | 50.0       | 55.4         |       |
| 90 Styrene                     | 104 | 11.059    | 11.059        | 0.000         | 94 | 418282   | 50.0       | 60.6         |       |
| 91 Bromoform                   | 173 | 11.241    | 11.241        | 0.000         | 96 | 47359    | 50.0       | 60.2         |       |
| 92 2-Chlorobenzotrifluoride    | 180 | 11.302    | 11.302        | 0.000         | 96 | 196198   | 50.0       | 57.3         |       |
| 93 Isopropylbenzene            | 105 | 11.405    | 11.405        | 0.000         | 98 | 593256   | 50.0       | 55.2         |       |
| 96 1,1,2,2-Tetrachloroethane   | 83  | 11.716    | 11.716        | 0.000         | 95 | 151801   | 50.0       | 52.5         |       |
| 95 Bromobenzene                | 156 | 11.722    | 11.722        | 0.000         | 97 | 155001   | 50.0       | 50.7         |       |
| 97 trans-1,4-Dichloro-2-buten  | 53  | 11.746    | 11.746        | 0.000         | 80 | 42963    | 50.0       | 44.3         |       |
| 98 1,2,3-Trichloropropane      | 110 | 11.770    | 11.770        | 0.000         | 86 | 50092    | 50.0       | 43.0         |       |
| 99 N-Propylbenzene             | 120 | 11.825    | 11.825        | 0.000         | 99 | 166851   | 50.0       | 47.3         |       |
| 100 2-Chlorotoluene            | 126 | 11.910    | 11.910        | 0.000         | 95 | 147150   | 50.0       | 50.3         |       |
| 101 3-Chlorotoluene            | 126 | 11.977    | 11.977        | 0.000         | 96 | 152769   | 50.0       | 49.7         |       |

| Compound                         | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|----------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 102 1,3,5-Trimethylbenzene       | 105 | 12.008    | 12.008        | 0.000         | 94 | 543052   | 50.0       | 47.4         |       |
| 103 4-Chlorotoluene              | 126 | 12.038    | 12.038        | 0.000         | 99 | 158737   | 50.0       | 51.4         |       |
| 104 tert-Butylbenzene            | 119 | 12.324    | 12.324        | 0.000         | 92 | 390957   | 50.0       | 43.2         |       |
| 106 1,2,4-Trimethylbenzene       | 105 | 12.385    | 12.385        | 0.000         | 99 | 554157   | 50.0       | 47.3         |       |
| 107 1,2-dichloro-4-(trifluorom   | 214 | 12.421    | 12.421        | 0.000         | 98 | 167530   | 50.0       | 50.5         |       |
| 108 sec-Butylbenzene             | 105 | 12.549    | 12.549        | 0.000         | 95 | 644276   | 50.0       | 47.7         |       |
| 109 1,3-Dichlorobenzene          | 146 | 12.665    | 12.665        | 0.000         | 95 | 297837   | 50.0       | 49.8         |       |
| 110 4-Isopropyltoluene           | 119 | 12.707    | 12.707        | 0.000         | 96 | 527780   | 50.0       | 46.5         |       |
| 111 1,4-Dichlorobenzene          | 146 | 12.774    | 12.774        | 0.000         | 90 | 306846   | 50.0       | 50.2         |       |
| 113 2,4-Dichloro-1-(trifluorom   | 214 | 12.792    | 12.792        | 0.000         | 96 | 166090   | 50.0       | 50.3         |       |
| 114 2,5-Dichlorobenzotrifluori   | 214 | 12.835    | 12.835        | 0.000         | 97 | 179071   | 50.0       | 48.6         |       |
| 116 n-Butylbenzene               | 91  | 13.115    | 13.115        | 0.000         | 99 | 495581   | 50.0       | 43.8         |       |
| 117 1,2-Dichlorobenzene          | 146 | 13.127    | 13.127        | 0.000         | 94 | 292233   | 50.0       | 48.4         |       |
| 118 1,2-Dibromo-3-Chloropropan   | 75  | 13.918    | 13.918        | 0.000         | 69 | 20055    | 50.0       | 36.2         |       |
| 119 2,4- & 2,5- & 2,6- Dichlor   | 125 | 14.058    | 14.058        | 0.000         | 99 | 687573   | 150.0      | 130.9        |       |
| 121 2,3- & 3,4- Dichlorotoluen   | 125 | 14.478    | 14.478        | 0.000         | 98 | 498770   | 100.0      | 86.1         |       |
| 122 1,2,4-Trichlorobenzene       | 180 | 14.739    | 14.739        | 0.000         | 94 | 212282   | 50.0       | 45.4         |       |
| 123 Hexachlorobutadiene          | 225 | 14.891    | 14.891        | 0.000         | 96 | 89541    | 50.0       | 48.6         |       |
| 124 Naphthalene                  | 128 | 15.007    | 15.007        | 0.000         | 98 | 412873   | 50.0       | 43.7         |       |
| 125 1,2,3-Trichlorobenzene       | 180 | 15.232    | 15.232        | 0.000         | 96 | 195834   | 50.0       | 44.8         |       |
| 126 2,4,5-Trichlorotoluene       | 159 | 16.011    | 16.011        | 0.000         | 0  | 111029   | 50.0       | 37.8         |       |
| 127 2,3,6-Trichlorotoluene       | 159 | 16.108    | 16.108        | 0.000         | 96 | 123210   | 50.0       | 44.2         |       |
| 146 3,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 147 2,6-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 143 2,5-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 145 2,3-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 144 2,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| S 130 1,2-Dichloroethene, Total  | 96  |           |               |               | 0  |          | 100.0      | 97.2         |       |
| S 131 Xylenes, Total             | 106 |           |               |               | 0  |          | 100.0      | 112.5        |       |
| S 132 1,3-Dichloropropene, Total | 1   |           |               |               | 0  |          | 100.0      | 110.8        |       |

### QC Flag Legend

#### Processing Flags

ND - Not Detected or Marked ND

### Reagents:

|                     |                    |           |             |
|---------------------|--------------------|-----------|-------------|
| VOA8260VOAPRI_00147 | Amount Added: 2.00 | Units: uL |             |
| voaWKet1stRes_00001 | Amount Added: 2.00 | Units: uL |             |
| voaWAcro1stRe_00001 | Amount Added: 6.00 | Units: uL |             |
| voaWEEpri Res_00006 | Amount Added: 2.00 | Units: uL |             |
| voaWVA2nd Res_00010 | Amount Added: 2.00 | Units: uL |             |
| VOA8260INT_00042    | Amount Added: 2.00 | Units: uL | Run Reagent |
| VOA8260SURRE_00042  | Amount Added: 2.00 | Units: uL | Run Reagent |

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007002.D

Injection Date: 07-Oct-2015 12:51:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: CCVIS

Worklist Smp#: 2

Client ID:

Purge Vol: 5.000 mL

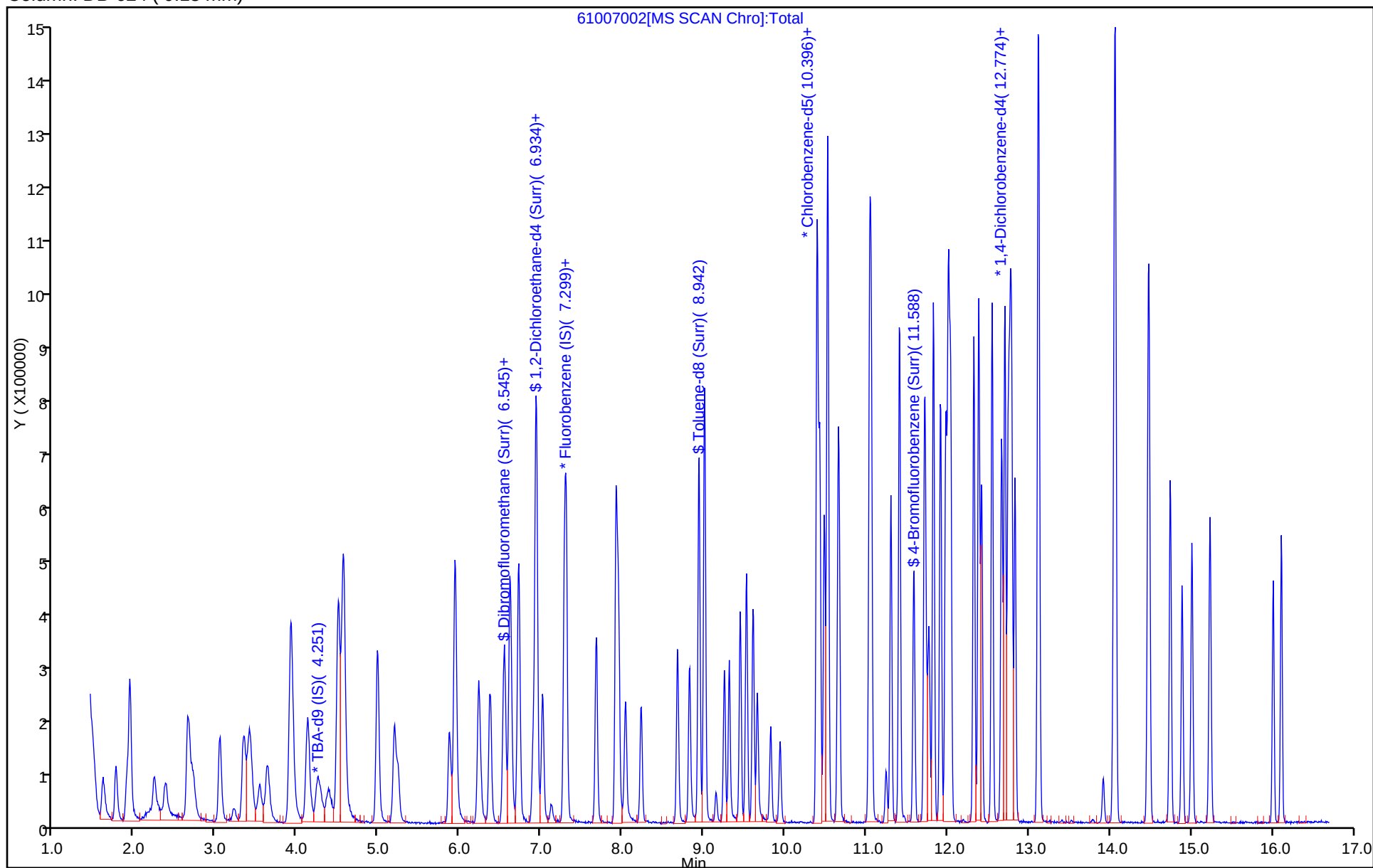
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: MSVOA\_LL\_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826007.D  
Lims ID: BFB  
Client ID:  
Sample Type: BFB  
Inject. Date: 26-Aug-2015 14:01:30 ALS Bottle#: 4 Worklist Smp#: 7  
Injection Vol: 5.0 mL Dil. Factor: 1.0000  
Sample Info: BFB  
Misc. Info.: 180-0008300-007  
Operator ID: 001562 Instrument ID: CHHP5  
Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\MSVOA\_LL\_CHHP5.m  
Limit Group: VOA 8260C ICAL  
Last Update: 27-Aug-2015 11:26:53 Calib Date: 26-Aug-2015 17:52:30  
Integrator: RTE ID Type: Deconvolution ID  
Quant Method: Internal Standard Quant By: Initial Calibration  
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D  
Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
Process Host: XAWRK048

| Compound  | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|-----------|-----|--------------|------------------|------------------|---|----------|---------------|-----------------|-------|
| \$ 10 BFB | 95  | 8.366        | 8.366            | 0.000            | 0 | 128431   | NR            | NR              |       |

**QC Flag Legend**

Processing Flags

NR - Missing Quant Standard

**Reagents:**

VOABFB25\_00065

Amount Added: 1.00

Units: uL

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826007.D

Injection Date: 26-Aug-2015 14:01:30

Instrument ID: CHHP5

Lims ID: BFB

Client ID:

Operator ID: 001562

ALS Bottle#: 4 Worklist Smp#: 7

Injection Vol: 5.0 mL

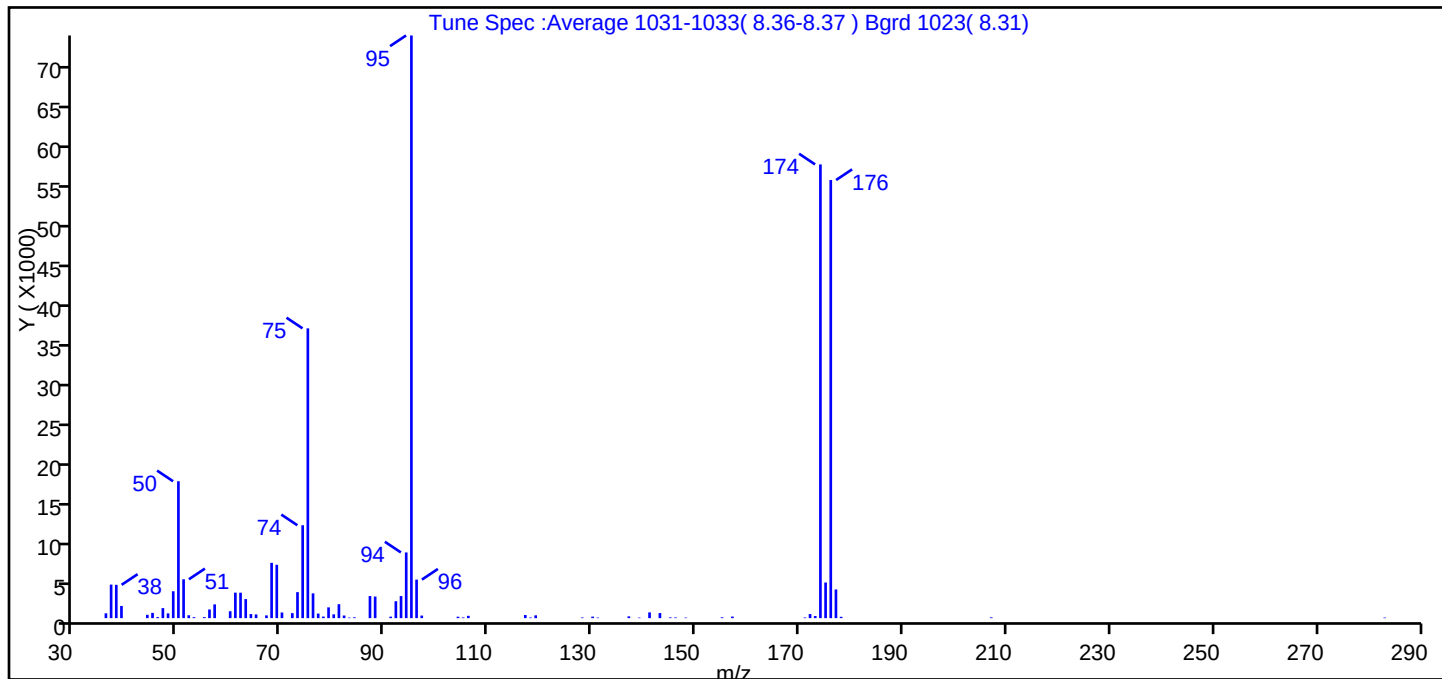
Dil. Factor: 1.0000

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C ICAL

Tune Method: BFB Method 8260

\$ 10 BFB



| m/z | Ion Abundance Criteria                         | % Relative Abundance |
|-----|------------------------------------------------|----------------------|
| 95  | Base peak, 100% relative abundance             | 100.0                |
| 50  | 15 to 40% of m/z 95                            | 23.5                 |
| 75  | 30 to 60% of m/z 95                            | 49.7                 |
| 96  | 5 to 9% of m/z 95                              | 6.6                  |
| 173 | Less than 2% of m/z 174                        | 0.4 (0.5)            |
| 174 | 50 to 120% of m/z 95                           | 77.9                 |
| 175 | 5 to 9% of m/z 174                             | 6.1 (7.9)            |
| 176 | Greater than 95% but less than 101% of m/z 174 | 75.2 (96.6)          |
| 177 | 5 to 9% of m/z 176                             | 4.9 (6.6)            |

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826007.D\MSVOA\_LL\_CHHP5.rsltspectrum  
Injection Date: 26-Aug-2015 14:01:30  
Spectrum: Tune Spec :Average 1031-1033( 8.36-8.37 ) Bgrd 1023( 8.31)  
Base Peak: 95.00  
Minimum % Base Peak: 0  
Number of Points: 77

| m/z   | Y     | m/z   | Y     | m/z    | Y     | m/z    | Y     |
|-------|-------|-------|-------|--------|-------|--------|-------|
| 36.00 | 611   | 63.00 | 2411  | 87.00  | 2793  | 141.00 | 728   |
| 37.00 | 4245  | 64.00 | 518   | 88.00  | 2731  | 143.00 | 645   |
| 38.00 | 4214  | 65.00 | 470   | 91.00  | 185   | 145.00 | 90    |
| 39.00 | 1541  | 67.00 | 350   | 92.00  | 2139  | 146.00 | 83    |
| 44.00 | 422   | 68.00 | 6998  | 93.00  | 2793  | 148.00 | 69    |
| 45.00 | 664   | 69.00 | 6752  | 94.00  | 8313  | 155.00 | 103   |
| 46.00 | 131   | 70.00 | 715   | 95.00  | 73720 | 157.00 | 200   |
| 47.00 | 1270  | 72.00 | 635   | 96.00  | 4875  | 171.00 | 82    |
| 48.00 | 602   | 73.00 | 3289  | 97.00  | 325   | 172.00 | 516   |
| 49.00 | 3402  | 74.00 | 11753 | 104.00 | 180   | 173.00 | 266   |
| 50.00 | 17320 | 75.00 | 36664 | 105.00 | 86    | 174.00 | 57408 |
| 51.00 | 4919  | 76.00 | 3139  | 106.00 | 295   | 175.00 | 4509  |
| 52.00 | 366   | 77.00 | 580   | 117.00 | 395   | 176.00 | 55432 |
| 53.00 | 119   | 78.00 | 199   | 118.00 | 78    | 177.00 | 3632  |
| 55.00 | 129   | 79.00 | 1363  | 119.00 | 354   | 178.00 | 170   |
| 56.00 | 1095  | 80.00 | 480   | 128.00 | 80    | 207.00 | 97    |
| 57.00 | 1741  | 81.00 | 1763  | 130.00 | 191   | 283.00 | 74    |
| 60.00 | 873   | 82.00 | 333   | 131.00 | 68    |        |       |
| 61.00 | 3226  | 83.00 | 66    | 137.00 | 226   |        |       |
| 62.00 | 3220  | 84.00 | 102   | 139.00 | 67    |        |       |



## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826007.D

Injection Date: 26-Aug-2015 14:01:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: BFB

Worklist Smp#: 7

Client ID:

Injection Vol: 5.0 mL

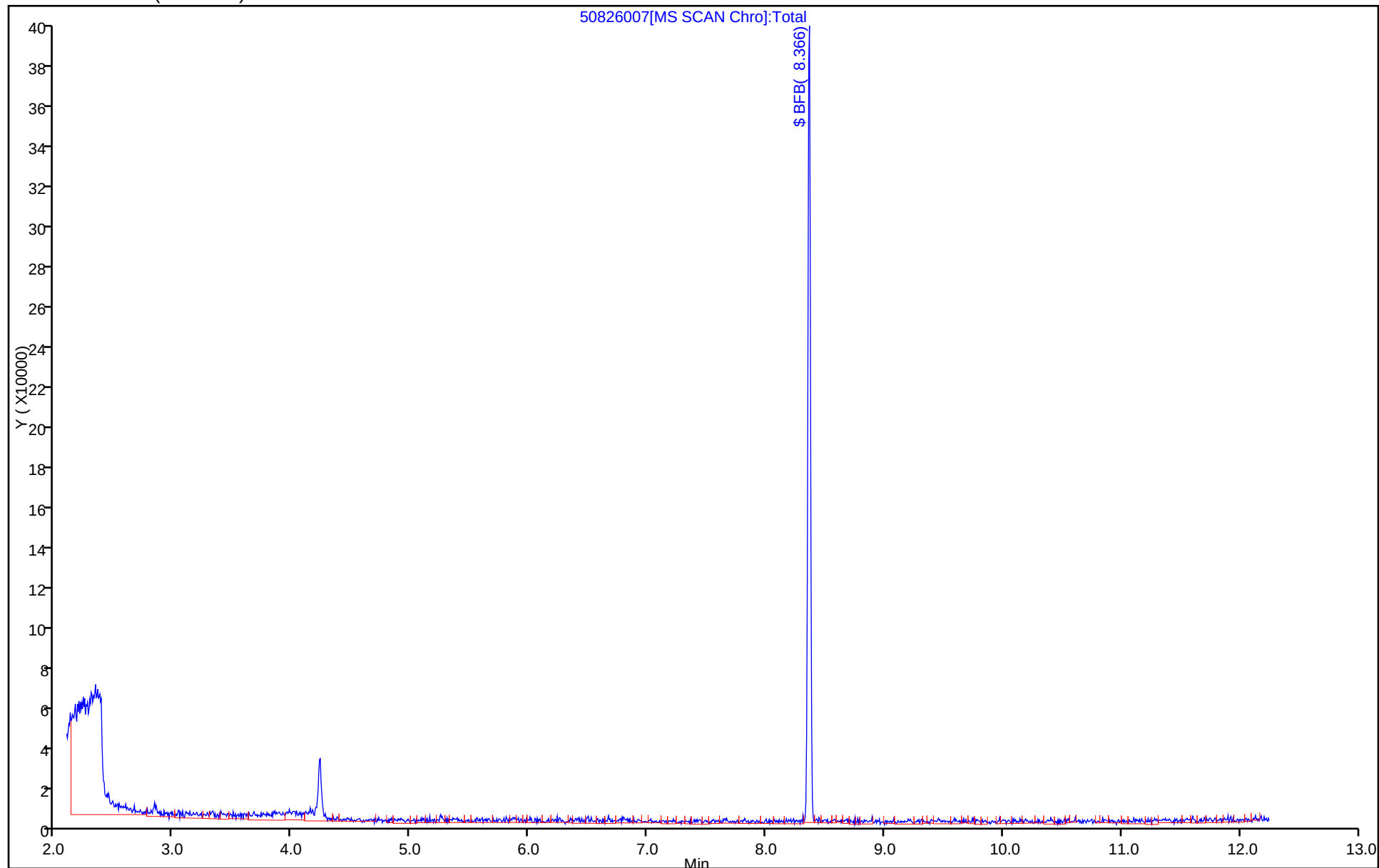
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\51008004.D  
Lims ID: BFB  
Client ID:  
Sample Type: BFB  
Inject. Date: 08-Oct-2015 11:00:30 ALS Bottle#: 1 Worklist Smp#: 4  
Injection Vol: 5.0 mL Dil. Factor: 1.0000  
Sample Info: BFB  
Misc. Info.: 180-0008892-004  
Operator ID: 001562 Instrument ID: CHHP5  
Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\MSVOA\_LL\_CHHP5.m  
Limit Group: VOA 8260C ICAL  
Last Update: 08-Oct-2015 13:15:45 Calib Date: 26-Aug-2015 17:52:30  
Integrator: RTE ID Type: Deconvolution ID  
Quant Method: Internal Standard Quant By: Initial Calibration  
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D  
Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
Process Host: XAWRK015

First Level Reviewer: fergusond

Date: 08-Oct-2015 11:25:52

| Compound | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|----------|-----|--------------|------------------|------------------|---|----------|---------------|-----------------|-------|
|----------|-----|--------------|------------------|------------------|---|----------|---------------|-----------------|-------|

|           |    |       |       |       |   |       |    |    |  |
|-----------|----|-------|-------|-------|---|-------|----|----|--|
| \$ 10 BFB | 95 | 8.360 | 8.360 | 0.000 | 0 | 59613 | NR | NR |  |
|-----------|----|-------|-------|-------|---|-------|----|----|--|

**QC Flag Legend**

Processing Flags

NR - Missing Quant Standard

**Reagents:**

VOABFB25\_00067

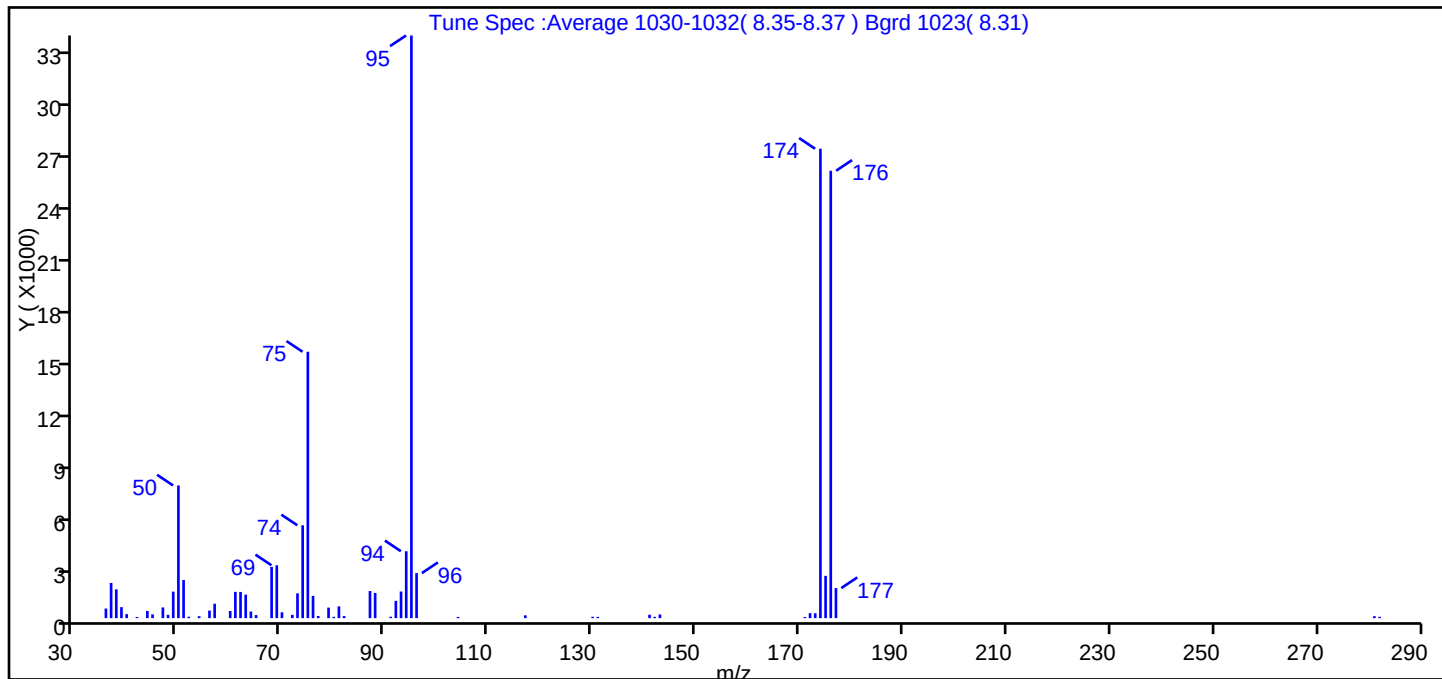
Amount Added: 1.00

Units: uL

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\51008004.D  
Injection Date: 08-Oct-2015 11:00:30 Instrument ID: CHHP5  
Lims ID: BFB  
Client ID:  
Operator ID: 001562 ALS Bottle#: 1 Worklist Smp#: 4  
Injection Vol: 5.0 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP5 Limit Group: VOA 8260C ICAL  
Tune Method: BFB Method 8260

\$ 10 BFB



| m/z | Ion Abundance Criteria                         | % Relative Abundance |
|-----|------------------------------------------------|----------------------|
| 95  | Base peak, 100% relative abundance             | 100.0                |
| 50  | 15 to 40% of m/z 95                            | 22.8                 |
| 75  | 30 to 60% of m/z 95                            | 45.7                 |
| 96  | 5 to 9% of m/z 95                              | 7.7                  |
| 173 | Less than 2% of m/z 174                        | 0.8 (1.0)            |
| 174 | 50 to 120% of m/z 95                           | 80.6                 |
| 175 | 5 to 9% of m/z 174                             | 7.3 (9.0)            |
| 176 | Greater than 95% but less than 101% of m/z 174 | 76.8 (95.3)          |
| 177 | 5 to 9% of m/z 176                             | 5.2 (6.7)            |

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\51008004.D\MSVOA\_LL\_CHHP5.rsl\tspectr

Injection Date: 08-Oct-2015 11:00:30

Spectrum: Tune Spec :Average 1030-1032( 8.35-8.37 ) Bgrd 1023( 8.31)

Base Peak: 95.00

Minimum % Base Peak: 0

Number of Points: 60

| m/z   | Y    | m/z   | Y     | m/z    | Y     | m/z    | Y     |
|-------|------|-------|-------|--------|-------|--------|-------|
| 36.00 | 552  | 56.00 | 434   | 76.00  | 1279  | 117.00 | 161   |
| 37.00 | 2024 | 57.00 | 828   | 77.00  | 121   | 130.00 | 79    |
| 38.00 | 1651 | 60.00 | 409   | 79.00  | 605   | 131.00 | 73    |
| 39.00 | 630  | 61.00 | 1510  | 80.00  | 74    | 141.00 | 196   |
| 40.00 | 231  | 62.00 | 1505  | 81.00  | 677   | 142.00 | 75    |
| 42.00 | 67   | 63.00 | 1352  | 82.00  | 120   | 143.00 | 210   |
| 44.00 | 414  | 64.00 | 379   | 87.00  | 1557  | 171.00 | 67    |
| 45.00 | 218  | 65.00 | 178   | 88.00  | 1444  | 172.00 | 286   |
| 47.00 | 615  | 68.00 | 2938  | 91.00  | 80    | 173.00 | 279   |
| 48.00 | 190  | 69.00 | 3036  | 92.00  | 994   | 174.00 | 26960 |
| 49.00 | 1524 | 70.00 | 338   | 93.00  | 1531  | 175.00 | 2430  |
| 50.00 | 7620 | 72.00 | 188   | 94.00  | 3843  | 176.00 | 25696 |
| 51.00 | 2188 | 73.00 | 1424  | 95.00  | 33464 | 177.00 | 1727  |
| 52.00 | 79   | 74.00 | 5332  | 96.00  | 2588  | 281.00 | 112   |
| 54.00 | 112  | 75.00 | 15300 | 104.00 | 71    | 282.00 | 76    |

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\51008004.D

Injection Date: 08-Oct-2015 11:00:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: BFB

Worklist Smp#: 4

Client ID:

Injection Vol: 5.0 mL

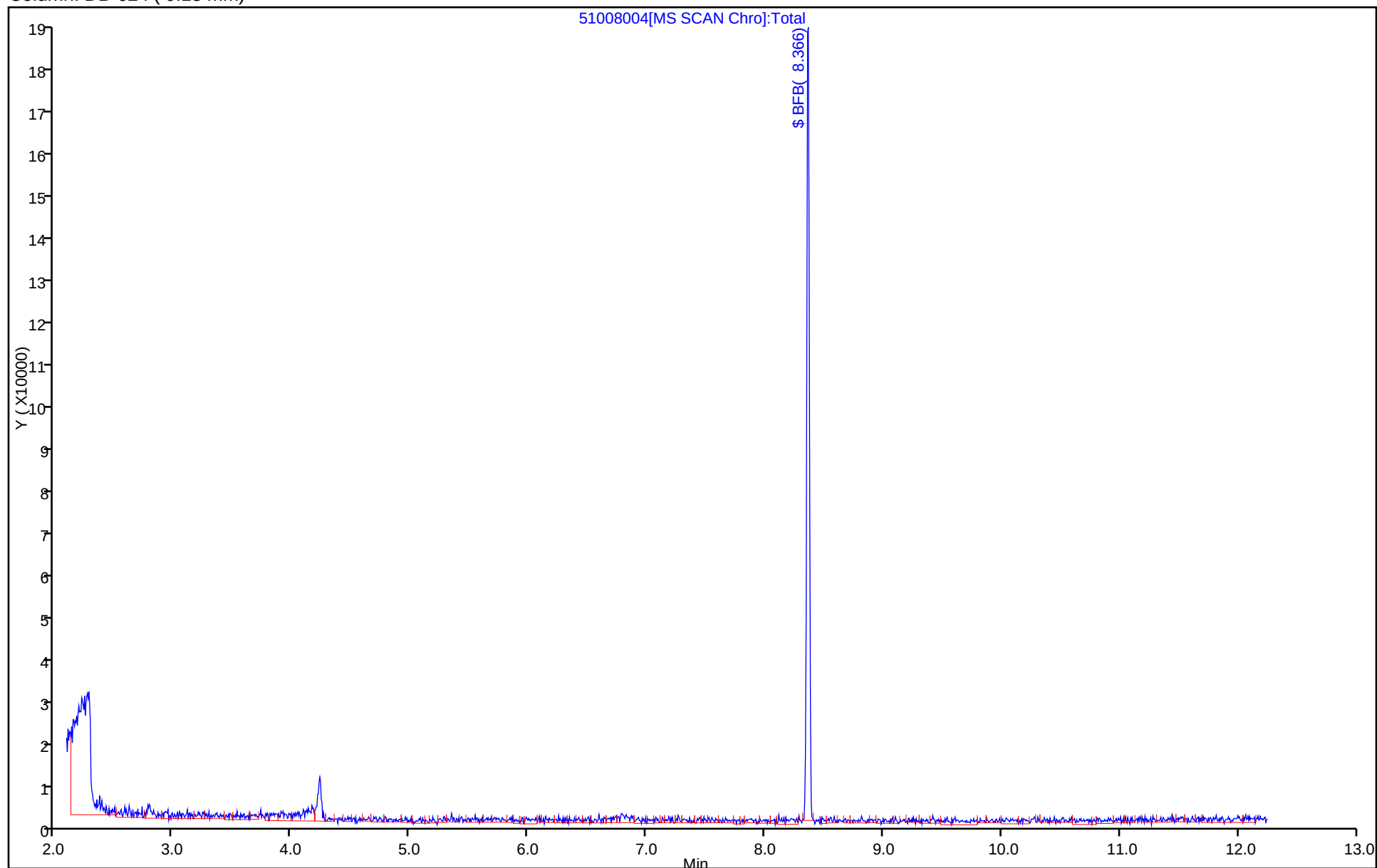
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731001.D  
Lims ID: BFB  
Client ID:  
Sample Type: BFB  
Inject. Date: 31-Jul-2015 12:10:30 ALS Bottle#: 1 Worklist Smp#: 1  
Injection Vol: 5.0 mL Dil. Factor: 1.0000  
Sample Info: BFB  
Misc. Info.: 180-0007999-001  
Operator ID: 001562 Instrument ID: CHHP6  
Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\MSVOA\_LL\_CHHP6.m  
Limit Group: VOA 8260C ICAL  
Last Update: 03-Aug-2015 12:15:22 Calib Date: 31-Jul-2015 18:02:30  
Integrator: RTE ID Type: Deconvolution ID  
Quant Method: Internal Standard Quant By: Initial Calibration  
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731014.D  
Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
Process Host: XAWRK049

| Compound  | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|-----------|-----|--------------|------------------|------------------|---|----------|---------------|-----------------|-------|
| \$ 10 BFB | 95  | 8.381        | 8.381            | 0.000            | 0 | 114672   | NR            | NR              |       |

**QC Flag Legend**

Processing Flags

NR - Missing Quant Standard

**Reagents:**

VOABFB25\_00064

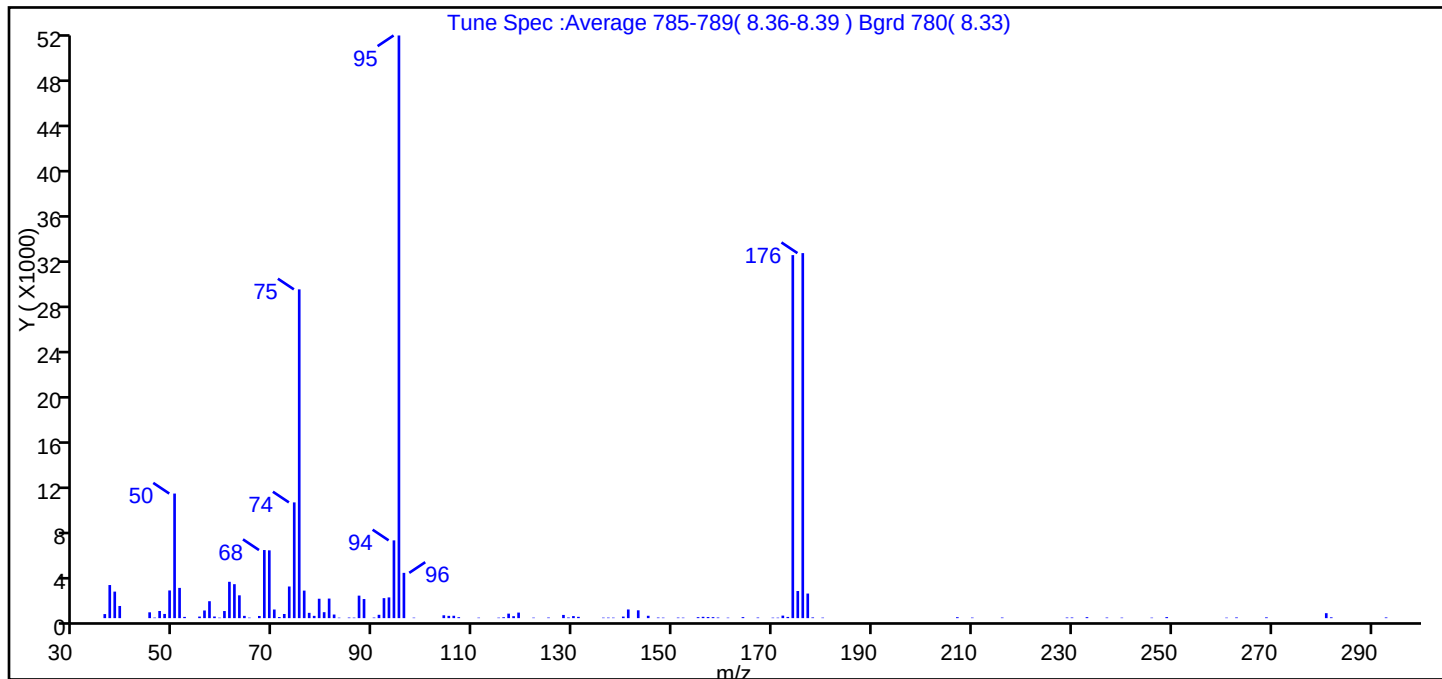
Amount Added: 1.00

Units: uL

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731001.D  
Injection Date: 31-Jul-2015 12:10:30 Instrument ID: CHHP6  
Lims ID: BFB  
Client ID:  
Operator ID: 001562 ALS Bottle#: 1 Worklist Smp#: 1  
Injection Vol: 5.0 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP6 Limit Group: VOA 8260C ICAL  
Tune Method: BFB Method 8260

\$ 10 BFB



| m/z | Ion Abundance Criteria                         | % Relative Abundance |
|-----|------------------------------------------------|----------------------|
| 95  | Base peak, 100% relative abundance             | 100.0                |
| 50  | 15 to 40% of m/z 95                            | 21.4                 |
| 75  | 30 to 60% of m/z 95                            | 56.4                 |
| 96  | 5 to 9% of m/z 95                              | 7.8                  |
| 173 | Less than 2% of m/z 174                        | 0.2 (0.3)            |
| 174 | 50 to 120% of m/z 95                           | 62.3                 |
| 175 | 5 to 9% of m/z 174                             | 4.7 (7.5)            |
| 176 | Greater than 95% but less than 101% of m/z 174 | 62.6 (100.6)         |
| 177 | 5 to 9% of m/z 176                             | 4.2 (6.7)            |

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731001.D\MSVOA\_LL\_CHHP6.rsltspectrum  
Injection Date: 31-Jul-2015 12:10:30  
Spectrum: Tune Spec :Average 785-789( 8.36-8.39 ) Bgrd 780( 8.33)  
Base Peak: 95.00  
Minimum % Base Peak: 0  
Number of Points: 113

| m/z   | Y     | m/z    | Y     | m/z    | Y   | m/z    | Y     |
|-------|-------|--------|-------|--------|-----|--------|-------|
| 36.00 | 357   | 73.00  | 2786  | 116.00 | 79  | 170.00 | 42    |
| 37.00 | 2914  | 74.00  | 10190 | 117.00 | 397 | 171.00 | 42    |
| 38.00 | 2336  | 75.00  | 28944 | 118.00 | 172 | 172.00 | 223   |
| 39.00 | 1071  | 76.00  | 2425  | 119.00 | 489 | 173.00 | 107   |
| 45.00 | 513   | 77.00  | 467   | 122.00 | 43  | 174.00 | 31960 |
| 46.00 | 47    | 78.00  | 201   | 125.00 | 52  | 175.00 | 2388  |
| 47.00 | 630   | 79.00  | 1709  | 128.00 | 283 | 176.00 | 32136 |
| 48.00 | 370   | 80.00  | 524   | 129.00 | 57  | 177.00 | 2165  |
| 49.00 | 2439  | 81.00  | 1723  | 130.00 | 180 | 178.00 | 64    |
| 50.00 | 10968 | 82.00  | 318   | 131.00 | 115 | 180.00 | 45    |
| 51.00 | 2663  | 83.00  | 42    | 136.00 | 43  | 207.00 | 82    |
| 52.00 | 110   | 85.00  | 51    | 137.00 | 46  | 210.00 | 48    |
| 55.00 | 140   | 86.00  | 45    | 138.00 | 43  | 216.00 | 52    |
| 56.00 | 674   | 87.00  | 1982  | 140.00 | 137 | 229.00 | 53    |
| 57.00 | 1491  | 88.00  | 1683  | 141.00 | 763 | 230.00 | 56    |
| 58.00 | 144   | 90.00  | 51    | 143.00 | 689 | 233.00 | 85    |
| 59.00 | 42    | 91.00  | 295   | 145.00 | 209 | 237.00 | 52    |
| 60.00 | 626   | 92.00  | 1761  | 147.00 | 52  | 240.00 | 44    |
| 61.00 | 3200  | 93.00  | 1826  | 148.00 | 43  | 246.00 | 42    |
| 62.00 | 2990  | 94.00  | 6848  | 151.00 | 49  | 249.00 | 90    |
| 63.00 | 2009  | 95.00  | 51296 | 152.00 | 43  | 261.00 | 42    |
| 64.00 | 201   | 96.00  | 3987  | 155.00 | 87  | 263.00 | 61    |
| 65.00 | 44    | 98.00  | 42    | 156.00 | 116 | 269.00 | 68    |
| 67.00 | 191   | 104.00 | 251   | 157.00 | 98  | 281.00 | 438   |
| 68.00 | 5995  | 105.00 | 201   | 158.00 | 87  | 282.00 | 71    |
| 69.00 | 5969  | 106.00 | 210   | 159.00 | 54  | 293.00 | 62    |
| 70.00 | 760   | 107.00 | 82    | 161.00 | 42  |        |       |
| 71.00 | 96    | 111.00 | 42    | 164.00 | 89  |        |       |
| 72.00 | 366   | 115.00 | 42    | 167.00 | 53  |        |       |



Report Date: 03-Aug-2015 12:15:24

Chrom Revision: 2.2 09-Jul-2015 10:16:20

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150731-7999.b\60731001.D

Injection Date: 31-Jul-2015 12:10:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 5.0 mL

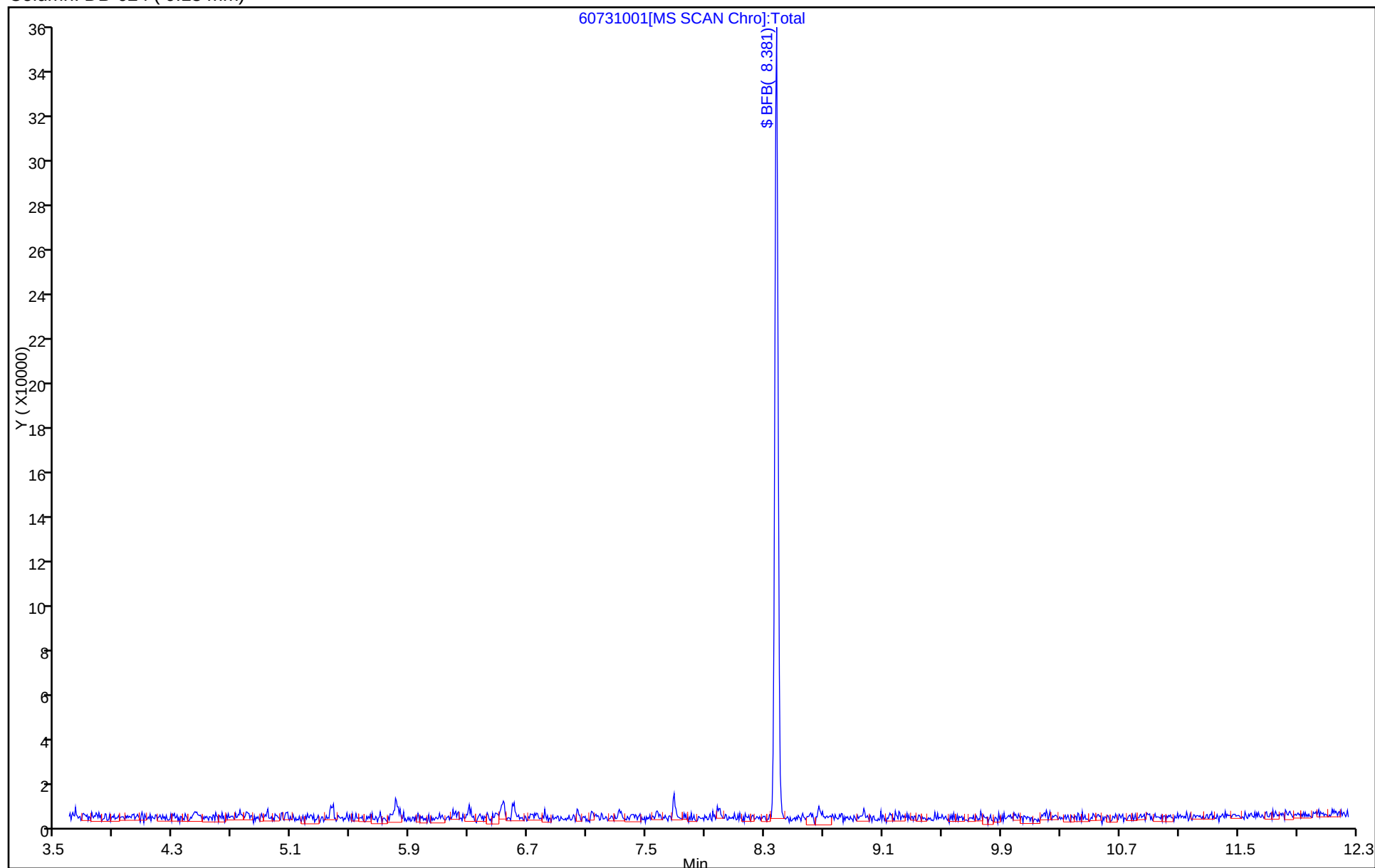
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MSVOA\_LL\_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007004.D  
Lims ID: BFB  
Client ID:  
Sample Type: BFB  
Inject. Date: 07-Oct-2015 11:51:30 ALS Bottle#: 1 Worklist Smp#: 4  
Injection Vol: 5.0 mL Dil. Factor: 1.0000  
Sample Info: BFB  
Misc. Info.: 180-0008874-004  
Operator ID: 001562 Instrument ID: CHHP6  
Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\MSVOA\_LL\_CHHP6.m  
Limit Group: VOA 8260C ICAL  
Last Update: 07-Oct-2015 14:05:06 Calib Date: 14-Sep-2015 16:03:30  
Integrator: RTE ID Type: Deconvolution ID  
Quant Method: Internal Standard Quant By: Initial Calibration  
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150914-8521.b\60914006.D  
Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
Process Host: XAWRK012

First Level Reviewer: fergusond

Date: 07-Oct-2015 12:01:04

| Compound | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|----------|-----|--------------|------------------|------------------|---|----------|---------------|-----------------|-------|
|----------|-----|--------------|------------------|------------------|---|----------|---------------|-----------------|-------|

|           |    |       |       |       |   |        |    |    |  |
|-----------|----|-------|-------|-------|---|--------|----|----|--|
| \$ 10 BFB | 95 | 8.375 | 8.375 | 0.000 | 0 | 151730 | NR | NR |  |
|-----------|----|-------|-------|-------|---|--------|----|----|--|

**QC Flag Legend**

Processing Flags

NR - Missing Quant Standard

**Reagents:**

VOABFB25\_00067

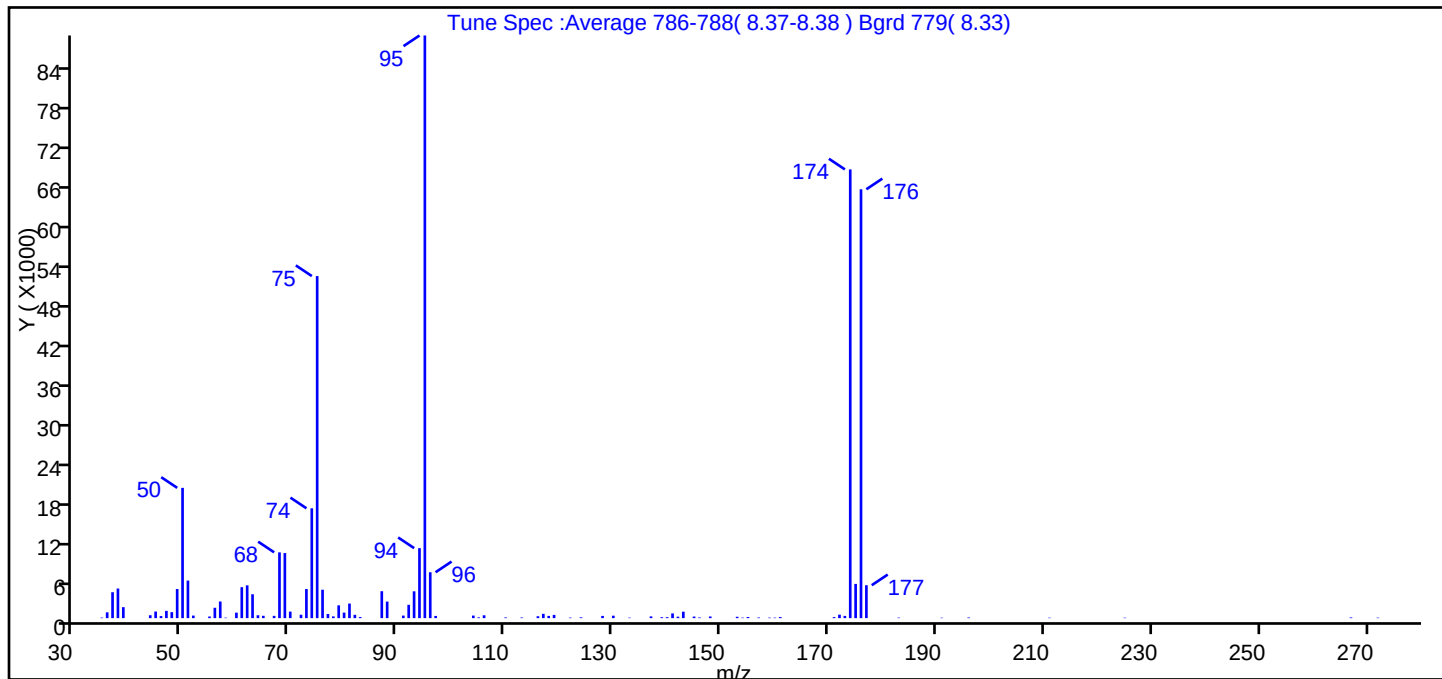
Amount Added: 1.00

Units: uL

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007004.D  
Injection Date: 07-Oct-2015 11:51:30 Instrument ID: CHHP6  
Lims ID: BFB  
Client ID:  
Operator ID: 001562 ALS Bottle#: 1 Worklist Smp#: 4  
Injection Vol: 5.0 mL Dil. Factor: 1.0000  
Method: MSVOA\_LL\_CHHP6 Limit Group: VOA 8260C ICAL  
Tune Method: BFB Method 8260

\$ 10 BFB



| m/z | Ion Abundance Criteria                         | % Relative Abundance |
|-----|------------------------------------------------|----------------------|
| 95  | Base peak, 100% relative abundance             | 100.0                |
| 50  | 15 to 40% of m/z 95                            | 22.4                 |
| 75  | 30 to 60% of m/z 95                            | 58.7                 |
| 96  | 5 to 9% of m/z 95                              | 7.9                  |
| 173 | Less than 2% of m/z 174                        | 0.4 (0.5)            |
| 174 | 50 to 120% of m/z 95                           | 77.0                 |
| 175 | 5 to 9% of m/z 174                             | 5.9 (7.6)            |
| 176 | Greater than 95% but less than 101% of m/z 174 | 73.6 (95.6)          |
| 177 | 5 to 9% of m/z 176                             | 5.6 (7.7)            |

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007004.D\MSVOA\_LL\_CHHP6.rsltspectrum  
Injection Date: 07-Oct-2015 11:51:30  
Spectrum: Tune Spec :Average 786-788( 8.37-8.38 ) Bgrd 779( 8.33)  
Base Peak: 95.00  
Minimum % Base Peak: 0  
Number of Points: 93

| m/z   | Y     | m/z   | Y     | m/z    | Y   | m/z    | Y     |
|-------|-------|-------|-------|--------|-----|--------|-------|
| 35.00 | 82    | 67.00 | 346   | 97.00  | 334 | 153.00 | 207   |
| 36.00 | 882   | 68.00 | 9960  | 104.00 | 391 | 154.00 | 74    |
| 37.00 | 3922  | 69.00 | 9853  | 105.00 | 113 | 155.00 | 169   |
| 38.00 | 4480  | 70.00 | 990   | 106.00 | 434 | 157.00 | 95    |
| 39.00 | 1663  | 72.00 | 516   | 110.00 | 106 | 159.00 | 80    |
| 44.00 | 442   | 73.00 | 4409  | 113.00 | 95  | 160.00 | 74    |
| 45.00 | 997   | 74.00 | 16624 | 116.00 | 289 | 161.00 | 164   |
| 46.00 | 310   | 75.00 | 51776 | 117.00 | 654 | 171.00 | 153   |
| 47.00 | 1102  | 76.00 | 4303  | 118.00 | 339 | 172.00 | 524   |
| 48.00 | 907   | 77.00 | 627   | 119.00 | 493 | 173.00 | 339   |
| 49.00 | 4406  | 78.00 | 263   | 122.00 | 82  | 174.00 | 67920 |
| 50.00 | 19720 | 79.00 | 1939  | 124.00 | 121 | 175.00 | 5183  |
| 51.00 | 5685  | 80.00 | 838   | 128.00 | 340 | 176.00 | 64912 |
| 52.00 | 390   | 81.00 | 2207  | 130.00 | 371 | 177.00 | 4982  |
| 55.00 | 245   | 82.00 | 505   | 133.00 | 76  | 183.00 | 76    |
| 56.00 | 1569  | 83.00 | 160   | 137.00 | 267 | 191.00 | 67    |
| 57.00 | 2518  | 87.00 | 4079  | 139.00 | 137 | 196.00 | 94    |
| 58.00 | 75    | 88.00 | 2504  | 140.00 | 143 | 211.00 | 68    |
| 60.00 | 833   | 91.00 | 387   | 141.00 | 716 | 225.00 | 68    |
| 61.00 | 4684  | 92.00 | 2018  | 142.00 | 220 | 267.00 | 105   |
| 62.00 | 4963  | 93.00 | 4062  | 143.00 | 977 | 272.00 | 76    |
| 63.00 | 3617  | 94.00 | 10595 | 145.00 | 239 |        |       |
| 64.00 | 438   | 95.00 | 88192 | 146.00 | 99  |        |       |
| 65.00 | 357   | 96.00 | 6948  | 148.00 | 250 |        |       |

Report Date: 07-Oct-2015 14:05:08

Chrom Revision: 2.2 08-Sep-2015 13:41:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007004.D

Injection Date: 07-Oct-2015 11:51:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: BFB

Worklist Smp#: 4

Client ID:

Injection Vol: 5.0 mL

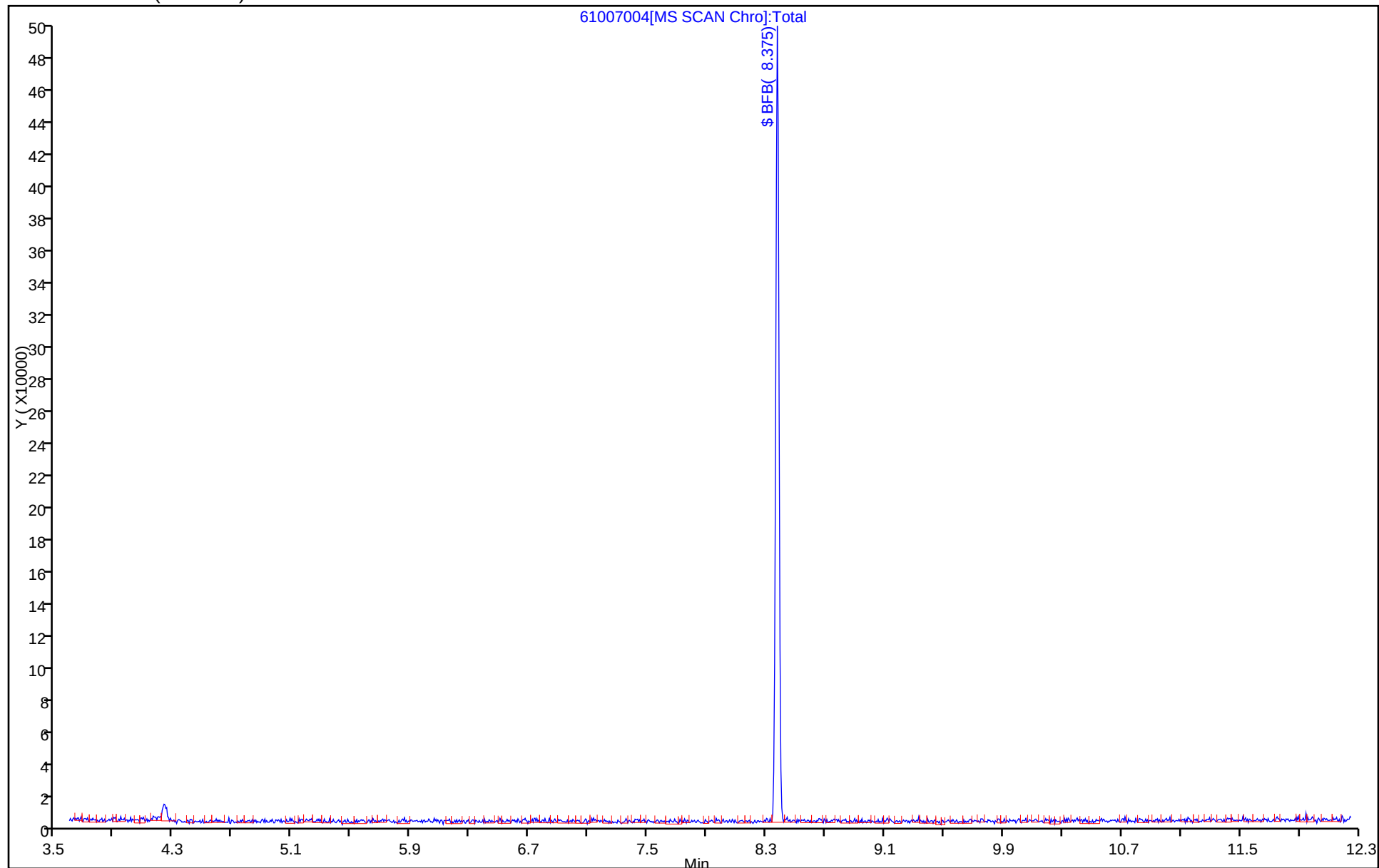
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MSVOA\_LL\_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 180-156189/5

Matrix: Water Lab File ID: 61007005.D

Analysis Method: 8260C Date Collected: \_\_\_\_\_

Sample wt/vol: 5 (mL) Date Analyzed: 10/07/2015 14:07

Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_ Level: (low/med) Low

Analysis Batch No.: 156189 Units: ug/L

| CAS NO.    | COMPOUND NAME               | RESULT | Q | RL  | MDL   |
|------------|-----------------------------|--------|---|-----|-------|
| 74-87-3    | Chloromethane               | ND     |   | 1.0 | 0.28  |
| 75-01-4    | Vinyl chloride              | ND     |   | 1.0 | 0.23  |
| 74-83-9    | Bromomethane                | ND     |   | 1.0 | 0.31  |
| 75-00-3    | Chloroethane                | ND     |   | 1.0 | 0.21  |
| 75-35-4    | 1,1-Dichloroethene          | ND     |   | 1.0 | 0.30  |
| 67-64-1    | Acetone                     | ND     |   | 5.0 | 2.5   |
| 75-15-0    | Carbon disulfide            | ND     |   | 1.0 | 0.21  |
| 75-09-2    | Methylene Chloride          | ND     |   | 1.0 | 0.13  |
| 156-60-5   | trans-1,2-Dichloroethene    | ND     |   | 1.0 | 0.17  |
| 1634-04-4  | Methyl tert-butyl ether     | ND     |   | 1.0 | 0.18  |
| 75-34-3    | 1,1-Dichloroethane          | ND     |   | 1.0 | 0.12  |
| 156-59-2   | cis-1,2-Dichloroethene      | ND     |   | 1.0 | 0.24  |
| 74-97-5    | Bromochloromethane          | ND     |   | 1.0 | 0.18  |
| 78-93-3    | 2-Butanone (MEK)            | ND     |   | 5.0 | 0.55  |
| 67-66-3    | Chloroform                  | ND     |   | 1.0 | 0.17  |
| 71-55-6    | 1,1,1-Trichloroethane       | ND     |   | 1.0 | 0.29  |
| 56-23-5    | Carbon tetrachloride        | ND     |   | 1.0 | 0.14  |
| 71-43-2    | Benzene                     | ND     |   | 1.0 | 0.11  |
| 107-06-2   | 1,2-Dichloroethane          | ND     |   | 1.0 | 0.21  |
| 79-01-6    | Trichloroethene             | ND     |   | 1.0 | 0.14  |
| 78-87-5    | 1,2-Dichloropropane         | ND     |   | 1.0 | 0.095 |
| 75-27-4    | Bromodichloromethane        | ND     |   | 1.0 | 0.13  |
| 10061-01-5 | cis-1,3-Dichloropropene     | ND     |   | 1.0 | 0.19  |
| 108-10-1   | 4-Methyl-2-pentanone (MIBK) | ND     |   | 5.0 | 0.53  |
| 108-88-3   | Toluene                     | ND     |   | 1.0 | 0.15  |
| 10061-02-6 | trans-1,3-Dichloropropene   | ND     |   | 1.0 | 0.15  |
| 79-00-5    | 1,1,2-Trichloroethane       | ND     |   | 1.0 | 0.20  |
| 127-18-4   | Tetrachloroethene           | ND     |   | 1.0 | 0.15  |
| 591-78-6   | 2-Hexanone                  | ND     |   | 5.0 | 0.16  |
| 124-48-1   | Dibromochloromethane        | ND     |   | 1.0 | 0.14  |
| 106-93-4   | 1,2-Dibromoethane (EDB)     | ND     |   | 1.0 | 0.18  |
| 108-90-7   | Chlorobenzene               | ND     |   | 1.0 | 0.14  |
| 630-20-6   | 1,1,1,2-Tetrachloroethane   | ND     |   | 1.0 | 0.28  |
| 100-41-4   | Ethylbenzene                | ND     |   | 1.0 | 0.23  |
| 1330-20-7  | Xylenes, Total              | ND     |   | 3.0 | 0.49  |
| 100-42-5   | Styrene                     | ND     |   | 1.0 | 0.097 |

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 180-156189/5  
 Matrix: Water Lab File ID: 61007005.D  
 Analysis Method: 8260C Date Collected: \_\_\_\_\_  
 Sample wt/vol: 5 (mL) Date Analyzed: 10/07/2015 14:07  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 156189 Units: ug/L

| CAS NO.  | COMPOUND NAME             | RESULT | Q | RL  | MDL  |
|----------|---------------------------|--------|---|-----|------|
| 75-25-2  | Bromoform                 | ND     |   | 1.0 | 0.19 |
| 79-34-5  | 1,1,2,2-Tetrachloroethane | ND     |   | 1.0 | 0.20 |
| 107-13-1 | Acrylonitrile             | ND     |   | 20  | 0.55 |
| 123-91-1 | 1,4-Dioxane               | ND     |   | 200 | 34   |

| CAS NO.    | SURROGATE                    | %REC | Q | LIMITS |
|------------|------------------------------|------|---|--------|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 101  |   | 64-135 |
| 2037-26-5  | Toluene-d8 (Surr)            | 102  |   | 71-118 |
| 460-00-4   | 4-Bromofluorobenzene (Surr)  | 86   |   | 70-118 |
| 1868-53-7  | Dibromofluoromethane (Surr)  | 101  |   | 70-128 |

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007005.D  
 Lims ID: MB  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 07-Oct-2015 14:07:30 ALS Bottle#: 5 Worklist Smp#: 5  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: MB  
 Misc. Info.: 180-0008874-005  
 Operator ID: 001562 Instrument ID: CHHP6  
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\MSVOA\_LL\_CHHP6.m  
 Limit Group: VOA 8260C ICAL  
 Last Update: 07-Oct-2015 14:36:30 Calib Date: 14-Sep-2015 16:03:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150914-8521.b\60914006.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: XAWRK012

First Level Reviewer: fergusond

Date: 07-Oct-2015 14:36:29

| Compound                        | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|---------------------------------|-----|--------------|------------------|------------------|----|----------|---------------|-----------------|-------|
| * 1 TBA-d9 (IS)                 | 65  | 4.224        | 4.245            | -0.021           | 92 | 185013   | 1000.0        | 1000.0          |       |
| * 2 Fluorobenzene (IS)          | 96  | 7.290        | 7.281            | 0.009            | 97 | 465495   | 50.0          | 50.0            |       |
| * 3 Chlorobenzene-d5            | 119 | 10.398       | 10.396           | 0.002            | 90 | 112798   | 50.0          | 50.0            |       |
| * 4 1,4-Dichlorobenzene-d4      | 152 | 12.746       | 12.750           | -0.004           | 98 | 182602   | 50.0          | 50.0            |       |
| \$ 5 Dibromofluoromethane (Surr | 113 | 6.553        | 6.551            | 0.002            | 93 | 107821   | 50.0          | 50.3            |       |
| \$ 6 1,2-Dichloroethane-d4 (Sur | 65  | 6.931        | 6.928            | 0.003            | 70 | 174216   | 50.0          | 50.4            |       |
| \$ 7 Toluene-d8 (Surr)          | 98  | 8.944        | 8.942            | 0.002            | 94 | 452122   | 50.0          | 50.8            |       |
| \$ 8 4-Bromofluorobenzene (Surr | 95  | 11.585       | 11.588           | -0.004           | 86 | 169915   | 50.0          | 43.0            |       |
| 11 Dichlorodifluoromethane      | 85  |              | 1.605            |                  |    |          |               | ND              |       |
| 12 Chloromethane                | 50  |              | 1.757            |                  |    |          |               | ND              |       |
| 13 Vinyl chloride               | 62  |              | 1.903            |                  |    |          |               | ND              |       |
| 14 Butadiene                    | 39  |              | 1.933            |                  |    |          |               | ND              |       |
| 15 Bromomethane                 | 94  |              | 2.232            |                  |    |          |               | ND              |       |
| 17 Dichlorofluoromethane        | 67  |              | 2.651            |                  |    |          |               | ND              |       |
| 18 Trichlorofluoromethane       | 101 |              | 2.694            |                  |    |          |               | ND              |       |
| 19 Ethanol                      | 45  |              | 2.928            |                  |    |          |               | ND              |       |
| 20 Ethyl ether                  | 59  |              | 3.047            |                  |    |          |               | ND              |       |
| 21 Acrolein                     | 56  |              | 3.211            |                  |    |          |               | ND              |       |
| 22 1,1-Dichloroethene           | 96  |              | 3.339            |                  |    |          |               | ND              |       |
| 23 1,1,2-Trichloro-1,2,2-trif   | 101 |              | 3.412            |                  |    |          |               | ND              |       |
| 24 Acetone                      | 43  |              | 3.418            |                  |    |          |               | ND              |       |
| 25 Iodomethane                  | 142 |              | 3.533            |                  |    |          |               | ND              |       |
| 26 Carbon disulfide             | 76  |              | 3.625            |                  |    |          |               | ND              |       |
| 27 Isopropyl alcohol            | 45  |              | 3.683            |                  |    |          |               | ND              |       |
| 28 Acetonitrile                 | 40  |              | 3.841            |                  |    |          |               | ND              |       |
| 29 3-Chloro-1-propene           | 76  |              | 3.911            |                  |    |          |               | ND              |       |
| 30 Methyl acetate               | 43  |              | 3.923            |                  |    |          |               | ND              |       |
| 32 2-Methyl-2-propanol          | 59  |              | 4.379            |                  |    |          |               | ND              |       |
| 33 Acrylonitrile                | 53  |              | 4.501            |                  |    |          |               | ND              |       |
| 34 trans-1,2-Dichloroethene     | 96  |              | 4.568            |                  |    |          |               | ND              |       |
| 35 Methyl tert-butyl ether      | 73  |              | 4.574            |                  |    |          |               | ND              |       |



| Compound                       | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|--------------------------------|-----|--------------|------------------|------------------|---|----------|---------------|-----------------|-------|
| 37 1,1-Dichloroethane          | 63  |              | 5.188            |                  |   |          |               | ND              |       |
| 39 2-Chloro-1,3-butadiene      | 53  |              | 5.295            |                  |   |          |               | ND              |       |
| 40 Isopropyl ether             | 45  |              | 5.295            |                  |   |          |               | ND              |       |
| 41 Tert-butyl ethyl ether      | 59  |              | 5.769            |                  |   |          |               | ND              |       |
| 43 cis-1,2-Dichloroethene      | 96  |              | 5.936            |                  |   |          |               | ND              |       |
| 42 2,2-Dichloropropane         | 77  |              | 5.942            |                  |   |          |               | ND              |       |
| 44 2-Butanone (MEK)            | 43  |              | 5.949            |                  |   |          |               | ND              |       |
| 45 Propionitrile               | 54  |              | 6.013            |                  |   |          |               | ND              |       |
| 46 Ethyl acetate               | 43  |              | 6.025            |                  |   |          |               | ND              |       |
| 47 Methacrylonitrile           | 41  |              | 6.195            |                  |   |          |               | ND              |       |
| 48 Chlorobromomethane          | 128 |              | 6.222            |                  |   |          |               | ND              |       |
| 49 Tetrahydrofuran             | 42  |              | 6.241            |                  |   |          |               | ND              |       |
| 50 Chloroform                  | 83  |              | 6.368            |                  |   |          |               | ND              |       |
| 51 1,1,1-Trichloroethane       | 97  |              | 6.539            |                  |   |          |               | ND              |       |
| 52 Cyclohexane                 | 56  |              | 6.612            |                  |   |          |               | ND              |       |
| 53 Carbon tetrachloride        | 117 |              | 6.709            |                  |   |          |               | ND              |       |
| 54 1,1-Dichloropropene         | 75  |              | 6.727            |                  |   |          |               | ND              |       |
| 55 Isobutyl alcohol            | 41  |              | 6.904            |                  |   |          |               | ND              |       |
| 56 Benzene                     | 78  |              | 6.940            |                  |   |          |               | ND              |       |
| 57 1,2-Dichloroethane          | 62  |              | 7.013            |                  |   |          |               | ND              |       |
| 148 Isooctane                  | 57  |              | 7.102            |                  |   |          |               | ND              |       |
| 58 Tert-amyl methyl ether      | 73  |              | 7.126            |                  |   |          |               | ND              |       |
| 59 n-Heptane                   | 43  |              | 7.305            |                  |   |          |               | ND              |       |
| 60 n-Butanol                   | 56  |              | 7.606            |                  |   |          |               | ND              |       |
| 61 Trichloroethene             | 130 |              | 7.676            |                  |   |          |               | ND              |       |
| 62 Ethyl acrylate              | 55  |              | 7.789            |                  |   |          |               | ND              |       |
| 63 Methylcyclohexane           | 83  |              | 7.920            |                  |   |          |               | ND              |       |
| 64 1,2-Dichloropropane         | 63  |              | 7.950            |                  |   |          |               | ND              |       |
| 65 1,4-Dioxane                 | 88  |              | 8.029            |                  |   |          |               | ND              |       |
| 66 Methyl methacrylate         | 69  |              | 8.032            |                  |   |          |               | ND              |       |
| 67 Dibromomethane              | 93  |              | 8.035            |                  |   |          |               | ND              |       |
| 68 Dichlorobromomethane        | 83  |              | 8.230            |                  |   |          |               | ND              |       |
| 69 2-Nitropropane              | 41  |              | 8.446            |                  |   |          |               | ND              |       |
| 70 2-Chloroethyl vinyl ether   | 63  |              | 8.530            |                  |   |          |               | ND              |       |
| 71 cis-1,3-Dichloropropene     | 75  |              | 8.674            |                  |   |          |               | ND              |       |
| 72 4-Methyl-2-pentanone (MIBK) | 43  |              | 8.826            |                  |   |          |               | ND              |       |
| 73 Toluene                     | 91  |              | 9.009            |                  |   |          |               | ND              |       |
| 74 trans-1,3-Dichloropropene   | 75  |              | 9.252            |                  |   |          |               | ND              |       |
| 75 Ethyl methacrylate          | 69  |              | 9.313            |                  |   |          |               | ND              |       |
| 77 Tetrachloroethene           | 164 |              | 9.526            |                  |   |          |               | ND              |       |
| 78 1,3-Dichloropropane         | 76  |              | 9.605            |                  |   |          |               | ND              |       |
| 79 2-Hexanone                  | 43  |              | 9.659            |                  |   |          |               | ND              |       |
| 80 n-Butyl acetate             | 43  |              | 9.784            |                  |   |          |               | ND              |       |
| 81 Chlorodibromomethane        | 129 |              | 9.824            |                  |   |          |               | ND              |       |
| 82 Ethylene Dibromide          | 107 |              | 9.939            |                  |   |          |               | ND              |       |
| 83 3-Chlorobenzotrifluoride    | 180 |              | 10.390           |                  |   |          |               | ND              |       |
| 84 Chlorobenzene               | 112 |              | 10.426           |                  |   |          |               | ND              |       |
| 85 4-Chlorobenzotrifluoride    | 180 |              | 10.481           |                  |   |          |               | ND              |       |
| 87 Ethylbenzene                | 106 |              | 10.523           |                  |   |          |               | ND              |       |
| 86 1,1,1,2-Tetrachloroethane   | 131 |              | 10.523           |                  |   |          |               | ND              |       |
| 88 m-Xylene & p-Xylene         | 106 |              | 10.657           |                  |   |          |               | ND              |       |
| 89 o-Xylene                    | 106 |              | 11.040           |                  |   |          |               | ND              |       |

| Compound                         | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ng | OnCol Amt ng | Flags |
|----------------------------------|-----|-----------|---------------|---------------|---|----------|------------|--------------|-------|
| 91 Bromoform                     | 173 |           | 11.241        |               |   |          |            | ND           |       |
| 129 Cyclohexanol                 | 57  |           | 11.246        |               |   |          |            | ND           |       |
| 92 2-Chlorobenzotrifluoride      | 180 |           | 11.302        |               |   |          |            | ND           |       |
| 93 Isopropylbenzene              | 105 |           | 11.405        |               |   |          |            | ND           |       |
| 94 Cyclohexanone                 | 55  |           | 11.494        |               |   |          |            | ND           |       |
| 96 1,1,2,2-Tetrachloroethane     | 83  |           | 11.716        |               |   |          |            | ND           |       |
| 95 Bromobenzene                  | 156 |           | 11.722        |               |   |          |            | ND           |       |
| 97 trans-1,4-Dichloro-2-buten    | 53  |           | 11.746        |               |   |          |            | ND           |       |
| 98 1,2,3-Trichloropropane        | 110 |           | 11.770        |               |   |          |            | ND           |       |
| 99 N-Propylbenzene               | 120 |           | 11.825        |               |   |          |            | ND           |       |
| 100 2-Chlorotoluene              | 126 |           | 11.910        |               |   |          |            | ND           |       |
| 101 3-Chlorotoluene              | 126 |           | 11.977        |               |   |          |            | ND           |       |
| 102 1,3,5-Trimethylbenzene       | 105 |           | 12.008        |               |   |          |            | ND           |       |
| 103 4-Chlorotoluene              | 126 |           | 12.038        |               |   |          |            | ND           |       |
| 104 tert-Butylbenzene            | 119 |           | 12.324        |               |   |          |            | ND           |       |
| 105 Pentachloroethane            | 167 |           | 12.352        |               |   |          |            | ND           |       |
| 106 1,2,4-Trimethylbenzene       | 105 |           | 12.385        |               |   |          |            | ND           |       |
| 107 1,2-dichloro-4-(trifluorom   | 214 |           | 12.421        |               |   |          |            | ND           |       |
| 108 sec-Butylbenzene             | 105 |           | 12.549        |               |   |          |            | ND           |       |
| 109 1,3-Dichlorobenzene          | 146 |           | 12.665        |               |   |          |            | ND           |       |
| 110 4-Isopropyltoluene           | 119 |           | 12.707        |               |   |          |            | ND           |       |
| 111 1,4-Dichlorobenzene          | 146 |           | 12.774        |               |   |          |            | ND           |       |
| 113 2,4-Dichloro-1-(triflourom   | 214 |           | 12.792        |               |   |          |            | ND           |       |
| 112 1,2,3-Trimethylbenzene       | 105 |           | 12.796        |               |   |          |            | ND           |       |
| 114 2,5-Dichlorobenzotrifluori   | 214 |           | 12.835        |               |   |          |            | ND           |       |
| 115 Benzyl chloride              | 91  |           | 12.881        |               |   |          |            | ND           |       |
| 116 n-Butylbenzene               | 91  |           | 13.115        |               |   |          |            | ND           |       |
| 117 1,2-Dichlorobenzene          | 146 |           | 13.127        |               |   |          |            | ND           |       |
| 118 1,2-Dibromo-3-Chloropropan   | 75  |           | 13.918        |               |   |          |            | ND           |       |
| 119 2,4- & 2,5- & 2,6- Dichlor   | 125 |           | 14.058        |               |   |          |            | ND           |       |
| 120 1,3,5-Trichlorobenzene       | 180 |           | 14.110        |               |   |          |            | ND           |       |
| 121 2,3- & 3,4- Dichlorotoluen   | 125 |           | 14.478        |               |   |          |            | ND           |       |
| 122 1,2,4-Trichlorobenzene       | 180 |           | 14.739        |               |   |          |            | ND           |       |
| 125 1,2,3-Trichlorobenzene       | 180 |           | 15.232        |               |   |          |            | ND           |       |
| 126 2,4,5-Trichlorotoluene       | 159 |           | 16.011        |               |   |          |            | ND           |       |
| 127 2,3,6-Trichlorotoluene       | 159 |           | 16.108        |               |   |          |            | ND           |       |
| 128 2-Methylnaphthalene          | 142 |           | 16.154        |               |   |          |            | ND           |       |
| 153 1,2 Epoxybutane TIC          | 1   |           | 0.000         |               |   |          |            | ND           |       |
| 145 2,3-Dichlorotoluene          | 1   |           | 0.000         |               |   |          |            | ND           |       |
| 147 2,6-Dichlorotoluene          | 1   |           | 0.000         |               |   |          |            | ND           |       |
| 146 3,4-Dichlorotoluene          | 1   |           | 0.000         |               |   |          |            | ND           |       |
| 152 Formaldehyde TIC             | 1   |           | 0.000         |               |   |          |            | ND           |       |
| 150 Tert-butyl ethyl ether (TI   | 1   |           | 0.000         |               |   |          |            | ND           |       |
| 151 Tert-amyl methyl ether (TI   | 1   |           | 0.000         |               |   |          |            | ND           |       |
| 144 2,4-Dichlorotoluene          | 1   |           | 0.000         |               |   |          |            | ND           |       |
| 149 Isopropyl ether TIC          | 1   |           | 0.000         |               |   |          |            | ND           |       |
| 143 2,5-Dichlorotoluene          | 1   |           | 0.000         |               |   |          |            | ND           |       |
| S 130 1,2-Dichloroethene, Total  | 96  |           | 1.000         |               |   |          |            | ND           |       |
| S 131 Xylenes, Total             | 106 |           | 1.000         |               |   |          |            | ND           |       |
| S 132 1,3-Dichloropropene, Total | 1   |           | 0.000         |               |   |          |            | ND           |       |
| T 133 Tetrahydrofuran TIC        | 42  |           | 0.000         |               |   |          |            | ND           |       |
| T 134 Methyl n-amyl ketone TIC   | 43  |           | 0.000         |               |   |          |            | ND           |       |

| Compound | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|----------|-----|--------------|------------------|------------------|---|----------|---------------|-----------------|-------|
|----------|-----|--------------|------------------|------------------|---|----------|---------------|-----------------|-------|

T 135 Mesityl oxide TIC

83

0.000

ND

**Reagents:**

VOA8260INT\_00042

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR\_00042

Amount Added: 2.00

Units: uL

Run Reagent

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007005.D

Injection Date: 07-Oct-2015 14:07:30

Instrument ID: CHHP6

Operator ID: 001562

Lims ID: MB

Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL

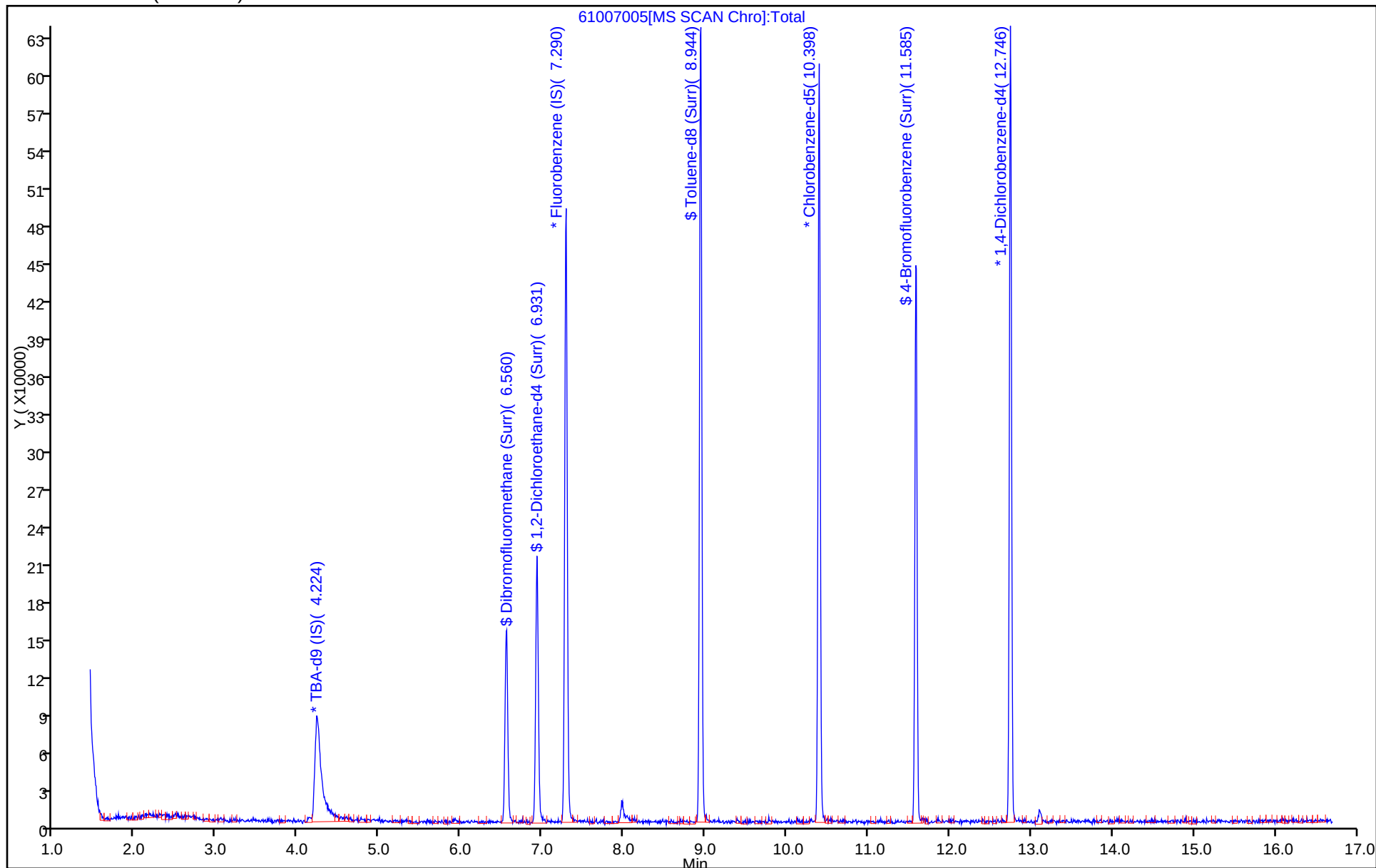
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: MSVOA\_LL\_CHHP6

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 180-156309/6

Matrix: Water Lab File ID: 51008006.D

Analysis Method: 8260C Date Collected: \_\_\_\_\_

Sample wt/vol: 5 (mL) Date Analyzed: 10/08/2015 13:21

Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_ Level: (low/med) Low

Analysis Batch No.: 156309 Units: ug/L

| CAS NO.    | COMPOUND NAME               | RESULT | Q | RL  | MDL   |
|------------|-----------------------------|--------|---|-----|-------|
| 74-87-3    | Chloromethane               | ND     |   | 1.0 | 0.28  |
| 75-01-4    | Vinyl chloride              | ND     |   | 1.0 | 0.23  |
| 74-83-9    | Bromomethane                | ND     |   | 1.0 | 0.31  |
| 75-00-3    | Chloroethane                | ND     |   | 1.0 | 0.21  |
| 75-35-4    | 1,1-Dichloroethene          | ND     |   | 1.0 | 0.30  |
| 67-64-1    | Acetone                     | ND     |   | 5.0 | 2.5   |
| 75-15-0    | Carbon disulfide            | ND     |   | 1.0 | 0.21  |
| 75-09-2    | Methylene Chloride          | ND     |   | 1.0 | 0.13  |
| 156-60-5   | trans-1,2-Dichloroethene    | ND     |   | 1.0 | 0.17  |
| 1634-04-4  | Methyl tert-butyl ether     | ND     |   | 1.0 | 0.18  |
| 75-34-3    | 1,1-Dichloroethane          | ND     |   | 1.0 | 0.12  |
| 156-59-2   | cis-1,2-Dichloroethene      | ND     |   | 1.0 | 0.24  |
| 74-97-5    | Bromochloromethane          | ND     |   | 1.0 | 0.18  |
| 78-93-3    | 2-Butanone (MEK)            | ND     |   | 5.0 | 0.55  |
| 67-66-3    | Chloroform                  | ND     |   | 1.0 | 0.17  |
| 71-55-6    | 1,1,1-Trichloroethane       | ND     |   | 1.0 | 0.29  |
| 56-23-5    | Carbon tetrachloride        | ND     |   | 1.0 | 0.14  |
| 71-43-2    | Benzene                     | ND     |   | 1.0 | 0.11  |
| 107-06-2   | 1,2-Dichloroethane          | ND     |   | 1.0 | 0.21  |
| 79-01-6    | Trichloroethene             | ND     |   | 1.0 | 0.14  |
| 78-87-5    | 1,2-Dichloropropane         | ND     |   | 1.0 | 0.095 |
| 75-27-4    | Bromodichloromethane        | ND     |   | 1.0 | 0.13  |
| 10061-01-5 | cis-1,3-Dichloropropene     | ND     |   | 1.0 | 0.19  |
| 108-10-1   | 4-Methyl-2-pentanone (MIBK) | ND     |   | 5.0 | 0.53  |
| 108-88-3   | Toluene                     | ND     |   | 1.0 | 0.15  |
| 10061-02-6 | trans-1,3-Dichloropropene   | ND     |   | 1.0 | 0.15  |
| 79-00-5    | 1,1,2-Trichloroethane       | ND     |   | 1.0 | 0.20  |
| 127-18-4   | Tetrachloroethene           | ND     |   | 1.0 | 0.15  |
| 591-78-6   | 2-Hexanone                  | ND     |   | 5.0 | 0.16  |
| 124-48-1   | Dibromochloromethane        | ND     |   | 1.0 | 0.14  |
| 106-93-4   | 1,2-Dibromoethane (EDB)     | ND     |   | 1.0 | 0.18  |
| 108-90-7   | Chlorobenzene               | ND     |   | 1.0 | 0.14  |
| 630-20-6   | 1,1,1,2-Tetrachloroethane   | ND     |   | 1.0 | 0.28  |
| 100-41-4   | Ethylbenzene                | ND     |   | 1.0 | 0.23  |
| 1330-20-7  | Xylenes, Total              | ND     |   | 3.0 | 0.49  |
| 100-42-5   | Styrene                     | ND     |   | 1.0 | 0.097 |

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 180-156309/6  
 Matrix: Water Lab File ID: 51008006.D  
 Analysis Method: 8260C Date Collected: \_\_\_\_\_  
 Sample wt/vol: 5 (mL) Date Analyzed: 10/08/2015 13:21  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 156309 Units: ug/L

| CAS NO.  | COMPOUND NAME             | RESULT | Q | RL  | MDL  |
|----------|---------------------------|--------|---|-----|------|
| 75-25-2  | Bromoform                 | ND     |   | 1.0 | 0.19 |
| 79-34-5  | 1,1,2,2-Tetrachloroethane | ND     |   | 1.0 | 0.20 |
| 107-13-1 | Acrylonitrile             | ND     |   | 20  | 0.55 |
| 123-91-1 | 1,4-Dioxane               | ND     |   | 200 | 34   |

| CAS NO.    | SURROGATE                    | %REC | Q | LIMITS |
|------------|------------------------------|------|---|--------|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 90   |   | 64-135 |
| 2037-26-5  | Toluene-d8 (Surr)            | 91   |   | 71-118 |
| 460-00-4   | 4-Bromofluorobenzene (Surr)  | 92   |   | 70-118 |
| 1868-53-7  | Dibromofluoromethane (Surr)  | 100  |   | 70-128 |

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\51008006.D  
 Lims ID: MB  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 08-Oct-2015 13:21:30 ALS Bottle#: 5 Worklist Smp#: 6  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: MB  
 Misc. Info.: 180-0008892-006  
 Operator ID: 001562 Instrument ID: CHHP5  
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C ICAL  
 Last Update: 08-Oct-2015 13:33:59 Calib Date: 26-Aug-2015 17:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: XAWRK015

First Level Reviewer: fergusond

Date: 08-Oct-2015 13:33:58

| Compound                        | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|---------------------------------|-----|--------------|------------------|------------------|----|----------|---------------|-----------------|-------|
| * 1 TBA-d9 (IS)                 | 65  | 4.268        | 4.269            | -0.001           | 0  | 152547   | 1000.0        | 1000.0          |       |
| * 2 Fluorobenzene (IS)          | 96  | 7.292        | 7.286            | 0.006            | 98 | 310216   | 50.0          | 50.0            |       |
| * 3 Chlorobenzene-d5            | 119 | 10.388       | 10.389           | -0.001           | 86 | 82365    | 50.0          | 50.0            |       |
| * 4 1,4-Dichlorobenzene-d4      | 152 | 12.730       | 12.731           | -0.001           | 95 | 126878   | 50.0          | 50.0            |       |
| \$ 5 Dibromofluoromethane (Surr | 113 | 6.562        | 6.562            | 0.000            | 94 | 75931    | 50.0          | 49.8            |       |
| \$ 6 1,2-Dichloroethane-d4 (Sur | 65  | 6.939        | 6.934            | 0.005            | 0  | 93672    | 50.0          | 44.8            |       |
| \$ 7 Toluene-d8 (Surr)          | 98  | 8.940        | 8.935            | 0.005            | 93 | 290408   | 50.0          | 45.7            |       |
| \$ 8 4-Bromofluorobenzene (Surr | 95  | 11.568       | 11.569           | -0.001           | 91 | 110765   | 50.0          | 46.2            |       |
| 11 Dichlorodifluoromethane      | 85  |              | 1.598            |                  |    |          |               | ND              |       |
| 12 Chloromethane                | 50  |              | 1.769            |                  |    |          |               | ND              |       |
| 13 Vinyl chloride               | 62  |              | 1.909            |                  |    |          |               | ND              |       |
| 14 Butadiene                    | 39  |              | 1.945            |                  |    |          |               | ND              |       |
| 15 Bromomethane                 | 94  |              | 2.255            |                  |    |          |               | ND              |       |
| 16 Chloroethane                 | 64  |              | 2.395            |                  |    |          |               | ND              |       |
| 17 Dichlorofluoromethane        | 67  |              | 2.669            |                  |    |          |               | ND              |       |
| 18 Trichlorofluoromethane       | 101 |              | 2.706            |                  |    |          |               | ND              |       |
| 19 Ethanol                      | 45  |              | 2.957            |                  |    |          |               | ND              |       |
| 20 Ethyl ether                  | 59  |              | 3.046            |                  |    |          |               | ND              |       |
| 21 Acrolein                     | 56  |              | 3.235            |                  |    |          |               | ND              |       |
| 22 1,1-Dichloroethene           | 96  |              | 3.338            |                  |    |          |               | ND              |       |
| 23 1,1,2-Trichloro-1,2,2-trif   | 101 |              | 3.423            |                  |    |          |               | ND              |       |
| 24 Acetone                      | 43  |              | 3.448            |                  |    |          |               | ND              |       |
| 25 Iodomethane                  | 142 |              | 3.539            |                  |    |          |               | ND              |       |
| 26 Carbon disulfide             | 76  |              | 3.630            |                  |    |          |               | ND              |       |
| 27 Isopropyl alcohol            | 45  |              | 3.706            |                  |    |          |               | ND              |       |
| 29 Acetonitrile                 | 40  |              | 3.870            |                  |    |          |               | ND              |       |
| 28 3-Chloro-1-propene           | 76  |              | 3.916            |                  |    |          |               | ND              |       |
| 30 Methyl acetate               | 43  |              | 3.940            |                  |    |          |               | ND              |       |
| 31 Methylene Chloride           | 84  |              | 4.135            |                  |    |          |               | ND              |       |
| 32 2-Methyl-2-propanol          | 59  |              | 4.397            |                  |    |          |               | ND              |       |
| 33 Acrylonitrile                | 53  |              | 4.525            |                  |    |          |               | ND              |       |

| Compound                      | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|-------------------------------|-----|--------------|------------------|------------------|---|----------|---------------|-----------------|-------|
| 34 trans-1,2-Dichloroethene   | 96  |              | 4.561            |                  |   |          |               | ND              |       |
| 35 Methyl tert-butyl ether    | 73  |              | 4.573            |                  |   |          |               | ND              |       |
| 36 Hexane                     | 57  |              | 4.987            |                  |   |          |               | ND              |       |
| 37 1,1-Dichloroethane         | 63  |              | 5.200            |                  |   |          |               | ND              |       |
| 38 Vinyl acetate              | 43  |              | 5.255            |                  |   |          |               | ND              |       |
| 39 2-Chloro-1,3-butadiene     | 53  |              | 5.299            |                  |   |          |               | ND              |       |
| 41 Isopropyl ether            | 45  |              | 5.299            |                  |   |          |               | ND              |       |
| 40 Isopropyl ether TIC        | 45  |              | 5.409            |                  |   |          |               | ND              |       |
| 42 Tert-butyl ethyl ether     | 59  |              | 5.780            |                  |   |          |               | ND              |       |
| 44 2,2-Dichloropropane        | 77  |              | 5.942            |                  |   |          |               | ND              |       |
| 45 cis-1,2-Dichloroethene     | 96  |              | 5.954            |                  |   |          |               | ND              |       |
| 46 2-Butanone (MEK)           | 43  |              | 5.960            |                  |   |          |               | ND              |       |
| 43 Tert-butyl ethyl ether (TI | 59  |              | 5.961            |                  |   |          |               | ND              |       |
| 47 Propionitrile              | 54  |              | 6.036            |                  |   |          |               | ND              |       |
| 48 Ethyl acetate              | 43  |              | 6.036            |                  |   |          |               | ND              |       |
| 50 Methacrylonitrile          | 41  |              | 6.212            |                  |   |          |               | ND              |       |
| 49 Chlorobromomethane         | 128 |              | 6.234            |                  |   |          |               | ND              |       |
| 51 Tetrahydrofuran            | 42  |              | 6.246            |                  |   |          |               | ND              |       |
| 52 Chloroform                 | 83  |              | 6.380            |                  |   |          |               | ND              |       |
| 53 1,1,1-Trichloroethane      | 97  |              | 6.538            |                  |   |          |               | ND              |       |
| 54 Cyclohexane                | 56  |              | 6.611            |                  |   |          |               | ND              |       |
| 56 Carbon tetrachloride       | 117 |              | 6.715            |                  |   |          |               | ND              |       |
| 55 1,1-Dichloropropene        | 75  |              | 6.733            |                  |   |          |               | ND              |       |
| 57 Isobutyl alcohol           | 41  |              | 6.927            |                  |   |          |               | ND              |       |
| 58 Benzene                    | 78  |              | 6.946            |                  |   |          |               | ND              |       |
| 59 1,2-Dichloroethane         | 62  |              | 7.025            |                  |   |          |               | ND              |       |
| 61 Tert-amyl methyl ether     | 73  |              | 7.125            |                  |   |          |               | ND              |       |
| 60 Tert-amyl methyl ether (TI | 73  |              | 7.262            |                  |   |          |               | ND              |       |
| 62 n-Heptane                  | 43  |              | 7.311            |                  |   |          |               | ND              |       |
| 63 n-Butanol                  | 56  |              | 7.629            |                  |   |          |               | ND              |       |
| 64 Trichloroethene            | 130 |              | 7.676            |                  |   |          |               | ND              |       |
| 65 Ethyl acrylate             | 55  |              | 7.800            |                  |   |          |               | ND              |       |
| 66 Methylcyclohexane          | 83  |              | 7.913            |                  |   |          |               | ND              |       |
| 67 1,2-Dichloropropane        | 63  |              | 7.949            |                  |   |          |               | ND              |       |
| 70 1,4-Dioxane                | 88  |              | 8.029            |                  |   |          |               | ND              |       |
| 69 Methyl methacrylate        | 69  |              | 8.031            |                  |   |          |               | ND              |       |
| 68 Dibromomethane             | 93  |              | 8.035            |                  |   |          |               | ND              |       |
| 71 Dichlorobromomethane       | 83  |              | 8.235            |                  |   |          |               | ND              |       |
| 72 2-Nitropropane             | 41  |              | 8.451            |                  |   |          |               | ND              |       |
| 73 2-Chloroethyl vinyl ether  | 63  |              | 8.527            |                  |   |          |               | ND              |       |
| 74 cis-1,3-Dichloropropene    | 75  |              | 8.673            |                  |   |          |               | ND              |       |
| 75 4-Methyl-2-pentanone (MIBK | 43  |              | 8.826            |                  |   |          |               | ND              |       |
| 76 Toluene                    | 91  |              | 9.002            |                  |   |          |               | ND              |       |
| 77 trans-1,3-Dichloropropene  | 75  |              | 9.251            |                  |   |          |               | ND              |       |
| 78 Ethyl methacrylate         | 69  |              | 9.312            |                  |   |          |               | ND              |       |
| 79 1,1,2-Trichloroethane      | 97  |              | 9.446            |                  |   |          |               | ND              |       |
| 80 Tetrachloroethene          | 164 |              | 9.519            |                  |   |          |               | ND              |       |
| 81 1,3-Dichloropropane        | 76  |              | 9.604            |                  |   |          |               | ND              |       |
| 82 2-Hexanone                 | 43  |              | 9.659            |                  |   |          |               | ND              |       |
| 83 n-Butyl acetate            | 43  |              | 9.783            |                  |   |          |               | ND              |       |
| 84 Chlorodibromomethane       | 129 |              | 9.811            |                  |   |          |               | ND              |       |
| 85 Ethylene Dibromide         | 107 |              | 9.927            |                  |   |          |               | ND              |       |



| Compound                       | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|---|----------|------------|--------------|-------|
| 86 3-Chlorobenzotrifluoride    | 180 |           | 10.389        |               |   |          |            | ND           |       |
| 87 Chlorobenzene               | 112 |           | 10.413        |               |   |          |            | ND           |       |
| 88 4-Chlorobenzotrifluoride    | 180 |           | 10.474        |               |   |          |            | ND           |       |
| 89 1,1,1,2-Tetrachloroethane   | 131 |           | 10.511        |               |   |          |            | ND           |       |
| 90 Ethylbenzene                | 106 |           | 10.517        |               |   |          |            | ND           |       |
| 91 m-Xylene & p-Xylene         | 106 |           | 10.644        |               |   |          |            | ND           |       |
| 92 o-Xylene                    | 106 |           | 11.028        |               |   |          |            | ND           |       |
| 93 Styrene                     | 104 |           | 11.046        |               |   |          |            | ND           |       |
| 94 Bromoform                   | 173 |           | 11.235        |               |   |          |            | ND           |       |
| 95 Cyclohexanol                | 57  |           | 11.245        |               |   |          |            | ND           |       |
| 96 2-Chlorobenzotrifluoride    | 180 |           | 11.295        |               |   |          |            | ND           |       |
| 97 Isopropylbenzene            | 105 |           | 11.399        |               |   |          |            | ND           |       |
| 98 Cyclohexanone               | 55  |           | 11.480        |               |   |          |            | ND           |       |
| 99 1,1,2,2-Tetrachloroethane   | 83  |           | 11.709        |               |   |          |            | ND           |       |
| 100 Bromobenzene               | 156 |           | 11.709        |               |   |          |            | ND           |       |
| 102 trans-1,4-Dichloro-2-buten | 53  |           | 11.746        |               |   |          |            | ND           |       |
| 101 1,2,3-Trichloropropane     | 110 |           | 11.764        |               |   |          |            | ND           |       |
| 103 N-Propylbenzene            | 120 |           | 11.812        |               |   |          |            | ND           |       |
| 104 2-Chlorotoluene            | 126 |           | 11.898        |               |   |          |            | ND           |       |
| 105 3-Chlorotoluene            | 126 |           | 11.965        |               |   |          |            | ND           |       |
| 106 1,3,5-Trimethylbenzene     | 105 |           | 11.995        |               |   |          |            | ND           |       |
| 107 4-Chlorotoluene            | 126 |           | 12.019        |               |   |          |            | ND           |       |
| 108 tert-Butylbenzene          | 119 |           | 12.311        |               |   |          |            | ND           |       |
| 109 Pentachloroethane          | 167 |           | 12.338        |               |   |          |            | ND           |       |
| 110 1,2,4-Trimethylbenzene     | 105 |           | 12.366        |               |   |          |            | ND           |       |
| 111 1,2-dichloro-4-(trifluorom | 214 |           | 12.415        |               |   |          |            | ND           |       |
| 112 sec-Butylbenzene           | 105 |           | 12.530        |               |   |          |            | ND           |       |
| 113 1,3-Dichlorobenzene        | 146 |           | 12.646        |               |   |          |            | ND           |       |
| 114 4-Isopropyltoluene         | 119 |           | 12.689        |               |   |          |            | ND           |       |
| 115 1,4-Dichlorobenzene        | 146 |           | 12.755        |               |   |          |            | ND           |       |
| 117 1,2,3-Trimethylbenzene     | 105 |           | 12.776        |               |   |          |            | ND           |       |
| 116 2,4-Dichloro-1-(triflourom | 214 |           | 12.780        |               |   |          |            | ND           |       |
| 118 2,5-Dichlorobenzotrifluori | 214 |           | 12.822        |               |   |          |            | ND           |       |
| 119 Benzyl chloride            | 91  |           | 12.867        |               |   |          |            | ND           |       |
| 120 n-Butylbenzene             | 91  |           | 13.096        |               |   |          |            | ND           |       |
| 121 1,2-Dichlorobenzene        | 146 |           | 13.108        |               |   |          |            | ND           |       |
| 122 1,2-Dibromo-3-Chloropropan | 75  |           | 13.899        |               |   |          |            | ND           |       |
| 123 2,4- & 2,5- & 2,6- Dichlor | 125 |           | 14.045        |               |   |          |            | ND           |       |
| 124 1,3,5-Trichlorobenzene     | 180 |           | 14.087        |               |   |          |            | ND           |       |
| 125 2,3- & 3,4- Dichlorotoluen | 125 |           | 14.459        |               |   |          |            | ND           |       |
| 126 1,2,4-Trichlorobenzene     | 180 |           | 14.726        |               |   |          |            | ND           |       |
| 127 Hexachlorobutadiene        | 225 |           | 14.872        |               |   |          |            | ND           |       |
| 128 Naphthalene                | 128 |           | 14.988        |               |   |          |            | ND           |       |
| 129 1,2,3-Trichlorobenzene     | 180 |           | 15.213        |               |   |          |            | ND           |       |
| 131 2,4,5-Trichlorotoluene     | 159 |           | 15.992        |               |   |          |            | ND           |       |
| 130 2,3,6-Trichlorotoluene     | 159 |           | 16.089        |               |   |          |            | ND           |       |
| 132 2-Methylnaphthalene        | 142 |           | 16.134        |               |   |          |            | ND           |       |
| 146 2,5-Dichlorotoluene        | 1   |           | 0.000         |               |   |          |            | ND           |       |
| 150 2,6-Dichlorotoluene        | 1   |           | 0.000         |               |   |          |            | ND           |       |
| 147 2,4-Dichlorotoluene        | 1   |           | 0.000         |               |   |          |            | ND           |       |
| 149 3,4-Dichlorotoluene        | 1   |           | 0.000         |               |   |          |            | ND           |       |
| 151 Isooctane                  | 57  |           | 0.000         |               |   |          |            | ND           |       |

| Compound                         | Sig | RT<br>(min.) | Exp RT<br>(min.) | Dlt RT<br>(min.) | Q | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|----------------------------------|-----|--------------|------------------|------------------|---|----------|---------------|-----------------|-------|
| 148 2,3-Dichlorotoluene          | 1   |              | 0.000            |                  |   |          |               | ND              |       |
| 152 Formaldehyde TIC             | 1   |              | 0.000            |                  |   |          |               | ND              |       |
| S 133 Xylenes, Total             | 106 |              | 1.000            |                  |   |          |               | ND              |       |
| S 134 1,2-Dichloroethene, Total  | 96  |              | 1.000            |                  |   |          |               | ND              |       |
| S 135 1,3-Dichloropropene, Total | 1   |              | 0.000            |                  |   |          |               | ND              |       |
| T 136 Mesityl oxide TIC          | 83  |              | 0.000            |                  |   |          |               | ND              |       |
| T 138 Methyl n-amyl ketone TIC   | 43  |              | 0.000            |                  |   |          |               | ND              |       |
| T 137 Tetrahydrofuran TIC        | 42  |              | 6.253            |                  |   |          |               | ND              |       |
| T 153 1,2 Epoxybutane TIC        | 42  |              | 6.253            |                  |   |          |               | ND              |       |

**Reagents:**

VOA8260INT\_00042

Amount Added: 2.00

Units: uL

Run Reagent

VOA8260SURR\_00042

Amount Added: 2.00

Units: uL

Run Reagent

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\51008006.D

Injection Date: 08-Oct-2015 13:21:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: MB

Worklist Smp#: 6

Client ID:

Purge Vol: 5.000 mL

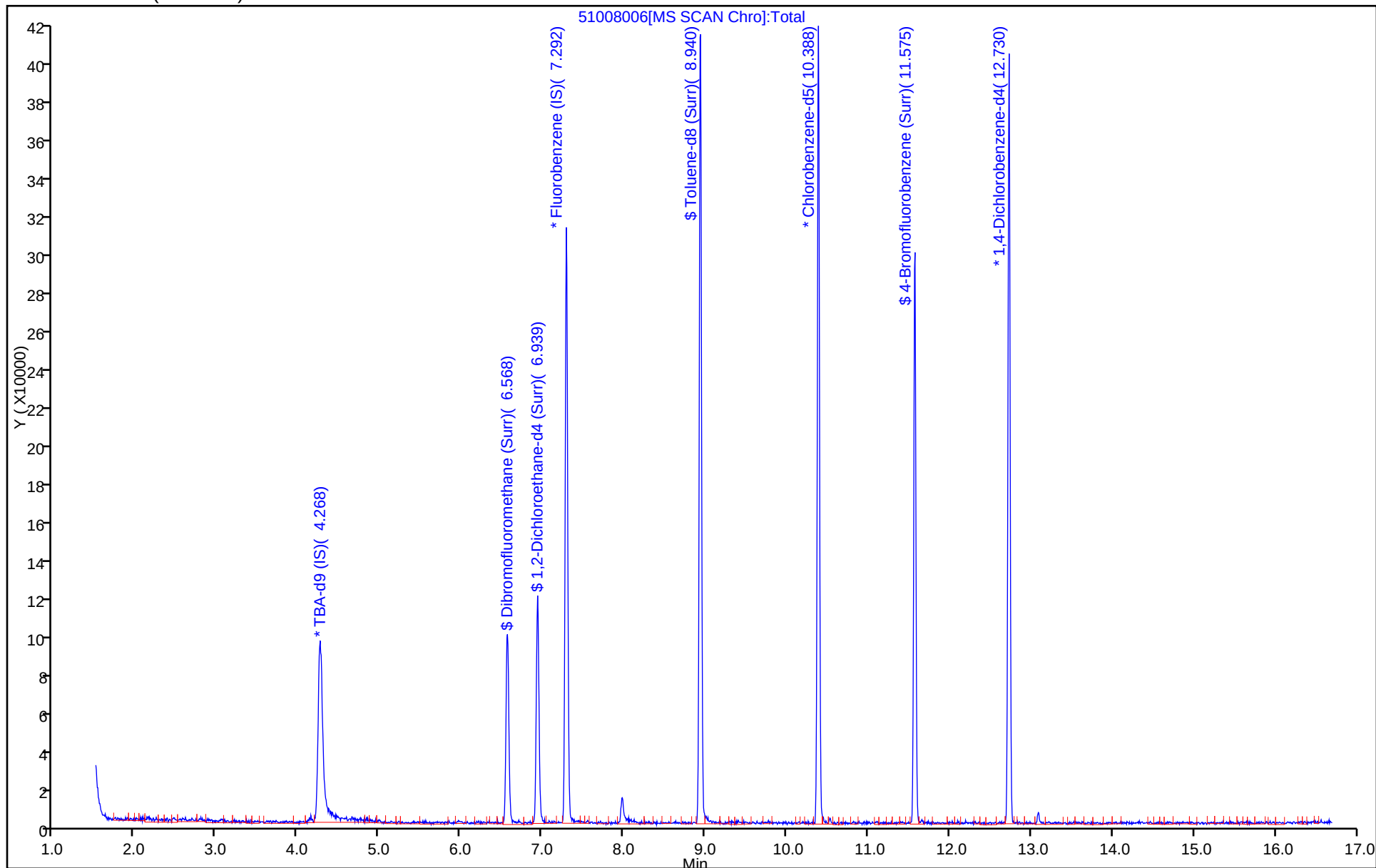
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 ( 0.18 mm)



FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCS 180-156189/8

Matrix: Water Lab File ID: 61007008.D

Analysis Method: 8260C Date Collected: \_\_\_\_\_

Sample wt/vol: 5 (mL) Date Analyzed: 10/07/2015 15:36

Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_ Level: (low/med) Low

Analysis Batch No.: 156189 Units: ug/L

| CAS NO.    | COMPOUND NAME               | RESULT | Q | RL  | MDL   |
|------------|-----------------------------|--------|---|-----|-------|
| 74-87-3    | Chloromethane               | 11.3   |   | 1.0 | 0.28  |
| 75-01-4    | Vinyl chloride              | 9.97   |   | 1.0 | 0.23  |
| 74-83-9    | Bromomethane                | 8.04   |   | 1.0 | 0.31  |
| 75-00-3    | Chloroethane                | 8.97   |   | 1.0 | 0.21  |
| 75-35-4    | 1,1-Dichloroethene          | 8.60   |   | 1.0 | 0.30  |
| 67-64-1    | Acetone                     | 20.8   |   | 5.0 | 2.5   |
| 75-15-0    | Carbon disulfide            | 8.38   |   | 1.0 | 0.21  |
| 75-09-2    | Methylene Chloride          | 8.72   |   | 1.0 | 0.13  |
| 156-60-5   | trans-1,2-Dichloroethene    | 8.87   |   | 1.0 | 0.17  |
| 1634-04-4  | Methyl tert-butyl ether     | 8.96   |   | 1.0 | 0.18  |
| 75-34-3    | 1,1-Dichloroethane          | 9.57   |   | 1.0 | 0.12  |
| 156-59-2   | cis-1,2-Dichloroethene      | 8.99   |   | 1.0 | 0.24  |
| 74-97-5    | Bromochloromethane          | 10.0   |   | 1.0 | 0.18  |
| 78-93-3    | 2-Butanone (MEK)            | 24.0   |   | 5.0 | 0.55  |
| 67-66-3    | Chloroform                  | 8.87   |   | 1.0 | 0.17  |
| 71-55-6    | 1,1,1-Trichloroethane       | 8.02   |   | 1.0 | 0.29  |
| 56-23-5    | Carbon tetrachloride        | 8.84   |   | 1.0 | 0.14  |
| 71-43-2    | Benzene                     | 9.97   |   | 1.0 | 0.11  |
| 107-06-2   | 1,2-Dichloroethane          | 9.18   |   | 1.0 | 0.21  |
| 79-01-6    | Trichloroethene             | 10.4   |   | 1.0 | 0.14  |
| 78-87-5    | 1,2-Dichloropropane         | 10.7   |   | 1.0 | 0.095 |
| 75-27-4    | Bromodichloromethane        | 9.15   |   | 1.0 | 0.13  |
| 10061-01-5 | cis-1,3-Dichloropropene     | 9.63   |   | 1.0 | 0.19  |
| 108-10-1   | 4-Methyl-2-pentanone (MIBK) | 20.8   |   | 5.0 | 0.53  |
| 108-88-3   | Toluene                     | 10.1   |   | 1.0 | 0.15  |
| 10061-02-6 | trans-1,3-Dichloropropene   | 8.94   |   | 1.0 | 0.15  |
| 79-00-5    | 1,1,2-Trichloroethane       | 9.90   |   | 1.0 | 0.20  |
| 127-18-4   | Tetrachloroethene           | 10.2   |   | 1.0 | 0.15  |
| 591-78-6   | 2-Hexanone                  | 20.7   |   | 5.0 | 0.16  |
| 124-48-1   | Dibromochloromethane        | 9.99   |   | 1.0 | 0.14  |
| 106-93-4   | 1,2-Dibromoethane (EDB)     | 10.2   |   | 1.0 | 0.18  |
| 108-90-7   | Chlorobenzene               | 10.2   |   | 1.0 | 0.14  |
| 630-20-6   | 1,1,1,2-Tetrachloroethane   | 10.2   |   | 1.0 | 0.28  |
| 100-41-4   | Ethylbenzene                | 9.50   |   | 1.0 | 0.23  |
| 1330-20-7  | Xylenes, Total              | 19.1   |   | 3.0 | 0.49  |
| 100-42-5   | Styrene                     | 10.5   |   | 1.0 | 0.097 |

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCS 180-156189/8  
 Matrix: Water Lab File ID: 61007008.D  
 Analysis Method: 8260C Date Collected: \_\_\_\_\_  
 Sample wt/vol: 5 (mL) Date Analyzed: 10/07/2015 15:36  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 156189 Units: ug/L

| CAS NO.  | COMPOUND NAME             | RESULT | Q | RL  | MDL  |
|----------|---------------------------|--------|---|-----|------|
| 75-25-2  | Bromoform                 | 10.8   |   | 1.0 | 0.19 |
| 79-34-5  | 1,1,2,2-Tetrachloroethane | 9.90   |   | 1.0 | 0.20 |
| 107-13-1 | Acrylonitrile             | 125    |   | 20  | 0.55 |
| 123-91-1 | 1,4-Dioxane               | 223    |   | 200 | 34   |

| CAS NO.    | SURROGATE                    | %REC | Q | LIMITS |
|------------|------------------------------|------|---|--------|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 98   |   | 64-135 |
| 2037-26-5  | Toluene-d8 (Surr)            | 106  |   | 71-118 |
| 460-00-4   | 4-Bromofluorobenzene (Surr)  | 91   |   | 70-118 |
| 1868-53-7  | Dibromofluoromethane (Surr)  | 98   |   | 70-128 |

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007008.D  
 Lims ID: LCS  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 07-Oct-2015 15:36:30 ALS Bottle#: 8 Worklist Smp#: 8  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: LCS  
 Misc. Info.: 180-0008874-008  
 Operator ID: 001562 Instrument ID: CHHP6  
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\MSVOA\_LL\_CHHP6.m  
 Limit Group: VOA 8260C ICAL  
 Last Update: 08-Oct-2015 09:01:50 Calib Date: 14-Sep-2015 16:03:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last Ical File: \\ChromNA\Pittsburgh\ChromData\CHHP6\20150914-8521.b\60914006.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: XAWRK015

First Level Reviewer: fergusond

Date: 07-Oct-2015 15:59:33

| Compound                        | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q   | Response | Cal Amt ng | OnCol Amt ng | Flags |
|---------------------------------|-----|-----------|---------------|---------------|-----|----------|------------|--------------|-------|
| * 1 TBA-d9 (IS)                 | 65  | 4.254     | 4.245         | 0.009         | 95  | 207975   | 1000.0     | 1000.0       |       |
| * 2 Fluorobenzene (IS)          | 96  | 7.290     | 7.281         | 0.009         | 97  | 460649   | 50.0       | 50.0         |       |
| * 3 Chlorobenzene-d5            | 119 | 10.398    | 10.396        | 0.002         | 89  | 105123   | 50.0       | 50.0         |       |
| * 4 1,4-Dichlorobenzene-d4      | 152 | 12.746    | 12.750        | -0.004        | 95  | 187985   | 50.0       | 50.0         |       |
| \$ 5 Dibromofluoromethane (Surr | 113 | 6.554     | 6.551         | 0.003         | 94  | 104249   | 50.0       | 49.1         |       |
| \$ 6 1,2-Dichloroethane-d4 (Sur | 65  | 6.931     | 6.928         | 0.003         | 72  | 168195   | 50.0       | 49.1         |       |
| \$ 7 Toluene-d8 (Surr)          | 98  | 8.944     | 8.942         | 0.002         | 93  | 441124   | 50.0       | 53.2         |       |
| \$ 8 4-Bromofluorobenzene (Surr | 95  | 11.585    | 11.588        | -0.003        | 85  | 167135   | 50.0       | 45.4         |       |
| 11 Dichlorodifluoromethane      | 85  | 1.602     | 1.605         | -0.003        | 99  | 129230   | 50.0       | 40.5         |       |
| 12 Chloromethane                | 50  | 1.766     | 1.757         | 0.009         | 100 | 155775   | 50.0       | 56.7         |       |
| 13 Vinyl chloride               | 62  | 1.906     | 1.903         | 0.003         | 98  | 147577   | 50.0       | 49.8         |       |
| 14 Butadiene                    | 39  | 1.942     | 1.933         | 0.009         | 92  | 150149   | 50.0       | 54.1         |       |
| 15 Bromomethane                 | 94  | 2.246     | 2.232         | 0.014         | 91  | 64231    | 50.0       | 40.2         |       |
| 16 Chloroethane                 | 64  | 2.380     | 2.371         | 0.009         | 100 | 90694    | 50.0       | 44.9         |       |
| 17 Dichlorofluoromethane        | 67  | 2.648     | 2.651         | -0.003        | 98  | 194348   | 50.0       | 41.3         |       |
| 18 Trichlorofluoromethane       | 101 | 2.697     | 2.694         | 0.003         | 82  | 144273   | 50.0       | 38.5         |       |
| 20 Ethyl ether                  | 59  | 3.049     | 3.047         | 0.002         | 93  | 135441   | 50.0       | 50.9         |       |
| 21 Acrolein                     | 56  | 3.226     | 3.211         | 0.015         | 99  | 41352    | 150.0      | 142.6        |       |
| 22 1,1-Dichloroethene           | 96  | 3.354     | 3.339         | 0.015         | 95  | 99736    | 50.0       | 43.0         |       |
| 23 1,1,2-Trichloro-1,2,2-trif   | 101 | 3.408     | 3.412         | -0.004        | 93  | 105429   | 50.0       | 43.1         |       |
| 24 Acetone                      | 43  | 3.433     | 3.418         | 0.015         | 83  | 84913    | 100.0      | 104.2        |       |
| 25 Iodomethane                  | 142 | 3.542     | 3.533         | 0.009         | 98  | 142630   | 50.0       | 45.8         |       |
| 26 Carbon disulfide             | 76  | 3.640     | 3.625         | 0.015         | 100 | 251688   | 50.0       | 41.9         |       |
| 29 3-Chloro-1-propene           | 76  | 3.913     | 3.911         | 0.002         | 64  | 54916    | 50.0       | 42.0         |       |
| 30 Methyl acetate               | 43  | 3.925     | 3.923         | 0.002         | 98  | 615462   | 250.0      | 322.1        |       |
| 31 Methylene Chloride           | 84  | 4.126     | 4.124         | 0.002         | 97  | 142081   | 50.0       | 43.6         |       |
| 32 2-Methyl-2-propanol          | 59  | 4.370     | 4.379         | -0.009        | 91  | 105276   | 500.0      | 449.8        |       |
| 33 Acrylonitrile                | 53  | 4.509     | 4.501         | 0.008         | 98  | 600580   | 500.0      | 623.4        |       |
| 34 trans-1,2-Dichloroethene     | 96  | 4.564     | 4.568         | -0.004        | 96  | 118687   | 50.0       | 44.4         |       |
| 35 Methyl tert-butyl ether      | 73  | 4.576     | 4.574         | 0.002         | 97  | 359224   | 50.0       | 44.8         |       |
| 36 Hexane                       | 57  | 4.990     | 4.981         | 0.009         | 95  | 174035   | 50.0       | 48.0         |       |

| Compound                       | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 37 1,1-Dichloroethane          | 63  | 5.203     | 5.188         | 0.015         | 96 | 229333   | 50.0       | 47.9         |       |
| 38 Vinyl acetate               | 43  | 5.239     | 5.237         | 0.002         | 98 | 194379   | 50.0       | 50.3         |       |
| 43 cis-1,2-Dichloroethene      | 96  | 5.939     | 5.936         | 0.003         | 86 | 130860   | 50.0       | 45.0         |       |
| 42 2,2-Dichloropropane         | 77  | 5.939     | 5.942         | -0.003        | 55 | 99976    | 50.0       | 41.3         |       |
| 44 2-Butanone (MEK)            | 43  | 5.945     | 5.949         | -0.004        | 99 | 133602   | 100.0      | 120.1        |       |
| 48 Chlorobromomethane          | 128 | 6.231     | 6.222         | 0.009         | 93 | 58631    | 50.0       | 50.2         |       |
| 49 Tetrahydrofuran             | 42  | 6.243     | 6.241         | 0.002         | 90 | 89962    | 100.0      | 120.1        |       |
| 50 Chloroform                  | 83  | 6.371     | 6.368         | 0.003         | 94 | 210851   | 50.0       | 44.3         |       |
| 51 1,1,1-Trichloroethane       | 97  | 6.541     | 6.539         | 0.002         | 97 | 140896   | 50.0       | 40.1         |       |
| 52 Cyclohexane                 | 56  | 6.620     | 6.612         | 0.008         | 93 | 212823   | 50.0       | 47.3         |       |
| 53 Carbon tetrachloride        | 117 | 6.718     | 6.709         | 0.009         | 73 | 109637   | 50.0       | 44.2         |       |
| 54 1,1-Dichloropropene         | 75  | 6.724     | 6.727         | -0.003        | 93 | 164565   | 50.0       | 43.6         |       |
| 55 Isobutyl alcohol            | 41  | 6.900     | 6.904         | -0.004        | 91 | 114725   | 1250.0     | 1721.4       |       |
| 56 Benzene                     | 78  | 6.943     | 6.940         | 0.003         | 98 | 534964   | 50.0       | 49.8         |       |
| 57 1,2-Dichloroethane          | 62  | 7.022     | 7.013         | 0.009         | 98 | 198502   | 50.0       | 45.9         |       |
| 59 n-Heptane                   | 43  | 7.308     | 7.305         | 0.003         | 92 | 163105   | 50.0       | 55.9         |       |
| 61 Trichloroethene             | 130 | 7.679     | 7.676         | 0.003         | 97 | 115940   | 50.0       | 51.8         |       |
| 63 Methylcyclohexane           | 83  | 7.922     | 7.920         | 0.002         | 95 | 182020   | 50.0       | 40.1         |       |
| 64 1,2-Dichloropropane         | 63  | 7.953     | 7.950         | 0.003         | 95 | 137045   | 50.0       | 53.4         |       |
| 65 1,4-Dioxane                 | 88  | 8.032     | 8.029         | 0.003         | 42 | 28170    | 1000.0     | 1112.7       | M     |
| 67 Dibromomethane              | 93  | 8.038     | 8.035         | 0.003         | 96 | 75912    | 50.0       | 48.7         |       |
| 68 Dichlorobromomethane        | 83  | 8.233     | 8.230         | 0.003         | 98 | 133922   | 50.0       | 45.8         |       |
| 71 cis-1,3-Dichloropropene     | 75  | 8.677     | 8.674         | 0.003         | 92 | 154721   | 50.0       | 48.1         |       |
| 72 4-Methyl-2-pentanone (MIBK) | 43  | 8.823     | 8.826         | -0.003        | 97 | 224769   | 100.0      | 104.0        |       |
| 73 Toluene                     | 91  | 9.011     | 9.009         | 0.002         | 99 | 547322   | 50.0       | 50.5         |       |
| 74 trans-1,3-Dichloropropene   | 75  | 9.255     | 9.252         | 0.003         | 97 | 123016   | 50.0       | 44.7         |       |
| 75 Ethyl methacrylate          | 69  | 9.315     | 9.313         | 0.002         | 91 | 148169   | 50.0       | 50.7         |       |
| 76 1,1,2-Trichloroethane       | 97  | 9.449     | 9.447         | 0.002         | 94 | 111096   | 50.0       | 49.5         |       |
| 77 Tetrachloroethene           | 164 | 9.528     | 9.526         | 0.002         | 96 | 94317    | 50.0       | 51.0         |       |
| 78 1,3-Dichloropropane         | 76  | 9.607     | 9.605         | 0.002         | 94 | 209517   | 50.0       | 50.6         |       |
| 79 2-Hexanone                  | 43  | 9.656     | 9.659         | -0.003        | 97 | 146763   | 100.0      | 103.4        |       |
| 81 Chlorodibromomethane        | 129 | 9.826     | 9.824         | 0.002         | 91 | 76501    | 50.0       | 50.0         |       |
| 82 Ethylene Dibromide          | 107 | 9.942     | 9.939         | 0.003         | 97 | 101115   | 50.0       | 50.9         |       |
| 83 3-Chlorobenzotrifluoride    | 180 | 10.392    | 10.390        | 0.002         | 94 | 184931   | 50.0       | 53.2         |       |
| 84 Chlorobenzene               | 112 | 10.429    | 10.426        | 0.003         | 93 | 340436   | 50.0       | 51.1         |       |
| 85 4-Chlorobenzotrifluoride    | 180 | 10.483    | 10.481        | 0.002         | 95 | 177029   | 50.0       | 55.0         |       |
| 86 1,1,1,2-Tetrachloroethane   | 131 | 10.520    | 10.523        | -0.003        | 89 | 93553    | 50.0       | 51.2         |       |
| 87 Ethylbenzene                | 106 | 10.532    | 10.523        | 0.009         | 99 | 178585   | 50.0       | 47.5         |       |
| 88 m-Xylene & p-Xylene         | 106 | 10.660    | 10.657        | 0.003         | 99 | 228220   | 50.0       | 48.9         |       |
| 89 o-Xylene                    | 106 | 11.043    | 11.040        | 0.003         | 97 | 216812   | 50.0       | 46.4         |       |
| 90 Styrene                     | 104 | 11.061    | 11.059        | 0.002         | 94 | 377775   | 50.0       | 52.7         |       |
| 91 Bromoform                   | 173 | 11.244    | 11.241        | 0.003         | 95 | 44087    | 50.0       | 53.9         |       |
| 92 2-Chlorobenzotrifluoride    | 180 | 11.305    | 11.302        | 0.003         | 97 | 188213   | 50.0       | 52.9         |       |
| 93 Isopropylbenzene            | 105 | 11.408    | 11.405        | 0.003         | 97 | 535650   | 50.0       | 47.9         |       |
| 96 1,1,2,2-Tetrachloroethane   | 83  | 11.718    | 11.716        | 0.002         | 96 | 148539   | 50.0       | 49.5         |       |
| 95 Bromobenzene                | 156 | 11.724    | 11.722        | 0.002         | 96 | 141550   | 50.0       | 46.8         |       |
| 97 trans-1,4-Dichloro-2-buten  | 53  | 11.755    | 11.746        | 0.009         | 74 | 38617    | 50.0       | 40.3         |       |
| 98 1,2,3-Trichloropropane      | 110 | 11.773    | 11.770        | 0.003         | 84 | 51684    | 50.0       | 45.0         |       |
| 99 N-Propylbenzene             | 120 | 11.828    | 11.825        | 0.003         | 99 | 144602   | 50.0       | 41.5         |       |
| 100 2-Chlorotoluene            | 126 | 11.913    | 11.910        | 0.003         | 94 | 130361   | 50.0       | 45.1         |       |
| 101 3-Chlorotoluene            | 126 | 11.980    | 11.977        | 0.003         | 96 | 142665   | 50.0       | 47.0         |       |
| 102 1,3,5-Trimethylbenzene     | 105 | 12.010    | 12.008        | 0.002         | 93 | 494712   | 50.0       | 43.7         |       |

| Compound                         | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|----------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 103 4-Chlorotoluene              | 126 | 12.041    | 12.038        | 0.003         | 98 | 142782   | 50.0       | 46.8         |       |
| 104 tert-Butylbenzene            | 119 | 12.327    | 12.324        | 0.003         | 92 | 353710   | 50.0       | 39.6         |       |
| 106 1,2,4-Trimethylbenzene       | 105 | 12.388    | 12.385        | 0.003         | 98 | 496660   | 50.0       | 42.9         |       |
| 107 1,2-dichloro-4-(trifluorom   | 214 | 12.424    | 12.421        | 0.003         | 98 | 162526   | 50.0       | 49.6         |       |
| 108 sec-Butylbenzene             | 105 | 12.552    | 12.549        | 0.003         | 95 | 562992   | 50.0       | 42.2         |       |
| 109 1,3-Dichlorobenzene          | 146 | 12.667    | 12.665        | 0.002         | 96 | 268293   | 50.0       | 45.4         |       |
| 110 4-Isopropyltoluene           | 119 | 12.704    | 12.707        | -0.003        | 96 | 455755   | 50.0       | 40.7         |       |
| 111 1,4-Dichlorobenzene          | 146 | 12.771    | 12.774        | -0.003        | 91 | 274629   | 50.0       | 45.5         |       |
| 113 2,4-Dichloro-1-(trifluorom   | 214 | 12.789    | 12.792        | -0.003        | 97 | 168934   | 50.0       | 51.8         |       |
| 114 2,5-Dichlorobenzotrifluori   | 214 | 12.832    | 12.835        | -0.003        | 98 | 171258   | 50.0       | 47.0         |       |
| 116 n-Butylbenzene               | 91  | 13.111    | 13.115        | -0.004        | 98 | 428139   | 50.0       | 38.3         |       |
| 117 1,2-Dichlorobenzene          | 146 | 13.124    | 13.127        | -0.003        | 94 | 268244   | 50.0       | 45.0         |       |
| 118 1,2-Dibromo-3-Chloropropan   | 75  | 13.914    | 13.918        | -0.004        | 73 | 20803    | 50.0       | 38.1         |       |
| 119 2,4- & 2,5- & 2,6- Dichlor   | 125 | 14.061    | 14.058        | 0.002         | 98 | 690413   | 150.0      | 133.1        |       |
| 121 2,3- & 3,4- Dichlorotoluen   | 125 | 14.474    | 14.478        | -0.004        | 98 | 496601   | 100.0      | 86.8         |       |
| 122 1,2,4-Trichlorobenzene       | 180 | 14.742    | 14.739        | 0.003         | 93 | 197915   | 50.0       | 42.8         |       |
| 123 Hexachlorobutadiene          | 225 | 14.888    | 14.891        | -0.003        | 96 | 81509    | 50.0       | 44.8         |       |
| 124 Naphthalene                  | 128 | 15.010    | 15.007        | 0.003         | 98 | 425548   | 50.0       | 45.6         |       |
| 125 1,2,3-Trichlorobenzene       | 180 | 15.229    | 15.232        | -0.003        | 95 | 183890   | 50.0       | 42.5         |       |
| 126 2,4,5-Trichlorotoluene       | 159 | 16.013    | 16.011        | 0.002         | 0  | 110429   | 50.0       | 38.1         |       |
| 127 2,3,6-Trichlorotoluene       | 159 | 16.111    | 16.108        | 0.003         | 95 | 117029   | 50.0       | 42.5         |       |
| 145 2,3-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 144 2,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 146 3,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 147 2,6-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 143 2,5-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| S 131 Xylenes, Total             | 106 |           |               |               | 0  |          | 100.0      | 95.3         |       |
| S 130 1,2-Dichloroethene, Total  | 96  |           |               |               | 0  |          | 100.0      | 89.3         |       |
| S 132 1,3-Dichloropropene, Total | 1   |           |               |               | 0  |          | 100.0      | 92.8         |       |

### QC Flag Legend

#### Processing Flags

ND - Not Detected or Marked ND

#### Review Flags

M - Manually Integrated

### Reagents:

|                     |                    |           |             |
|---------------------|--------------------|-----------|-------------|
| VOA8260VOA2ND_00146 | Amount Added: 2.00 | Units: uL |             |
| voaWKetmix2nd_00002 | Amount Added: 2.00 | Units: uL |             |
| voaWVA2nd Res_00010 | Amount Added: 2.00 | Units: uL |             |
| voaWEEpri Res_00006 | Amount Added: 2.00 | Units: uL |             |
| voaWAcro1stRe_00001 | Amount Added: 6.00 | Units: uL |             |
| VOA8260INT_00042    | Amount Added: 2.00 | Units: uL | Run Reagent |
| VOA8260SURRE_00042  | Amount Added: 2.00 | Units: uL | Run Reagent |



Operator ID: 001562

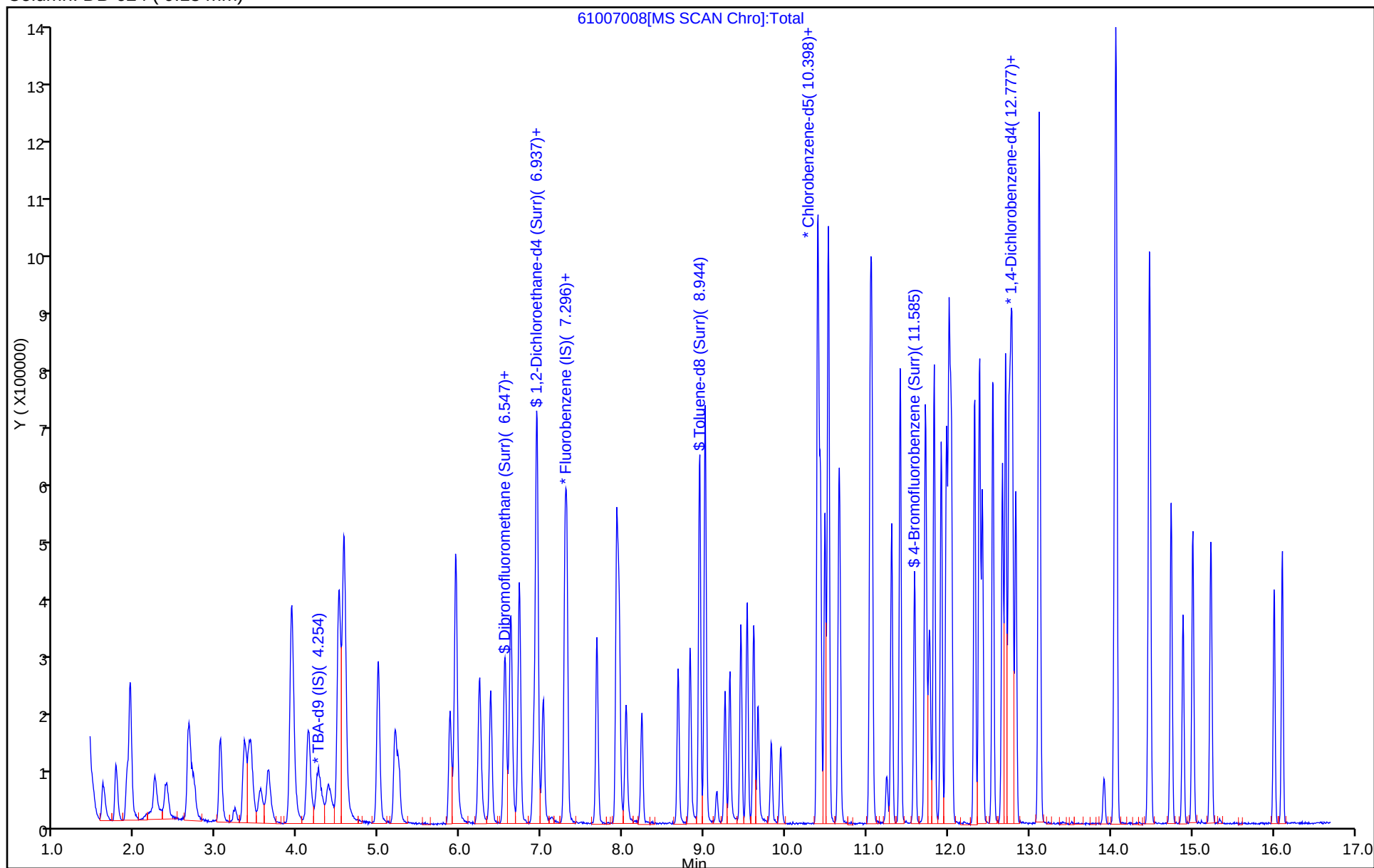
Worklist Smp#: 8

Client ID:

ALS Bottle#: 8

Limit Group: VOA 8260C ICAL

Column: DB-624 ( 0.18 mm)



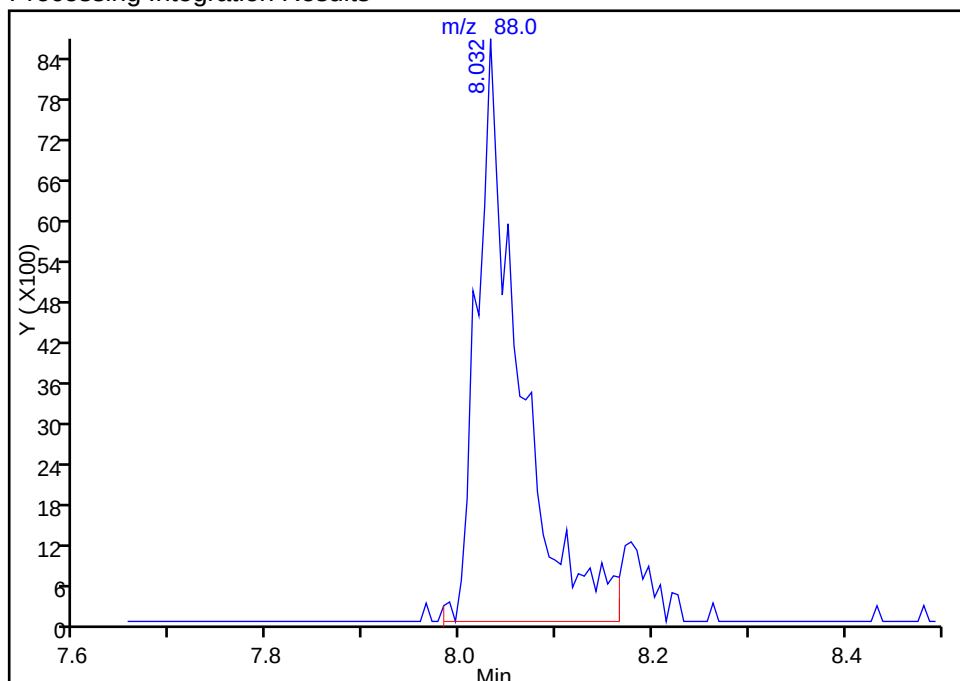
## TestAmerica Pittsburgh

|                 |                                                                 |                |                    |
|-----------------|-----------------------------------------------------------------|----------------|--------------------|
| Data File:      | \\ChromNA\Pittsburgh\ChromData\CHHP6\20151007-8874.b\61007008.D |                |                    |
| Injection Date: | 07-Oct-2015 15:36:30                                            | Instrument ID: | CHHP6              |
| Lims ID:        | LCS                                                             |                |                    |
| Client ID:      |                                                                 |                |                    |
| Operator ID:    | 001562                                                          | ALS Bottle#:   | 8 Worklist Smp#: 8 |
| Purge Vol:      | 5.000 mL                                                        | Dil. Factor:   | 1.0000             |
| Method:         | MSVOA_LL_CHHP6                                                  | Limit Group:   | VOA 8260C ICAL     |
| Column:         | DB-624 ( 0.18 mm)                                               | Detector       | MS SCAN            |

## 65 1,4-Dioxane, CAS: 123-91-1

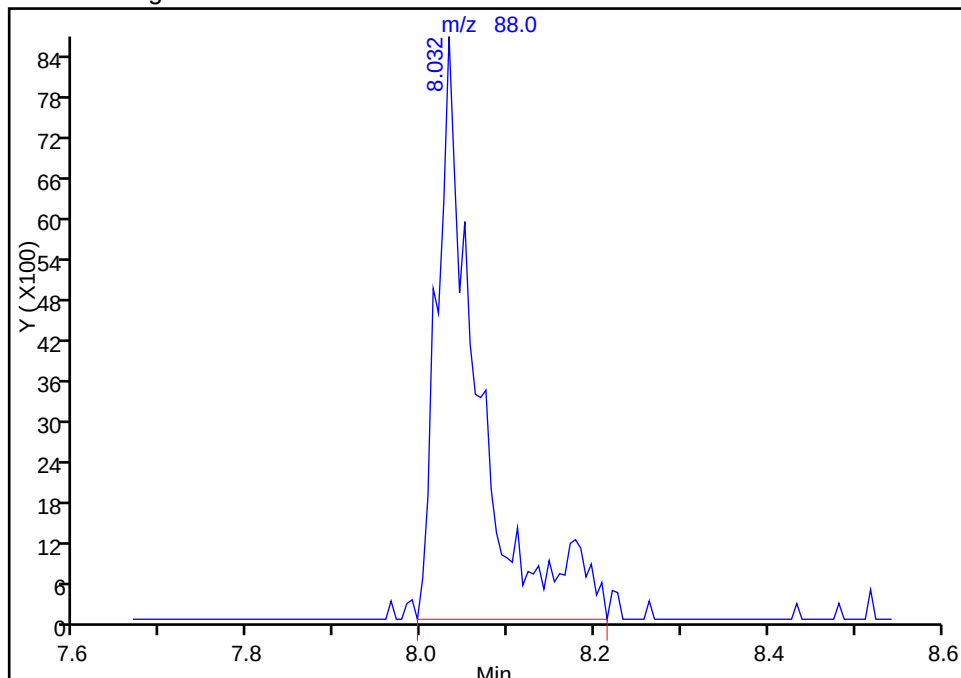
RT: 8.03  
Area: 26274  
Amount: 1037.8501  
Amount Units: ng

## Processing Integration Results



RT: 8.03  
Area: 28170  
Amount: 1112.7441  
Amount Units: ng

## Manual Integration Results



Reviewer: fergusond, 07-Oct-2015 15:59:33  
Audit Action: Manually Integrated  
Audit Reason: Incomplete Integration

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCS 180-156309/9

Matrix: Water Lab File ID: 51008009.D

Analysis Method: 8260C Date Collected: \_\_\_\_\_

Sample wt/vol: 5 (mL) Date Analyzed: 10/08/2015 14:48

Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1

Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)

% Moisture: \_\_\_\_\_ Level: (low/med) Low

Analysis Batch No.: 156309 Units: ug/L

| CAS NO.    | COMPOUND NAME               | RESULT | Q | RL  | MDL   |
|------------|-----------------------------|--------|---|-----|-------|
| 74-87-3    | Chloromethane               | 9.02   |   | 1.0 | 0.28  |
| 75-01-4    | Vinyl chloride              | 7.57   |   | 1.0 | 0.23  |
| 74-83-9    | Bromomethane                | 8.60   |   | 1.0 | 0.31  |
| 75-00-3    | Chloroethane                | 6.91   |   | 1.0 | 0.21  |
| 75-35-4    | 1,1-Dichloroethene          | 9.25   |   | 1.0 | 0.30  |
| 67-64-1    | Acetone                     | 20.6   |   | 5.0 | 2.5   |
| 75-15-0    | Carbon disulfide            | 8.90   |   | 1.0 | 0.21  |
| 75-09-2    | Methylene Chloride          | 9.77   |   | 1.0 | 0.13  |
| 156-60-5   | trans-1,2-Dichloroethene    | 9.37   |   | 1.0 | 0.17  |
| 1634-04-4  | Methyl tert-butyl ether     | 9.47   |   | 1.0 | 0.18  |
| 75-34-3    | 1,1-Dichloroethane          | 8.74   |   | 1.0 | 0.12  |
| 156-59-2   | cis-1,2-Dichloroethene      | 9.22   |   | 1.0 | 0.24  |
| 74-97-5    | Bromochloromethane          | 10.7   |   | 1.0 | 0.18  |
| 78-93-3    | 2-Butanone (MEK)            | 21.8   |   | 5.0 | 0.55  |
| 67-66-3    | Chloroform                  | 9.19   |   | 1.0 | 0.17  |
| 71-55-6    | 1,1,1-Trichloroethane       | 9.09   |   | 1.0 | 0.29  |
| 56-23-5    | Carbon tetrachloride        | 9.75   |   | 1.0 | 0.14  |
| 71-43-2    | Benzene                     | 9.47   |   | 1.0 | 0.11  |
| 107-06-2   | 1,2-Dichloroethane          | 8.97   |   | 1.0 | 0.21  |
| 79-01-6    | Trichloroethene             | 10.3   |   | 1.0 | 0.14  |
| 78-87-5    | 1,2-Dichloropropane         | 9.63   |   | 1.0 | 0.095 |
| 75-27-4    | Bromodichloromethane        | 9.29   |   | 1.0 | 0.13  |
| 10061-01-5 | cis-1,3-Dichloropropene     | 8.92   |   | 1.0 | 0.19  |
| 108-10-1   | 4-Methyl-2-pentanone (MIBK) | 19.5   |   | 5.0 | 0.53  |
| 108-88-3   | Toluene                     | 10.0   |   | 1.0 | 0.15  |
| 10061-02-6 | trans-1,3-Dichloropropene   | 8.85   |   | 1.0 | 0.15  |
| 79-00-5    | 1,1,2-Trichloroethane       | 10.1   |   | 1.0 | 0.20  |
| 127-18-4   | Tetrachloroethene           | 10.7   |   | 1.0 | 0.15  |
| 591-78-6   | 2-Hexanone                  | 18.9   |   | 5.0 | 0.16  |
| 124-48-1   | Dibromochloromethane        | 10.7   |   | 1.0 | 0.14  |
| 106-93-4   | 1,2-Dibromoethane (EDB)     | 10.5   |   | 1.0 | 0.18  |
| 108-90-7   | Chlorobenzene               | 10.4   |   | 1.0 | 0.14  |
| 630-20-6   | 1,1,1,2-Tetrachloroethane   | 10.2   |   | 1.0 | 0.28  |
| 100-41-4   | Ethylbenzene                | 10.2   |   | 1.0 | 0.23  |
| 1330-20-7  | Xylenes, Total              | 21.0   |   | 3.0 | 0.49  |
| 100-42-5   | Styrene                     | 11.1   |   | 1.0 | 0.097 |

FORM I  
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCS 180-156309/9  
 Matrix: Water Lab File ID: 51008009.D  
 Analysis Method: 8260C Date Collected: \_\_\_\_\_  
 Sample wt/vol: 5 (mL) Date Analyzed: 10/08/2015 14:48  
 Soil Aliquot Vol: \_\_\_\_\_ Dilution Factor: 1  
 Soil Extract Vol.: \_\_\_\_\_ GC Column: DB-624 ID: 0.18 (mm)  
 % Moisture: \_\_\_\_\_ Level: (low/med) Low  
 Analysis Batch No.: 156309 Units: ug/L

| CAS NO.  | COMPOUND NAME             | RESULT | Q | RL  | MDL  |
|----------|---------------------------|--------|---|-----|------|
| 75-25-2  | Bromoform                 | 11.0   |   | 1.0 | 0.19 |
| 79-34-5  | 1,1,2,2-Tetrachloroethane | 10.2   |   | 1.0 | 0.20 |
| 107-13-1 | Acrylonitrile             | 102    |   | 20  | 0.55 |
| 123-91-1 | 1,4-Dioxane               | 258    |   | 200 | 34   |

| CAS NO.    | SURROGATE                    | %REC | Q | LIMITS |
|------------|------------------------------|------|---|--------|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 90   |   | 64-135 |
| 2037-26-5  | Toluene-d8 (Surr)            | 102  |   | 71-118 |
| 460-00-4   | 4-Bromofluorobenzene (Surr)  | 96   |   | 70-118 |
| 1868-53-7  | Dibromofluoromethane (Surr)  | 103  |   | 70-128 |

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\51008009.D  
 Lims ID: LCS  
 Client ID:  
 Sample Type: LCS  
 Inject. Date: 08-Oct-2015 14:48:30 ALS Bottle#: 8 Worklist Smp#: 9  
 Purge Vol: 5.000 mL Dil. Factor: 1.0000  
 Sample Info: LCS  
 Misc. Info.: 180-0008892-009  
 Operator ID: 001562 Instrument ID: CHHP5  
 Method: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\MSVOA\_LL\_CHHP5.m  
 Limit Group: VOA 8260C ICAL  
 Last Update: 08-Oct-2015 15:18:29 Calib Date: 26-Aug-2015 17:52:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last Ical File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20150826-8300.b\50826014.D  
 Column 1 : DB-624 ( 0.18 mm) Det: MS SCAN  
 Process Host: XAWRK015

First Level Reviewer: fergusond

Date: 08-Oct-2015 15:18:27

| Compound                        | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q   | Response | Cal Amt ng | OnCol Amt ng | Flags |
|---------------------------------|-----|-----------|---------------|---------------|-----|----------|------------|--------------|-------|
| * 1 TBA-d9 (IS)                 | 65  | 4.279     | 4.269         | 0.010         | 0   | 127184   | 1000.0     | 1000.0       |       |
| * 2 Fluorobenzene (IS)          | 96  | 7.290     | 7.286         | 0.004         | 98  | 319307   | 50.0       | 50.0         |       |
| * 3 Chlorobenzene-d5            | 119 | 10.386    | 10.389        | -0.003        | 86  | 80373    | 50.0       | 50.0         |       |
| * 4 1,4-Dichlorobenzene-d4      | 152 | 12.728    | 12.731        | -0.003        | 92  | 122270   | 50.0       | 50.0         |       |
| \$ 5 Dibromofluoromethane (Surr | 113 | 6.566     | 6.562         | 0.004         | 94  | 80389    | 50.0       | 51.3         |       |
| \$ 6 1,2-Dichloroethane-d4 (Sur | 65  | 6.937     | 6.934         | 0.003         | 0   | 96664    | 50.0       | 44.9         |       |
| \$ 7 Toluene-d8 (Surr)          | 98  | 8.938     | 8.935         | 0.003         | 94  | 315631   | 50.0       | 50.9         |       |
| \$ 8 4-Bromofluorobenzene (Surr | 95  | 11.573    | 11.569        | 0.004         | 91  | 112300   | 50.0       | 48.0         |       |
| 11 Dichlorodifluoromethane      | 85  | 1.608     | 1.598         | 0.010         | 98  | 95904    | 50.0       | 53.2         |       |
| 12 Chloromethane                | 50  | 1.772     | 1.769         | 0.003         | 100 | 119403   | 50.0       | 45.1         |       |
| 13 Vinyl chloride               | 62  | 1.906     | 1.909         | -0.003        | 98  | 88961    | 50.0       | 37.9         |       |
| 14 Butadiene                    | 39  | 1.949     | 1.945         | 0.004         | 98  | 124477   | 50.0       | 44.9         |       |
| 15 Bromomethane                 | 94  | 2.277     | 2.255         | 0.022         | 89  | 41129    | 50.0       | 43.0         |       |
| 16 Chloroethane                 | 64  | 2.411     | 2.395         | 0.016         | 98  | 48974    | 50.0       | 34.6         |       |
| 17 Dichlorofluoromethane        | 67  | 2.679     | 2.669         | 0.010         | 98  | 120074   | 50.0       | 39.9         |       |
| 18 Trichlorofluoromethane       | 101 | 2.721     | 2.706         | 0.015         | 78  | 107135   | 50.0       | 47.6         |       |
| 20 Ethyl ether                  | 59  | 3.050     | 3.046         | 0.004         | 97  | 88642    | 50.0       | 42.5         |       |
| 21 Acrolein                     | 56  | 3.232     | 3.235         | -0.003        | 99  | 40719    | 150.0      | 131.1        |       |
| 22 1,1-Dichloroethene           | 96  | 3.354     | 3.338         | 0.016         | 95  | 82235    | 50.0       | 46.2         |       |
| 23 1,1,2-Trichloro-1,2,2-trif   | 101 | 3.433     | 3.423         | 0.010         | 91  | 86471    | 50.0       | 45.9         |       |
| 24 Acetone                      | 43  | 3.451     | 3.448         | 0.003         | 99  | 66292    | 100.0      | 102.9        |       |
| 25 Iodomethane                  | 142 | 3.536     | 3.539         | -0.003        | 98  | 139377   | 50.0       | 52.6         |       |
| 26 Carbon disulfide             | 76  | 3.646     | 3.630         | 0.016         | 100 | 183739   | 50.0       | 44.5         |       |
| 28 3-Chloro-1-propene           | 76  | 3.926     | 3.916         | 0.010         | 89  | 43309    | 50.0       | 43.0         |       |
| 30 Methyl acetate               | 43  | 3.944     | 3.940         | 0.004         | 99  | 499003   | 250.0      | 259.2        |       |
| 31 Methylene Chloride           | 84  | 4.139     | 4.135         | 0.004         | 97  | 102300   | 50.0       | 48.8         |       |
| 32 2-Methyl-2-propanol          | 59  | 4.412     | 4.397         | 0.015         | 88  | 73687    | 500.0      | 514.8        |       |
| 33 Acrylonitrile                | 53  | 4.522     | 4.525         | -0.002        | 98  | 476310   | 500.0      | 509.9        |       |
| 34 trans-1,2-Dichloroethene     | 96  | 4.571     | 4.561         | 0.010         | 96  | 90425    | 50.0       | 46.8         |       |
| 35 Methyl tert-butyl ether      | 73  | 4.583     | 4.573         | 0.010         | 96  | 211589   | 50.0       | 47.3         |       |
| 36 Hexane                       | 57  | 4.990     | 4.987         | 0.003         | 96  | 153380   | 50.0       | 47.3         |       |

| Compound                       | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q   | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|-----|----------|------------|--------------|-------|
| 37 1,1-Dichloroethane          | 63  | 5.203     | 5.200         | 0.003         | 96  | 166139   | 50.0       | 43.7         |       |
| 38 Vinyl acetate               | 43  | 5.252     | 5.255         | -0.002        | 97  | 155951   | 50.0       | 54.6         |       |
| 44 2,2-Dichloropropane         | 77  | 5.952     | 5.942         | 0.010         | 55  | 70519    | 50.0       | 46.3         |       |
| 45 cis-1,2-Dichloroethene      | 96  | 5.952     | 5.954         | -0.002        | 85  | 95096    | 50.0       | 46.1         |       |
| 46 2-Butanone (MEK)            | 43  | 5.958     | 5.960         | -0.002        | 73  | 105555   | 100.0      | 109.0        |       |
| 49 Chlorobromomethane          | 128 | 6.237     | 6.234         | 0.003         | 96  | 48608    | 50.0       | 53.7         |       |
| 51 Tetrahydrofuran             | 42  | 6.256     | 6.246         | 0.010         | 92  | 70960    | 100.0      | 91.4         |       |
| 52 Chloroform                  | 83  | 6.383     | 6.380         | 0.003         | 95  | 151005   | 50.0       | 45.9         |       |
| 53 1,1,1-Trichloroethane       | 97  | 6.548     | 6.538         | 0.010         | 96  | 110491   | 50.0       | 45.5         |       |
| 54 Cyclohexane                 | 56  | 6.621     | 6.611         | 0.010         | 95  | 181762   | 50.0       | 44.7         |       |
| 56 Carbon tetrachloride        | 117 | 6.718     | 6.715         | 0.003         | 97  | 100864   | 50.0       | 48.7         |       |
| 55 1,1-Dichloropropene         | 75  | 6.730     | 6.733         | -0.003        | 91  | 120181   | 50.0       | 44.7         |       |
| 57 Isobutyl alcohol            | 41  | 6.931     | 6.927         | 0.004         | 90  | 88719    | 1250.0     | 1459.0       |       |
| 58 Benzene                     | 78  | 6.949     | 6.946         | 0.003         | 98  | 372856   | 50.0       | 47.4         |       |
| 59 1,2-Dichloroethane          | 62  | 7.022     | 7.025         | -0.003        | 96  | 122099   | 50.0       | 44.8         |       |
| 62 n-Heptane                   | 43  | 7.308     | 7.311         | -0.003        | 97  | 141275   | 50.0       | 48.0         |       |
| 64 Trichloroethene             | 130 | 7.679     | 7.676         | 0.003         | 95  | 98906    | 50.0       | 51.3         |       |
| 66 Methylcyclohexane           | 83  | 7.916     | 7.913         | 0.003         | 96  | 140463   | 50.0       | 46.3         |       |
| 67 1,2-Dichloropropane         | 63  | 7.953     | 7.949         | 0.004         | 95  | 99447    | 50.0       | 48.1         |       |
| 70 1,4-Dioxane                 | 88  | 8.026     | 8.029         | -0.003        | 39  | 18402    | 1000.0     | 1292.0       |       |
| 68 Dibromomethane              | 93  | 8.038     | 8.035         | 0.003         | 94  | 51204    | 50.0       | 48.8         |       |
| 71 Dichlorobromomethane        | 83  | 8.233     | 8.235         | -0.002        | 98  | 96331    | 50.0       | 46.4         |       |
| 74 cis-1,3-Dichloropropene     | 75  | 8.677     | 8.673         | 0.004         | 91  | 108465   | 50.0       | 44.6         |       |
| 75 4-Methyl-2-pentanone (MIBK) | 43  | 8.829     | 8.826         | 0.003         | 99  | 193299   | 100.0      | 97.6         |       |
| 76 Toluene                     | 91  | 9.005     | 9.002         | 0.003         | 99  | 399397   | 50.0       | 50.2         |       |
| 77 trans-1,3-Dichloropropene   | 75  | 9.255     | 9.251         | 0.004         | 98  | 91926    | 50.0       | 44.3         |       |
| 78 Ethyl methacrylate          | 69  | 9.310     | 9.312         | -0.002        | 95  | 98986    | 50.0       | 49.3         |       |
| 79 1,1,2-Trichloroethane       | 97  | 9.443     | 9.446         | -0.003        | 91  | 76451    | 50.0       | 50.5         |       |
| 80 Tetrachloroethene           | 164 | 9.516     | 9.519         | -0.003        | 98  | 82334    | 50.0       | 53.3         |       |
| 81 1,3-Dichloropropane         | 76  | 9.602     | 9.604         | -0.002        | 99  | 134659   | 50.0       | 47.9         |       |
| 82 2-Hexanone                  | 43  | 9.656     | 9.659         | -0.003        | 98  | 135324   | 100.0      | 94.7         |       |
| 84 Chlorodibromomethane        | 129 | 9.815     | 9.811         | 0.003         | 90  | 70275    | 50.0       | 53.6         |       |
| 85 Ethylene Dibromide          | 107 | 9.930     | 9.927         | 0.003         | 100 | 76817    | 50.0       | 52.7         |       |
| 86 3-Chlorobenzotrifluoride    | 180 | 10.386    | 10.389        | -0.003        | 87  | 146501   | 50.0       | 57.3         |       |
| 87 Chlorobenzene               | 112 | 10.417    | 10.413        | 0.004         | 95  | 265403   | 50.0       | 51.8         |       |
| 88 4-Chlorobenzotrifluoride    | 180 | 10.478    | 10.474        | 0.004         | 95  | 143616   | 50.0       | 59.4         |       |
| 89 1,1,1,2-Tetrachloroethane   | 131 | 10.508    | 10.511        | -0.003        | 90  | 85288    | 50.0       | 51.1         |       |
| 90 Ethylbenzene                | 106 | 10.514    | 10.517        | -0.003        | 98  | 138341   | 50.0       | 50.9         |       |
| 91 m-Xylene & p-Xylene         | 106 | 10.648    | 10.644        | 0.004         | 0   | 174634   | 50.0       | 52.4         |       |
| 92 o-Xylene                    | 106 | 11.031    | 11.028        | 0.003         | 96  | 165948   | 50.0       | 52.4         |       |
| 93 Styrene                     | 104 | 11.049    | 11.046        | 0.003         | 96  | 289823   | 50.0       | 55.3         |       |
| 94 Bromoform                   | 173 | 11.232    | 11.235        | -0.003        | 97  | 41258    | 50.0       | 55.2         |       |
| 96 2-Chlorobenzotrifluoride    | 180 | 11.299    | 11.295        | 0.004         | 98  | 145867   | 50.0       | 58.0         |       |
| 97 Isopropylbenzene            | 105 | 11.396    | 11.399        | -0.003        | 96  | 420967   | 50.0       | 54.3         |       |
| 99 1,1,2,2-Tetrachloroethane   | 83  | 11.706    | 11.709        | -0.003        | 90  | 104369   | 50.0       | 51.1         |       |
| 100 Bromobenzene               | 156 | 11.706    | 11.709        | -0.003        | 93  | 110426   | 50.0       | 52.6         |       |
| 102 trans-1,4-Dichloro-2-buten | 53  | 11.743    | 11.746        | -0.003        | 80  | 11774    | 50.0       | 15.5         |       |
| 101 1,2,3-Trichloropropane     | 110 | 11.767    | 11.764        | 0.003         | 87  | 34504    | 50.0       | 49.8         |       |
| 103 N-Propylbenzene            | 120 | 11.810    | 11.812        | -0.002        | 99  | 117347   | 50.0       | 48.8         |       |
| 104 2-Chlorotoluene            | 126 | 11.901    | 11.898        | 0.003         | 97  | 105773   | 50.0       | 51.8         |       |
| 105 3-Chlorotoluene            | 126 | 11.968    | 11.965        | 0.003         | 94  | 112797   | 50.0       | 53.7         |       |
| 106 1,3,5-Trimethylbenzene     | 105 | 11.998    | 11.995        | 0.003         | 95  | 353892   | 50.0       | 52.1         |       |

| Compound                         | Sig | RT (min.) | Exp RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|----------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 107 4-Chlorotoluene              | 126 | 12.023    | 12.019        | 0.004         | 97 | 119279   | 50.0       | 53.1         |       |
| 108 tert-Butylbenzene            | 119 | 12.309    | 12.311        | -0.002        | 94 | 282529   | 50.0       | 51.2         |       |
| 110 1,2,4-Trimethylbenzene       | 105 | 12.370    | 12.366        | 0.004         | 98 | 350677   | 50.0       | 51.6         |       |
| 111 1,2-dichloro-4-(trifluorom   | 214 | 12.412    | 12.415        | -0.003        | 98 | 102275   | 50.0       | 53.9         |       |
| 112 sec-Butylbenzene             | 105 | 12.534    | 12.530        | 0.004         | 94 | 404147   | 50.0       | 51.9         |       |
| 113 1,3-Dichlorobenzene          | 146 | 12.649    | 12.646        | 0.003         | 99 | 209693   | 50.0       | 56.1         |       |
| 114 4-Isopropyltoluene           | 119 | 12.686    | 12.689        | -0.002        | 97 | 345537   | 50.0       | 52.4         |       |
| 115 1,4-Dichlorobenzene          | 146 | 12.753    | 12.755        | -0.002        | 97 | 215414   | 50.0       | 55.4         |       |
| 116 2,4-Dichloro-1-(trifluorom   | 214 | 12.777    | 12.780        | -0.003        | 95 | 95114    | 50.0       | 54.1         |       |
| 118 2,5-Dichlorobenzotrifluori   | 214 | 12.820    | 12.822        | -0.002        | 0  | 100573   | 50.0       | 53.0         |       |
| 120 n-Butylbenzene               | 91  | 13.100    | 13.096        | 0.004         | 97 | 266675   | 50.0       | 47.3         |       |
| 121 1,2-Dichlorobenzene          | 146 | 13.112    | 13.108        | 0.004         | 98 | 189795   | 50.0       | 54.3         |       |
| 122 1,2-Dibromo-3-Chloropropan   | 75  | 13.903    | 13.899        | 0.004         | 82 | 14671    | 50.0       | 51.2         |       |
| 123 2,4- & 2,5- & 2,6- Dichlor   | 125 | 14.049    | 14.045        | 0.004         | 0  | 325582   | 150.0      | 163.2        |       |
| 125 2,3- & 3,4- Dichlorotoluen   | 125 | 14.462    | 14.459        | 0.003         | 0  | 204451   | 100.0      | 107.5        |       |
| 126 1,2,4-Trichlorobenzene       | 180 | 14.724    | 14.726        | -0.002        | 93 | 72084    | 50.0       | 53.0         |       |
| 127 Hexachlorobutadiene          | 225 | 14.870    | 14.872        | -0.002        | 96 | 34685    | 50.0       | 53.0         |       |
| 128 Naphthalene                  | 128 | 14.992    | 14.988        | 0.004         | 97 | 196982   | 50.0       | 56.4         |       |
| 129 1,2,3-Trichlorobenzene       | 180 | 15.217    | 15.213        | 0.004         | 95 | 56712    | 50.0       | 51.6         |       |
| 131 2,4,5-Trichlorotoluene       | 159 | 15.989    | 15.992        | -0.003        | 0  | 18123    | 50.0       | 45.7         |       |
| 130 2,3,6-Trichlorotoluene       | 159 | 16.087    | 16.089        | -0.002        | 94 | 17966    | 50.0       | 49.1         |       |
| 149 3,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 148 2,3-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 147 2,4-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 150 2,6-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| 146 2,5-Dichlorotoluene          | 1   |           | 0.000         |               |    |          | ND         | ND           |       |
| S 134 1,2-Dichloroethene, Total  | 96  |           |               |               | 0  |          | 100.0      | 92.9         |       |
| S 133 Xylenes, Total             | 106 |           |               |               | 0  |          | 100.0      | 104.9        |       |
| S 135 1,3-Dichloropropene, Total | 1   |           |               |               | 0  |          | 100.0      | 88.9         |       |

### QC Flag Legend

#### Processing Flags

ND - Not Detected or Marked ND

### Reagents:

|                     |                    |           |             |
|---------------------|--------------------|-----------|-------------|
| VOA8260VOA2ND_00146 | Amount Added: 2.00 | Units: uL |             |
| voaWKetmix2nd_00002 | Amount Added: 2.00 | Units: uL |             |
| voaWVA2nd Res_00010 | Amount Added: 2.00 | Units: uL |             |
| voaWEEpri Res_00006 | Amount Added: 2.00 | Units: uL |             |
| voaWAcro1stRe_00001 | Amount Added: 6.00 | Units: uL |             |
| VOA8260INT_00042    | Amount Added: 2.00 | Units: uL | Run Reagent |
| VOA8260SURR_00042   | Amount Added: 2.00 | Units: uL | Run Reagent |

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP5\20151008-8892.b\51008009.D

Injection Date: 08-Oct-2015 14:48:30

Instrument ID: CHHP5

Operator ID: 001562

Lims ID: LCS

Worklist Smp#: 9

Client ID:

Purge Vol: 5.000 mL

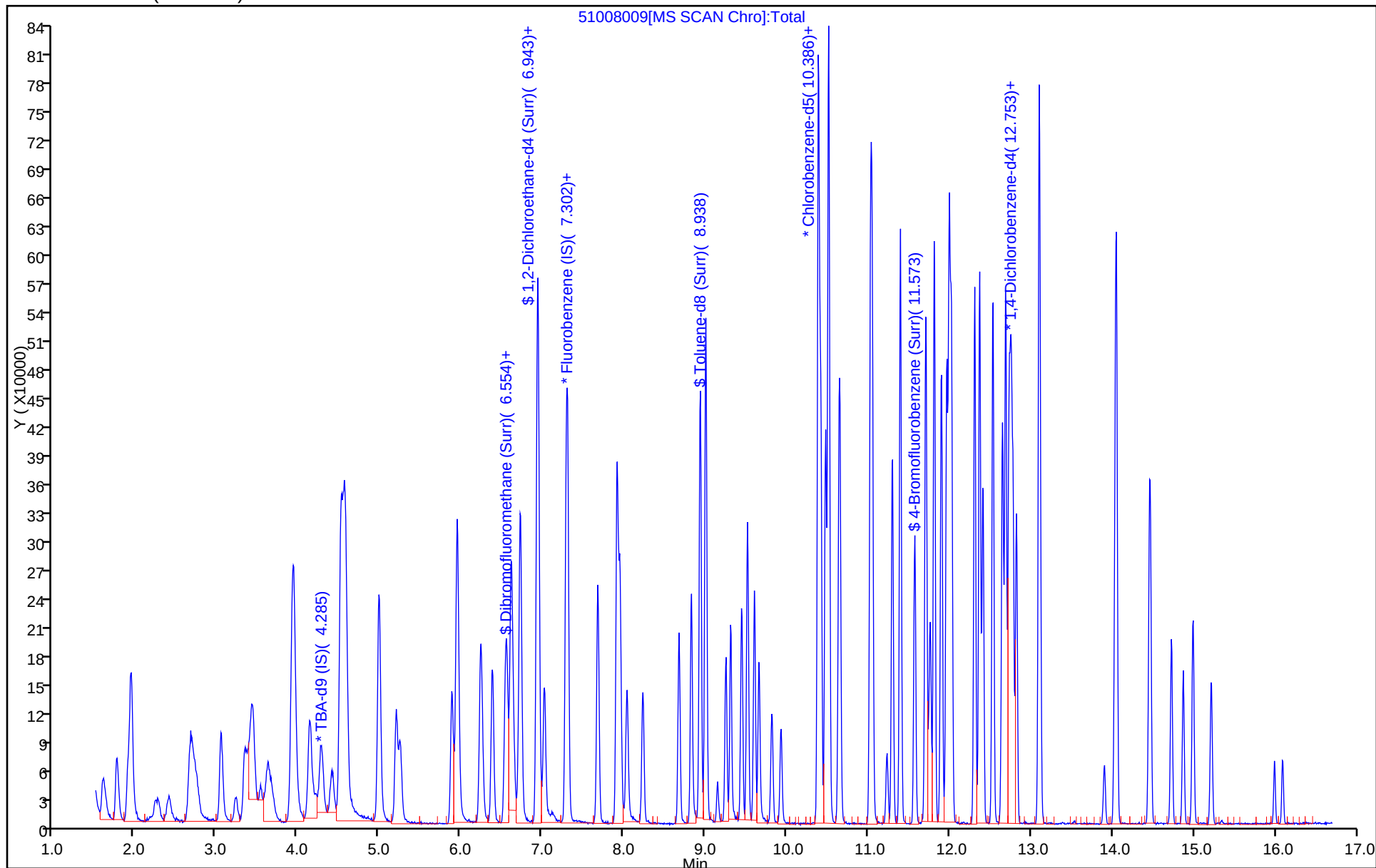
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: MSVOA\_LL\_CHHP5

Limit Group: VOA 8260C ICAL

Column: DB-624 (0.18 mm)





## GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

Instrument ID: CHHP6 Start Date: 07/31/2015 12:10Analysis Batch Number: 149469 End Date: 07/31/2015 18:50

| LAB SAMPLE ID     | CLIENT SAMPLE ID | DATE ANALYZED    | DILUTION<br>FACTOR | LAB FILE ID | COLUMN ID        |
|-------------------|------------------|------------------|--------------------|-------------|------------------|
| BFB 180-149469/1  |                  | 07/31/2015 12:10 | 1                  | 60731001.D  | DB-624 0.18 (mm) |
| IC 180-149469/4   |                  | 07/31/2015 14:00 | 1                  | 60731004.D  | DB-624 0.18 (mm) |
| ICIS 180-149469/5 |                  | 07/31/2015 14:24 | 1                  | 60731005.D  | DB-624 0.18 (mm) |
| IC 180-149469/6   |                  | 07/31/2015 14:49 | 1                  | 60731006.D  | DB-624 0.18 (mm) |
| IC 180-149469/7   |                  | 07/31/2015 15:13 | 1                  | 60731007.D  | DB-624 0.18 (mm) |
| IC 180-149469/8   |                  | 07/31/2015 15:37 | 1                  | 60731008.D  | DB-624 0.18 (mm) |
| IC 180-149469/9   |                  | 07/31/2015 16:01 | 1                  | 60731009.D  | DB-624 0.18 (mm) |
| IC 180-149469/10  |                  | 07/31/2015 16:25 | 1                  | 60731010.D  | DB-624 0.18 (mm) |
| IC 180-149469/14  |                  | 07/31/2015 18:02 | 1                  | 60731014.D  | DB-624 0.18 (mm) |
| ZZZZZ             |                  | 07/31/2015 18:26 | 1                  |             | DB-624 0.18 (mm) |
| ICV 180-149469/16 |                  | 07/31/2015 18:50 | 1                  |             | DB-624 0.18 (mm) |

## GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

Instrument ID: CHHP5 Start Date: 08/26/2015 14:01Analysis Batch Number: 151868 End Date: 08/26/2015 20:16

| LAB SAMPLE ID     | CLIENT SAMPLE ID | DATE ANALYZED    | DILUTION<br>FACTOR | LAB FILE ID | COLUMN ID        |
|-------------------|------------------|------------------|--------------------|-------------|------------------|
| BFB 180-151868/7  |                  | 08/26/2015 14:01 | 1                  | 50826007.D  | DB-624 0.18 (mm) |
| IC 180-151868/6   |                  | 08/26/2015 15:04 | 1                  | 50826006.D  | DB-624 0.18 (mm) |
| IC 180-151868/8   |                  | 08/26/2015 15:28 | 1                  | 50826008.D  | DB-624 0.18 (mm) |
| ICIS 180-151868/9 |                  | 08/26/2015 15:52 | 1                  | 50826009.D  | DB-624 0.18 (mm) |
| IC 180-151868/10  |                  | 08/26/2015 16:16 | 1                  | 50826010.D  | DB-624 0.18 (mm) |
| IC 180-151868/11  |                  | 08/26/2015 16:40 | 1                  | 50826011.D  | DB-624 0.18 (mm) |
| IC 180-151868/12  |                  | 08/26/2015 17:04 | 1                  | 50826012.D  | DB-624 0.18 (mm) |
| IC 180-151868/13  |                  | 08/26/2015 17:28 | 1                  | 50826013.D  | DB-624 0.18 (mm) |
| IC 180-151868/14  |                  | 08/26/2015 17:52 | 1                  | 50826014.D  | DB-624 0.18 (mm) |
| ZZZZZ             |                  | 08/26/2015 19:52 | 1                  |             | DB-624 0.18 (mm) |
| ICV 180-151868/20 |                  | 08/26/2015 20:16 | 1                  |             | DB-624 0.18 (mm) |

## GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

Instrument ID: CHHP6 Start Date: 10/07/2015 11:51Analysis Batch Number: 156189 End Date: 10/07/2015 23:42

| LAB SAMPLE ID      | CLIENT SAMPLE ID   | DATE ANALYZED    | DILUTION<br>FACTOR | LAB FILE ID | COLUMN ID        |
|--------------------|--------------------|------------------|--------------------|-------------|------------------|
| BFB 180-156189/4   |                    | 10/07/2015 11:51 | 1                  | 61007004.D  | DB-624 0.18 (mm) |
| CCVIS 180-156189/2 |                    | 10/07/2015 12:51 | 1                  | 61007002.D  | DB-624 0.18 (mm) |
| ZZZZZ              |                    | 10/07/2015 13:33 | 1                  |             | DB-624 0.18 (mm) |
| MB 180-156189/5    |                    | 10/07/2015 14:07 | 1                  | 61007005.D  | DB-624 0.18 (mm) |
| LCS 180-156189/8   |                    | 10/07/2015 15:36 | 1                  | 61007008.D  | DB-624 0.18 (mm) |
| ZZZZZ              |                    | 10/07/2015 17:13 | 12.5               |             | DB-624 0.18 (mm) |
| 180-48309-7        | HD-QC12-0/1-2      | 10/07/2015 19:39 | 1                  | 61007018.D  | DB-624 0.18 (mm) |
| 180-48309-2        | HD-MW-143S-0/1-0   | 10/07/2015 20:03 | 1                  | 61007019.D  | DB-624 0.18 (mm) |
| 180-48309-3        | HD-MW-143D-0/1-0   | 10/07/2015 20:27 | 1                  | 61007020.D  | DB-624 0.18 (mm) |
| 180-48309-4        | HD-MW-20M-0/1-0    | 10/07/2015 20:51 | 1                  | 61007021.D  | DB-624 0.18 (mm) |
| 180-48309-6 DL     | HD-MW-64D-0/1-0 DL | 10/07/2015 21:15 | 25                 | 61007022.D  | DB-624 0.18 (mm) |
| 180-48309-5        | HD-MW-92-0/1-0     | 10/07/2015 23:42 | 1                  | 61007028.D  | DB-624 0.18 (mm) |

## GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

Instrument ID: CHHP5 Start Date: 10/08/2015 11:00Analysis Batch Number: 156309 End Date: 10/08/2015 22:50

| LAB SAMPLE ID      | CLIENT SAMPLE ID  | DATE ANALYZED    | DILUTION<br>FACTOR | LAB FILE ID | COLUMN ID        |
|--------------------|-------------------|------------------|--------------------|-------------|------------------|
| BFB 180-156309/4   |                   | 10/08/2015 11:00 | 1                  | 51008004.D  | DB-624 0.18 (mm) |
| CCVIS 180-156309/5 |                   | 10/08/2015 12:33 | 1                  | 51008005.D  | DB-624 0.18 (mm) |
| ZZZZZ              |                   | 10/08/2015 12:57 | 1                  |             | DB-624 0.18 (mm) |
| MB 180-156309/6    |                   | 10/08/2015 13:21 | 1                  | 51008006.D  | DB-624 0.18 (mm) |
| ZZZZZ              |                   | 10/08/2015 14:00 | 1                  |             | DB-624 0.18 (mm) |
| ZZZZZ              |                   | 10/08/2015 14:24 | 1                  |             | DB-624 0.18 (mm) |
| LCS 180-156309/9   |                   | 10/08/2015 14:48 | 1                  | 51008009.D  | DB-624 0.18 (mm) |
| ZZZZZ              |                   | 10/08/2015 15:12 | 1                  |             | DB-624 0.18 (mm) |
| ZZZZZ              |                   | 10/08/2015 15:36 | 1                  |             | DB-624 0.18 (mm) |
| 180-48309-1        | HD-MW-87-0/1-0    | 10/08/2015 16:24 | 12.5               | 51008013.D  | DB-624 0.18 (mm) |
| 180-48309-5 DL     | HD-MW-92-0/1-0 DL | 10/08/2015 16:48 | 10                 | 51008014.D  | DB-624 0.18 (mm) |
| ZZZZZ              |                   | 10/08/2015 17:12 | 1                  |             | DB-624 0.18 (mm) |
| ZZZZZ              |                   | 10/08/2015 17:36 | 50                 |             | DB-624 0.18 (mm) |
| ZZZZZ              |                   | 10/08/2015 18:00 | 1                  |             | DB-624 0.18 (mm) |
| ZZZZZ              |                   | 10/08/2015 18:25 | 1                  |             | DB-624 0.18 (mm) |
| ZZZZZ              |                   | 10/08/2015 18:49 | 2                  |             | DB-624 0.18 (mm) |
| ZZZZZ              |                   | 10/08/2015 19:13 | 2                  |             | DB-624 0.18 (mm) |
| ZZZZZ              |                   | 10/08/2015 19:37 | 1                  |             | DB-624 0.18 (mm) |
| ZZZZZ              |                   | 10/08/2015 20:01 | 1                  |             | DB-624 0.18 (mm) |
| ZZZZZ              |                   | 10/08/2015 20:25 | 1                  |             | DB-624 0.18 (mm) |
| ZZZZZ              |                   | 10/08/2015 20:49 | 1                  |             | DB-624 0.18 (mm) |
| ZZZZZ              |                   | 10/08/2015 21:13 | 1                  |             | DB-624 0.18 (mm) |
| ZZZZZ              |                   | 10/08/2015 21:37 | 1                  |             | DB-624 0.18 (mm) |
| ZZZZZ              |                   | 10/08/2015 22:01 | 1                  |             | DB-624 0.18 (mm) |
| ZZZZZ              |                   | 10/08/2015 22:25 | 5                  |             | DB-624 0.18 (mm) |
| 180-48309-6        | HD-MW-64D-0/1-0   | 10/08/2015 22:50 | 2.5                | 51008029.D  | DB-624 0.18 (mm) |

# Method 8270D Low Level

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Semivolatile Organic Compounds  
(GC/MS) Low Level by Method 8270D

FORM II  
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

Matrix: Water Level: Low

GC Column (1): Rxi-5SilMS ID: 0.32 (mm)

| Client Sample ID | Lab Sample ID         | 2FP # | PHL # | NBZ # | FBP # | TBP # | TPH # |
|------------------|-----------------------|-------|-------|-------|-------|-------|-------|
| HD-MW-87-0/1-0   | 180-48309-1           | 50    | 56    | 60    | 59    | 54    | 76    |
|                  | MB<br>180-156027/1-A  | 64    | 64    | 62    | 60    | 58    | 71    |
|                  | LCS<br>180-156027/2-A | 67    | 67    | 68    | 66    | 73    | 78    |

|                                   |                  |
|-----------------------------------|------------------|
|                                   | <u>QC LIMITS</u> |
| 2FP = 2-Fluorophenol (Surr)       | 20-105           |
| PHL = Phenol-d5 (Surr)            | 25-105           |
| NBZ = Nitrobenzene-d5 (Surr)      | 27-114           |
| FBP = 2-Fluorobiphenyl            | 28-109           |
| TBP = 2,4,6-Tribromophenol (Surr) | 30-118           |
| TPH = Terphenyl-d14 (Surr)        | 20-118           |

# Column to be used to flag recovery values

FORM II 8270D LL

FORM III  
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
SDG No.: \_\_\_\_\_  
Matrix: Water Level: Low Lab File ID: V1009006.D  
Lab ID: LCS 180-156027/2-A Client ID: \_\_\_\_\_

| COMPOUND    | SPIKE<br>ADDED<br>(ug/L) | LCS<br>CONCENTRATION<br>(ug/L) | LCS<br>%<br>REC | QC<br>LIMITS<br>REC | # |
|-------------|--------------------------|--------------------------------|-----------------|---------------------|---|
| 1,4-Dioxane | 20.0                     | 14.4                           | 72              | 36-100              |   |

# Column to be used to flag recovery and RPD values

FORM IV  
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
SDG No.: \_\_\_\_\_  
Lab File ID: V1009004.D Lab Sample ID: MB 180-156027/1-A  
Matrix: Water Date Extracted: 10/06/2015 10:44  
Instrument ID: CH731 Date Analyzed: 10/09/2015 09:46  
Level: (Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

| CLIENT SAMPLE ID | LAB SAMPLE ID      | LAB<br>FILE ID | DATE ANALYZED    |
|------------------|--------------------|----------------|------------------|
|                  | LCS 180-156027/2-A | V1009006.D     | 10/09/2015 10:42 |
| HD-MW-87-0/1-0   | 180-48309-1        | V1011025.D     | 10/11/2015 19:44 |



FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Lab File ID: V0901002.D DFTPP Injection Date: 08/31/2015  
 Instrument ID: CH731 DFTPP Injection Time: 13:24  
 Analysis Batch No.: 152241

| M/E | ION ABUNDANCE CRITERIA              | % RELATIVE ABUNDANCE |
|-----|-------------------------------------|----------------------|
| 51  | 30.0 - 60.0 % of mass 198           | 40.2                 |
| 68  | Less than 2.0 % of mass 69          | 0.2 (0.6)1           |
| 69  | Mass 69 relative abundance          | 43.8                 |
| 70  | Less than 2.0 % of mass 69          | 0.0 (0.0)1           |
| 127 | 40.0 - 60.0 % of mass 198           | 48.1                 |
| 197 | Less than 1.0 % of mass 198         | 0.0                  |
| 198 | Base Peak, 100 % relative abundance | 100.0                |
| 199 | 5.0- 9.0 % of mass 198              | 7.4                  |
| 275 | 10.0 - 30.0 % of mass 198           | 21.1                 |
| 365 | Greater than 1.0 % of mass 198      | 2.4                  |
| 441 | Present but less than mass 443      | 7.3 (67.7)3          |
| 442 | Greater than 40.0 % of mass 198     | 55.1                 |
| 443 | 17.0 - 23.0 % of mass 442           | 10.9 (19.7)2         |

1-Value is % mass 69                      2-Value is % mass 442                      3-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

| CLIENT SAMPLE ID | LAB SAMPLE ID     | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|------------------|-------------------|-------------|---------------|---------------|
|                  | IC 180-152241/3   | V0901003.D  | 08/31/2015    | 13:40         |
|                  | IC 180-152241/4   | V0901004.D  | 08/31/2015    | 14:08         |
|                  | IC 180-152241/5   | V0901005.D  | 08/31/2015    | 14:36         |
|                  | ICIS 180-152241/6 | V0901006.D  | 08/31/2015    | 15:03         |
|                  | IC 180-152241/7   | V0901007.D  | 08/31/2015    | 15:31         |
|                  | IC 180-152241/8   | V0901008.D  | 08/31/2015    | 15:59         |
|                  | IC 180-152241/9   | V0901009.D  | 08/31/2015    | 16:27         |
|                  | IC 180-152241/10  | V0901010.D  | 08/31/2015    | 16:55         |

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Lab File ID: V1009002.D DFTPP Injection Date: 10/09/2015  
 Instrument ID: CH731 DFTPP Injection Time: 09:01  
 Analysis Batch No.: 156466

| M/E | ION ABUNDANCE CRITERIA              | % RELATIVE ABUNDANCE |
|-----|-------------------------------------|----------------------|
| 51  | 30.0 - 60.0 % of mass 198           | 39.5                 |
| 68  | Less than 2.0 % of mass 69          | 0.0 (0.0)1           |
| 69  | Mass 69 relative abundance          | 42.4                 |
| 70  | Less than 2.0 % of mass 69          | 0.1 (0.3)1           |
| 127 | 40.0 - 60.0 % of mass 198           | 47.0                 |
| 197 | Less than 1.0 % of mass 198         | 0.3                  |
| 198 | Base Peak, 100 % relative abundance | 100.0                |
| 199 | 5.0- 9.0 % of mass 198              | 6.7                  |
| 275 | 10.0 - 30.0 % of mass 198           | 22.7                 |
| 365 | Greater than 1.0 % of mass 198      | 2.7                  |
| 441 | Present but less than mass 443      | 8.7 (78.1)3          |
| 442 | Greater than 40.0 % of mass 198     | 60.8                 |
| 443 | 17.0 - 23.0 % of mass 442           | 11.1 (18.2)2         |

1-Value is % mass 69                      2-Value is % mass 442                      3-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

| CLIENT SAMPLE ID | LAB SAMPLE ID      | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|------------------|--------------------|-------------|---------------|---------------|
|                  | CCVIS 180-156466/3 | V1009003.D  | 10/09/2015    | 09:18         |
|                  | MB 180-156027/1-A  | V1009004.D  | 10/09/2015    | 09:46         |
|                  | LCS 180-156027/2-A | V1009006.D  | 10/09/2015    | 10:42         |

FORM V  
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Lab File ID: V1011002.D DFTPP Injection Date: 10/11/2015  
 Instrument ID: CH731 DFTPP Injection Time: 09:16  
 Analysis Batch No.: 156605

| M/E | ION ABUNDANCE CRITERIA              | % RELATIVE ABUNDANCE |
|-----|-------------------------------------|----------------------|
| 51  | 30.0 - 60.0 % of mass 198           | 36.3                 |
| 68  | Less than 2.0 % of mass 69          | 0.3 (0.6)1           |
| 69  | Mass 69 relative abundance          | 41.0                 |
| 70  | Less than 2.0 % of mass 69          | 0.2 (0.5)1           |
| 127 | 40.0 - 60.0 % of mass 198           | 44.1                 |
| 197 | Less than 1.0 % of mass 198         | 0.0                  |
| 198 | Base Peak, 100 % relative abundance | 100.0                |
| 199 | 5.0- 9.0 % of mass 198              | 5.9                  |
| 275 | 10.0 - 30.0 % of mass 198           | 22.8                 |
| 365 | Greater than 1.0 % of mass 198      | 2.8                  |
| 441 | Present but less than mass 443      | 8.4 (68.0)3          |
| 442 | Greater than 40.0 % of mass 198     | 62.3                 |
| 443 | 17.0 - 23.0 % of mass 442           | 12.4 (19.8)2         |

1-Value is % mass 69                      2-Value is % mass 442                      3-Value is % mass 443

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

| CLIENT SAMPLE ID | LAB SAMPLE ID      | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|------------------|--------------------|-------------|---------------|---------------|
|                  | CCVIS 180-156605/3 | V1011003.D  | 10/11/2015    | 09:33         |
| HD-MW-87-0/1-0   | 180-48309-1        | V1011025.D  | 10/11/2015    | 19:44         |

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: CCVIS 180-156466/3 Date Analyzed: 10/09/2015 09:18  
 Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32 (mm)  
 Lab File ID (Standard): V1009003.D Heated Purge: (Y/N) N  
 Calibration ID: 25150

|                    | DCB              |        | NPT     |        | ANT     |        |      |
|--------------------|------------------|--------|---------|--------|---------|--------|------|
|                    | AREA #           | RT #   | AREA #  | RT #   | AREA #  | RT #   |      |
| 12/24 HOUR STD     | 197119           | 6.31   | 804831  | 7.54   | 505326  | 9.18   |      |
| UPPER LIMIT        | 394238           | 6.81   | 1609662 | 8.04   | 1010652 | 9.68   |      |
| LOWER LIMIT        | 98560            | 5.81   | 402416  | 7.04   | 252663  | 8.68   |      |
| LAB SAMPLE ID      | CLIENT SAMPLE ID |        |         |        |         |        |      |
| MB 180-156027/1-A  |                  | 182230 | 6.31    | 765778 | 7.54    | 506044 | 9.18 |
| LCS 180-156027/2-A |                  | 171890 | 6.31    | 731792 | 7.54    | 500334 | 9.18 |

DCB = 1,4-Dichlorobenzene-d4

NPT = Naphthalene-d8

ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area

RT Limit =  $\pm$  0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: CCVIS 180-156466/3 Date Analyzed: 10/09/2015 09:18  
 Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32 (mm)  
 Lab File ID (Standard): V1009003.D Heated Purge: (Y/N) N  
 Calibration ID: 25150

|                    |  | PHN              |       | CRY     |       | PRY     |       |
|--------------------|--|------------------|-------|---------|-------|---------|-------|
|                    |  | AREA #           | RT #  | AREA #  | RT #  | AREA #  | RT #  |
| 12/24 HOUR STD     |  | 951658           | 10.57 | 864459  | 14.18 | 713136  | 17.17 |
| UPPER LIMIT        |  | 1903316          | 11.07 | 1728918 | 14.68 | 1426272 | 17.67 |
| LOWER LIMIT        |  | 475829           | 10.07 | 432230  | 13.68 | 356568  | 16.67 |
| LAB SAMPLE ID      |  | CLIENT SAMPLE ID |       |         |       |         |       |
| MB 180-156027/1-A  |  | 955168           | 10.56 | 873334  | 14.18 | 675530  | 17.16 |
| LCS 180-156027/2-A |  | 961061           | 10.57 | 853355  | 14.18 | 704595  | 17.15 |

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12  
 PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area  
 RT Limit =  $\pm$  0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: CCVIS 180-156605/3 Date Analyzed: 10/11/2015 09:33  
 Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32 (mm)  
 Lab File ID (Standard): V1011003.D Heated Purge: (Y/N) N  
 Calibration ID: 25150

|                | DCB              |      | NPT     |      | ANT    |      |
|----------------|------------------|------|---------|------|--------|------|
|                | AREA #           | RT # | AREA #  | RT # | AREA # | RT # |
| 12/24 HOUR STD | 135067           | 6.30 | 531363  | 7.53 | 333175 | 9.16 |
| UPPER LIMIT    | 270134           | 6.80 | 1062726 | 8.03 | 666350 | 9.66 |
| LOWER LIMIT    | 67534            | 5.80 | 265682  | 7.03 | 166588 | 8.66 |
| LAB SAMPLE ID  | CLIENT SAMPLE ID |      |         |      |        |      |
| 180-48309-1    | HD-MW-87-0/1-0   |      | 130340  | 6.29 | 511594 | 7.50 |
|                |                  |      |         |      | 306260 | 9.14 |

DCB = 1,4-Dichlorobenzene-d4

NPT = Naphthalene-d8

ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area

RT Limit =  $\pm$  0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII  
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Sample No.: CCVIS 180-156605/3 Date Analyzed: 10/11/2015 09:33  
 Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32 (mm)  
 Lab File ID (Standard): V1011003.D Heated Purge: (Y/N) N  
 Calibration ID: 25150

|                | PHN              |       | CRY     |       | PRY     |       |
|----------------|------------------|-------|---------|-------|---------|-------|
|                | AREA #           | RT #  | AREA #  | RT #  | AREA #  | RT #  |
| 12/24 HOUR STD | 643030           | 10.54 | 744112  | 14.13 | 716576  | 17.10 |
| UPPER LIMIT    | 1286060          | 11.04 | 1488224 | 14.63 | 1433152 | 17.60 |
| LOWER LIMIT    | 321515           | 10.04 | 372056  | 13.63 | 358288  | 16.60 |
| LAB SAMPLE ID  | CLIENT SAMPLE ID |       |         |       |         |       |
| 180-48309-1    | HD-MW-87-0/1-0   |       | 535167  | 10.52 | 631344  | 14.09 |
|                |                  |       |         |       | 687574  | 17.05 |

PHN = Phenanthrene-d10  
 CRY = Chrysene-d12  
 PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area  
 RT Limit =  $\pm$  0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

|                                         |                                         |
|-----------------------------------------|-----------------------------------------|
| Lab Name: <u>TestAmerica Pittsburgh</u> | Job No.: <u>180-48309-1</u>             |
| SDG No.: _____                          |                                         |
| Client Sample ID: <u>HD-MW-87-0/1-0</u> | Lab Sample ID: <u>180-48309-1</u>       |
| Matrix: <u>Water</u>                    | Lab File ID: <u>V1011025.D</u>          |
| Analysis Method: <u>8270D LL</u>        | Date Collected: <u>09/30/2015 10:37</u> |
| Extract. Method: <u>3520C</u>           | Date Extracted: <u>10/06/2015 10:46</u> |
| Sample wt/vol: <u>270 (mL)</u>          | Date Analyzed: <u>10/11/2015 19:44</u>  |
| Con. Extract Vol.: <u>0.25 (mL)</u>     | Dilution Factor: <u>1</u>               |
| Injection Volume: <u>2 (uL)</u>         | Level: (low/med) <u>Low</u>             |
| % Moisture: _____                       | GPC Cleanup: (Y/N) <u>N</u>             |
| Analysis Batch No.: <u>156605</u>       | Units: <u>ug/L</u>                      |

| CAS NO.  | COMPOUND NAME | RESULT | Q | RL  | MDL   |
|----------|---------------|--------|---|-----|-------|
| 123-91-1 | 1,4-Dioxane   | 9.7    |   | 1.9 | 0.049 |

| CAS NO.   | SURROGATE                   | %REC | Q | LIMITS |
|-----------|-----------------------------|------|---|--------|
| 321-60-8  | 2-Fluorobiphenyl            | 59   |   | 28-109 |
| 367-12-4  | 2-Fluorophenol (Surr)       | 50   |   | 20-105 |
| 118-79-6  | 2,4,6-Tribromophenol (Surr) | 54   |   | 30-118 |
| 4165-60-0 | Nitrobenzene-d5 (Surr)      | 60   |   | 27-114 |
| 4165-62-2 | Phenol-d5 (Surr)            | 56   |   | 25-105 |
| 1718-51-0 | Terphenyl-d14 (Surr)        | 76   |   | 20-118 |



TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20151011-8939.b\V1011025.D  
 Lims ID: 180-48309-A-1-A Lab Sample ID: 180-48309-1  
 Client ID: HD-MW-87-0/1-0  
 Sample Type: Client  
 Inject. Date: 11-Oct-2015 19:44:30 ALS Bottle#: 24 Worklist Smp#: 25  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Sample Info: 180-0008939-025  
 Operator ID: 003200 Instrument ID: CH731  
 Method: \\ChromNA\Pittsburgh\ChromData\CH731\20151011-8939.b\BNA\_CH731.m  
 Limit Group: BNA 8270D ICAL  
 Last Update: 12-Oct-2015 06:37:50 Calib Date: 01-Sep-2015 07:35:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH731\20150901-8368.b\V0901N11.D  
 Column 1 : Rxi-5SilMS ( 0.32 mm) Det: MS SCAN  
 Process Host: XAWRK051

First Level Reviewer: piccolinov

Date: 12-Oct-2015 06:35:54

| Compound                   | Sig | RT<br>(min.) | Adj RT<br>(min.) | Dlt RT<br>(min.) | Q   | Response | OnCol Amt<br>ng | Flags |
|----------------------------|-----|--------------|------------------|------------------|-----|----------|-----------------|-------|
| * 1 1,4-Dichlorobenzene-d4 | 152 | 6.286        | 6.301            | -0.015           | 94  | 130340   | 8.00            |       |
| * 2 Naphthalene-d8         | 136 | 7.504        | 7.525            | -0.021           | 100 | 511594   | 8.00            |       |
| * 3 Acenaphthene-d10       | 164 | 9.138        | 9.159            | -0.021           | 91  | 306260   | 8.00            |       |
| * 4 Phenanthrene-d10       | 188 | 10.517       | 10.543           | -0.026           | 97  | 535167   | 8.00            |       |
| * 5 Chrysene-d12           | 240 | 14.085       | 14.128           | -0.043           | 96  | 631344   | 8.00            |       |
| * 6 Perylene-d12           | 264 | 17.045       | 17.103           | -0.058           | 99  | 687574   | 8.00            |       |
| \$ 7 2-Fluorophenol        | 112 | 4.918        | 4.912            | 0.006            | 93  | 387359   | 20.2            |       |
| \$ 8 Phenol-d5             | 99  | 5.933        | 5.938            | -0.005           | 94  | 558117   | 22.3            |       |
| \$ 9 Nitrobenzene-d5       | 82  | 6.820        | 6.830            | -0.010           | 91  | 592870   | 23.8            |       |
| \$ 10 2-Fluorobiphenyl     | 172 | 8.497        | 8.513            | -0.016           | 100 | 1252011  | 23.4            |       |
| \$ 11 2,4,6-Tribromophenol | 330 | 9.865        | 9.886            | -0.021           | 92  | 159538   | 21.5            |       |
| \$ 12 Terphenyl-d14        | 244 | 12.312       | 12.343           | -0.031           | 99  | 1823136  | 30.4            |       |
| 13 1,4-Dioxane             | 88  | 1.547        | 1.526            | 0.021            | 92  | 139184   | 21.0            |       |

**Reagents:**

SVTAPITINTRNi\_00009

Amount Added: 1.00

Units: uL

Run Reagent

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20151011-8939.b\V1011025.D

Injection Date: 11-Oct-2015 19:44:30

Instrument ID: CH731

Operator ID: 003200

Lims ID: 180-48309-A-1-A

Lab Sample ID: 180-48309-1

Worklist Smp#: 25

Client ID: HD-MW-87-0/1-0

Injection Vol: 2.0 ul

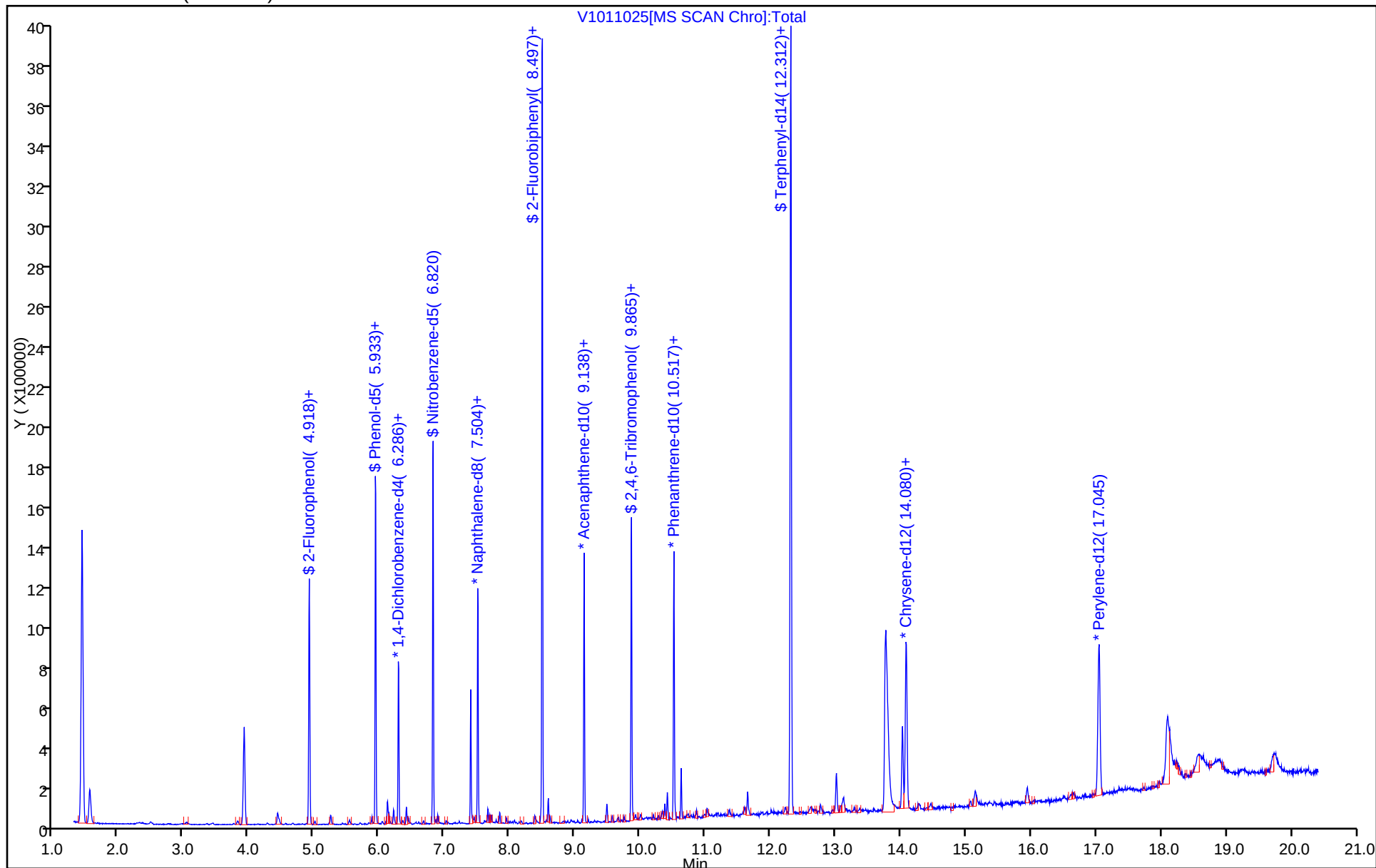
Dil. Factor: 1.0000

ALS Bottle#: 24

Method: BNA\_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS ( 0.32 mm)



## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20151011-8939.b\1011025.D

Injection Date: 11-Oct-2015 19:44:30

Instrument ID: CH731

Lims ID: 180-48309-A-1-A

Lab Sample ID: 180-48309-1

Client ID: HD-MW-87-0/1-0

Operator ID: 003200

ALS Bottle#: 24

Worklist Smp#: 25

Injection Vol: 2.0 ul

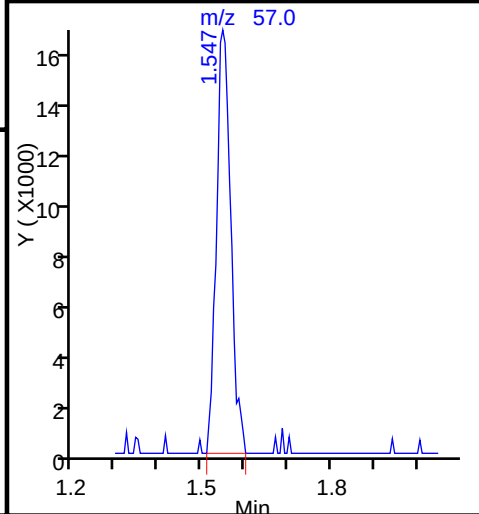
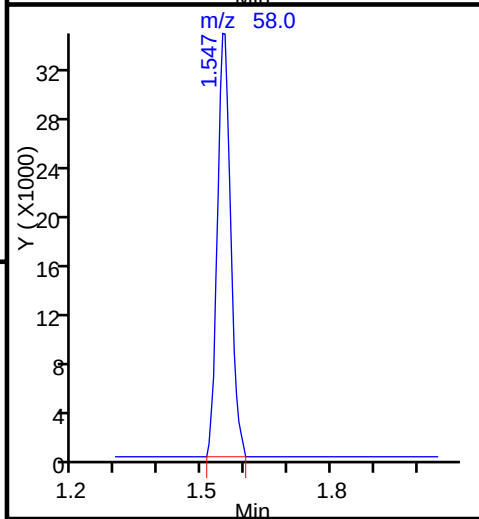
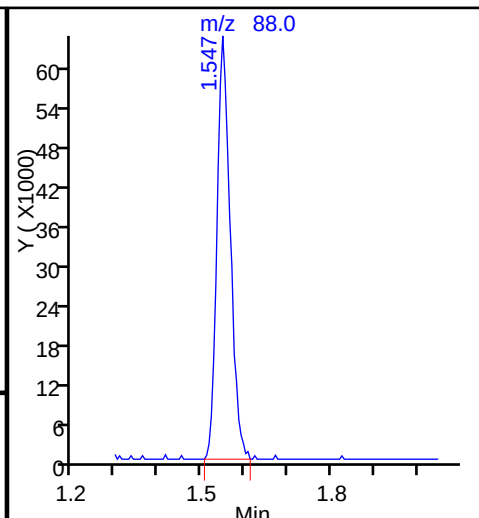
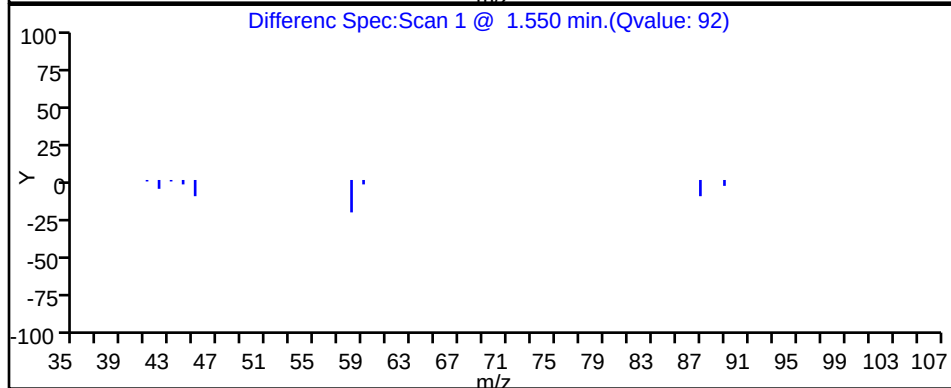
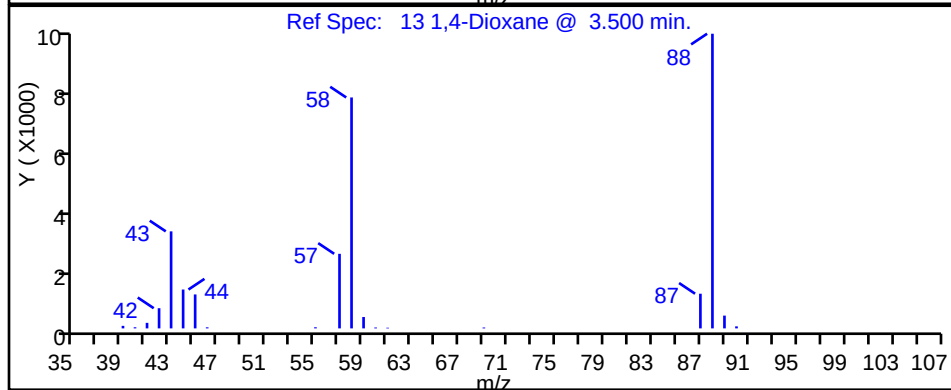
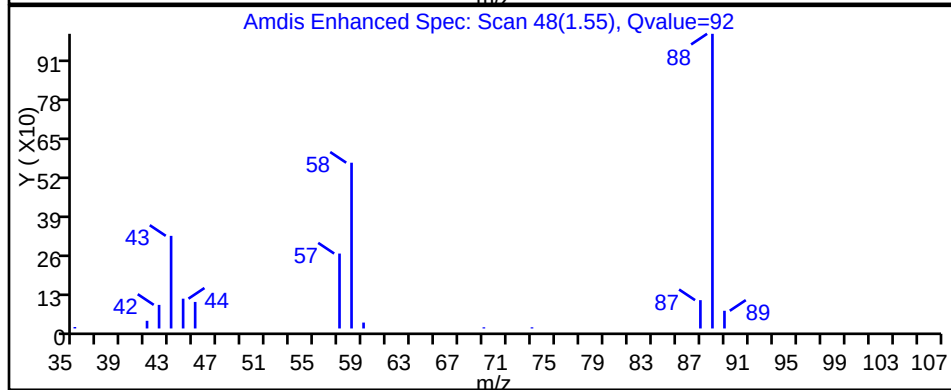
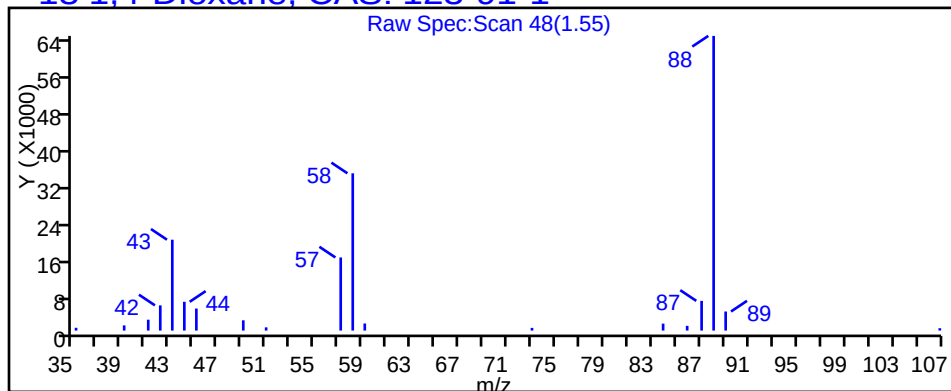
Dil. Factor: 1.0000

Method: BNA\_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS (0.32 mm)

Detector: MS SCAN

**13 1,4-Dioxane, CAS: 123-91-1**

FORM VI  
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 152241

SDG No.: \_\_\_\_\_

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/31/2015 13:40 Calibration End Date: 08/31/2015 16:55 Calibration ID: 25150

Calibration Files:

|         |                   |              |
|---------|-------------------|--------------|
| LEVEL:  | LAB SAMPLE ID:    | LAB FILE ID: |
| Level 1 | IC 180-152241/3   | V0901003.D   |
| Level 2 | IC 180-152241/4   | V0901004.D   |
| Level 3 | IC 180-152241/5   | V0901005.D   |
| Level 4 | ICIS 180-152241/6 | V0901006.D   |
| Level 5 | IC 180-152241/7   | V0901007.D   |
| Level 6 | IC 180-152241/8   | V0901008.D   |
| Level 7 | IC 180-152241/9   | V0901009.D   |
| Level 8 | IC 180-152241/10  | V0901010.D   |

| ANALYTE                 | RRF              |                  |                  |        |        | CURVE TYPE | COEFFICIENT |        |    | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|-------------------------|------------------|------------------|------------------|--------|--------|------------|-------------|--------|----|---|---------|------|---|----------|------------|---|----------------|
|                         | LVL 1            | LVL 2            | LVL 3            | LVL 4  | LVL 5  |            | B           | M1     | M2 |   |         |      |   |          |            |   |                |
|                         | LVL 6            | LVL 7            | LVL 8            |        |        |            |             |        |    |   |         |      |   |          |            |   |                |
| 1,4-Dioxane             | 0.4441<br>0.3874 | 0.4103<br>0.3736 | 0.4322<br>0.3619 | 0.4341 | 0.4042 | Ave        |             | 0.4059 |    |   | 0.0100  | 7.4  |   | 20.0     |            |   |                |
| N-Nitrosodimethylamine  | 0.4416<br>0.5304 | 0.5038<br>0.5080 | 0.5354<br>0.4938 | 0.5555 | 0.5565 | Ave        |             | 0.5156 |    |   | 0.0100  | 7.3  |   | 20.0     |            |   |                |
| Pyridine                | 0.7823<br>0.9872 | 0.9768<br>0.9522 | 1.0624<br>0.9098 | 1.0393 | 1.0097 | Ave        |             | 0.9650 |    |   | 0.0100  | 9.1  |   | 20.0     |            |   |                |
| Methyl methanesulfonate | 0.6579<br>0.6602 | 0.6713<br>0.6349 | 0.7053<br>0.6125 | 0.7390 | 0.6901 | Ave        |             | 0.6714 |    |   | 0.0100  | 6.0  |   | 20.0     |            |   |                |
| Benzaldehyde            | 0.8726<br>0.7638 | 0.8392<br>0.7323 | 0.8430<br>0.7015 | 0.8384 | 0.7940 | Ave        |             | 0.7981 |    |   | 0.0100  | 7.6  |   | 20.0     |            |   |                |
| Phenol                  | 1.7514<br>1.6077 | 1.7539<br>1.5404 | 1.8219<br>1.4618 | 1.8017 | 1.6952 | Ave        |             | 1.6792 |    |   | 0.8000  | 7.7  |   | 20.0     |            |   |                |
| Aniline                 | 1.8895<br>1.8491 | 1.9457<br>1.7710 | 1.9934<br>1.6943 | 2.0563 | 1.9512 | Ave        |             | 1.8938 |    |   | 0.0100  | 6.3  |   | 20.0     |            |   |                |
| Bis(2-chloroethyl)ether | 1.1720<br>1.1364 | 1.1751<br>1.0883 | 1.2743<br>1.0419 | 1.2341 | 1.1685 | Ave        |             | 1.1613 |    |   | 0.7000  | 6.4  |   | 20.0     |            |   |                |
| 2-Chlorophenol          | 1.4473<br>1.4131 | 1.3955<br>1.3360 | 1.5303<br>1.3059 | 1.5104 | 1.4395 | Ave        |             | 1.4222 |    |   | 0.8000  | 5.5  |   | 20.0     |            |   |                |
| n-Decane                | 1.4081<br>1.3056 | 1.3570<br>1.2489 | 1.5049<br>1.1893 | 1.4477 | 1.3992 | Ave        |             | 1.3576 |    |   |         | 7.7  |   | 20.0     |            |   |                |
| 1,3-Dichlorobenzene     | 1.7278<br>1.6024 | 1.5915<br>1.5632 | 1.7184<br>1.5147 | 1.7074 | 1.6413 | Ave        |             | 1.6333 |    |   | 0.0100  | 4.8  |   | 20.0     |            |   |                |
| 1,4-Dichlorobenzene     | 1.6666<br>1.6429 | 1.7104<br>1.6057 | 1.7639<br>1.5625 | 1.7729 | 1.6609 | Ave        |             | 1.6732 |    |   | 0.0100  | 4.4  |   | 20.0     |            |   |                |
| Benzyl alcohol          | 0.8304<br>0.8421 | 0.8396<br>0.8171 | 0.9252<br>0.7863 | 0.9081 | 0.8672 | Ave        |             | 0.8520 |    |   | 0.0100  | 5.4  |   | 20.0     |            |   |                |
| 1,2-Dichlorobenzene     | 1.6286<br>1.5823 | 1.5840<br>1.5087 | 1.7134<br>1.4839 | 1.6984 | 1.6035 | Ave        |             | 1.6004 |    |   | 0.0100  | 5.1  |   | 20.0     |            |   |                |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 152241  
SDG No.: \_\_\_\_\_  
Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32 (mm) Heated Purge: (Y/N) N  
Calibration Start Date: 08/31/2015 13:40 Calibration End Date: 08/31/2015 16:55 Calibration ID: 25150

| ANALYTE                      | RRF              |                  |                  |        |        | CURVE<br>TYPE | COEFFICIENT |        |    | # | MIN RRF | %RSD | # | MAX<br>%RSD | R^2<br>OR COD | # | MIN R^2<br>OR COD |
|------------------------------|------------------|------------------|------------------|--------|--------|---------------|-------------|--------|----|---|---------|------|---|-------------|---------------|---|-------------------|
|                              | LVL 1<br>LVL 6   | LVL 2<br>LVL 7   | LVL 3<br>LVL 8   | LVL 4  | LVL 5  |               | B           | M1     | M2 |   |         |      |   |             |               |   |                   |
| 2-Methylphenol               | 1.2179<br>1.1972 | 1.3115<br>1.1425 | 1.3595<br>1.0895 | 1.3263 | 1.2529 | Ave           |             | 1.2372 |    |   | 0.7000  | 7.6  |   | 20.0        |               |   |                   |
| Indene                       | 2.5089<br>2.3365 | 2.3830<br>2.2463 | 2.5496<br>2.1711 | 2.5450 | 2.4289 | Ave           |             | 2.3962 |    |   | 0.0100  | 5.8  |   | 20.0        |               |   |                   |
| 2,2'-oxybis[1-chloropropane] | 1.8377<br>1.5879 | 1.8001<br>1.5289 | 1.8343<br>1.4497 | 1.8567 | 1.7179 | Ave           |             | 1.7016 |    |   | 0.0100  | 9.3  |   | 20.0        |               |   |                   |
| N-Nitrosopyrrolidine         | 0.6535<br>0.5501 | 0.5406<br>0.5356 | 0.5590<br>0.5246 | 0.5890 | 0.5657 | Ave           |             | 0.5648 |    |   | 0.0100  | 7.3  |   | 20.0        |               |   |                   |
| Acetophenone                 | 2.0757<br>1.7446 | 1.9699<br>1.6761 | 2.0876<br>1.5866 | 2.0251 | 1.8603 | Ave           |             | 1.8782 |    |   | 0.0100  | 10.2 |   | 20.0        |               |   |                   |
| N-Nitrosodi-n-propylamine    | 0.9562<br>0.8487 | 0.9832<br>0.8020 | 1.0103<br>0.7534 | 0.9879 | 0.9281 | Ave           |             | 0.9087 |    |   | 0.5000  | 10.5 |   | 20.0        |               |   |                   |
| Methylphenol, 3 & 4          | 1.4675<br>1.2377 | 1.3160<br>1.1683 | 1.3940<br>1.1242 | 1.4135 | 1.3087 | Ave           |             | 1.3037 |    |   | 0.6000  | 9.3  |   | 20.0        |               |   |                   |
| Hexachloroethane             | 0.7578<br>0.7167 | 0.7372<br>0.6940 | 0.7482<br>0.6768 | 0.7584 | 0.7450 | Ave           |             | 0.7293 |    |   | 0.3000  | 4.2  |   | 20.0        |               |   |                   |
| Nitrobenzene                 | 0.3854<br>0.3623 | 0.4008<br>0.3499 | 0.4127<br>0.3409 | 0.3986 | 0.3923 | Ave           |             | 0.3804 |    |   | 0.2000  | 6.9  |   | 20.0        |               |   |                   |
| Isophorone                   | 0.6276<br>0.5956 | 0.6530<br>0.5835 | 0.6582<br>0.5712 | 0.6464 | 0.6568 | Ave           |             | 0.6240 |    |   | 0.4000  | 5.7  |   | 20.0        |               |   |                   |
| 2-Nitrophenol                | 0.1589<br>0.1959 | 0.2026<br>0.1915 | 0.1923<br>0.1890 | 0.2008 | 0.2025 | Ave           |             | 0.1917 |    |   | 0.1000  | 7.4  |   | 20.0        |               |   |                   |
| 2,4-Dimethylphenol           | 0.3838<br>0.3512 | 0.3833<br>0.3418 | 0.3982<br>0.3325 | 0.3944 | 0.3877 | Ave           |             | 0.3716 |    |   | 0.2000  | 6.9  |   | 20.0        |               |   |                   |
| Benzoic acid                 | ++++<br>0.1752   | ++++<br>0.1950   | 0.0736<br>0.1783 | 0.1047 | 0.1585 | Lin1          | -0.579      | 0.1914 |    |   | 0.0100  |      |   |             | 0.9950        |   | 0.9900            |
| Bis(2-chloroethoxy)methane   | 0.4014<br>0.3592 | 0.3823<br>0.3494 | 0.3900<br>0.3436 | 0.3928 | 0.3931 | Ave           |             | 0.3765 |    |   | 0.3000  | 5.9  |   | 20.0        |               |   |                   |
| 2,4-Dichlorophenol           | 0.2955<br>0.3112 | 0.3229<br>0.3099 | 0.3366<br>0.3072 | 0.3310 | 0.3336 | Ave           |             | 0.3185 |    |   | 0.2000  | 4.6  |   | 20.0        |               |   |                   |
| 1,2,4-Trichlorobenzene       | 0.4065<br>0.3704 | 0.3860<br>0.3639 | 0.4065<br>0.3588 | 0.3908 | 0.3873 | Ave           |             | 0.3838 |    |   | 0.0100  | 4.7  |   | 20.0        |               |   |                   |
| Naphthalene                  | 1.1634<br>1.0343 | 1.1272<br>1.0183 | 1.1301<br>1.0010 | 1.1248 | 1.1161 | Ave           |             | 1.0894 |    |   | 0.7000  | 5.6  |   | 20.0        |               |   |                   |
| 4-Chloroaniline              | 0.4399<br>0.4316 | 0.4512<br>0.4348 | 0.4667<br>0.4274 | 0.4762 | 0.4682 | Ave           |             | 0.4495 |    |   | 0.0100  | 4.2  |   | 20.0        |               |   |                   |
| 2,6-Dichlorophenol           | 0.3103<br>0.3101 | 0.3312<br>0.3041 | 0.3311<br>0.3005 | 0.3366 | 0.3301 | Ave           |             | 0.3193 |    |   | 0.0100  | 4.5  |   | 20.0        |               |   |                   |
| Hexachlorobutadiene          | 0.2350<br>0.2327 | 0.2479<br>0.2381 | 0.2594<br>0.2357 | 0.2559 | 0.2580 | Ave           |             | 0.2453 |    |   | 0.0100  | 4.6  |   | 20.0        |               |   |                   |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 152241  
SDG No.: \_\_\_\_\_  
Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32 (mm) Heated Purge: (Y/N) N  
Calibration Start Date: 08/31/2015 13:40 Calibration End Date: 08/31/2015 16:55 Calibration ID: 25150

| ANALYTE                    | RRF              |                  |                  |        |        | CURVE<br>TYPE | COEFFICIENT |        |    | # | MIN RRF | %RSD | # | MAX<br>%RSD | R^2<br>OR COD | # | MIN R^2<br>OR COD |
|----------------------------|------------------|------------------|------------------|--------|--------|---------------|-------------|--------|----|---|---------|------|---|-------------|---------------|---|-------------------|
|                            | LVL 1<br>LVL 6   | LVL 2<br>LVL 7   | LVL 3<br>LVL 8   | LVL 4  | LVL 5  |               | B           | M1     | M2 |   |         |      |   |             |               |   |                   |
| Caprolactam                | 0.1034<br>0.0914 | 0.0914<br>0.0988 | 0.0899<br>0.0987 | 0.0951 | 0.0981 | Ave           |             | 0.0958 |    |   | 0.0100  | 4.9  |   | 20.0        |               |   |                   |
| 4-Chloro-3-methylphenol    | 0.3029<br>0.3022 | 0.3278<br>0.3075 | 0.3276<br>0.3015 | 0.3294 | 0.3316 | Ave           |             | 0.3163 |    |   | 0.2000  | 4.4  |   | 20.0        |               |   |                   |
| 2-Methylnaphthalene        | 0.7982<br>0.7423 | 0.8127<br>0.7328 | 0.8169<br>0.7191 | 0.7932 | 0.7864 | Ave           |             | 0.7752 |    |   | 0.4000  | 4.9  |   | 20.0        |               |   |                   |
| 1-Methylnaphthalene        | 0.7129<br>0.6461 | 0.7093<br>0.6444 | 0.7284<br>0.6345 | 0.6860 | 0.6856 | Ave           |             | 0.6809 |    |   | 0.0100  | 5.2  |   | 20.0        |               |   |                   |
| Hexachlorocyclopentadiene  | 0.3465<br>0.4544 | 0.4122<br>0.4460 | 0.4334<br>0.4387 | 0.4560 | 0.4568 | Ave           |             | 0.4305 |    |   | 0.0500  | 8.6  |   | 20.0        |               |   |                   |
| 1,2,4,5-Tetrachlorobenzene | 0.6706<br>0.6138 | 0.6663<br>0.5919 | 0.6720<br>0.5747 | 0.6604 | 0.6370 | Ave           |             | 0.6358 |    |   | 0.0100  | 6.0  |   | 20.0        |               |   |                   |
| 2,4,6-Trichlorophenol      | 0.3754<br>0.3958 | 0.3861<br>0.3865 | 0.4149<br>0.3906 | 0.4122 | 0.4033 | Ave           |             | 0.3956 |    |   | 0.2000  | 3.5  |   | 20.0        |               |   |                   |
| 2,4,5-Trichlorophenol      | 0.3667<br>0.4154 | 0.4088<br>0.4133 | 0.4266<br>0.4099 | 0.4342 | 0.4444 | Ave           |             | 0.4149 |    |   | 0.2000  | 5.6  |   | 20.0        |               |   |                   |
| 1,1'-Biphenyl              | 1.6038<br>1.4963 | 1.5568<br>1.4399 | 1.6378<br>1.4274 | 1.6230 | 1.5703 | Ave           |             | 1.5444 |    |   | 0.0100  | 5.3  |   | 20.0        |               |   |                   |
| 2-Chloronaphthalene        | 1.2873<br>1.1611 | 1.2521<br>1.1302 | 1.3017<br>1.0964 | 1.2551 | 1.2202 | Ave           |             | 1.2130 |    |   | 0.8000  | 6.2  |   | 20.0        |               |   |                   |
| 2-Nitroaniline             | 0.3021<br>0.3455 | 0.3369<br>0.3402 | 0.3591<br>0.3313 | 0.3697 | 0.3586 | Ave           |             | 0.3429 |    |   | 0.0100  | 6.1  |   | 20.0        |               |   |                   |
| Dimethyl phthalate         | 1.3607<br>1.2496 | 1.2693<br>1.2446 | 1.3540<br>1.2342 | 1.3226 | 1.3141 | Ave           |             | 1.2937 |    |   | 0.0100  | 3.9  |   | 20.0        |               |   |                   |
| 1,3-Dinitrobenzene         | ++++<br>0.2121   | 0.1703<br>0.2184 | 0.1978<br>0.2177 | 0.2068 | 0.2178 | Ave           |             | 0.2058 |    |   | 0.0100  | 8.4  |   | 20.0        |               |   |                   |
| 2,6-Dinitrotoluene         | 0.2544<br>0.2962 | 0.2785<br>0.2981 | 0.3090<br>0.2995 | 0.3062 | 0.3088 | Ave           |             | 0.2938 |    |   | 0.2000  | 6.4  |   | 20.0        |               |   |                   |
| Acenaphthylene             | 1.9221<br>1.8056 | 1.9107<br>1.7601 | 1.9154<br>1.7332 | 1.9435 | 1.9115 | Ave           |             | 1.8628 |    |   | 0.9000  | 4.4  |   | 20.0        |               |   |                   |
| 3-Nitroaniline             | 0.2596<br>0.3148 | 0.2987<br>0.3253 | 0.3262<br>0.3213 | 0.3332 | 0.3376 | Ave           |             | 0.3146 |    |   | 0.0100  | 8.0  |   | 20.0        |               |   |                   |
| Acenaphthene               | 1.2321<br>1.1141 | 1.2206<br>1.0718 | 1.2787<br>1.0459 | 1.2611 | 1.2157 | Ave           |             | 1.1800 |    |   | 0.9000  | 7.6  |   | 20.0        |               |   |                   |
| 2,4-Dinitrophenol          | ++++<br>0.2011   | 0.0914<br>0.2174 | 0.1283<br>0.2225 | 0.1680 | 0.1883 | Lin2          | -0.515      | 0.2090 |    |   | 0.0100  |      |   |             | 0.9940        |   | 0.9900            |
| 4-Nitrophenol              | 0.1724<br>0.2147 | 0.1987<br>0.2218 | 0.2090<br>0.2194 | 0.2198 | 0.2264 | Ave           |             | 0.2103 |    |   | 0.0100  | 8.3  |   | 20.0        |               |   |                   |
| 2,4-Dinitrotoluene         | 0.3055<br>0.4096 | 0.3763<br>0.4160 | 0.3916<br>0.4200 | 0.4145 | 0.4235 | Ave           |             | 0.3946 |    |   | 0.2000  | 10.0 |   | 20.0        |               |   |                   |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 152241  
SDG No.: \_\_\_\_\_  
Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32 (mm) Heated Purge: (Y/N) N  
Calibration Start Date: 08/31/2015 13:40 Calibration End Date: 08/31/2015 16:55 Calibration ID: 25150

| ANALYTE                              | RRF              |                  |                  |        |        | CURVE<br>TYPE | COEFFICIENT |        |    | # | MIN RRF | %RSD | # | MAX<br>%RSD | R^2<br>OR COD | # | MIN R^2<br>OR COD |
|--------------------------------------|------------------|------------------|------------------|--------|--------|---------------|-------------|--------|----|---|---------|------|---|-------------|---------------|---|-------------------|
|                                      | LVL 1<br>LVL 6   | LVL 2<br>LVL 7   | LVL 3<br>LVL 8   | LVL 4  | LVL 5  |               | B           | M1     | M2 |   |         |      |   |             |               |   |                   |
| Dibenzofuran                         | 1.7928<br>1.6843 | 1.8049<br>1.6681 | 1.8515<br>1.6273 | 1.8266 | 1.8030 | Ave           |             | 1.7573 |    |   | 0.8000  | 4.8  |   | 20.0        |               |   |                   |
| 2,3,5,6-Tetrachlorophenol            | 0.2947<br>0.3986 | 0.3569<br>0.4044 | 0.3773<br>0.4115 | 0.3838 | 0.4065 | Ave           |             | 0.3792 |    |   | 0.0100  | 10.2 |   | 20.0        |               |   |                   |
| 2,3,4,6-Tetrachlorophenol            | 0.3388<br>0.3973 | 0.3667<br>0.4036 | 0.3850<br>0.4000 | 0.4018 | 0.4111 | Ave           |             | 0.3880 |    |   | 0.0100  | 6.2  |   | 20.0        |               |   |                   |
| 2-Naphthylamine                      | 1.1676<br>1.1381 | 1.2415<br>1.1505 | 1.2361<br>1.1228 | 1.2669 | 1.2522 | Ave           |             | 1.1970 |    |   | 0.0100  | 4.8  |   | 20.0        |               |   |                   |
| Diethyl phthalate                    | 1.5099<br>1.2723 | 1.3987<br>1.2540 | 1.3938<br>1.2345 | 1.3922 | 1.3765 | Ave           |             | 1.3540 |    |   | 0.0100  | 6.9  |   | 20.0        |               |   |                   |
| Hexadecane                           | 0.5394<br>0.4798 | 0.5762<br>0.4585 | 0.5773<br>0.4309 | 0.5738 | 0.5606 | Ave           |             | 0.5246 |    |   |         | 11.3 |   | 20.0        |               |   |                   |
| 4-Chlorophenyl phenyl ether          | 0.7554<br>0.7149 | 0.7027<br>0.7070 | 0.7303<br>0.7034 | 0.7533 | 0.7428 | Ave           |             | 0.7262 |    |   | 0.4000  | 3.1  |   | 20.0        |               |   |                   |
| 4-Nitroaniline                       | 0.2838<br>0.3335 | 0.3260<br>0.3393 | 0.3359<br>0.3408 | 0.3489 | 0.3530 | Ave           |             | 0.3326 |    |   | 0.0100  | 6.5  |   | 20.0        |               |   |                   |
| Fluorene                             | 1.4219<br>1.3705 | 1.4989<br>1.3566 | 1.5164<br>1.3410 | 1.5171 | 1.4935 | Ave           |             | 1.4395 |    |   | 0.9000  | 5.3  |   | 20.0        |               |   |                   |
| 4,6-Dinitro-2-methylphenol           | 0.1054<br>0.1514 | 0.1244<br>0.1531 | 0.1162<br>0.1544 | 0.1382 | 0.1480 | Ave           |             | 0.1364 |    |   | 0.0100  | 13.8 |   | 20.0        |               |   |                   |
| N-Nitrosodiphenylamine               | 0.5870<br>0.5344 | 0.5842<br>0.5108 | 0.5791<br>0.5023 | 0.5781 | 0.5664 | Ave           |             | 0.5553 |    |   | 0.0100  | 6.2  |   | 20.0        |               |   |                   |
| 1,2-Diphenylhydrazine(as Azobenzene) | 0.7624<br>0.7195 | 0.8134<br>0.6675 | 0.8043<br>0.6433 | 0.8113 | 0.7819 | Ave           |             | 0.7505 |    |   | 0.0100  | 8.9  |   | 20.0        |               |   |                   |
| 4-Bromophenyl phenyl ether           | 0.1964<br>0.2305 | 0.2294<br>0.2206 | 0.2319<br>0.2178 | 0.2365 | 0.2357 | Ave           |             | 0.2248 |    |   | 0.1000  | 5.9  |   | 20.0        |               |   |                   |
| Hexachlorobenzene                    | 0.2391<br>0.2495 | 0.2325<br>0.2442 | 0.2465<br>0.2434 | 0.2472 | 0.2556 | Ave           |             | 0.2447 |    |   | 0.1000  | 2.8  |   | 20.0        |               |   |                   |
| Atrazine                             | 0.1822<br>0.2249 | 0.2068<br>0.2185 | 0.2267<br>0.2150 | 0.2353 | 0.2351 | Ave           |             | 0.2181 |    |   | 0.0100  | 8.0  |   | 20.0        |               |   |                   |
| Pentachlorophenol                    | 0.2103<br>0.1664 | 0.1771<br>0.1665 | 0.1387<br>0.1661 | 0.1516 | 0.1640 | Ave           |             | 0.1676 |    |   | 0.0500  | 12.4 |   | 20.0        |               |   |                   |
| n-Octadecane                         | 2.3521<br>2.1757 | 2.4613<br>2.0608 | 2.4940<br>1.8822 | 2.5316 | 2.4392 | Ave           |             | 2.2996 |    |   |         | 10.2 |   | 20.0        |               |   |                   |
| Phenanthrene                         | 1.2891<br>1.1546 | 1.2878<br>1.1187 | 1.2856<br>1.1036 | 1.2539 | 1.2534 | Ave           |             | 1.2183 |    |   | 0.7000  | 6.5  |   | 20.0        |               |   |                   |
| Anthracene                           | 1.2301<br>1.1759 | 1.2487<br>1.1358 | 1.2775<br>1.1248 | 1.2766 | 1.2552 | Ave           |             | 1.2156 |    |   | 0.7000  | 5.1  |   | 20.0        |               |   |                   |
| Carbazole                            | 1.0530<br>1.0541 | 1.0771<br>1.0190 | 1.1275<br>1.0014 | 1.1174 | 1.1110 | Ave           |             | 1.0701 |    |   | 0.0100  | 4.3  |   | 20.0        |               |   |                   |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 152241  
SDG No.: \_\_\_\_\_  
Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32 (mm) Heated Purge: (Y/N) N  
Calibration Start Date: 08/31/2015 13:40 Calibration End Date: 08/31/2015 16:55 Calibration ID: 25150

| ANALYTE                        | RRF              |                  |                  |        |        | CURVE<br>TYPE | COEFFICIENT |        |    | # | MIN RRF | %RSD | # | MAX<br>%RSD | R^2<br>OR COD | # | MIN R^2<br>OR COD |
|--------------------------------|------------------|------------------|------------------|--------|--------|---------------|-------------|--------|----|---|---------|------|---|-------------|---------------|---|-------------------|
|                                | LVL 1<br>LVL 6   | LVL 2<br>LVL 7   | LVL 3<br>LVL 8   | LVL 4  | LVL 5  |               | B           | M1     | M2 |   |         |      |   |             |               |   |                   |
| Di-n-butyl phthalate           | 1.1278<br>1.2358 | 1.2054<br>1.2132 | 1.2628<br>1.1940 | 1.2971 | 1.3049 | Ave           |             | 1.2301 |    |   | 0.0100  | 4.7  |   | 20.0        |               |   |                   |
| Fluoranthene                   | 1.2846<br>1.3087 | 1.2354<br>1.2858 | 1.3319<br>1.2675 | 1.3499 | 1.3415 | Ave           |             | 1.3007 |    |   | 0.6000  | 3.0  |   | 20.0        |               |   |                   |
| Benzidine                      | 0.4370<br>0.5402 | 0.4253<br>0.5568 | 0.4608<br>0.5462 | 0.5353 | 0.5425 | Ave           |             | 0.5055 |    |   | 0.0100  | 10.8 |   | 20.0        |               |   |                   |
| Pyrene                         | 1.2464<br>1.1686 | 1.2921<br>1.1330 | 1.3084<br>1.0869 | 1.3295 | 1.2929 | Ave           |             | 1.2322 |    |   | 0.6000  | 7.4  |   | 20.0        |               |   |                   |
| Butyl benzyl phthalate         | 0.4773<br>0.5019 | 0.4757<br>0.4860 | 0.4985<br>0.4664 | 0.5293 | 0.5298 | Ave           |             | 0.4956 |    |   | 0.0100  | 4.8  |   | 20.0        |               |   |                   |
| 3,3'-Dichlorobenzidine         | 0.4146<br>0.4592 | 0.4126<br>0.4499 | 0.4142<br>0.4425 | 0.4277 | 0.4656 | Ave           |             | 0.4358 |    |   | 0.0100  | 4.9  |   | 20.0        |               |   |                   |
| Bis(2-ethylhexyl) phthalate    | 0.6159<br>0.7086 | 0.6648<br>0.6777 | 0.7032<br>0.6456 | 0.7363 | 0.7405 | Ave           |             | 0.6866 |    |   | 0.0100  | 6.4  |   | 20.0        |               |   |                   |
| Benzo[a]anthracene             | 1.1868<br>1.1339 | 1.1898<br>1.1161 | 1.2099<br>1.0904 | 1.2140 | 1.1955 | Ave           |             | 1.1671 |    |   | 0.8000  | 4.0  |   | 20.0        |               |   |                   |
| Chrysene                       | 1.0944<br>1.0853 | 1.1004<br>1.0526 | 1.1394<br>1.0249 | 1.1377 | 1.1082 | Ave           |             | 1.0929 |    |   | 0.7000  | 3.6  |   | 20.0        |               |   |                   |
| Di-n-octyl phthalate           | 1.5986<br>1.2457 | 1.3781<br>1.2059 | 1.1720<br>1.1722 | 1.2657 | 1.2914 | Ave           |             | 1.2912 |    |   | 0.0100  | 11.0 |   | 20.0        |               |   |                   |
| 7,12-Dimethylbenz(a)anthracene | 0.4894<br>0.5495 | 0.5316<br>0.5322 | 0.5396<br>0.5300 | 0.5719 | 0.5650 | Ave           |             | 0.5386 |    |   | 0.0100  | 4.7  |   | 20.0        |               |   |                   |
| Benzo[b]fluoranthene           | 1.1982<br>1.2459 | 1.2244<br>1.1722 | 1.2837<br>1.2129 | 1.2956 | 1.2813 | Ave           |             | 1.2393 |    |   | 0.7000  | 3.6  |   | 20.0        |               |   |                   |
| Benzo[k]fluoranthene           | 1.2019<br>1.2251 | 1.2294<br>1.1922 | 1.3048<br>1.1298 | 1.3208 | 1.3032 | Ave           |             | 1.2384 |    |   | 0.7000  | 5.4  |   | 20.0        |               |   |                   |
| Benzo[e]pyrene                 | 1.1093<br>1.1622 | 1.1431<br>1.1253 | 1.1852<br>1.0963 | 1.2032 | 1.2090 | Ave           |             | 1.1542 |    |   | 0.0100  | 3.7  |   | 20.0        |               |   |                   |
| Benzo[a]pyrene                 | 1.0947<br>1.2113 | 1.1764<br>1.1651 | 1.1980<br>1.1415 | 1.2304 | 1.2187 | Ave           |             | 1.1795 |    |   | 0.7000  | 3.8  |   | 20.0        |               |   |                   |
| Indeno[1,2,3-cd]pyrene         | 1.2251<br>1.3822 | 1.3397<br>1.3292 | 1.3494<br>1.3191 | 1.4107 | 1.4279 | Ave           |             | 1.3479 |    |   | 0.5000  | 4.7  |   | 20.0        |               |   |                   |
| Dibenz(a,h)anthracene          | 1.0181<br>1.1823 | 1.1211<br>1.1487 | 1.1369<br>1.1357 | 1.1749 | 1.2120 | Ave           |             | 1.1412 |    |   | 0.4000  | 5.1  |   | 20.0        |               |   |                   |
| Benzo[g,h,i]perylene           | 1.1389<br>1.1809 | 1.1421<br>1.1626 | 1.1885<br>1.1557 | 1.1999 | 1.2203 | Ave           |             | 1.1736 |    |   | 0.5000  | 2.5  |   | 20.0        |               |   |                   |
| 2-Fluorophenol (Surr)          | 1.2489<br>1.1564 | 1.2030<br>1.1208 | 1.1963<br>1.0862 | 1.2288 | 1.1838 | Ave           |             | 1.1780 |    |   |         | 4.6  |   | 20.0        |               |   |                   |
| Phenol-d5 (Surr)               | 1.5979<br>1.4953 | 1.5500<br>1.4311 | 1.6299<br>1.3716 | 1.6576 | 1.5700 | Ave           |             | 1.5379 |    |   |         | 6.4  |   | 20.0        |               |   |                   |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.



FORM VI  
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 152241

SDG No.: \_\_\_\_\_

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/31/2015 13:40 Calibration End Date: 08/31/2015 16:55 Calibration ID: 25150

| ANALYTE                     | RRF              |                  |                  |        |        | CURVE<br>TYPE | COEFFICIENT |        |    | # | MIN RRF | %RSD | # | MAX<br>%RSD | R^2<br>OR COD | # | MIN R^2<br>OR COD |
|-----------------------------|------------------|------------------|------------------|--------|--------|---------------|-------------|--------|----|---|---------|------|---|-------------|---------------|---|-------------------|
|                             | LVL 1            | LVL 2            | LVL 3            | LVL 4  | LVL 5  |               | B           | M1     | M2 |   |         |      |   |             |               |   |                   |
|                             | LVL 6            | LVL 7            | LVL 8            |        |        |               |             |        |    |   |         |      |   |             |               |   |                   |
| Nitrobenzene-d5 (Surr)      | 0.3878<br>0.3705 | 0.4020<br>0.3655 | 0.4168<br>0.3615 | 0.4084 | 0.4009 | Ave           |             | 0.3892 |    |   |         | 5.4  |   | 20.0        |               |   |                   |
| 2-Fluorobiphenyl            | 1.4732<br>1.3539 | 1.4246<br>1.3137 | 1.4562<br>1.2890 | 1.4552 | 1.4151 | Ave           |             | 1.3976 |    |   |         | 5.0  |   | 20.0        |               |   |                   |
| 2,4,6-Tribromophenol (Surr) | 0.1022<br>0.1198 | 0.0949<br>0.1219 | 0.1021<br>0.1183 | 0.1085 | 0.1193 | Ave           |             | 0.1109 |    |   | 0.0100  | 9.3  |   | 20.0        |               |   |                   |
| Terphenyl-d14 (Surr)        | 0.7142<br>0.7564 | 0.7747<br>0.7352 | 0.7862<br>0.7093 | 0.7962 | 0.8057 | Ave           |             | 0.7597 |    |   |         | 4.9  |   | 20.0        |               |   |                   |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI  
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 152241

SDG No.: \_\_\_\_\_

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/31/2015 13:40 Calibration End Date: 08/31/2015 16:55 Calibration ID: 25150

Calibration Files:

|         |                   |              |
|---------|-------------------|--------------|
| LEVEL:  | LAB SAMPLE ID:    | LAB FILE ID: |
| Level 1 | IC 180-152241/3   | V0901003.D   |
| Level 2 | IC 180-152241/4   | V0901004.D   |
| Level 3 | IC 180-152241/5   | V0901005.D   |
| Level 4 | ICIS 180-152241/6 | V0901006.D   |
| Level 5 | IC 180-152241/7   | V0901007.D   |
| Level 6 | IC 180-152241/8   | V0901008.D   |
| Level 7 | IC 180-152241/9   | V0901009.D   |
| Level 8 | IC 180-152241/10  | V0901010.D   |

| ANALYTE                 | IS<br>REF | CURVE<br>TYPE | RESPONSE        |                  |                   |        |        | CONCENTRATION (NG) |                |                |       |       |
|-------------------------|-----------|---------------|-----------------|------------------|-------------------|--------|--------|--------------------|----------------|----------------|-------|-------|
|                         |           |               | LVL 1<br>LVL 6  | LVL 2<br>LVL 7   | LVL 3<br>LVL 8    | LVL 4  | LVL 5  | LVL 1<br>LVL 6     | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4 | LVL 5 |
| 1,4-Dioxane             | DCB       | Ave           | 2513<br>201364  | 11101<br>279408  | 22493<br>356294   | 55565  | 105203 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| N-Nitrosodimethylamine  | DCB       | Ave           | 2499<br>275725  | 13632<br>379885  | 27865<br>486190   | 71109  | 144862 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Pyridine                | DCB       | Ave           | 4427<br>513191  | 26429<br>712099  | 55292<br>895807   | 133039 | 262838 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Methyl methanesulfonate | DCB       | Ave           | 3723<br>343206  | 18162<br>474822  | 36708<br>603096   | 94603  | 179632 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Benzaldehyde            | DCB       | Ave           | 4938<br>397070  | 22705<br>547639  | 43874<br>690724   | 107323 | 206688 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Phenol                  | DCB       | Ave           | 9911<br>835757  | 47455<br>1151982 | 94817<br>1439322  | 230637 | 441274 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Aniline                 | DCB       | Ave           | 10692<br>961258 | 52643<br>1324460 | 103745<br>1668289 | 263241 | 507890 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Bis(2-chloroethyl)ether | DCB       | Ave           | 6632<br>590760  | 31795<br>813920  | 66318<br>1025923  | 157984 | 304156 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 2-Chlorophenol          | DCB       | Ave           | 8190<br>734589  | 37759<br>999145  | 79641<br>1285834  | 193353 | 374694 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| n-Decane                | DCB       | Ave           | 7968<br>678691  | 36716<br>933974  | 78321<br>1170998  | 185321 | 364217 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 1,3-Dichlorobenzene     | DCB       | Ave           | 9777<br>833025  | 43060<br>1169034 | 89430<br>1491482  | 218573 | 427222 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 1,4-Dichlorobenzene     | DCB       | Ave           | 9431<br>854038  | 46277<br>1200818 | 91801<br>1538522  | 226954 | 432346 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Benzyl alcohol          | DCB       | Ave           | 4699<br>437762  | 22716<br>611039  | 48151<br>774191   | 116255 | 225733 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 1,2-Dichlorobenzene     | DCB       | Ave           | 9216<br>822563  | 42858<br>1128307 | 89174<br>1461140  | 217421 | 417384 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 2-Methylphenol          | DCB       | Ave           | 6892<br>622346  | 35486<br>854410  | 70753<br>1072808  | 169780 | 326132 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |

FORM VI  
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 152241

SDG No.: \_\_\_\_\_

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/31/2015 13:40 Calibration End Date: 08/31/2015 16:55 Calibration ID: 25150

| ANALYTE                      | IS<br>REF | CURVE<br>TYPE | RESPONSE         |                   |                   |        |         | CONCENTRATION (NG) |                |                |       |       |
|------------------------------|-----------|---------------|------------------|-------------------|-------------------|--------|---------|--------------------|----------------|----------------|-------|-------|
|                              |           |               | LVL 1<br>LVL 6   | LVL 2<br>LVL 7    | LVL 3<br>LVL 8    | LVL 4  | LVL 5   | LVL 1<br>LVL 6     | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4 | LVL 5 |
| Indene                       | DCB       | Ave           | 14197<br>1214617 | 64475<br>1679927  | 132693<br>2137786 | 325789 | 632252  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 2,2'-oxybis[1-chloropropane] | DCB       | Ave           | 10399<br>825469  | 48704<br>1143395  | 95463<br>1427446  | 237680 | 447186  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| N-Nitrosopyrrolidine         | DCB       | Ave           | 3698<br>285945   | 14628<br>400584   | 29094<br>516581   | 75398  | 147255  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Acetophenone                 | DCB       | Ave           | 11746<br>906914  | 53299<br>1253461  | 108645<br>1562211 | 259244 | 484244  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| N-Nitrosodi-n-propylamine    | DCB       | Ave           | 5411<br>441214   | 26603<br>599779   | 52581<br>741815   | 126465 | 241584  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Methylphenol, 3 & 4          | DCB       | Ave           | 8304<br>643394   | 35608<br>873748   | 72549<br>1106901  | 180950 | 340648  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Hexachloroethane             | DCB       | Ave           | 4288<br>372580   | 19947<br>519024   | 38937<br>666391   | 97090  | 193936  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Nitrobenzene                 | NPT       | Ave           | 9006<br>776952   | 43310<br>1066255  | 87150<br>1349192  | 211409 | 407395  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Isophorone                   | NPT       | Ave           | 14666<br>1277258 | 70568<br>1778003  | 138999<br>2260645 | 342824 | 682023  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 2-Nitrophenol                | NPT       | Ave           | 3712<br>420234   | 21894<br>583637   | 40619<br>748083   | 106487 | 210297  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 2,4-Dimethylphenol           | NPT       | Ave           | 8968<br>753151   | 41418<br>1041480  | 84102<br>1315779  | 209203 | 402567  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Benzoic acid                 | NPT       | Lin1          | +++++<br>375654  | +++++<br>594277   | 15551<br>705621   | 55532  | 164640  | +++++<br>40.0      | +++++<br>60.0  | 4.00<br>80.0   | 10.0  | 20.0  |
| Bis(2-chloroethoxy)methane   | NPT       | Ave           | 9380<br>770276   | 41308<br>1064713  | 82356<br>1360002  | 208359 | 408194  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 2,4-Dichlorophenol           | NPT       | Ave           | 6905<br>667300   | 34899<br>944141   | 71088<br>1215699  | 175582 | 346426  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 1,2,4-Trichlorobenzene       | NPT       | Ave           | 9499<br>794260   | 41709<br>1108717  | 85855<br>1419941  | 207252 | 402160  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Naphthalene                  | NPT       | Ave           | 27184<br>2218172 | 121813<br>3102774 | 238651<br>3961496 | 596566 | 1159009 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 4-Chloroaniline              | NPT       | Ave           | 10278<br>925530  | 48762<br>1324788  | 98566<br>1691471  | 252553 | 486250  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 2,6-Dichlorophenol           | NPT       | Ave           | 7251<br>665137   | 35789<br>926626   | 69925<br>1189347  | 178546 | 342783  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Hexachlorobutadiene          | NPT       | Ave           | 5492<br>498986   | 26793<br>725569   | 54777<br>932690   | 135720 | 267889  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Caprolactam                  | NPT       | Ave           | 2415<br>195994   | 9876<br>300973    | 18977<br>390460   | 50427  | 101850  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 4-Chloro-3-methylphenol      | NPT       | Ave           | 7078<br>648108   | 35420<br>936942   | 69183<br>1193205  | 174727 | 344404  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |

FORM VI  
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 152241

SDG No.: \_\_\_\_\_

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/31/2015 13:40 Calibration End Date: 08/31/2015 16:55 Calibration ID: 25150

| ANALYTE                    | IS<br>REF | CURVE<br>TYPE | RESPONSE         |                   |                   |        |         | CONCENTRATION (NG) |                |                |       |       |
|----------------------------|-----------|---------------|------------------|-------------------|-------------------|--------|---------|--------------------|----------------|----------------|-------|-------|
|                            |           |               | LVL 1<br>LVL 6   | LVL 2<br>LVL 7    | LVL 3<br>LVL 8    | LVL 4  | LVL 5   | LVL 1<br>LVL 6     | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4 | LVL 5 |
| 2-Methylnaphthalene        | NPT       | Ave           | 18652<br>1592038 | 87821<br>2232756  | 172507<br>2845722 | 420716 | 816700  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 1-Methylnaphthalene        | NPT       | Ave           | 16658<br>1385626 | 76649<br>1963496  | 153822<br>2510891 | 363823 | 711948  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Hexachlorocyclopentadiene  | ANT       | Ave           | 4913<br>608183   | 28210<br>886261   | 56673<br>1135006  | 149399 | 302691  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 1,2,4,5-Tetrachlorobenzene | ANT       | Ave           | 9508<br>821465   | 45600<br>1176134  | 87870<br>1486780  | 216369 | 422134  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 2,4,6-Trichlorophenol      | ANT       | Ave           | 5323<br>529802   | 26423<br>767943   | 54244<br>1010572  | 135055 | 267261  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 2,4,5-Trichlorophenol      | ANT       | Ave           | 5199<br>556002   | 27979<br>821214   | 55772<br>1060563  | 142254 | 294500  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 1,1'-Biphenyl              | ANT       | Ave           | 22740<br>2002667 | 106547<br>2860874 | 214141<br>3692898 | 531753 | 1040543 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 2-Chloronaphthalene        | ANT       | Ave           | 18252<br>1554017 | 85690<br>2245596  | 170202<br>2836533 | 411214 | 808559  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 2-Nitroaniline             | ANT       | Ave           | 4283<br>462376   | 23054<br>675895   | 46947<br>856991   | 121138 | 237605  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Dimethyl phthalate         | ANT       | Ave           | 19292<br>1672530 | 86872<br>2472869  | 177042<br>3193164 | 433347 | 870830  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 1,3-Dinitrobenzene         | ANT       | Ave           | ++++<br>283925   | 11653<br>433868   | 25857<br>563184   | 67750  | 144305  | ++++<br>40.0       | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 2,6-Dinitrotoluene         | ANT       | Ave           | 3607<br>396407   | 19061<br>592384   | 40402<br>774781   | 100319 | 204627  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Acenaphthylene             | ANT       | Ave           | 27253<br>2416661 | 130763<br>3497114 | 250435<br>4484129 | 636764 | 1266666 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 3-Nitroaniline             | ANT       | Ave           | 3681<br>421304   | 20444<br>646266   | 42653<br>831142   | 109177 | 223742  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Acenaphthene               | ANT       | Ave           | 17469<br>1491106 | 83539<br>2129611  | 167192<br>2705975 | 413191 | 805607  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 2,4-Dinitrophenol          | ANT       | Lin2          | ++++<br>538395   | 12511<br>863873   | 33546<br>1151263  | 110082 | 249612  | ++++<br>80.0       | 4.00<br>120    | 8.00<br>160    | 20.0  | 40.0  |
| 4-Nitrophenol              | ANT       | Ave           | 4889<br>574831   | 27200<br>881491   | 54652<br>1135055  | 144007 | 300056  | 0.800<br>80.0      | 4.00<br>120    | 8.00<br>160    | 20.0  | 40.0  |
| 2,4-Dinitrotoluene         | ANT       | Ave           | 4331<br>548279   | 25755<br>826591   | 51206<br>1086532  | 135793 | 280619  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Dibenzofuran               | ANT       | Ave           | 25419<br>2254271 | 123527<br>3314307 | 242079<br>4210142 | 598462 | 1194756 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 2,3,5,6-Tetrachlorophenol  | ANT       | Ave           | 4178<br>533477   | 24428<br>803463   | 49331<br>1064721  | 125764 | 269363  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 2,3,4,6-Tetrachlorophenol  | ANT       | Ave           | 4803<br>531770   | 25094<br>801901   | 50343<br>1034946  | 131643 | 272412  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |

FORM VI  
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 152241

SDG No.: \_\_\_\_\_

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/31/2015 13:40 Calibration End Date: 08/31/2015 16:55 Calibration ID: 25150

| ANALYTE                               | IS REF | CURVE TYPE | RESPONSE         |                   |                   |        |         | CONCENTRATION (NG) |                |                |       |       |
|---------------------------------------|--------|------------|------------------|-------------------|-------------------|--------|---------|--------------------|----------------|----------------|-------|-------|
|                                       |        |            | LVL 1<br>LVL 6   | LVL 2<br>LVL 7    | LVL 3<br>LVL 8    | LVL 4  | LVL 5   | LVL 1<br>LVL 6     | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4 | LVL 5 |
| 2-Naphthylamine                       | ANT    | Ave        | 16555<br>1523242 | 84965<br>2285872  | 161622<br>2904871 | 415085 | 829799  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Diethyl phthalate                     | ANT    | Ave        | 21408<br>1702838 | 95724<br>2491639  | 182244<br>3193948 | 456132 | 912137  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Hexadecane                            | NPT    | Ave        | 12604<br>1028978 | 62263<br>1397088  | 121910<br>1705323 | 304348 | 582121  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 4-Chlorophenyl phenyl ether           | ANT    | Ave        | 10711<br>956781  | 48092<br>1404700  | 95483<br>1819749  | 246798 | 492206  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 4-Nitroaniline                        | ANT    | Ave        | 4024<br>446405   | 22310<br>674066   | 43917<br>881666   | 114302 | 233917  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Fluorene                              | ANT    | Ave        | 20161<br>1834343 | 102583<br>2695516 | 198272<br>3469462 | 497068 | 989672  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 4,6-Dinitro-2-methylphenol            | PHN    | Ave        | 5441<br>755388   | 30508<br>1188730  | 55789<br>1577783  | 165565 | 365342  | 0.800<br>80.0      | 4.00<br>120    | 8.00<br>160    | 20.0  | 40.0  |
| N-Nitrosodiphenylamine                | PHN    | Ave        | 30291<br>2666058 | 143210<br>3965267 | 278021<br>5134418 | 692525 | 1398657 | 0.800<br>80.0      | 4.00<br>120    | 8.00<br>160    | 20.0  | 40.0  |
| 1,2-Diphenylhydrazine (as Azobenzene) | PHN    | Ave        | 19671<br>1794860 | 99702<br>2591039  | 193083<br>3287555 | 485927 | 965418  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 4-Bromophenyl phenyl ether            | PHN    | Ave        | 5068<br>574987   | 28113<br>856180   | 55667<br>1113159  | 141647 | 291000  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Hexachlorobenzene                     | PHN    | Ave        | 6169<br>622415   | 28493<br>947897   | 59184<br>1244142  | 148037 | 315515  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Atrazine                              | PHN    | Ave        | 4701<br>561004   | 25353<br>848278   | 54428<br>1098657  | 140905 | 290220  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Pentachlorophenol                     | PHN    | Ave        | 10851<br>829971  | 43404<br>1292579  | 66577<br>1697903  | 181579 | 404974  | 0.800<br>80.0      | 4.00<br>120    | 8.00<br>160    | 20.0  | 40.0  |
| n-Octadecane                          | DCB    | Ave        | 13310<br>1131057 | 66596<br>1541202  | 129797<br>1853282 | 324076 | 634923  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Phenanthrene                          | PHN    | Ave        | 33259<br>2880228 | 157847<br>4342458 | 308622<br>5640236 | 751020 | 1547520 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Anthracene                            | PHN    | Ave        | 31738<br>2933520 | 153060<br>4408878 | 306661<br>5748524 | 764639 | 1549689 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Carbazole                             | PHN    | Ave        | 27168<br>2629503 | 132022<br>3955502 | 270667<br>5117901 | 669248 | 1371651 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Di-n-butyl phthalate                  | PHN    | Ave        | 29099<br>3082799 | 147747<br>4709352 | 303130<br>6102278 | 776911 | 1611079 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Fluoranthene                          | PHN    | Ave        | 33144<br>3264797 | 151430<br>4990877 | 319725<br>6477904 | 808503 | 1656336 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Benzidine                             | CRY    | Ave        | 11290<br>1562314 | 52731<br>2535078  | 118831<br>3407934 | 339390 | 725455  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Pyrene                                | CRY    | Ave        | 32201<br>3379936 | 160209<br>5158428 | 337422<br>6781286 | 842830 | 1728923 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |

FORM VI  
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 152241

SDG No.: \_\_\_\_\_

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/31/2015 13:40 Calibration End Date: 08/31/2015 16:55 Calibration ID: 25150

| ANALYTE                        | IS<br>REF | CURVE<br>TYPE | RESPONSE         |                   |                   |        |         | CONCENTRATION (NG) |                |                |       |       |
|--------------------------------|-----------|---------------|------------------|-------------------|-------------------|--------|---------|--------------------|----------------|----------------|-------|-------|
|                                |           |               | LVL 1<br>LVL 6   | LVL 2<br>LVL 7    | LVL 3<br>LVL 8    | LVL 4  | LVL 5   | LVL 1<br>LVL 6     | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4 | LVL 5 |
| Butyl benzyl phthalate         | CRY       | Ave           | 12332<br>1451542 | 58980<br>2212652  | 128551<br>2909727 | 335533 | 708523  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 3,3'-Dichlorobenzidine         | CRY       | Ave           | 10712<br>1328092 | 51162<br>2048467  | 106814<br>2760473 | 271127 | 622565  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Bis(2-ethylhexyl) phthalate    | CRY       | Ave           | 15912<br>2049564 | 82430<br>3085719  | 181356<br>4027626 | 466768 | 990284  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Benzo[a]anthracene             | CRY       | Ave           | 30661<br>3279613 | 147520<br>5081417 | 312044<br>6802828 | 769643 | 1598686 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Chrysene                       | CRY       | Ave           | 28274<br>3138949 | 136440<br>4792327 | 293847<br>6394304 | 721253 | 1481921 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Di-n-octyl phthalate           | PRY       | Ave           | 38875<br>3629195 | 161544<br>5602751 | 278022<br>7419754 | 761128 | 1669687 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 7,12-Dimethylbenz(a)anthracene | PRY       | Ave           | 11900<br>1601028 | 62316<br>2472560  | 127997<br>3354970 | 343910 | 730487  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Benzo[b]fluoranthene           | PRY       | Ave           | 29136<br>3629886 | 143518<br>5446463 | 304513<br>7677405 | 779148 | 1656570 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Benzo[k]fluoranthene           | PRY       | Ave           | 29227<br>3569072 | 144106<br>5539285 | 309524<br>7151269 | 794316 | 1684888 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Benzo[e]pyrene                 | PRY       | Ave           | 26976<br>3386071 | 133992<br>5228496 | 281151<br>6938914 | 723563 | 1563201 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Benzo[a]pyrene                 | PRY       | Ave           | 26620<br>3529029 | 137893<br>5413285 | 284194<br>7225435 | 739933 | 1575640 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Indeno[1,2,3-cd]pyrene         | PRY       | Ave           | 29792<br>4026833 | 157033<br>6175786 | 320102<br>8349705 | 848365 | 1846211 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Dibenz(a,h)anthracene          | PRY       | Ave           | 24757<br>3444565 | 131409<br>5337190 | 269706<br>7188461 | 706557 | 1567050 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Benzo[g,h,i]perylene           | PRY       | Ave           | 27696<br>3440452 | 133873<br>5401597 | 281951<br>7315071 | 721609 | 1577795 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 2-Fluorophenol (Surr)          | DCB       | Ave           | 7067<br>601129   | 32550<br>838231   | 62258<br>1069551  | 157305 | 308134  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Phenol-d5 (Surr)               | DCB       | Ave           | 9042<br>777332   | 41939<br>1070228  | 84827<br>1350534  | 212190 | 408662  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Nitrobenzene-d5 (Surr)         | NPT       | Ave           | 9061<br>794610   | 43441<br>1113656  | 88028<br>1430717  | 216601 | 416340  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 2-Fluorobiphenyl               | ANT       | Ave           | 20887<br>1812070 | 97501<br>2610251  | 190403<br>3334934 | 476787 | 937705  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| 2,4,6-Tribromophenol (Surr)    | PHN       | Ave           | 2636<br>298800   | 11634<br>473316   | 24511<br>604617   | 64980  | 147244  | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |
| Terphenyl-d14 (Surr)           | CRY       | Ave           | 18450<br>2187918 | 96061<br>3347581  | 202747<br>4425141 | 504747 | 1077468 | 0.400<br>40.0      | 2.00<br>60.0   | 4.00<br>80.0   | 10.0  | 20.0  |

FORM VI  
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 152241  
SDG No.: \_\_\_\_\_  
Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32 (mm) Heated Purge: (Y/N) N  
Calibration Start Date: 08/31/2015 13:40 Calibration End Date: 08/31/2015 16:55 Calibration ID: 25150

Curve Type Legend:

|                                                                                |
|--------------------------------------------------------------------------------|
| Ave = Average ISTD<br>Lin1 = Linear 1/conc ISTD<br>Lin2 = Linear 1/conc^2 ISTD |
|--------------------------------------------------------------------------------|

FORM VI  
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA  
READBACK PERCENT ERROR

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1 Analy Batch No.: 152241

SDG No.: \_\_\_\_\_

Instrument ID: CH731 GC Column: Rxi-5SilMS ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/31/2015 13:40 Calibration End Date: 08/31/2015 16:55 Calibration ID: 25150

Calibration Files:

| LEVEL:  | LAB SAMPLE ID:    | LAB FILE ID: |
|---------|-------------------|--------------|
| Level 1 | IC 180-152241/3   | V0901003.D   |
| Level 2 | IC 180-152241/4   | V0901004.D   |
| Level 3 | IC 180-152241/5   | V0901005.D   |
| Level 4 | ICIS 180-152241/6 | V0901006.D   |
| Level 5 | IC 180-152241/7   | V0901007.D   |
| Level 6 | IC 180-152241/8   | V0901008.D   |
| Level 7 | IC 180-152241/9   | V0901009.D   |
| Level 8 | IC 180-152241/10  | V0901010.D   |

| ANALYTE           | PERCENT ERROR      |                    |         |         |         |         | PERCENT ERROR LIMIT |                |       |       |       |       |
|-------------------|--------------------|--------------------|---------|---------|---------|---------|---------------------|----------------|-------|-------|-------|-------|
|                   | LVL 1 #<br>LVL 7 # | LVL 2 #<br>LVL 8 # | LVL 3 # | LVL 4 # | LVL 5 # | LVL 6 # | LVL 1<br>LVL 7      | LVL 2<br>LVL 8 | LVL 3 | LVL 4 | LVL 5 | LVL 6 |
| Benzoic acid      | +++++<br>6.9       | +++++<br>-3.1      | 14.1    | -15.0   | -2.0    | -0.9    | 40                  | 40             | 40    | 40    | 40    | 40    |
| 2,4-Dinitrophenol | +++++<br>6.1       | 5.4<br>8.0         | -7.8    | -7.3    | -3.7    | -0.7    | 40                  | 40<br>40       | 40    | 40    | 40    | 40    |



TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901003.D  
 Lims ID: IC  
 Client ID:  
 Sample Type: IC Calib Level: 1  
 Inject. Date: 31-Aug-2015 13:40:30 ALS Bottle#: 2 Worklist Smp#: 3  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Sample Info: 180-0008349-003  
 Operator ID: 003200 Instrument ID: CH731  
 Sublist: chrom-BNA\_CH731\*sub4  
 Method: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\BNA\_CH731.m  
 Limit Group: BNA 8270D ICAL  
 Last Update: 01-Sep-2015 04:26:25 Calib Date: 31-Aug-2015 16:55:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last Ical File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901010.D  
 Column 1 : Rxi-5SilMS ( 0.32 mm) Det: MS SCAN  
 Process Host: XAWRK024

First Level Reviewer: piccolinov

Date: 01-Sep-2015 04:09:03

| Compound                      | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q   | Response | Cal Amt ng | OnCol Amt ng | Flags |
|-------------------------------|-----|-----------|---------------|---------------|-----|----------|------------|--------------|-------|
| * 1 1,4-Dichlorobenzene-d4    | 152 | 6.256     | 6.256         | 0.000         | 94  | 113175   | 8.00       | 8.00         |       |
| * 2 Naphthalene-d8            | 136 | 7.490     | 7.490         | 0.000         | 100 | 467332   | 8.00       | 8.00         |       |
| * 3 Acenaphthene-d10          | 164 | 9.130     | 9.130         | 0.000         | 93  | 283569   | 8.00       | 8.00         |       |
| * 4 Phenanthrene-d10          | 188 | 10.509    | 10.509        | 0.000         | 98  | 516017   | 8.00       | 8.00         |       |
| * 5 Chrysene-d12              | 240 | 14.072    | 14.072        | 0.000         | 97  | 516686   | 8.00       | 8.00         |       |
| * 6 Perylene-d12              | 264 | 17.031    | 17.031        | 0.000         | 97  | 486349   | 8.00       | 8.00         |       |
| \$ 7 2-Fluorophenol           | 112 | 4.851     | 4.851         | 0.000         | 88  | 7067     | 0.4000     | 0.4241       |       |
| \$ 8 Phenol-d5                | 99  | 5.893     | 5.893         | 0.000         | 94  | 9042     | 0.4000     | 0.4156       |       |
| \$ 9 Nitrobenzene-d5          | 82  | 6.796     | 6.796         | 0.000         | 90  | 9061     | 0.4000     | 0.3986       |       |
| \$ 10 2-Fluorobiphenyl        | 172 | 8.489     | 8.489         | 0.000         | 99  | 20887    | 0.4000     | 0.4216       |       |
| \$ 11 2,4,6-Tribromophenol    | 330 | 9.857     | 9.857         | 0.000         | 85  | 2636     | 0.4000     | 0.3686       |       |
| \$ 12 Terphenyl-d14           | 244 | 12.304    | 12.304        | 0.000         | 98  | 18450    | 0.4000     | 0.3760       |       |
| 13 1,4-Dioxane                | 88  | 1.432     | 1.432         | 0.000         | 1   | 2513     | 0.4000     | 0.4376       | M     |
| 14 N-Nitrosodimethylamine     | 74  | 2.084     | 2.084         | 0.000         | 58  | 2499     | 0.4000     | 0.3426       | M     |
| 15 Pyridine                   | 79  | 2.170     | 2.170         | 0.000         | 92  | 4427     | 0.4000     | 0.3243       | M     |
| 22 Methyl methanesulfonate    | 80  | 4.600     | 4.600         | 0.000         | 84  | 3723     | 0.4000     | 0.3920       |       |
| 26 Benzaldehyde               | 77  | 5.802     | 5.802         | 0.000         | 92  | 4938     | 0.4000     | 0.4374       |       |
| 27 Phenol                     | 94  | 5.909     | 5.909         | 0.000         | 97  | 9911     | 0.4000     | 0.4172       |       |
| 28 Aniline                    | 93  | 5.920     | 5.920         | 0.000         | 95  | 10692    | 0.4000     | 0.3991       |       |
| 29 Bis(2-chloroethyl)ether    | 93  | 5.989     | 5.989         | 0.000         | 89  | 6632     | 0.4000     | 0.4037       |       |
| 31 2-Chlorophenol             | 128 | 6.048     | 6.048         | 0.000         | 95  | 8190     | 0.4000     | 0.4071       |       |
| 32 n-Decane                   | 43  | 6.117     | 6.117         | 0.000         | 84  | 7968     | 0.4000     | 0.4149       |       |
| 33 1,3-Dichlorobenzene        | 146 | 6.203     | 6.203         | 0.000         | 96  | 9777     | 0.4000     | 0.4231       |       |
| 34 1,4-Dichlorobenzene        | 146 | 6.278     | 6.278         | 0.000         | 90  | 9431     | 0.4000     | 0.3984       |       |
| 36 Benzyl alcohol             | 108 | 6.390     | 6.390         | 0.000         | 89  | 4699     | 0.4000     | 0.3899       |       |
| 37 1,2-Dichlorobenzene        | 146 | 6.427     | 6.427         | 0.000         | 95  | 9216     | 0.4000     | 0.4071       |       |
| 38 2-Methylphenol             | 108 | 6.502     | 6.502         | 0.000         | 95  | 6892     | 0.4000     | 0.3938       |       |
| 39 Indene                     | 116 | 6.513     | 6.513         | 0.000         | 90  | 14197    | 0.4000     | 0.4188       |       |
| 40 2,2'-oxybis[1-chloropropan | 45  | 6.529     | 6.529         | 0.000         | 91  | 10399    | 0.4000     | 0.4320       |       |
| 41 N-Nitrosopyrrolidine       | 100 | 6.614     | 6.614         | 0.000         | 81  | 3698     | 0.4000     | 0.4628       |       |
| 44 N-Nitrosodi-n-propylamine  | 70  | 6.646     | 6.646         | 0.000         | 70  | 5411     | 0.4000     | 0.4209       |       |

| Compound                       | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 43 Acetophenone                | 105 | 6.646     | 6.646         | 0.000         | 86 | 11746    | 0.4000     | 0.4421       |       |
| 45 4-Methylphenol              | 108 | 6.652     | 6.652         | 0.000         | 88 | 8304     | 0.4000     | 0.4502       |       |
| 47 Hexachloroethane            | 117 | 6.764     | 6.764         | 0.000         | 93 | 4288     | 0.4000     | 0.4156       |       |
| 48 Nitrobenzene                | 77  | 6.812     | 6.812         | 0.000         | 88 | 9006     | 0.4000     | 0.4053       |       |
| 50 Isophorone                  | 82  | 7.036     | 7.036         | 0.000         | 97 | 14666    | 0.4000     | 0.4023       |       |
| 51 2-Nitrophenol               | 139 | 7.122     | 7.122         | 0.000         | 89 | 3712     | 0.4000     | 0.3315       |       |
| 52 2,4-Dimethylphenol          | 107 | 7.154     | 7.154         | 0.000         | 97 | 8968     | 0.4000     | 0.4131       |       |
| 56 Benzoic acid                | 122 | 7.213     | 7.213         | 0.000         | 1  | 180      | 0.4000     | 3.04         | M     |
| 55 Bis(2-chloroethoxy)methane  | 93  | 7.239     | 7.239         | 0.000         | 97 | 9380     | 0.4000     | 0.4265       |       |
| 57 2,4-Dichlorophenol          | 162 | 7.346     | 7.346         | 0.000         | 93 | 6905     | 0.4000     | 0.3711       |       |
| 59 1,2,4-Trichlorobenzene      | 180 | 7.437     | 7.437         | 0.000         | 90 | 9499     | 0.4000     | 0.4237       |       |
| 60 Naphthalene                 | 128 | 7.506     | 7.506         | 0.000         | 97 | 27184    | 0.4000     | 0.4272       |       |
| 62 4-Chloroaniline             | 127 | 7.544     | 7.544         | 0.000         | 94 | 10278    | 0.4000     | 0.3914       |       |
| 63 2,6-Dichlorophenol          | 162 | 7.560     | 7.560         | 0.000         | 95 | 7251     | 0.4000     | 0.3888       |       |
| 64 Hexachlorobutadiene         | 225 | 7.629     | 7.629         | 0.000         | 93 | 5492     | 0.4000     | 0.3832       |       |
| 67 Caprolactam                 | 113 | 7.832     | 7.832         | 0.000         | 77 | 2415     | 0.4000     | 0.4314       |       |
| 70 4-Chloro-3-methylphenol     | 107 | 7.987     | 7.987         | 0.000         | 94 | 7078     | 0.4000     | 0.3830       |       |
| 72 2-Methylnaphthalene         | 142 | 8.158     | 8.158         | 0.000         | 92 | 18652    | 0.4000     | 0.4119       |       |
| 75 1-Methylnaphthalene         | 142 | 8.249     | 8.249         | 0.000         | 92 | 16658    | 0.4000     | 0.4188       |       |
| 76 Hexachlorocyclopentadiene   | 237 | 8.308     | 8.308         | 0.000         | 91 | 4913     | 0.4000     | 0.3220       |       |
| 77 1,2,4,5-Tetrachlorobenzene  | 216 | 8.313     | 8.313         | 0.000         | 94 | 9508     | 0.4000     | 0.4219       |       |
| 78 2,4,6-Trichlorophenol       | 196 | 8.409     | 8.409         | 0.000         | 89 | 5323     | 0.4000     | 0.3796       |       |
| 79 2,4,5-Trichlorophenol       | 196 | 8.441     | 8.441         | 0.000         | 90 | 5199     | 0.4000     | 0.3535       |       |
| 80 1,1'-Biphenyl               | 154 | 8.580     | 8.580         | 0.000         | 94 | 22740    | 0.4000     | 0.4154       |       |
| 81 2-Chloronaphthalene         | 162 | 8.612     | 8.612         | 0.000         | 95 | 18252    | 0.4000     | 0.4245       |       |
| 82 2-Nitroaniline              | 65  | 8.687     | 8.687         | 0.000         | 78 | 4283     | 0.4000     | 0.3524       |       |
| 86 Dimethyl phthalate          | 163 | 8.842     | 8.842         | 0.000         | 98 | 19292    | 0.4000     | 0.4207       |       |
| 87 1,3-Dinitrobenzene          | 168 | 8.874     | 8.874         | 0.000         | 80 | 1605     | 0.4000     | 0.2200       |       |
| 88 2,6-Dinitrotoluene          | 165 | 8.901     | 8.901         | 0.000         | 88 | 3607     | 0.4000     | 0.3463       |       |
| 89 Acenaphthylene              | 152 | 8.997     | 8.997         | 0.000         | 98 | 27253    | 0.4000     | 0.4128       |       |
| 90 3-Nitroaniline              | 138 | 9.061     | 9.061         | 0.000         | 57 | 3681     | 0.4000     | 0.3301       |       |
| 91 Acenaphthene                | 153 | 9.157     | 9.157         | 0.000         | 91 | 17469    | 0.4000     | 0.4177       |       |
| 92 2,4-Dinitrophenol           | 184 | 9.168     | 9.168         | 0.000         | 57 | 2566     | 0.8000     | 2.81         |       |
| 93 4-Nitrophenol               | 109 | 9.195     | 9.195         | 0.000         | 83 | 4889     | 0.8000     | 0.6559       |       |
| 94 2,4-Dinitrotoluene          | 165 | 9.275     | 9.275         | 0.000         | 90 | 4331     | 0.4000     | 0.3096       |       |
| 95 Dibenzofuran                | 168 | 9.317     | 9.317         | 0.000         | 95 | 25419    | 0.4000     | 0.4081       |       |
| 97 2,3,5,6-Tetrachlorophenol   | 232 | 9.387     | 9.387         | 0.000         | 85 | 4178     | 0.4000     | 0.3108       |       |
| 99 2,3,4,6-Tetrachlorophenol   | 232 | 9.424     | 9.424         | 0.000         | 72 | 4803     | 0.4000     | 0.3492       |       |
| 100 2-Naphthylamine            | 143 | 9.451     | 9.451         | 0.000         | 95 | 16555    | 0.4000     | 0.3902       |       |
| 101 Diethyl phthalate          | 149 | 9.483     | 9.483         | 0.000         | 97 | 21408    | 0.4000     | 0.4461       |       |
| 102 Hexadecane                 | 57  | 9.494     | 9.494         | 0.000         | 96 | 12604    | 0.4000     | 0.4113       |       |
| 104 4-Chlorophenyl phenyl ethe | 204 | 9.617     | 9.617         | 0.000         | 91 | 10711    | 0.4000     | 0.4161       |       |
| 105 4-Nitroaniline             | 138 | 9.622     | 9.622         | 0.000         | 75 | 4024     | 0.4000     | 0.3413       |       |
| 106 Fluorene                   | 166 | 9.633     | 9.633         | 0.000         | 94 | 20161    | 0.4000     | 0.3951       |       |
| 108 4,6-Dinitro-2-methylphenol | 198 | 9.654     | 9.654         | 0.000         | 71 | 5441     | 0.8000     | 0.6185       |       |
| 109 N-Nitrosodiphenylamine     | 169 | 9.718     | 9.718         | 0.000         | 62 | 30291    | 0.8000     | 0.8457       |       |
| 61 Azobenzene                  | 77  | 9.761     | 9.761         | 0.000         | 98 | 19671    | 0.4000     | 0.4064       |       |
| 111 1,2-Diphenylhydrazine      | 77  | 9.761     | 9.761         | 0.000         | 98 | 19671    | 0.4000     | 0.4064       |       |
| 116 4-Bromophenyl phenyl ether | 248 | 10.071    | 10.071        | 0.000         | 67 | 5068     | 0.4000     | 0.3494       |       |
| 118 Hexachlorobenzene          | 284 | 10.156    | 10.156        | 0.000         | 89 | 6169     | 0.4000     | 0.3908       |       |
| 119 Atrazine                   | 200 | 10.188    | 10.188        | 0.000         | 88 | 4701     | 0.4000     | 0.3342       |       |
| 122 Pentachlorophenol          | 266 | 10.327    | 10.327        | 0.000         | 89 | 10851    | 0.8000     | 1.00         |       |

| Compound                       | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 121 n-Octadecane               | 57  | 10.338    | 10.338        | 0.000         | 93 | 13310    | 0.4000     | 0.4091       |       |
| 126 Phenanthrene               | 178 | 10.530    | 10.530        | 0.000         | 95 | 33259    | 0.4000     | 0.4232       |       |
| 128 Anthracene                 | 178 | 10.584    | 10.584        | 0.000         | 97 | 31738    | 0.4000     | 0.4048       |       |
| 130 Carbazole                  | 167 | 10.722    | 10.722        | 0.000         | 96 | 27168    | 0.4000     | 0.3936       |       |
| 132 Di-n-butyl phthalate       | 149 | 11.027    | 11.027        | 0.000         | 99 | 29099    | 0.4000     | 0.3667       |       |
| 137 Fluoranthene               | 202 | 11.839    | 11.839        | 0.000         | 97 | 33144    | 0.4000     | 0.3951       |       |
| 138 Benzidine                  | 184 | 11.962    | 11.962        | 0.000         | 0  | 11290    | 0.4000     | 0.3458       | M     |
| 139 Pyrene                     | 202 | 12.143    | 12.143        | 0.000         | 96 | 32201    | 0.4000     | 0.4046       |       |
| 144 Butyl benzyl phthalate     | 149 | 13.009    | 13.009        | 0.000         | 96 | 12332    | 0.4000     | 0.3853       |       |
| 149 3,3'-Dichlorobenzidine     | 252 | 13.981    | 13.981        | 0.000         | 71 | 10712    | 0.4000     | 0.3806       |       |
| 151 Bis(2-ethylhexyl) phthalat | 149 | 14.040    | 14.040        | 0.000         | 0  | 15912    | 0.4000     | 0.3588       | M     |
| 152 Benzo[a]anthracene         | 228 | 14.051    | 14.051        | 0.000         | 98 | 30661    | 0.4000     | 0.4068       |       |
| 153 Chrysene                   | 228 | 14.120    | 14.120        | 0.000         | 74 | 28274    | 0.4000     | 0.4006       |       |
| 156 Di-n-octyl phthalate       | 149 | 15.359    | 15.359        | 0.000         | 0  | 38875    | 0.4000     | 0.4952       | M     |
| 157 7,12-Dimethylbenz(a)anthra | 256 | 16.203    | 16.203        | 0.000         | 80 | 11900    | 0.4000     | 0.3634       | M     |
| 158 Benzo[b]fluoranthene       | 252 | 16.225    | 16.225        | 0.000         | 98 | 29136    | 0.4000     | 0.3867       |       |
| 159 Benzo[k]fluoranthene       | 252 | 16.284    | 16.284        | 0.000         | 97 | 29227    | 0.4000     | 0.3882       |       |
| 176 Benzo[e]pyrene             | 252 | 16.796    | 16.796        | 0.000         | 0  | 26976    | 0.4000     | 0.3844       | M     |
| 160 Benzo[a]pyrene             | 252 | 16.914    | 16.914        | 0.000         | 77 | 26620    | 0.4000     | 0.3712       |       |
| 163 Indeno[1,2,3-cd]pyrene     | 276 | 19.275    | 19.275        | 0.000         | 97 | 29792    | 0.4000     | 0.3636       |       |
| 164 Dibenz(a,h)anthracene      | 278 | 19.313    | 19.313        | 0.000         | 78 | 24757    | 0.4000     | 0.3568       | M     |
| 165 Benzo[g,h,i]perylene       | 276 | 19.890    | 19.890        | 0.000         | 94 | 27696    | 0.4000     | 0.3882       | M     |
| S 208 Methyl Phenols, Total    | 108 |           |               |               | 0  |          | 0.8000     | 0.8440       |       |
| S 206 Total Cresols            | 108 |           |               |               | 0  |          | 0.8000     | 0.8440       |       |

**QC Flag Legend**

Review Flags

M - Manually Integrated

**Reagents:**

SVTAPSTD0.4i\_00009

Amount Added: 1.00

Units: mL

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901003.D

Injection Date: 31-Aug-2015 13:40:30

Instrument ID: CH731

Operator ID: 003200

Lims ID: IC

Worklist Smp#: 3

Client ID:

Injection Vol: 2.0 ul

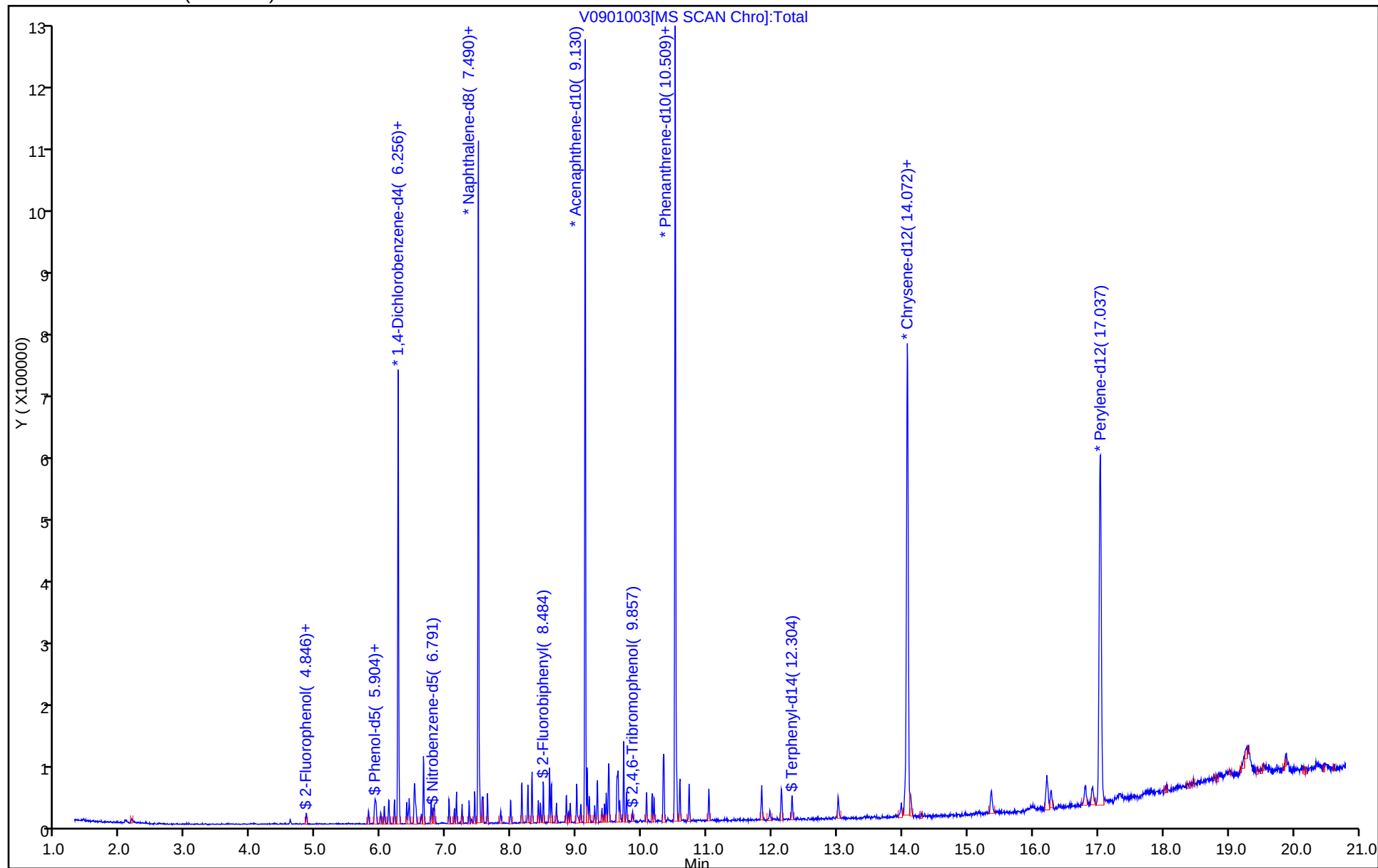
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: BNA\_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS (0.32 mm)



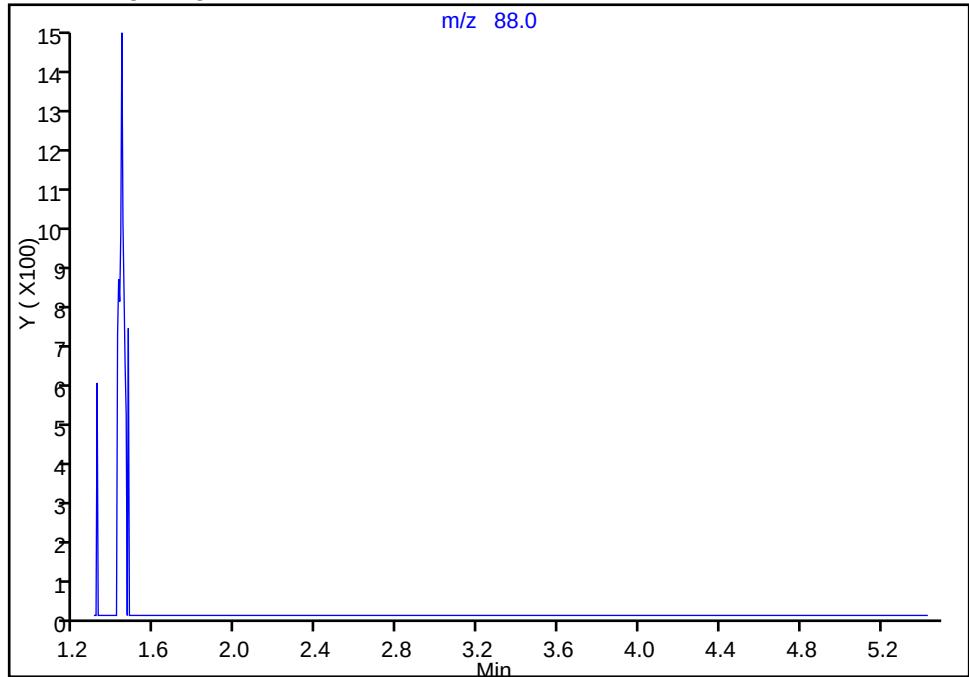
## TestAmerica Pittsburgh

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Injection Date: 31-Aug-2015 13:40:30 Instrument ID: CH731  
Lims ID: IC  
Client ID:  
Operator ID: 003200 ALS Bottle#: 2 Worklist Smp#: 3  
Injection Vol: 2.0 ul Dil. Factor: 1.0000  
Method: BNA\_CH731 Limit Group: BNA 8270D ICAL  
Column: Rxi-5SilMS ( 0.32 mm) Detector MS SCAN

**13 1,4-Dioxane, CAS: 123-91-1**

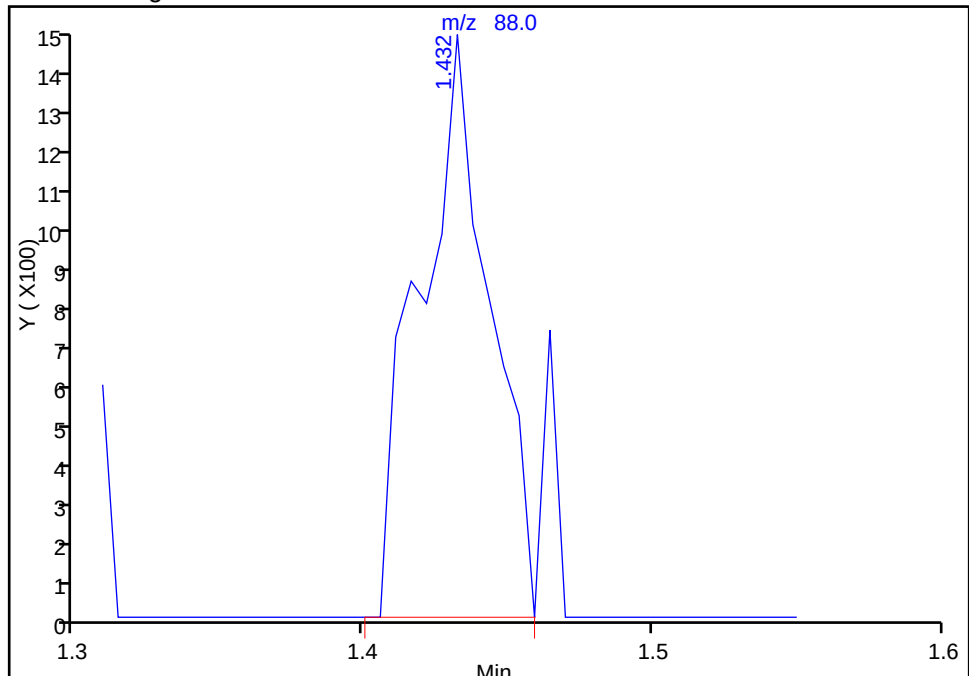
Not Detected  
Expected RT: 1.43

## Processing Integration Results



RT: 1.43  
Area: 2513  
Amount: 0.437583  
Amount Units: ng

## Manual Integration Results



Reviewer: piccolinov, 01-Sep-2015 04:09:03  
Audit Action: Manually Integrated  
Audit Reason: Poor chromatography

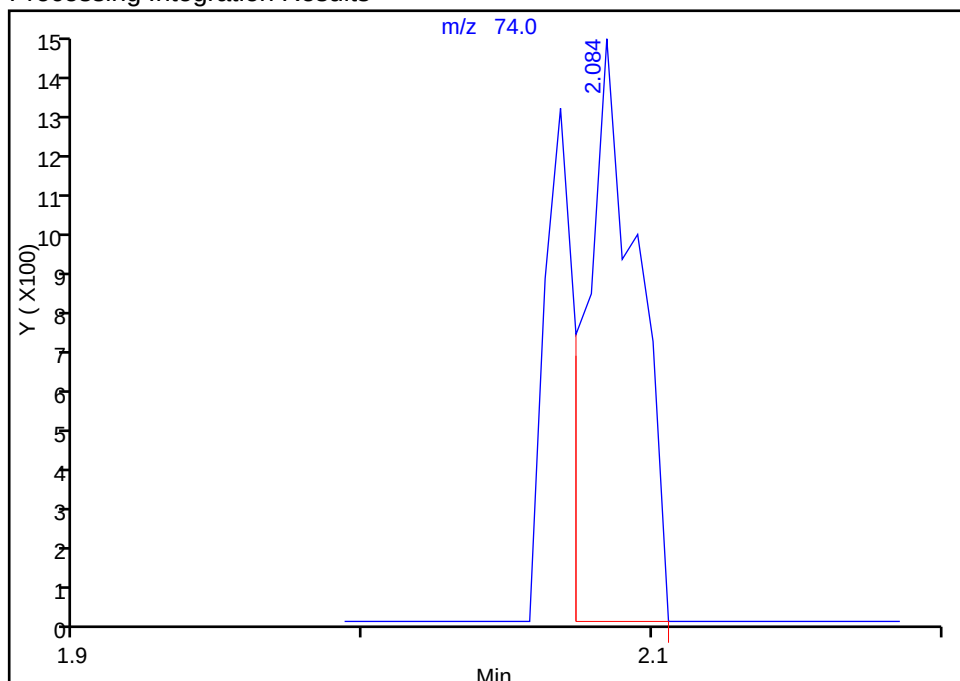
## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901003.D  
Injection Date: 31-Aug-2015 13:40:30 Instrument ID: CH731  
Lims ID: IC  
Client ID:  
Operator ID: 003200 ALS Bottle#: 2 Worklist Smp#: 3  
Injection Vol: 2.0 ul Dil. Factor: 1.0000  
Method: BNA\_CH731 Limit Group: BNA 8270D ICAL  
Column: Rxi-5SilMS ( 0.32 mm) Detector MS SCAN

**14 N-Nitrosodimethylamine, CAS: 62-75-9**

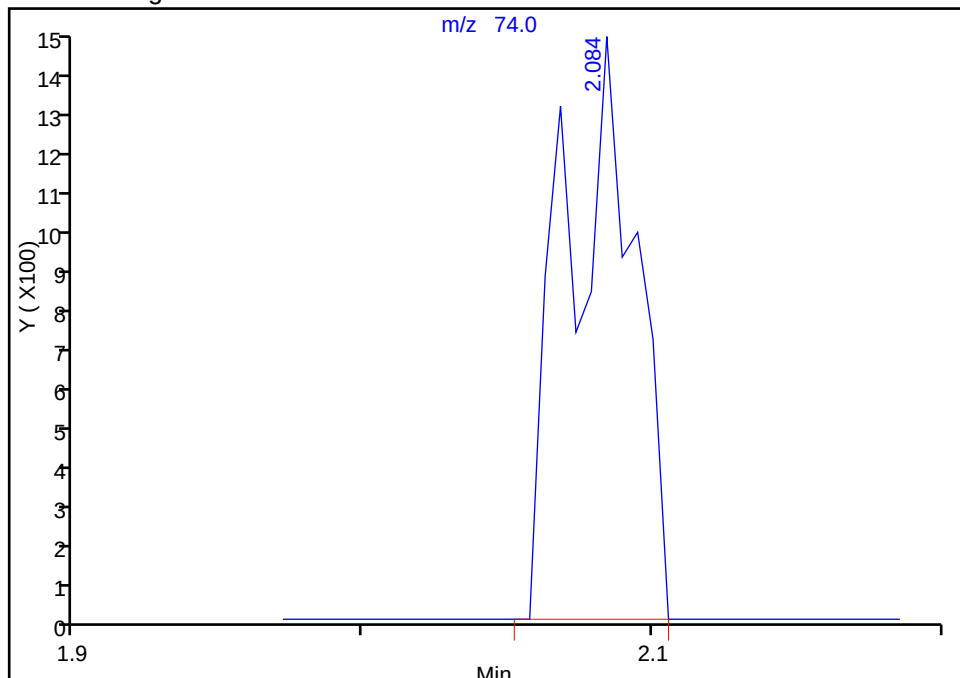
RT: 2.08  
Area: 1805  
Amount: 0.396321  
Amount Units: ng

## Processing Integration Results



RT: 2.08  
Area: 2499  
Amount: 0.342589  
Amount Units: ng

## Manual Integration Results



Reviewer: piccolinov, 01-Sep-2015 04:09:03  
Audit Action: Manually Integrated  
Audit Reason: Poor chromatography

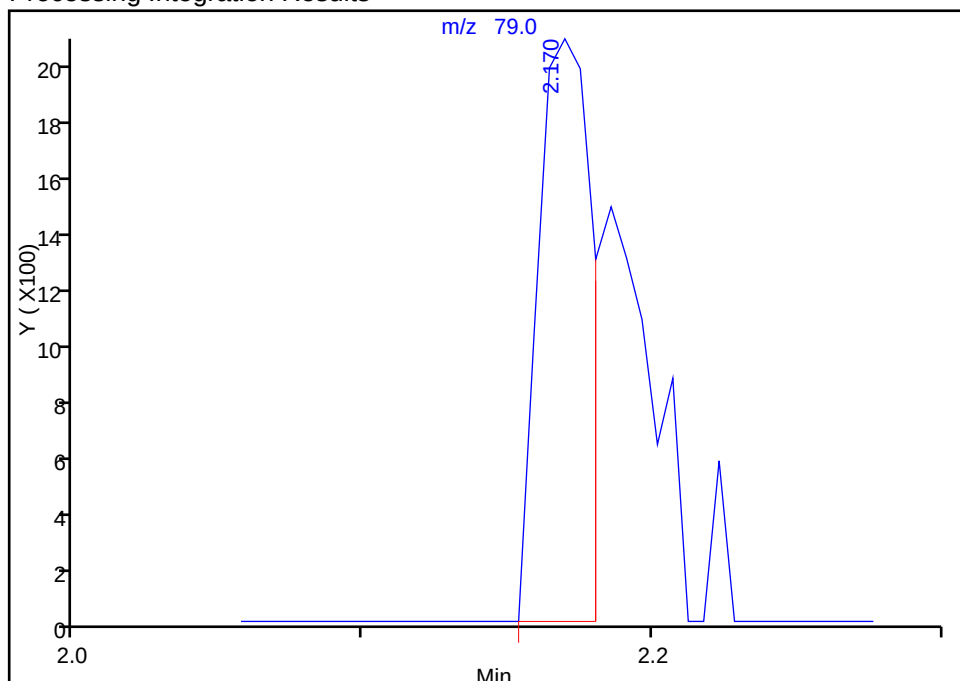
## TestAmerica Pittsburgh

|                 |                                                                 |                |                |
|-----------------|-----------------------------------------------------------------|----------------|----------------|
| Data File:      | \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901003.D |                |                |
| Injection Date: | 31-Aug-2015 13:40:30                                            | Instrument ID: | CH731          |
| Lims ID:        | IC                                                              |                |                |
| Client ID:      |                                                                 |                |                |
| Operator ID:    | 003200                                                          | ALS Bottle#:   | 2              |
| Injection Vol:  | 2.0 ul                                                          | Dil. Factor:   | 1.0000         |
| Method:         | BNA_CH731                                                       | Limit Group:   | BNA 8270D ICAL |
| Column:         | Rxi-5SilMS (0.32 mm)                                            | Detector:      | MS SCAN        |
|                 |                                                                 | Worklist Smp#: | 3              |

## 15 Pyridine, CAS: 110-86-1

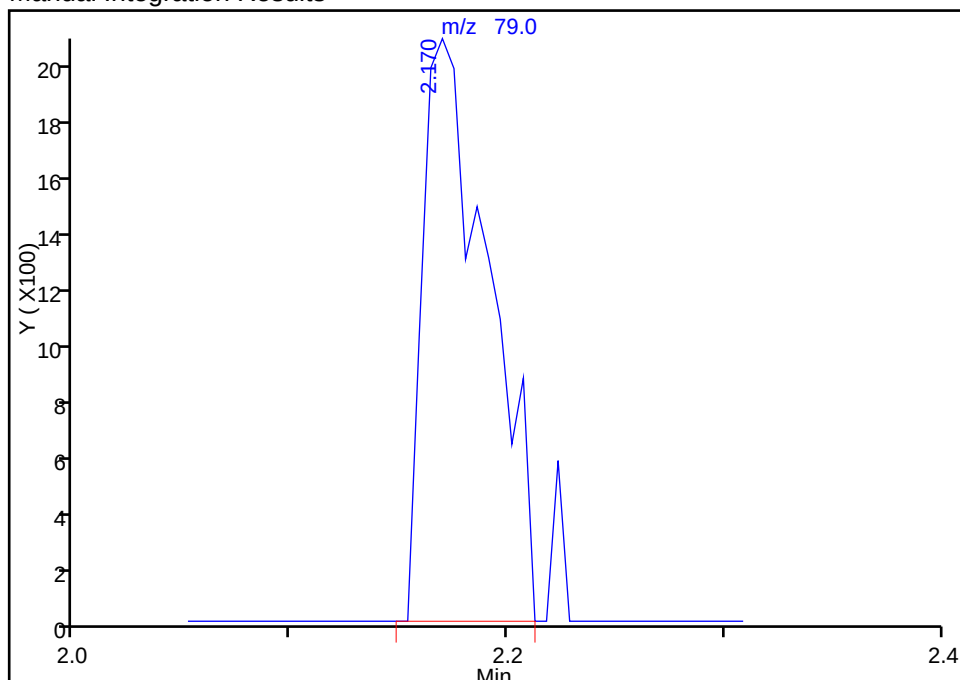
RT: 2.17  
Area: 2695  
Amount: 0.390808  
Amount Units: ng

## Processing Integration Results



RT: 2.17  
Area: 4427  
Amount: 0.324294  
Amount Units: ng

## Manual Integration Results



Reviewer: piccolinov, 01-Sep-2015 04:09:03  
Audit Action: Manually Integrated  
Audit Reason: Poor chromatography

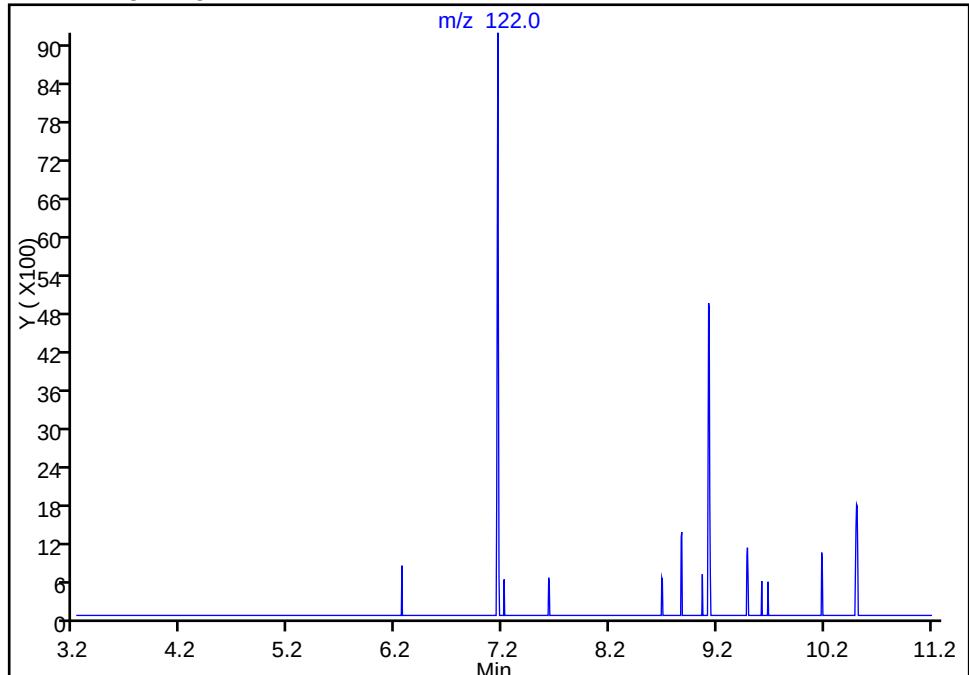
## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\0901003.D  
Injection Date: 31-Aug-2015 13:40:30 Instrument ID: CH731  
Lims ID: IC  
Client ID:  
Operator ID: 003200 ALS Bottle#: 2 Worklist Smp#: 3  
Injection Vol: 2.0 ul Dil. Factor: 1.0000  
Method: BNA\_CH731 Limit Group: BNA 8270D ICAL  
Column: Rxi-5SilMS ( 0.32 mm) Detector MS SCAN

**56 Benzoic acid, CAS: 65-85-0**

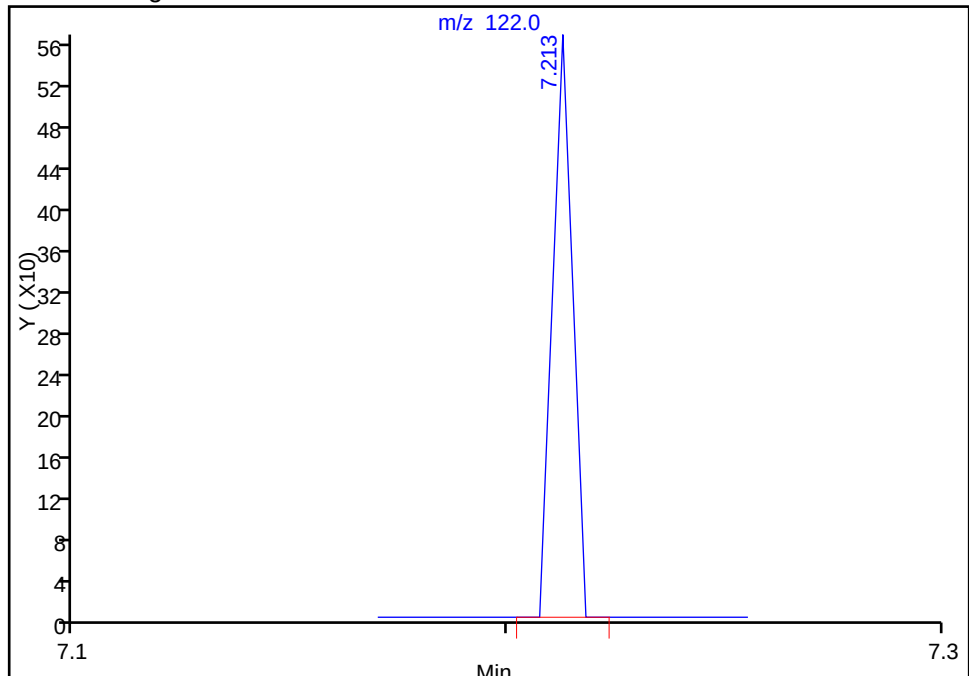
Not Detected  
Expected RT: 7.21

## Processing Integration Results



RT: 7.21  
Area: 180  
Amount: 3.041930  
Amount Units: ng

## Manual Integration Results



Reviewer: piccolinov, 01-Sep-2015 04:09:03  
Audit Action: Manually Integrated  
Audit Reason: Poor chromatography



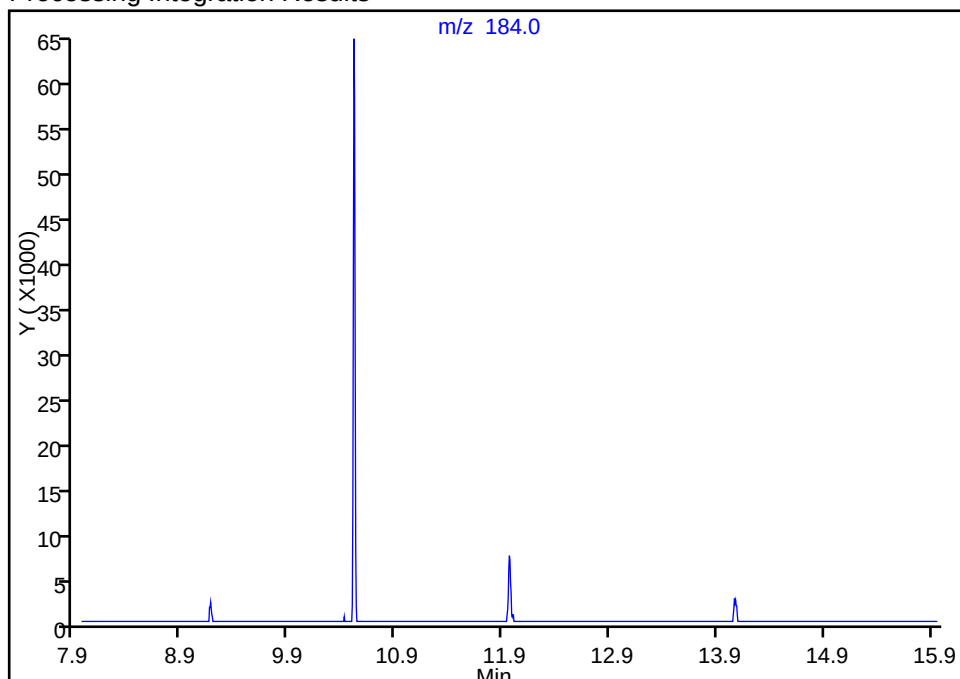
## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901003.D  
Injection Date: 31-Aug-2015 13:40:30 Instrument ID: CH731  
Lims ID: IC  
Client ID:  
Operator ID: 003200 ALS Bottle#: 2 Worklist Smp#: 3  
Injection Vol: 2.0 ul Dil. Factor: 1.0000  
Method: BNA\_CH731 Limit Group: BNA 8270D ICAL  
Column: Rxi-5SilMS ( 0.32 mm) Detector MS SCAN

## 138 Benzidine, CAS: 92-87-5

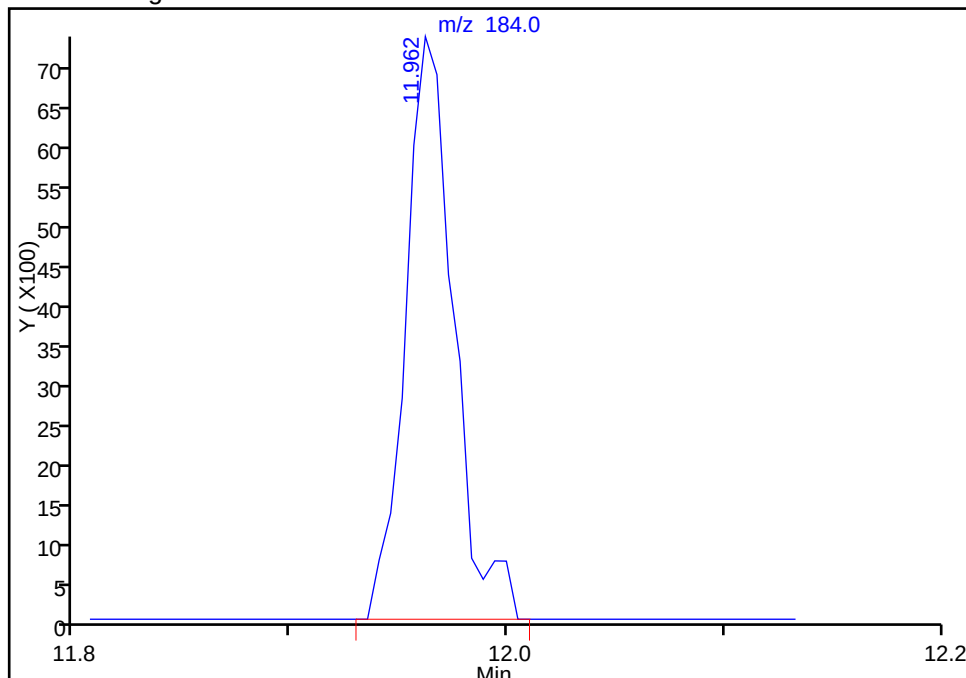
Not Detected  
Expected RT: 11.96

## Processing Integration Results



RT: 11.96  
Area: 11290  
Amount: 0.345801  
Amount Units: ng

## Manual Integration Results



Reviewer: piccolinov, 01-Sep-2015 04:09:03  
Audit Action: Manually Integrated  
Audit Reason: Poor chromatography

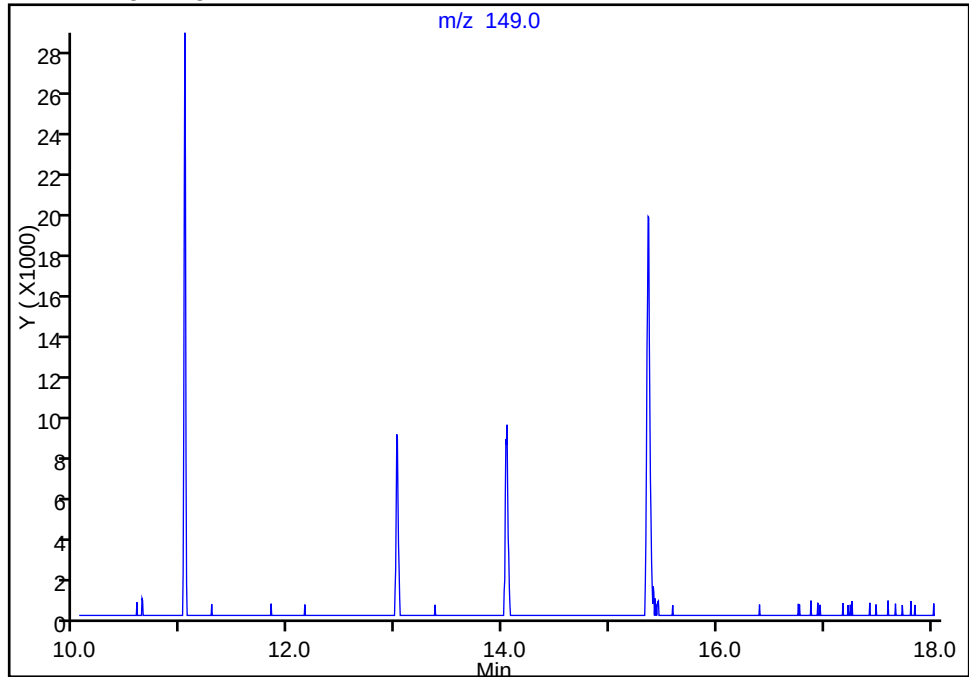
## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901003.D  
Injection Date: 31-Aug-2015 13:40:30 Instrument ID: CH731  
Lims ID: IC  
Client ID:  
Operator ID: 003200 ALS Bottle#: 2 Worklist Smp#: 3  
Injection Vol: 2.0 ul Dil. Factor: 1.0000  
Method: BNA\_CH731 Limit Group: BNA 8270D ICAL  
Column: Rxi-5SilMS ( 0.32 mm) Detector MS SCAN

**151 Bis(2-ethylhexyl) phthalate, CAS: 117-81-7**

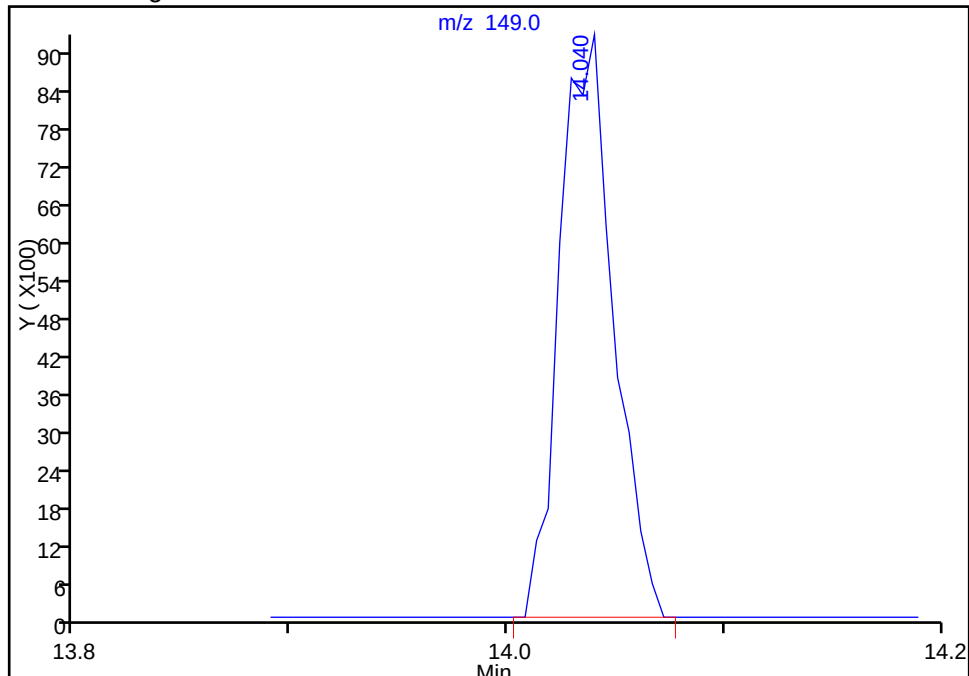
Not Detected  
Expected RT: 14.04

## Processing Integration Results



RT: 14.04  
Area: 15912  
Amount: 0.358836  
Amount Units: ng

## Manual Integration Results



Reviewer: piccolinov, 01-Sep-2015 04:09:03  
Audit Action: Manually Integrated  
Audit Reason: Poor chromatography

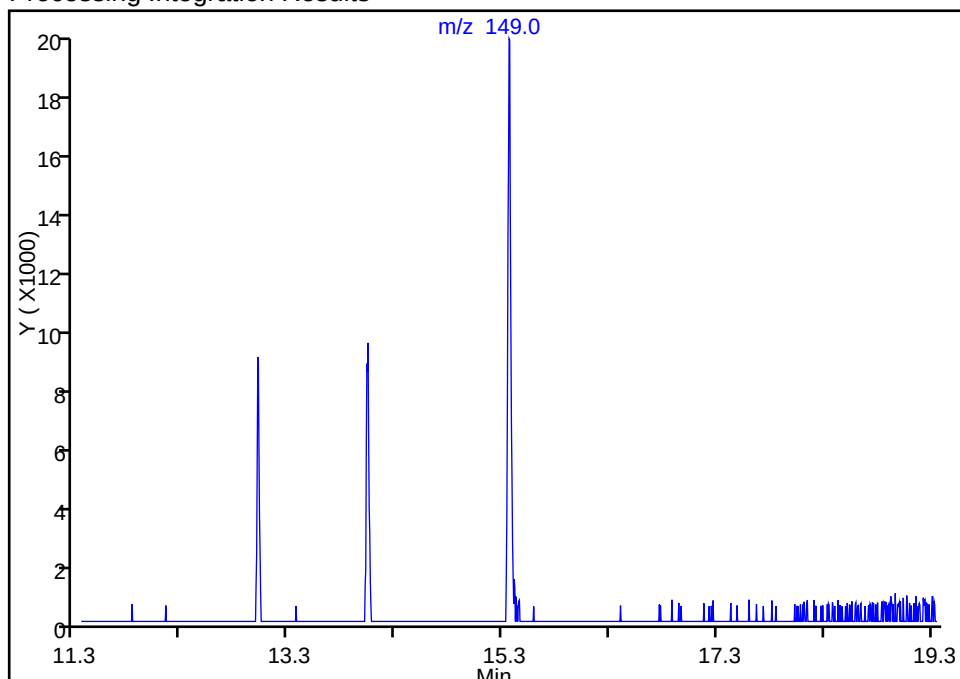
## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901003.D  
Injection Date: 31-Aug-2015 13:40:30 Instrument ID: CH731  
Lims ID: IC  
Client ID:  
Operator ID: 003200 ALS Bottle#: 2 Worklist Smp#: 3  
Injection Vol: 2.0 ul Dil. Factor: 1.0000  
Method: BNA\_CH731 Limit Group: BNA 8270D ICAL  
Column: Rxi-5SilMS ( 0.32 mm) Detector MS SCAN

## 156 Di-n-octyl phthalate, CAS: 117-84-0

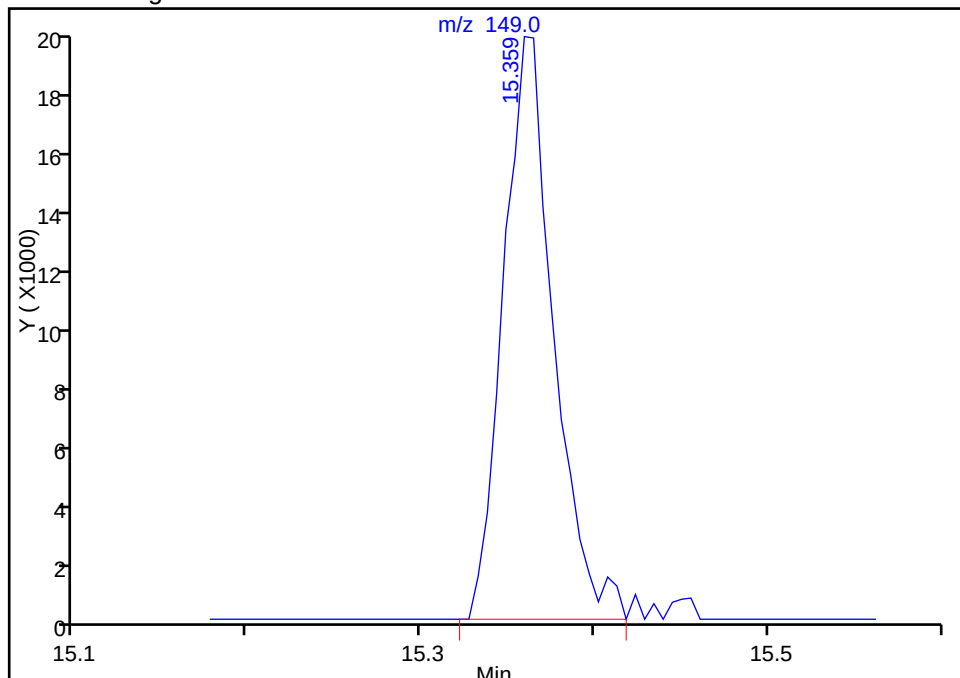
Not Detected  
Expected RT: 15.36

## Processing Integration Results



RT: 15.36  
Area: 38875  
Amount: 0.495243  
Amount Units: ng

## Manual Integration Results



Reviewer: piccolinov, 01-Sep-2015 04:09:03  
Audit Action: Manually Integrated  
Audit Reason: Poor chromatography

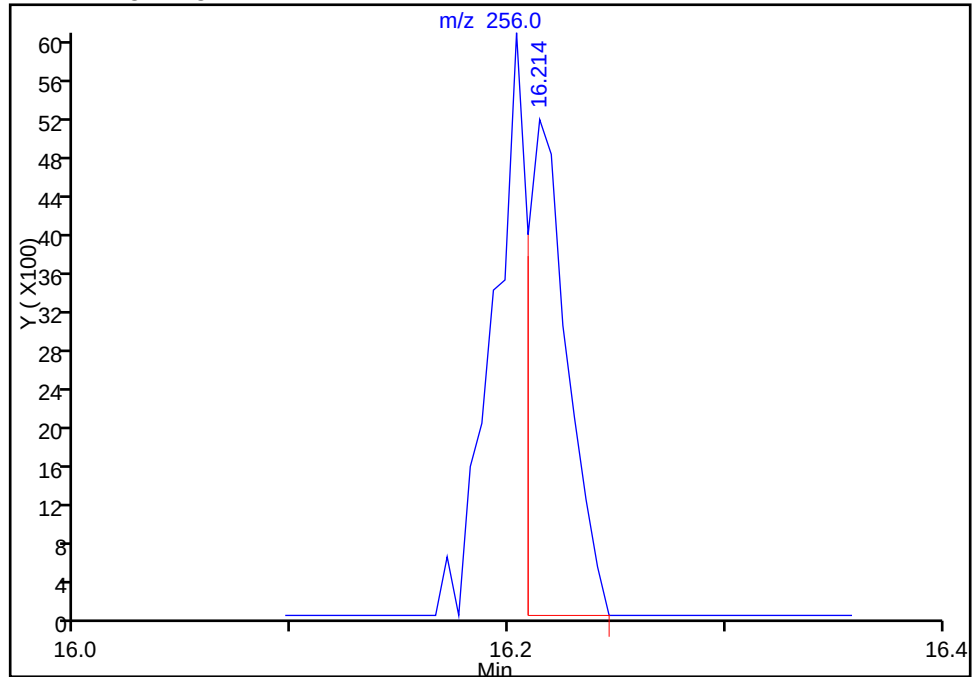
## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901003.D  
Injection Date: 31-Aug-2015 13:40:30 Instrument ID: CH731  
Lims ID: IC  
Client ID:  
Operator ID: 003200 ALS Bottle#: 2 Worklist Smp#: 3  
Injection Vol: 2.0 ul Dil. Factor: 1.0000  
Method: BNA\_CH731 Limit Group: BNA 8270D ICAL  
Column: Rxi-5SilMS ( 0.32 mm) Detector MS SCAN

## 157 7,12-Dimethylbenz(a)anthracene, CAS: 57-97-6

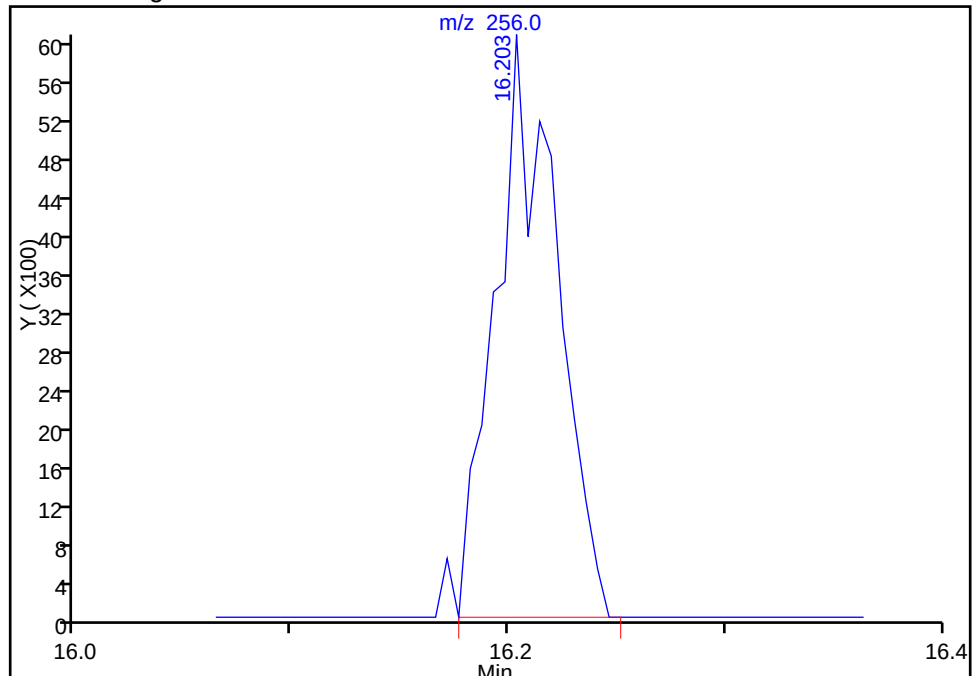
RT: 16.21  
Area: 6627  
Amount: 0.397567  
Amount Units: ng

## Processing Integration Results



RT: 16.20  
Area: 11900  
Amount: 0.363402  
Amount Units: ng

## Manual Integration Results



Reviewer: piccolinov, 01-Sep-2015 04:09:03  
Audit Action: Manually Integrated  
Audit Reason: Poor chromatography

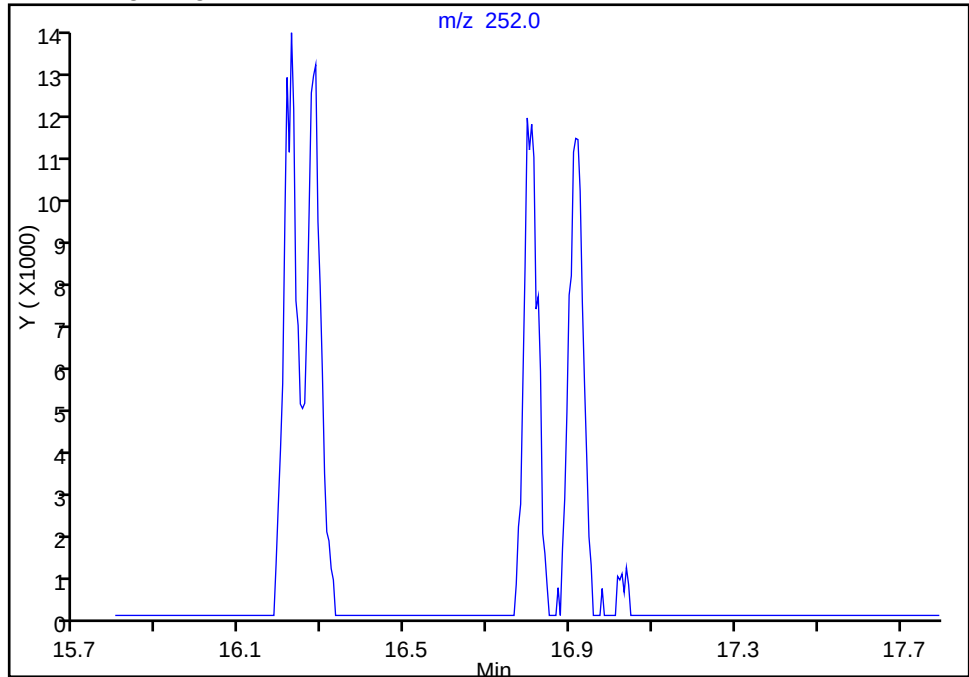
## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901003.D  
Injection Date: 31-Aug-2015 13:40:30 Instrument ID: CH731  
Lims ID: IC  
Client ID:  
Operator ID: 003200 ALS Bottle#: 2 Worklist Smp#: 3  
Injection Vol: 2.0 ul Dil. Factor: 1.0000  
Method: BNA\_CH731 Limit Group: BNA 8270D ICAL  
Column: Rxi-5SilMS ( 0.32 mm) Detector MS SCAN

**176 Benzo[e]pyrene, CAS: 192-97-2**

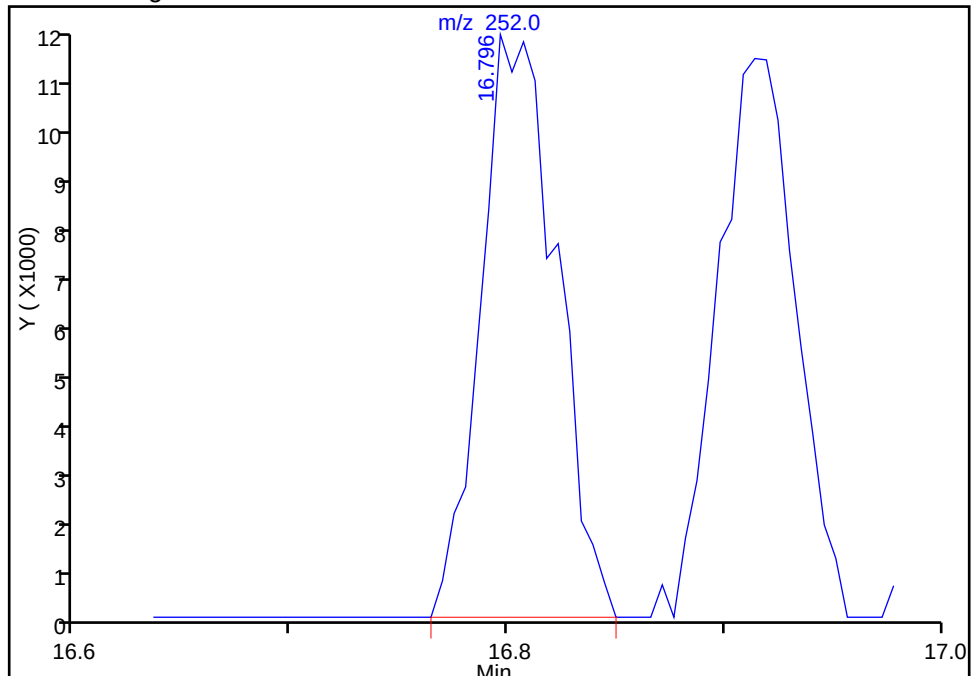
Not Detected  
Expected RT: 16.80

## Processing Integration Results



RT: 16.80  
Area: 26976  
Amount: 0.384447  
Amount Units: ng

## Manual Integration Results



Reviewer: piccolinov, 01-Sep-2015 04:09:03  
Audit Action: Manually Integrated  
Audit Reason: Poor chromatography

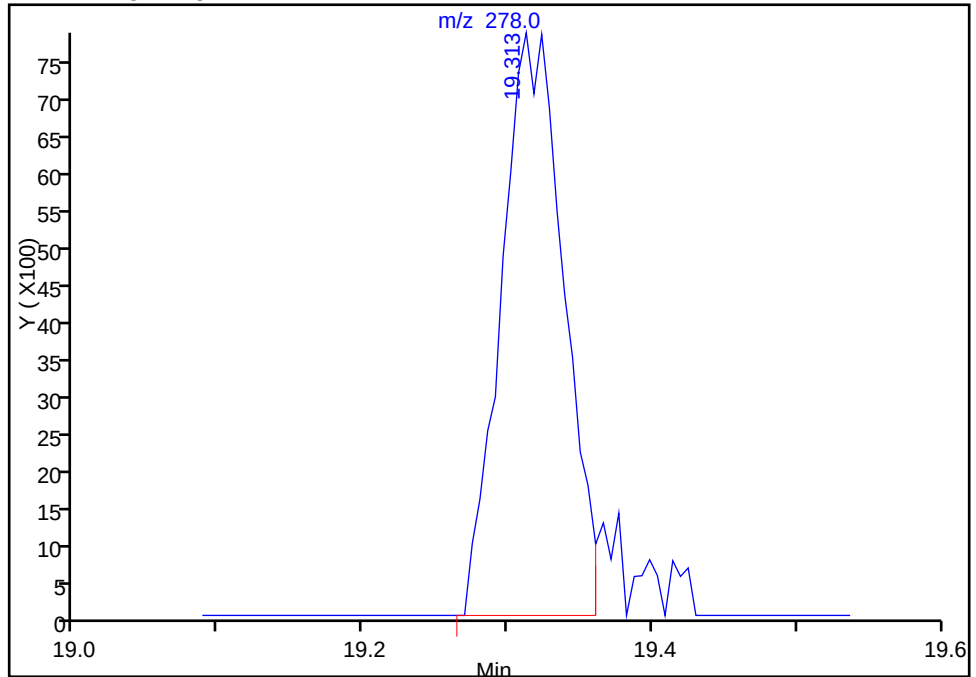
## TestAmerica Pittsburgh

|                 |                                                                |                |                |
|-----------------|----------------------------------------------------------------|----------------|----------------|
| Data File:      | \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\0901003.D |                |                |
| Injection Date: | 31-Aug-2015 13:40:30                                           | Instrument ID: | CH731          |
| Lims ID:        | IC                                                             |                |                |
| Client ID:      |                                                                |                |                |
| Operator ID:    | 003200                                                         | ALS Bottle#:   | 2              |
| Injection Vol:  | 2.0 ul                                                         | Dil. Factor:   | 1.0000         |
| Method:         | BNA_CH731                                                      | Limit Group:   | BNA 8270D ICAL |
| Column:         | Rxi-5SilMS (0.32 mm)                                           | Detector       | MS SCAN        |
|                 |                                                                | Worklist Smp#: | 3              |

**164 Dibenz(a,h)anthracene, CAS: 53-70-3**

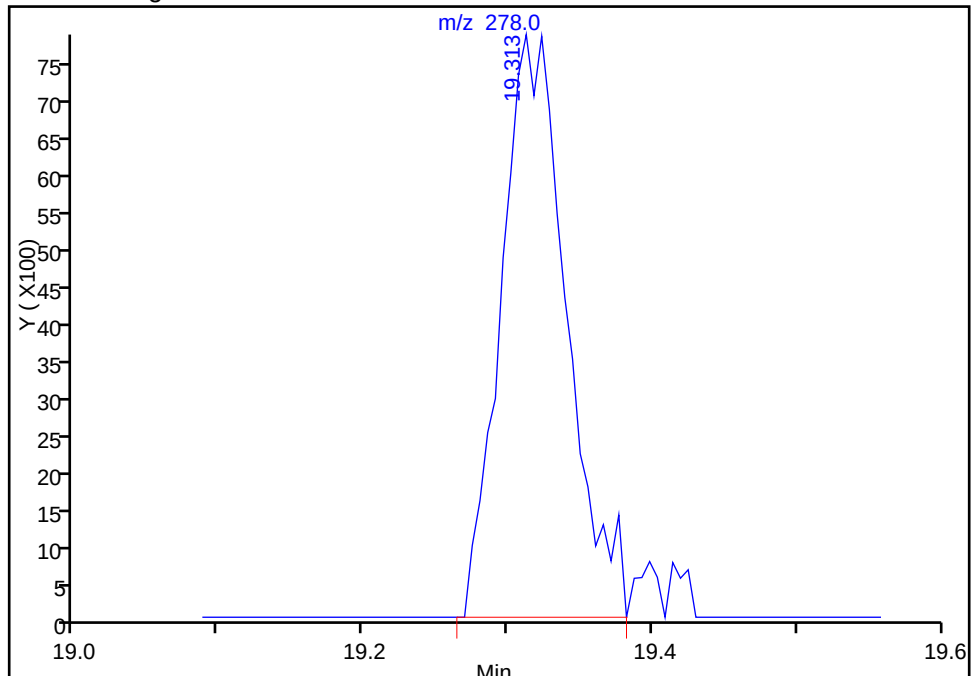
RT: 19.31  
Area: 23672  
Amount: 0.343538  
Amount Units: ng

## Processing Integration Results



RT: 19.31  
Area: 24757  
Amount: 0.356840  
Amount Units: ng

## Manual Integration Results



Reviewer: piccolinov, 01-Sep-2015 04:09:03  
Audit Action: Manually Integrated  
Audit Reason: Poor chromatography

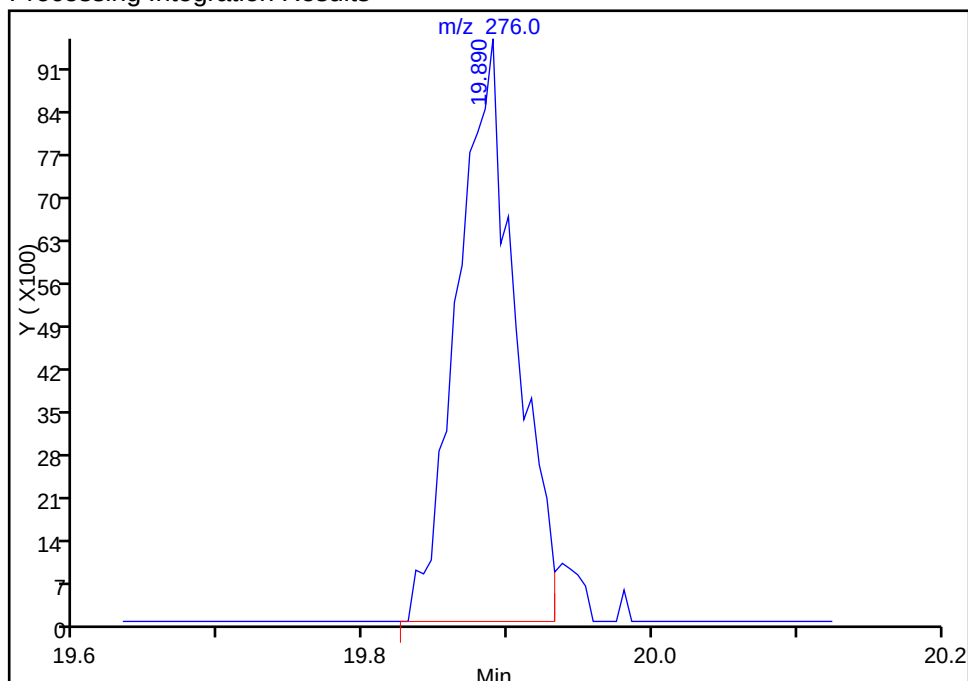
## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901003.D  
Injection Date: 31-Aug-2015 13:40:30 Instrument ID: CH731  
Lims ID: IC  
Client ID:  
Operator ID: 003200 ALS Bottle#: 2 Worklist Smp#: 3  
Injection Vol: 2.0 ul Dil. Factor: 1.0000  
Method: BNA\_CH731 Limit Group: BNA 8270D ICAL  
Column: Rxi-5SilMS ( 0.32 mm) Detector MS SCAN

**165 Benzo[g,h,i]perylene, CAS: 191-24-2**

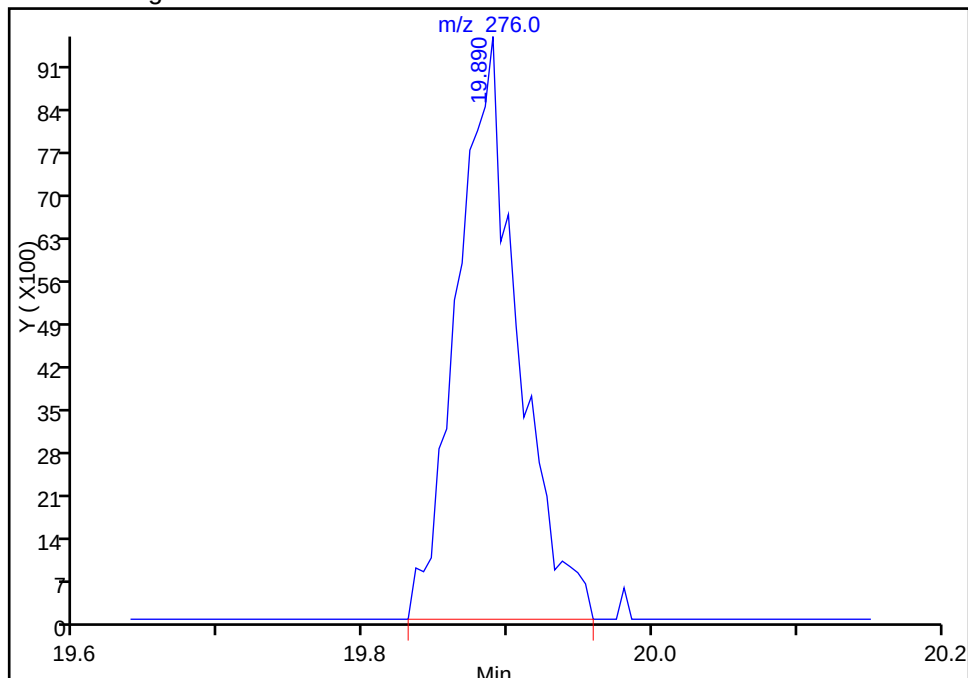
RT: 19.89  
Area: 26688  
Amount: 0.374712  
Amount Units: ng

## Processing Integration Results



RT: 19.89  
Area: 27696  
Amount: 0.388177  
Amount Units: ng

## Manual Integration Results



Reviewer: piccolinov, 01-Sep-2015 04:09:03  
Audit Action: Manually Integrated  
Audit Reason: Poor chromatography

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901004.D  
 Lims ID: IC  
 Client ID:  
 Sample Type: IC Calib Level: 2  
 Inject. Date: 31-Aug-2015 14:08:30 ALS Bottle#: 3 Worklist Smp#: 4  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Sample Info: 180-0008349-004  
 Operator ID: 003200 Instrument ID: CH731  
 Sublist: chrom-BNA\_CH731\*sub4  
 Method: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\BNA\_CH731.m  
 Limit Group: BNA 8270D ICAL  
 Last Update: 01-Sep-2015 04:26:30 Calib Date: 31-Aug-2015 16:55:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last Ical File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901010.D  
 Column 1 : Rxi-5SiIMS ( 0.32 mm) Det: MS SCAN  
 Process Host: XAWRK024

First Level Reviewer: piccolinov

Date: 01-Sep-2015 04:10:30

| Compound                      | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q   | Response | Cal Amt ng | OnCol Amt ng | Flags |
|-------------------------------|-----|-----------|---------------|---------------|-----|----------|------------|--------------|-------|
| * 1 1,4-Dichlorobenzene-d4    | 152 | 6.257     | 6.256         | 0.001         | 94  | 108227   | 8.00       | 8.00         |       |
| * 2 Naphthalene-d8            | 136 | 7.485     | 7.490         | -0.005        | 100 | 432257   | 8.00       | 8.00         |       |
| * 3 Acenaphthene-d10          | 164 | 9.125     | 9.130         | -0.005        | 92  | 273755   | 8.00       | 8.00         |       |
| * 4 Phenanthrene-d10          | 188 | 10.509    | 10.509        | 0.000         | 97  | 490293   | 8.00       | 8.00         |       |
| * 5 Chrysene-d12              | 240 | 14.067    | 14.072        | -0.005        | 97  | 495963   | 8.00       | 8.00         |       |
| * 6 Perylene-d12              | 264 | 17.026    | 17.031        | -0.005        | 97  | 468875   | 8.00       | 8.00         |       |
| \$ 7 2-Fluorophenol           | 112 | 4.852     | 4.851         | 0.001         | 92  | 32550    | 2.00       | 2.04         |       |
| \$ 8 Phenol-d5                | 99  | 5.893     | 5.893         | 0.000         | 95  | 41939    | 2.00       | 2.02         |       |
| \$ 9 Nitrobenzene-d5          | 82  | 6.791     | 6.796         | -0.005        | 91  | 43441    | 2.00       | 2.07         |       |
| \$ 10 2-Fluorobiphenyl        | 172 | 8.484     | 8.489         | -0.005        | 100 | 97501    | 2.00       | 2.04         |       |
| \$ 11 2,4,6-Tribromophenol    | 330 | 9.852     | 9.857         | -0.005        | 89  | 11634    | 2.00       | 1.71         |       |
| \$ 12 Terphenyl-d14           | 244 | 12.299    | 12.304        | -0.005        | 99  | 96061    | 2.00       | 2.04         |       |
| 13 1,4-Dioxane                | 88  | 1.433     | 1.432         | 0.001         | 88  | 11101    | 2.00       | 2.02         |       |
| 14 N-Nitrosodimethylamine     | 74  | 2.068     | 2.084         | -0.016        | 85  | 13632    | 2.00       | 1.95         |       |
| 15 Pyridine                   | 79  | 2.154     | 2.170         | -0.016        | 95  | 26429    | 2.00       | 2.02         |       |
| 22 Methyl methanesulfonate    | 80  | 4.601     | 4.600         | 0.001         | 89  | 18162    | 2.00       | 2.00         |       |
| 26 Benzaldehyde               | 77  | 5.803     | 5.802         | 0.001         | 90  | 22705    | 2.00       | 2.10         |       |
| 27 Phenol                     | 94  | 5.909     | 5.909         | 0.000         | 99  | 47455    | 2.00       | 2.09         |       |
| 28 Aniline                    | 93  | 5.920     | 5.920         | 0.000         | 97  | 52643    | 2.00       | 2.05         |       |
| 29 Bis(2-chloroethyl)ether    | 93  | 5.990     | 5.989         | 0.001         | 96  | 31795    | 2.00       | 2.02         |       |
| 31 2-Chlorophenol             | 128 | 6.043     | 6.048         | -0.005        | 95  | 37759    | 2.00       | 1.96         |       |
| 32 n-Decane                   | 43  | 6.112     | 6.117         | -0.005        | 88  | 36716    | 2.00       | 2.00         |       |
| 33 1,3-Dichlorobenzene        | 146 | 6.198     | 6.203         | -0.005        | 95  | 43060    | 2.00       | 1.95         |       |
| 34 1,4-Dichlorobenzene        | 146 | 6.273     | 6.278         | -0.005        | 95  | 46277    | 2.00       | 2.04         |       |
| 36 Benzyl alcohol             | 108 | 6.390     | 6.390         | 0.000         | 90  | 22716    | 2.00       | 1.97         |       |
| 37 1,2-Dichlorobenzene        | 146 | 6.428     | 6.427         | 0.001         | 94  | 42858    | 2.00       | 1.98         |       |
| 38 2-Methylphenol             | 108 | 6.502     | 6.502         | 0.000         | 97  | 35486    | 2.00       | 2.12         |       |
| 39 Indene                     | 116 | 6.513     | 6.513         | 0.000         | 88  | 64475    | 2.00       | 1.99         |       |
| 40 2,2'-oxybis[1-chloropropan | 45  | 6.529     | 6.529         | 0.000         | 89  | 48704    | 2.00       | 2.12         |       |
| 41 N-Nitrosopyrrolidine       | 100 | 6.615     | 6.614         | 0.001         | 81  | 14628    | 2.00       | 1.91         |       |
| 44 N-Nitrosodi-n-propylamine  | 70  | 6.647     | 6.646         | 0.001         | 70  | 26603    | 2.00       | 2.16         |       |



| Compound                       | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 43 Acetophenone                | 105 | 6.647     | 6.646         | 0.001         | 78 | 53299    | 2.00       | 2.10         |       |
| 45 4-Methylphenol              | 108 | 6.647     | 6.652         | -0.005        | 61 | 35608    | 2.00       | 2.02         |       |
| 47 Hexachloroethane            | 117 | 6.764     | 6.764         | 0.000         | 93 | 19947    | 2.00       | 2.02         |       |
| 48 Nitrobenzene                | 77  | 6.812     | 6.812         | 0.000         | 90 | 43310    | 2.00       | 2.11         |       |
| 50 Isophorone                  | 82  | 7.037     | 7.036         | 0.001         | 99 | 70568    | 2.00       | 2.09         |       |
| 51 2-Nitrophenol               | 139 | 7.122     | 7.122         | 0.000         | 97 | 21894    | 2.00       | 2.11         |       |
| 52 2,4-Dimethylphenol          | 107 | 7.149     | 7.154         | -0.005        | 97 | 41418    | 2.00       | 2.06         |       |
| 56 Benzoic acid                | 122 | 7.208     | 7.213         | -0.005        | 56 | 1307     | 2.00       | 3.15         | M     |
| 55 Bis(2-chloroethoxy)methane  | 93  | 7.240     | 7.239         | 0.001         | 97 | 41308    | 2.00       | 2.03         |       |
| 57 2,4-Dichlorophenol          | 162 | 7.347     | 7.346         | 0.001         | 94 | 34899    | 2.00       | 2.03         |       |
| 59 1,2,4-Trichlorobenzene      | 180 | 7.432     | 7.437         | -0.005        | 94 | 41709    | 2.00       | 2.01         |       |
| 60 Naphthalene                 | 128 | 7.507     | 7.506         | 0.001         | 98 | 121813   | 2.00       | 2.07         |       |
| 62 4-Chloroaniline             | 127 | 7.544     | 7.544         | 0.000         | 95 | 48762    | 2.00       | 2.01         |       |
| 63 2,6-Dichlorophenol          | 162 | 7.560     | 7.560         | 0.000         | 96 | 35789    | 2.00       | 2.07         |       |
| 64 Hexachlorobutadiene         | 225 | 7.630     | 7.629         | 0.001         | 96 | 26793    | 2.00       | 2.02         |       |
| 67 Caprolactam                 | 113 | 7.833     | 7.832         | 0.001         | 78 | 9876     | 2.00       | 1.91         |       |
| 70 4-Chloro-3-methylphenol     | 107 | 7.982     | 7.987         | -0.005        | 96 | 35420    | 2.00       | 2.07         |       |
| 72 2-Methylnaphthalene         | 142 | 8.153     | 8.158         | -0.005        | 92 | 87821    | 2.00       | 2.10         |       |
| 75 1-Methylnaphthalene         | 142 | 8.249     | 8.249         | 0.000         | 92 | 76649    | 2.00       | 2.08         |       |
| 76 Hexachlorocyclopentadiene   | 237 | 8.308     | 8.308         | 0.000         | 95 | 28210    | 2.00       | 1.91         |       |
| 77 1,2,4,5-Tetrachlorobenzene  | 216 | 8.313     | 8.313         | 0.000         | 96 | 45600    | 2.00       | 2.10         |       |
| 78 2,4,6-Trichlorophenol       | 196 | 8.410     | 8.409         | 0.001         | 94 | 26423    | 2.00       | 1.95         |       |
| 79 2,4,5-Trichlorophenol       | 196 | 8.442     | 8.441         | 0.001         | 95 | 27979    | 2.00       | 1.97         |       |
| 80 1,1'-Biphenyl               | 154 | 8.581     | 8.580         | 0.001         | 95 | 106547   | 2.00       | 2.02         |       |
| 81 2-Chloronaphthalene         | 162 | 8.607     | 8.612         | -0.005        | 96 | 85690    | 2.00       | 2.06         |       |
| 82 2-Nitroaniline              | 65  | 8.682     | 8.687         | -0.005        | 82 | 23054    | 2.00       | 1.96         |       |
| 86 Dimethyl phthalate          | 163 | 8.837     | 8.842         | -0.005        | 97 | 86872    | 2.00       | 1.96         |       |
| 87 1,3-Dinitrobenzene          | 168 | 8.869     | 8.874         | -0.005        | 85 | 11653    | 2.00       | 1.65         |       |
| 88 2,6-Dinitrotoluene          | 165 | 8.901     | 8.901         | 0.000         | 91 | 19061    | 2.00       | 1.90         |       |
| 89 Acenaphthylene              | 152 | 8.997     | 8.997         | 0.000         | 98 | 130763   | 2.00       | 2.05         |       |
| 90 3-Nitroaniline              | 138 | 9.061     | 9.061         | 0.000         | 94 | 20444    | 2.00       | 1.90         |       |
| 91 Acenaphthene                | 153 | 9.158     | 9.157         | 0.001         | 92 | 83539    | 2.00       | 2.07         |       |
| 92 2,4-Dinitrophenol           | 184 | 9.158     | 9.168         | -0.010        | 60 | 12511    | 4.00       | 4.21         |       |
| 93 4-Nitrophenol               | 109 | 9.190     | 9.195         | -0.005        | 82 | 27200    | 4.00       | 3.78         |       |
| 94 2,4-Dinitrotoluene          | 165 | 9.275     | 9.275         | 0.000         | 90 | 25755    | 2.00       | 1.91         |       |
| 95 Dibenzofuran                | 168 | 9.312     | 9.317         | -0.005        | 95 | 123527   | 2.00       | 2.05         |       |
| 97 2,3,5,6-Tetrachlorophenol   | 232 | 9.382     | 9.387         | -0.005        | 93 | 24428    | 2.00       | 1.88         |       |
| 99 2,3,4,6-Tetrachlorophenol   | 232 | 9.425     | 9.424         | 0.001         | 73 | 25094    | 2.00       | 1.89         |       |
| 100 2-Naphthylamine            | 143 | 9.451     | 9.451         | 0.000         | 96 | 84965    | 2.00       | 2.07         |       |
| 101 Diethyl phthalate          | 149 | 9.483     | 9.483         | 0.000         | 98 | 95724    | 2.00       | 2.07         |       |
| 102 Hexadecane                 | 57  | 9.494     | 9.494         | 0.000         | 96 | 62263    | 2.00       | 2.20         |       |
| 104 4-Chlorophenyl phenyl ethe | 204 | 9.612     | 9.617         | -0.005        | 93 | 48092    | 2.00       | 1.94         |       |
| 105 4-Nitroaniline             | 138 | 9.622     | 9.622         | 0.000         | 84 | 22310    | 2.00       | 1.96         |       |
| 106 Fluorene                   | 166 | 9.633     | 9.633         | 0.000         | 95 | 102583   | 2.00       | 2.08         |       |
| 108 4,6-Dinitro-2-methylphenol | 198 | 9.654     | 9.654         | 0.000         | 84 | 30508    | 4.00       | 3.65         |       |
| 109 N-Nitrosodiphenylamine     | 169 | 9.718     | 9.718         | 0.000         | 63 | 143210   | 4.00       | 4.21         |       |
| 61 Azobenzene                  | 77  | 9.761     | 9.761         | 0.000         | 99 | 99702    | 2.00       | 2.17         |       |
| 111 1,2-Diphenylhydrazine      | 77  | 9.761     | 9.761         | 0.000         | 99 | 99702    | 2.00       | 2.17         |       |
| 116 4-Bromophenyl phenyl ether | 248 | 10.071    | 10.071        | 0.000         | 68 | 28113    | 2.00       | 2.04         |       |
| 118 Hexachlorobenzene          | 284 | 10.151    | 10.156        | -0.005        | 91 | 28493    | 2.00       | 1.90         |       |
| 119 Atrazine                   | 200 | 10.183    | 10.188        | -0.005        | 92 | 25353    | 2.00       | 1.90         |       |
| 122 Pentachlorophenol          | 266 | 10.322    | 10.327        | -0.005        | 90 | 43404    | 4.00       | 4.23         |       |

| Compound                       | Sig | RT<br>(min.) | Adj RT<br>(min.) | Dlt RT<br>(min.) | Q   | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|--------------------------------|-----|--------------|------------------|------------------|-----|----------|---------------|-----------------|-------|
| 121 n-Octadecane               | 57  | 10.333       | 10.338           | -0.005           | 95  | 66596    | 2.00          | 2.14            |       |
| 126 Phenanthrene               | 178 | 10.530       | 10.530           | 0.000            | 96  | 157847   | 2.00          | 2.11            |       |
| 128 Anthracene                 | 178 | 10.579       | 10.584           | -0.005           | 97  | 153060   | 2.00          | 2.05            |       |
| 130 Carbazole                  | 167 | 10.723       | 10.722           | 0.001            | 96  | 132022   | 2.00          | 2.01            |       |
| 132 Di-n-butyl phthalate       | 149 | 11.022       | 11.027           | -0.005           | 100 | 147747   | 2.00          | 1.96            |       |
| 137 Fluoranthene               | 202 | 11.834       | 11.839           | -0.005           | 97  | 151430   | 2.00          | 1.90            |       |
| 138 Benzidine                  | 184 | 11.957       | 11.962           | -0.005           | 99  | 52731    | 2.00          | 1.68            |       |
| 139 Pyrene                     | 202 | 12.138       | 12.143           | -0.005           | 98  | 160209   | 2.00          | 2.10            |       |
| 144 Butyl benzyl phthalate     | 149 | 13.009       | 13.009           | 0.000            | 98  | 58980    | 2.00          | 1.92            |       |
| 149 3,3'-Dichlorobenzidine     | 252 | 13.976       | 13.981           | -0.005           | 74  | 51162    | 2.00          | 1.89            |       |
| 151 Bis(2-ethylhexyl) phthalat | 149 | 14.030       | 14.040           | -0.010           | 97  | 82430    | 2.00          | 1.94            |       |
| 152 Benzo[a]anthracene         | 228 | 14.051       | 14.051           | 0.000            | 98  | 147520   | 2.00          | 2.04            |       |
| 153 Chrysene                   | 228 | 14.115       | 14.120           | -0.005           | 97  | 136440   | 2.00          | 2.01            |       |
| 156 Di-n-octyl phthalate       | 149 | 15.354       | 15.359           | -0.005           | 99  | 161544   | 2.00          | 2.13            |       |
| 157 7,12-Dimethylbenz(a)anthra | 256 | 16.204       | 16.203           | 0.001            | 91  | 62316    | 2.00          | 1.97            |       |
| 158 Benzo[b]fluoranthene       | 252 | 16.214       | 16.225           | -0.011           | 97  | 143518   | 2.00          | 1.98            |       |
| 159 Benzo[k]fluoranthene       | 252 | 16.273       | 16.284           | -0.011           | 99  | 144106   | 2.00          | 1.99            |       |
| 176 Benzo[e]pyrene             | 252 | 16.802       | 16.796           | 0.006            | 0   | 133992   | 2.00          | 1.98            |       |
| 160 Benzo[a]pyrene             | 252 | 16.909       | 16.914           | -0.005           | 77  | 137893   | 2.00          | 1.99            |       |
| 163 Indeno[1,2,3-cd]pyrene     | 276 | 19.276       | 19.275           | 0.001            | 99  | 157033   | 2.00          | 1.99            |       |
| 164 Dibenz(a,h)anthracene      | 278 | 19.302       | 19.313           | -0.011           | 82  | 131409   | 2.00          | 1.96            |       |
| 165 Benzo[g,h,i]perylene       | 276 | 19.874       | 19.890           | -0.016           | 97  | 133873   | 2.00          | 1.95            |       |
| S 208 Methyl Phenols, Total    | 108 |              |                  |                  | 0   |          | 4.00          | 4.14            |       |
| S 206 Total Cresols            | 108 |              |                  |                  | 0   |          | 4.00          | 4.14            |       |

**QC Flag Legend**

Review Flags

M - Manually Integrated

**Reagents:**

SVTAPSTD2.0i\_00007

Amount Added: 1.00

Units: mL

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901004.D

Injection Date: 31-Aug-2015 14:08:30

Instrument ID: CH731

Operator ID: 003200

Lims ID: IC

Worklist Smp#: 4

Client ID:

Injection Vol: 2.0 ul

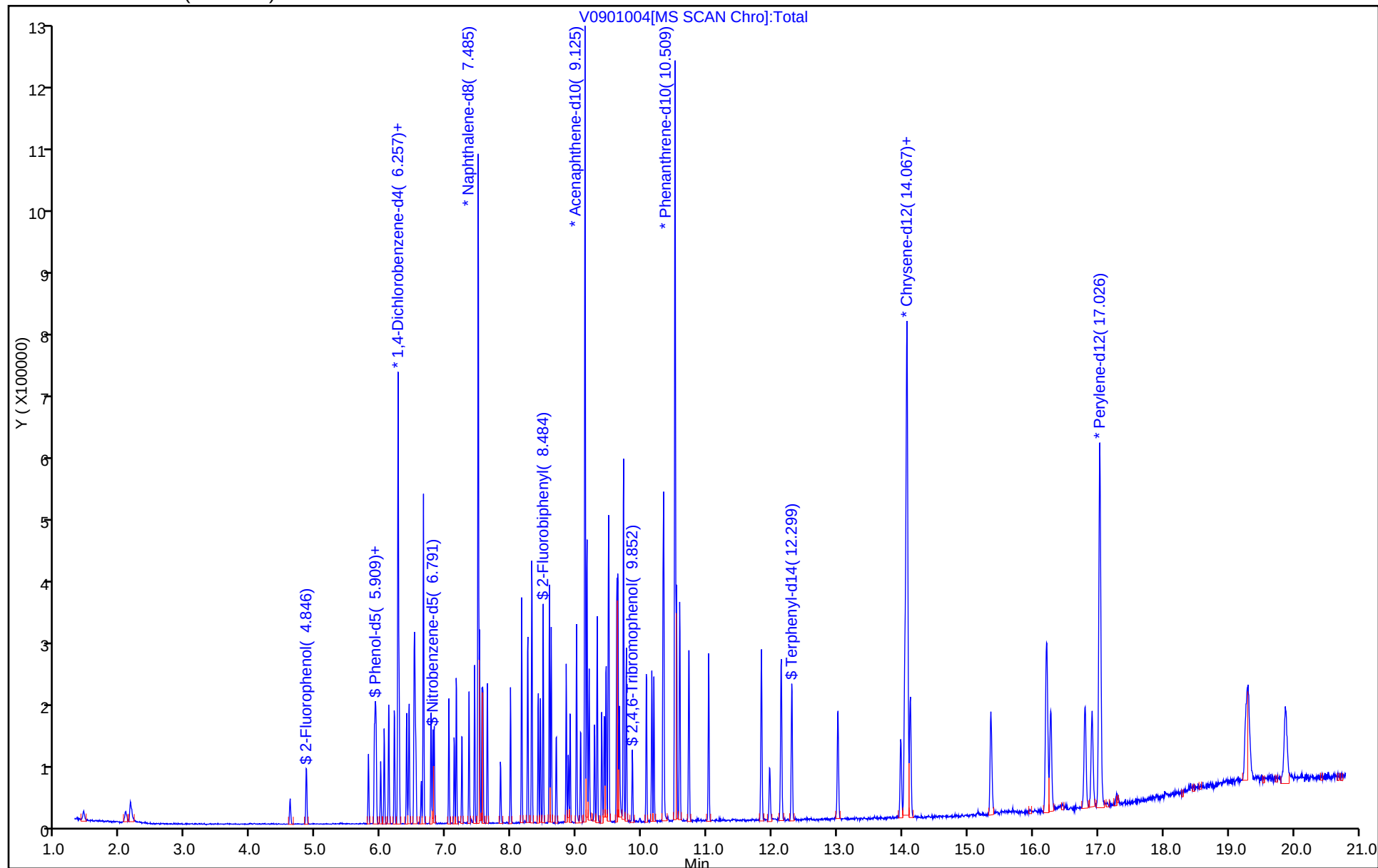
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: BNA\_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS ( 0.32 mm)



## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901004.D

Injection Date: 31-Aug-2015 14:08:30

Instrument ID: CH731

Lims ID: IC

Client ID:

Operator ID: 003200

ALS Bottle#:

3

Worklist Smp#: 4

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: BNA\_CH731

Limit Group: BNA 8270D ICAL

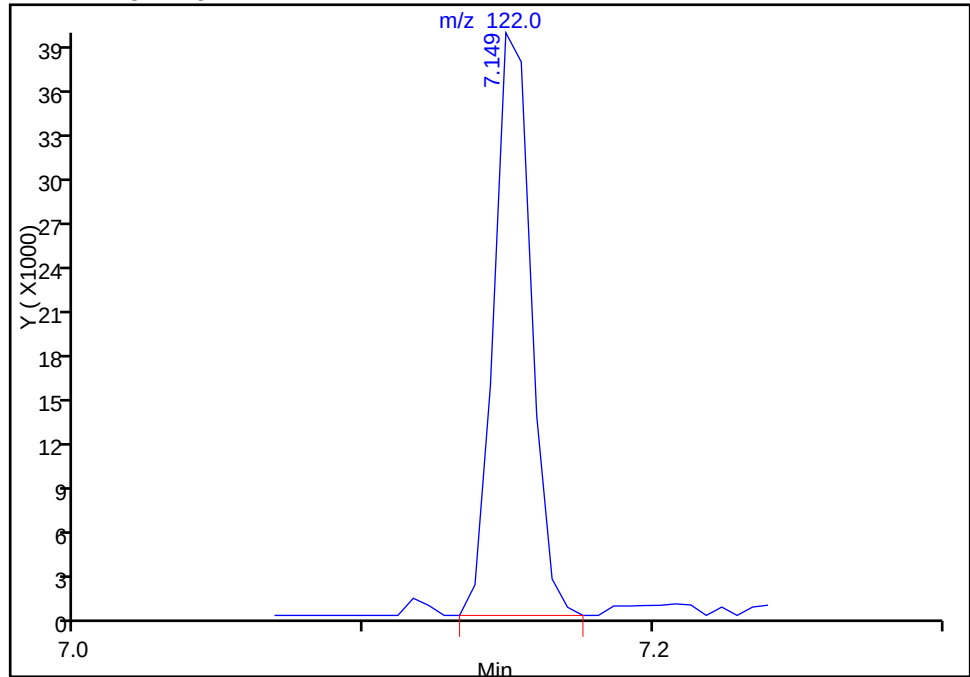
Column: Rxi-5SilMS (0.32 mm)

Detector: MS SCAN

## 56 Benzoic acid, CAS: 65-85-0

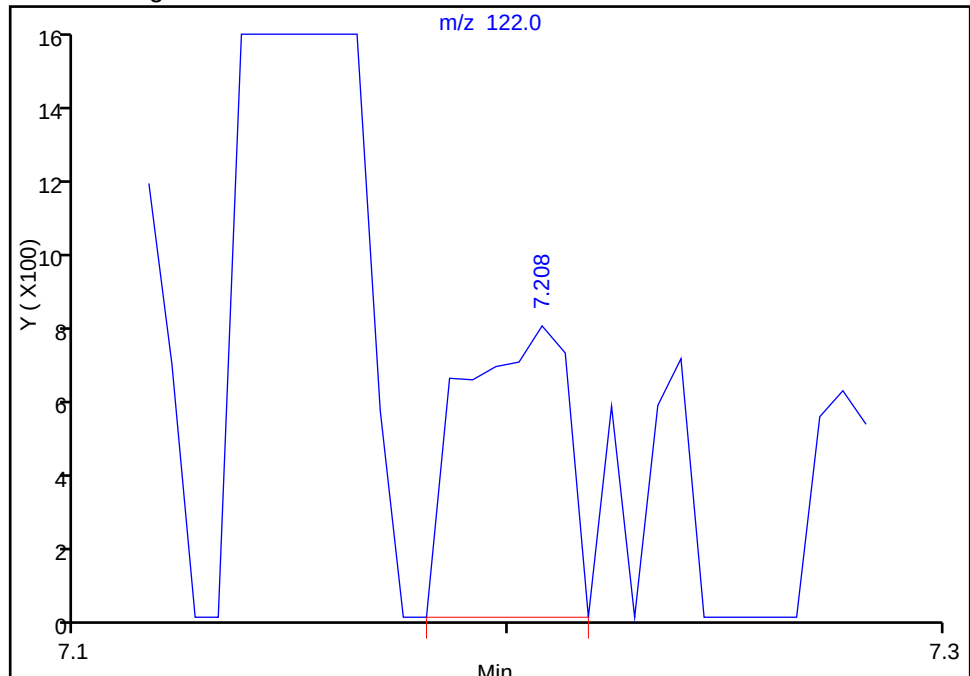
RT: 7.15  
Area: 35300  
Amount: 4.639225  
Amount Units: ng

## Processing Integration Results



RT: 7.21  
Area: 1307  
Amount: 3.152212  
Amount Units: ng

## Manual Integration Results



Reviewer: piccolinov, 01-Sep-2015 04:10:30

Audit Action: Manually Integrated

Audit Reason: Poor chromatography

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901005.D  
 Lims ID: IC  
 Client ID:  
 Sample Type: IC Calib Level: 3  
 Inject. Date: 31-Aug-2015 14:36:30 ALS Bottle#: 4 Worklist Smp#: 5  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Sample Info: 180-0008349-005  
 Operator ID: 003200 Instrument ID: CH731  
 Sublist: chrom-BNA\_CH731\*sub4  
 Method: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\BNA\_CH731.m  
 Limit Group: BNA 8270D ICAL  
 Last Update: 01-Sep-2015 04:26:32 Calib Date: 31-Aug-2015 16:55:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last Ical File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901010.D  
 Column 1 : Rxi-5SiIMS ( 0.32 mm) Det: MS SCAN  
 Process Host: XAWRK024

First Level Reviewer: piccolinov

Date: 01-Sep-2015 04:11:10

| Compound                      | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q   | Response | Cal Amt ng | OnCol Amt ng | Flags |
|-------------------------------|-----|-----------|---------------|---------------|-----|----------|------------|--------------|-------|
| * 1 1,4-Dichlorobenzene-d4    | 152 | 6.261     | 6.256         | 0.005         | 94  | 104088   | 8.00       | 8.00         |       |
| * 2 Naphthalene-d8            | 136 | 7.490     | 7.490         | 0.000         | 100 | 422371   | 8.00       | 8.00         |       |
| * 3 Acenaphthene-d10          | 164 | 9.130     | 9.130         | 0.000         | 92  | 261501   | 8.00       | 8.00         |       |
| * 4 Phenanthrene-d10          | 188 | 10.514    | 10.509        | 0.005         | 97  | 480103   | 8.00       | 8.00         |       |
| * 5 Chrysene-d12              | 240 | 14.082    | 14.072        | 0.010         | 97  | 515797   | 8.00       | 8.00         |       |
| * 6 Perylene-d12              | 264 | 17.037    | 17.031        | 0.005         | 97  | 474446   | 8.00       | 8.00         |       |
| \$ 7 2-Fluorophenol           | 112 | 4.856     | 4.851         | 0.005         | 93  | 62258    | 4.00       | 4.06         |       |
| \$ 8 Phenol-d5                | 99  | 5.898     | 5.893         | 0.005         | 95  | 84827    | 4.00       | 4.24         |       |
| \$ 9 Nitrobenzene-d5          | 82  | 6.796     | 6.796         | 0.000         | 90  | 88028    | 4.00       | 4.28         |       |
| \$ 10 2-Fluorobiphenyl        | 172 | 8.489     | 8.489         | 0.000         | 100 | 190403   | 4.00       | 4.17         |       |
| \$ 11 2,4,6-Tribromophenol    | 330 | 9.862     | 9.857         | 0.005         | 90  | 24511    | 4.00       | 3.68         |       |
| \$ 12 Terphenyl-d14           | 244 | 12.309    | 12.304        | 0.005         | 99  | 202747   | 4.00       | 4.14         |       |
| 13 1,4-Dioxane                | 88  | 1.437     | 1.432         | 0.005         | 88  | 22493    | 4.00       | 4.26         |       |
| 14 N-Nitrosodimethylamine     | 74  | 2.089     | 2.084         | 0.005         | 89  | 27865    | 4.00       | 4.15         |       |
| 15 Pyridine                   | 79  | 2.153     | 2.170         | -0.017        | 94  | 55292    | 4.00       | 4.40         |       |
| 22 Methyl methanesulfonate    | 80  | 4.605     | 4.600         | 0.005         | 90  | 36708    | 4.00       | 4.20         |       |
| 26 Benzaldehyde               | 77  | 5.807     | 5.802         | 0.005         | 94  | 43874    | 4.00       | 4.23         |       |
| 27 Phenol                     | 94  | 5.914     | 5.909         | 0.005         | 100 | 94817    | 4.00       | 4.34         |       |
| 28 Aniline                    | 93  | 5.925     | 5.920         | 0.005         | 96  | 103745   | 4.00       | 4.21         |       |
| 29 Bis(2-chloroethyl)ether    | 93  | 5.994     | 5.989         | 0.005         | 95  | 66318    | 4.00       | 4.39         |       |
| 31 2-Chlorophenol             | 128 | 6.048     | 6.048         | 0.000         | 96  | 79641    | 4.00       | 4.30         |       |
| 32 n-Decane                   | 43  | 6.117     | 6.117         | 0.000         | 89  | 78321    | 4.00       | 4.43         |       |
| 33 1,3-Dichlorobenzene        | 146 | 6.208     | 6.203         | 0.005         | 96  | 89430    | 4.00       | 4.21         |       |
| 34 1,4-Dichlorobenzene        | 146 | 6.277     | 6.278         | -0.001        | 92  | 91801    | 4.00       | 4.22         |       |
| 36 Benzyl alcohol             | 108 | 6.395     | 6.390         | 0.005         | 89  | 48151    | 4.00       | 4.34         |       |
| 37 1,2-Dichlorobenzene        | 146 | 6.432     | 6.427         | 0.005         | 95  | 89174    | 4.00       | 4.28         |       |
| 38 2-Methylphenol             | 108 | 6.507     | 6.502         | 0.005         | 97  | 70753    | 4.00       | 4.40         |       |
| 39 Indene                     | 116 | 6.518     | 6.513         | 0.005         | 89  | 132693   | 4.00       | 4.26         |       |
| 40 2,2'-oxybis[1-chloropropan | 45  | 6.534     | 6.529         | 0.005         | 88  | 95463    | 4.00       | 4.31         |       |
| 41 N-Nitrosopyrrolidine       | 100 | 6.614     | 6.614         | 0.000         | 82  | 29094    | 4.00       | 3.96         |       |
| 44 N-Nitrosodi-n-propylamine  | 70  | 6.651     | 6.646         | 0.005         | 71  | 52581    | 4.00       | 4.45         |       |

| Compound                       | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 43 Acetophenone                | 105 | 6.651     | 6.646         | 0.005         | 81 | 108645   | 4.00       | 4.45         |       |
| 45 4-Methylphenol              | 108 | 6.651     | 6.652         | -0.001        | 63 | 72549    | 4.00       | 4.28         |       |
| 47 Hexachloroethane            | 117 | 6.769     | 6.764         | 0.005         | 92 | 38937    | 4.00       | 4.10         |       |
| 48 Nitrobenzene                | 77  | 6.817     | 6.812         | 0.005         | 90 | 87150    | 4.00       | 4.34         |       |
| 50 Isophorone                  | 82  | 7.041     | 7.036         | 0.005         | 99 | 138999   | 4.00       | 4.22         |       |
| 51 2-Nitrophenol               | 139 | 7.127     | 7.122         | 0.005         | 98 | 40619    | 4.00       | 4.01         |       |
| 52 2,4-Dimethylphenol          | 107 | 7.154     | 7.154         | 0.000         | 99 | 84102    | 4.00       | 4.29         |       |
| 56 Benzoic acid                | 122 | 7.191     | 7.213         | -0.022        | 89 | 15551    | 4.00       | 4.56         | M     |
| 55 Bis(2-chloroethoxy)methane  | 93  | 7.239     | 7.239         | 0.000         | 97 | 82356    | 4.00       | 4.14         |       |
| 57 2,4-Dichlorophenol          | 162 | 7.351     | 7.346         | 0.005         | 94 | 71088    | 4.00       | 4.23         |       |
| 59 1,2,4-Trichlorobenzene      | 180 | 7.437     | 7.437         | 0.000         | 93 | 85855    | 4.00       | 4.24         |       |
| 60 Naphthalene                 | 128 | 7.511     | 7.506         | 0.005         | 97 | 238651   | 4.00       | 4.15         |       |
| 62 4-Chloroaniline             | 127 | 7.549     | 7.544         | 0.005         | 94 | 98566    | 4.00       | 4.15         |       |
| 63 2,6-Dichlorophenol          | 162 | 7.565     | 7.560         | 0.005         | 96 | 69925    | 4.00       | 4.15         |       |
| 64 Hexachlorobutadiene         | 225 | 7.634     | 7.629         | 0.005         | 96 | 54777    | 4.00       | 4.23         |       |
| 67 Caprolactam                 | 113 | 7.837     | 7.832         | 0.005         | 77 | 18977    | 4.00       | 3.75         |       |
| 70 4-Chloro-3-methylphenol     | 107 | 7.987     | 7.987         | 0.000         | 95 | 69183    | 4.00       | 4.14         |       |
| 72 2-Methylnaphthalene         | 142 | 8.158     | 8.158         | 0.000         | 92 | 172507   | 4.00       | 4.21         |       |
| 75 1-Methylnaphthalene         | 142 | 8.254     | 8.249         | 0.005         | 93 | 153822   | 4.00       | 4.28         |       |
| 76 Hexachlorocyclopentadiene   | 237 | 8.313     | 8.308         | 0.005         | 97 | 56673    | 4.00       | 4.03         |       |
| 77 1,2,4,5-Tetrachlorobenzene  | 216 | 8.318     | 8.313         | 0.005         | 98 | 87870    | 4.00       | 4.23         |       |
| 78 2,4,6-Trichlorophenol       | 196 | 8.414     | 8.409         | 0.005         | 94 | 54244    | 4.00       | 4.19         |       |
| 79 2,4,5-Trichlorophenol       | 196 | 8.446     | 8.441         | 0.005         | 93 | 55772    | 4.00       | 4.11         |       |
| 80 1,1'-Biphenyl               | 154 | 8.585     | 8.580         | 0.005         | 94 | 214141   | 4.00       | 4.24         |       |
| 81 2-Chloronaphthalene         | 162 | 8.612     | 8.612         | 0.000         | 97 | 170202   | 4.00       | 4.29         |       |
| 82 2-Nitroaniline              | 65  | 8.692     | 8.687         | 0.005         | 82 | 46947    | 4.00       | 4.19         |       |
| 86 Dimethyl phthalate          | 163 | 8.842     | 8.842         | 0.000         | 97 | 177042   | 4.00       | 4.19         |       |
| 87 1,3-Dinitrobenzene          | 168 | 8.874     | 8.874         | 0.000         | 88 | 25857    | 4.00       | 3.84         |       |
| 88 2,6-Dinitrotoluene          | 165 | 8.906     | 8.901         | 0.005         | 95 | 40402    | 4.00       | 4.21         |       |
| 89 Acenaphthylene              | 152 | 9.002     | 8.997         | 0.005         | 98 | 250435   | 4.00       | 4.11         |       |
| 90 3-Nitroaniline              | 138 | 9.066     | 9.061         | 0.005         | 92 | 42653    | 4.00       | 4.15         |       |
| 91 Acenaphthene                | 153 | 9.162     | 9.157         | 0.005         | 91 | 167192   | 4.00       | 4.33         |       |
| 92 2,4-Dinitrophenol           | 184 | 9.162     | 9.168         | -0.006        | 62 | 33546    | 8.00       | 7.38         |       |
| 93 4-Nitrophenol               | 109 | 9.194     | 9.195         | -0.001        | 83 | 54652    | 8.00       | 7.95         |       |
| 94 2,4-Dinitrotoluene          | 165 | 9.280     | 9.275         | 0.005         | 91 | 51206    | 4.00       | 3.97         |       |
| 95 Dibenzofuran                | 168 | 9.317     | 9.317         | 0.000         | 95 | 242079   | 4.00       | 4.21         |       |
| 97 2,3,5,6-Tetrachlorophenol   | 232 | 9.387     | 9.387         | 0.000         | 93 | 49331    | 4.00       | 3.98         |       |
| 99 2,3,4,6-Tetrachlorophenol   | 232 | 9.429     | 9.424         | 0.005         | 74 | 50343    | 4.00       | 3.97         |       |
| 100 2-Naphthylamine            | 143 | 9.456     | 9.451         | 0.005         | 96 | 161622   | 4.00       | 4.13         |       |
| 101 Diethyl phthalate          | 149 | 9.488     | 9.483         | 0.005         | 97 | 182244   | 4.00       | 4.12         |       |
| 102 Hexadecane                 | 57  | 9.499     | 9.494         | 0.005         | 96 | 121910   | 4.00       | 4.40         |       |
| 104 4-Chlorophenyl phenyl ethe | 204 | 9.616     | 9.617         | -0.001        | 95 | 95483    | 4.00       | 4.02         |       |
| 105 4-Nitroaniline             | 138 | 9.627     | 9.622         | 0.005         | 82 | 43917    | 4.00       | 4.04         |       |
| 106 Fluorene                   | 166 | 9.638     | 9.633         | 0.005         | 95 | 198272   | 4.00       | 4.21         |       |
| 108 4,6-Dinitro-2-methylphenol | 198 | 9.659     | 9.654         | 0.005         | 83 | 55789    | 8.00       | 6.82         |       |
| 109 N-Nitrosodiphenylamine     | 169 | 9.723     | 9.718         | 0.005         | 63 | 278021   | 8.00       | 8.34         |       |
| 61 Azobenzene                  | 77  | 9.766     | 9.761         | 0.005         | 99 | 193083   | 4.00       | 4.29         |       |
| 111 1,2-Diphenylhydrazine      | 77  | 9.766     | 9.761         | 0.005         | 99 | 193083   | 4.00       | 4.29         |       |
| 116 4-Bromophenyl phenyl ether | 248 | 10.076    | 10.071        | 0.005         | 67 | 55667    | 4.00       | 4.13         |       |
| 118 Hexachlorobenzene          | 284 | 10.156    | 10.156        | 0.000         | 93 | 59184    | 4.00       | 4.03         |       |
| 119 Atrazine                   | 200 | 10.188    | 10.188        | 0.000         | 93 | 54428    | 4.00       | 4.16         |       |
| 122 Pentachlorophenol          | 266 | 10.327    | 10.327        | 0.000         | 91 | 66577    | 8.00       | 6.62         |       |

| Compound                       | Sig | RT<br>(min.) | Adj RT<br>(min.) | Dlt RT<br>(min.) | Q   | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|--------------------------------|-----|--------------|------------------|------------------|-----|----------|---------------|-----------------|-------|
| 121 n-Octadecane               | 57  | 10.337       | 10.338           | -0.001           | 95  | 129797   | 4.00          | 4.34            |       |
| 126 Phenanthrene               | 178 | 10.535       | 10.530           | 0.005            | 97  | 308622   | 4.00          | 4.22            |       |
| 128 Anthracene                 | 178 | 10.589       | 10.584           | 0.005            | 97  | 306661   | 4.00          | 4.20            |       |
| 130 Carbazole                  | 167 | 10.727       | 10.722           | 0.005            | 96  | 270667   | 4.00          | 4.21            |       |
| 132 Di-n-butyl phthalate       | 149 | 11.032       | 11.027           | 0.005            | 100 | 303130   | 4.00          | 4.11            |       |
| 137 Fluoranthene               | 202 | 11.844       | 11.839           | 0.005            | 97  | 319725   | 4.00          | 4.10            |       |
| 138 Benzidine                  | 184 | 11.972       | 11.962           | 0.010            | 99  | 118831   | 4.00          | 3.65            |       |
| 139 Pyrene                     | 202 | 12.148       | 12.143           | 0.005            | 98  | 337422   | 4.00          | 4.25            |       |
| 144 Butyl benzyl phthalate     | 149 | 13.019       | 13.009           | 0.010            | 99  | 128551   | 4.00          | 4.02            |       |
| 149 3,3'-Dichlorobenzidine     | 252 | 13.986       | 13.981           | 0.005            | 74  | 106814   | 4.00          | 3.80            |       |
| 151 Bis(2-ethylhexyl) phthalat | 149 | 14.040       | 14.040           | 0.000            | 97  | 181356   | 4.00          | 4.10            |       |
| 152 Benzo[a]anthracene         | 228 | 14.061       | 14.051           | 0.010            | 98  | 312044   | 4.00          | 4.15            |       |
| 153 Chrysene                   | 228 | 14.130       | 14.120           | 0.010            | 97  | 293847   | 4.00          | 4.17            |       |
| 156 Di-n-octyl phthalate       | 149 | 15.370       | 15.359           | 0.011            | 100 | 278022   | 4.00          | 3.63            |       |
| 157 7,12-Dimethylbenz(a)anthra | 256 | 16.219       | 16.203           | 0.016            | 90  | 127997   | 4.00          | 4.01            |       |
| 158 Benzo[b]fluoranthene       | 252 | 16.230       | 16.225           | 0.005            | 98  | 304513   | 4.00          | 4.14            |       |
| 159 Benzo[k]fluoranthene       | 252 | 16.283       | 16.284           | -0.001           | 99  | 309524   | 4.00          | 4.21            |       |
| 176 Benzo[e]pyrene             | 252 | 16.812       | 16.796           | 0.016            | 0   | 281151   | 4.00          | 4.11            |       |
| 160 Benzo[a]pyrene             | 252 | 16.924       | 16.914           | 0.010            | 78  | 284194   | 4.00          | 4.06            |       |
| 163 Indeno[1,2,3-cd]pyrene     | 276 | 19.286       | 19.275           | 0.011            | 98  | 320102   | 4.00          | 4.00            |       |
| 164 Dibenz(a,h)anthracene      | 278 | 19.318       | 19.313           | 0.005            | 83  | 269706   | 4.00          | 3.98            |       |
| 165 Benzo[g,h,i]perylene       | 276 | 19.895       | 19.890           | 0.005            | 98  | 281951   | 4.00          | 4.05            |       |
| S 208 Methyl Phenols, Total    | 108 |              |                  |                  | 0   |          | 8.00          | 8.67            |       |
| S 206 Total Cresols            | 108 |              |                  |                  | 0   |          | 8.00          | 8.67            |       |

**QC Flag Legend**

Review Flags

M - Manually Integrated

**Reagents:**

SVTAPSTD4.0i\_00008

Amount Added: 1.00

Units: mL

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901005.D

Injection Date: 31-Aug-2015 14:36:30

Instrument ID: CH731

Operator ID: 003200

Lims ID: IC

Worklist Smp#: 5

Client ID:

Injection Vol: 2.0 ul

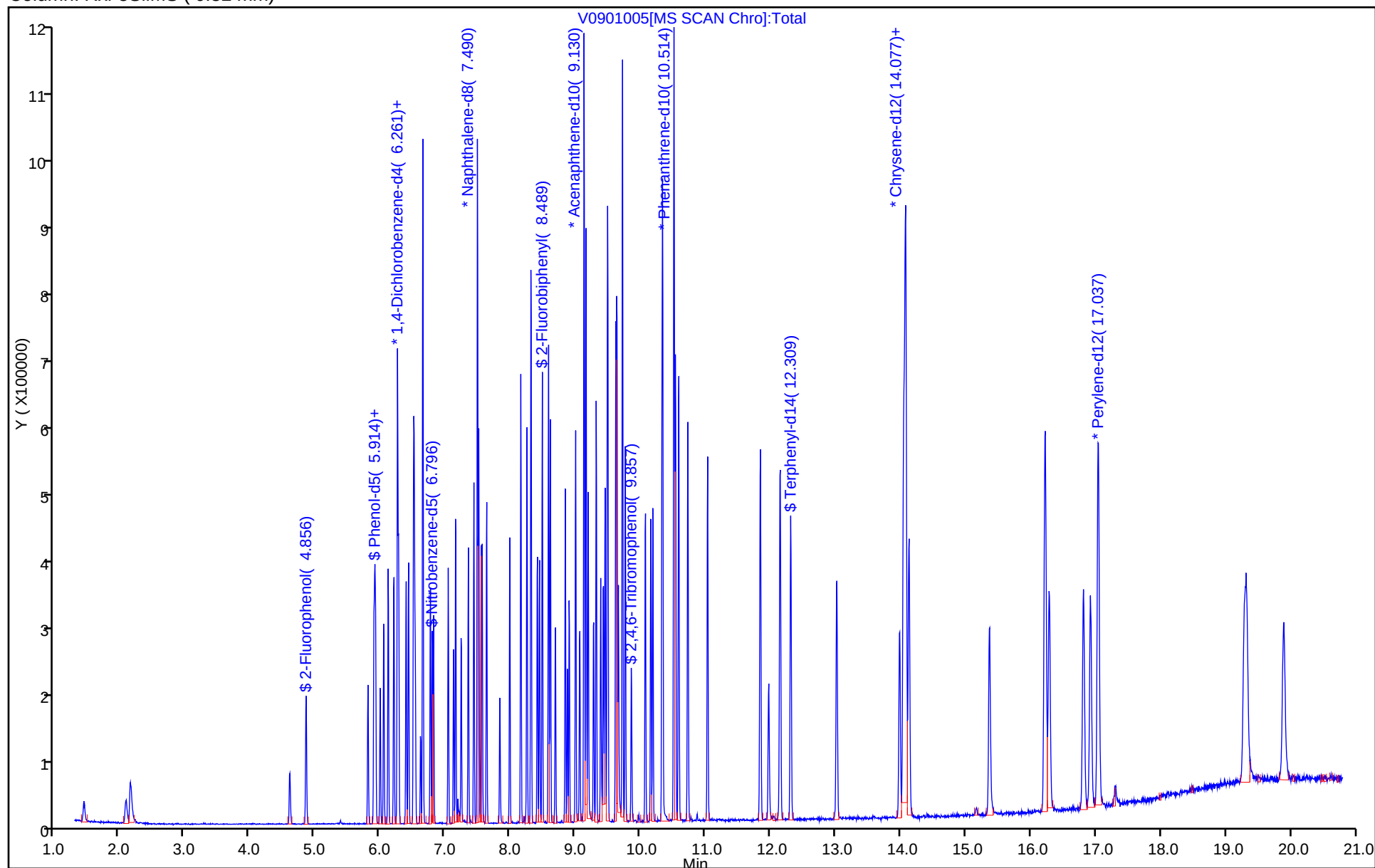
Dil. Factor: 1.0000

ALS Bottle#: 4

Method: BNA\_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS (0.32 mm)





## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901005.D

Injection Date: 31-Aug-2015 14:36:30

Instrument ID: CH731

Lims ID: IC

Client ID:

Operator ID: 003200

ALS Bottle#:

4

Worklist Smp#: 5

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: BNA\_CH731

Limit Group: BNA 8270D ICAL

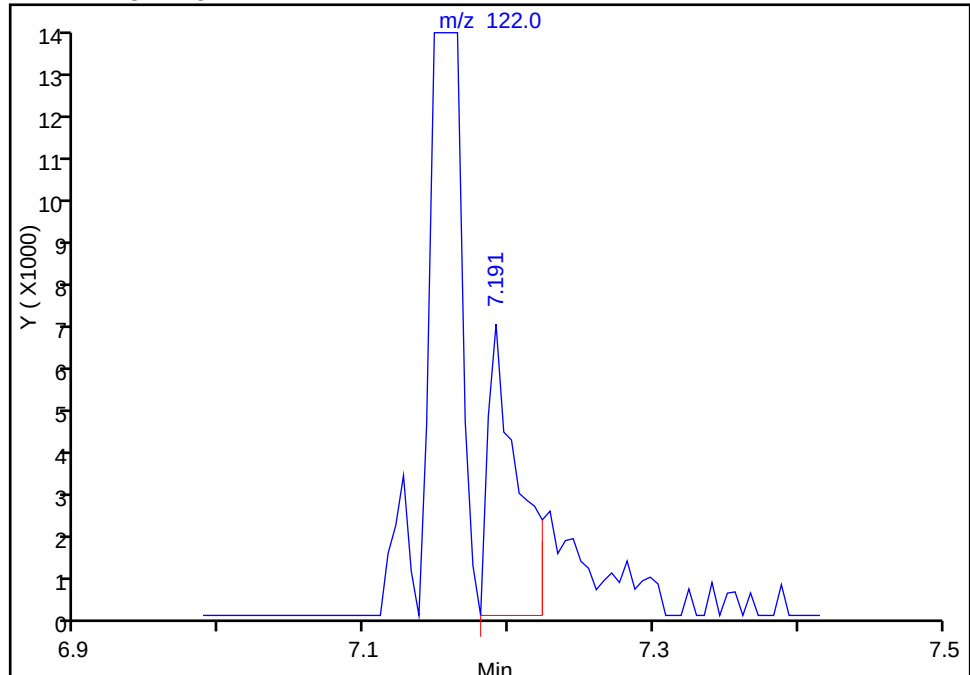
Column: Rxi-5SilMS (0.32 mm)

Detector: MS SCAN

**56 Benzoic acid, CAS: 65-85-0**

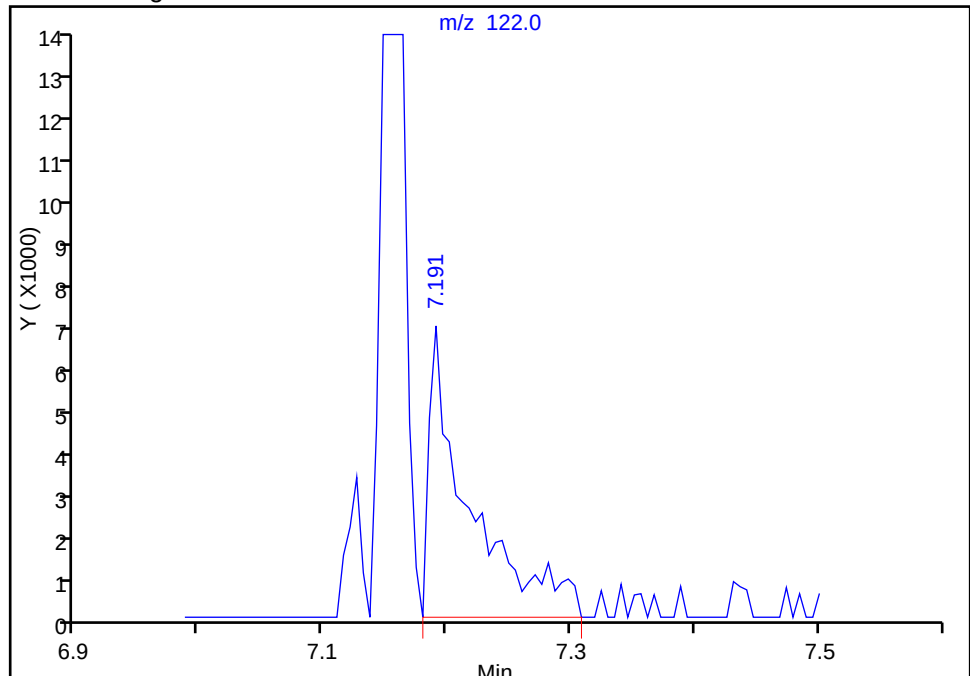
RT: 7.19  
Area: 9886  
Amount: 1.844735  
Amount Units: ng

## Processing Integration Results



RT: 7.19  
Area: 15551  
Amount: 4.564739  
Amount Units: ng

## Manual Integration Results



Reviewer: piccolinov, 01-Sep-2015 04:11:10

Audit Action: Manually Integrated

Audit Reason: Poor chromatography

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901006.D  
 Lims ID: ICIS  
 Client ID:  
 Sample Type: ICIS Calib Level: 4  
 Inject. Date: 31-Aug-2015 15:03:30 ALS Bottle#: 5 Worklist Smp#: 6  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Sample Info: 180-0008349-006  
 Operator ID: 003200 Instrument ID: CH731  
 Sublist: chrom-BNA\_CH731\*sub4  
 Method: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\BNA\_CH731.m  
 Limit Group: BNA 8270D ICAL  
 Last Update: 01-Sep-2015 04:26:35 Calib Date: 31-Aug-2015 16:55:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last Ical File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901010.D  
 Column 1 : Rxi-5SilMS ( 0.32 mm) Det: MS SCAN  
 Process Host: XAWRK024

First Level Reviewer: piccolinov

Date: 01-Sep-2015 04:12:02

| Compound                      | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q   | Response | Cal Amt ng | OnCol Amt ng | Flags |
|-------------------------------|-----|-----------|---------------|---------------|-----|----------|------------|--------------|-------|
| * 1 1,4-Dichlorobenzene-d4    | 152 | 6.261     | 6.261         | 0.000         | 93  | 102411   | 8.00       | 8.00         |       |
| * 2 Naphthalene-d8            | 136 | 7.490     | 7.490         | 0.000         | 100 | 424311   | 8.00       | 8.00         |       |
| * 3 Acenaphthene-d10          | 164 | 9.130     | 9.130         | 0.000         | 93  | 262115   | 8.00       | 8.00         |       |
| * 4 Phenanthrene-d10          | 188 | 10.508    | 10.508        | 0.000         | 97  | 479159   | 8.00       | 8.00         |       |
| * 5 Chrysene-d12              | 240 | 14.071    | 14.071        | 0.000         | 97  | 507170   | 8.00       | 8.00         |       |
| * 6 Perylene-d12              | 264 | 17.031    | 17.031        | 0.000         | 98  | 481094   | 8.00       | 8.00         |       |
| \$ 7 2-Fluorophenol           | 112 | 4.851     | 4.851         | 0.000         | 93  | 157305   | 10.0       | 10.4         |       |
| \$ 8 Phenol-d5                | 99  | 5.898     | 5.898         | 0.000         | 95  | 212190   | 10.0       | 10.8         |       |
| \$ 9 Nitrobenzene-d5          | 82  | 6.795     | 6.795         | 0.000         | 90  | 216601   | 10.0       | 10.5         |       |
| \$ 10 2-Fluorobiphenyl        | 172 | 8.484     | 8.484         | 0.000         | 99  | 476787   | 10.0       | 10.4         |       |
| \$ 11 2,4,6-Tribromophenol    | 330 | 9.856     | 9.856         | 0.000         | 91  | 64980    | 10.0       | 9.79         |       |
| \$ 12 Terphenyl-d14           | 244 | 12.303    | 12.303        | 0.000         | 99  | 504747   | 10.0       | 10.5         |       |
| 13 1,4-Dioxane                | 88  | 1.437     | 1.437         | 0.000         | 92  | 55565    | 10.0       | 10.7         |       |
| 14 N-Nitrosodimethylamine     | 74  | 2.078     | 2.078         | 0.000         | 87  | 71109    | 10.0       | 10.8         |       |
| 15 Pyridine                   | 79  | 2.142     | 2.142         | 0.000         | 95  | 133039   | 10.0       | 10.8         |       |
| 22 Methyl methanesulfonate    | 80  | 4.600     | 4.600         | 0.000         | 90  | 94603    | 10.0       | 11.0         |       |
| 26 Benzaldehyde               | 77  | 5.802     | 5.802         | 0.000         | 93  | 107323   | 10.0       | 10.5         |       |
| 27 Phenol                     | 94  | 5.909     | 5.909         | 0.000         | 96  | 230637   | 10.0       | 10.7         |       |
| 28 Aniline                    | 93  | 5.919     | 5.919         | 0.000         | 98  | 263241   | 10.0       | 10.9         |       |
| 29 Bis(2-chloroethyl)ether    | 93  | 5.994     | 5.994         | 0.000         | 94  | 157984   | 10.0       | 10.6         |       |
| 31 2-Chlorophenol             | 128 | 6.048     | 6.048         | 0.000         | 96  | 193353   | 10.0       | 10.6         |       |
| 32 n-Decane                   | 43  | 6.117     | 6.117         | 0.000         | 88  | 185321   | 10.0       | 10.7         |       |
| 33 1,3-Dichlorobenzene        | 146 | 6.202     | 6.202         | 0.000         | 97  | 218573   | 10.0       | 10.5         |       |
| 34 1,4-Dichlorobenzene        | 146 | 6.277     | 6.277         | 0.000         | 93  | 226954   | 10.0       | 10.6         |       |
| 36 Benzyl alcohol             | 108 | 6.389     | 6.389         | 0.000         | 89  | 116255   | 10.0       | 10.7         |       |
| 37 1,2-Dichlorobenzene        | 146 | 6.427     | 6.427         | 0.000         | 95  | 217421   | 10.0       | 10.6         |       |
| 38 2-Methylphenol             | 108 | 6.507     | 6.507         | 0.000         | 96  | 169780   | 10.0       | 10.7         |       |
| 39 Indene                     | 116 | 6.518     | 6.518         | 0.000         | 90  | 325789   | 10.0       | 10.6         |       |
| 40 2,2'-oxybis[1-chloropropan | 45  | 6.534     | 6.534         | 0.000         | 91  | 237680   | 10.0       | 10.9         |       |
| 41 N-Nitrosopyrrolidine       | 100 | 6.614     | 6.614         | 0.000         | 85  | 75398    | 10.0       | 10.4         |       |
| 44 N-Nitrosodi-n-propylamine  | 70  | 6.646     | 6.646         | 0.000         | 70  | 126465   | 10.0       | 10.9         |       |

| Compound                       | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q   | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|-----|----------|------------|--------------|-------|
| 43 Acetophenone                | 105 | 6.646     | 6.646         | 0.000         | 81  | 259244   | 10.0       | 10.8         |       |
| 45 4-Methylphenol              | 108 | 6.651     | 6.651         | 0.000         | 71  | 180950   | 10.0       | 10.8         |       |
| 47 Hexachloroethane            | 117 | 6.763     | 6.763         | 0.000         | 95  | 97090    | 10.0       | 10.4         |       |
| 48 Nitrobenzene                | 77  | 6.811     | 6.811         | 0.000         | 90  | 211409   | 10.0       | 10.5         |       |
| 50 Isophorone                  | 82  | 7.041     | 7.041         | 0.000         | 99  | 342824   | 10.0       | 10.4         |       |
| 51 2-Nitrophenol               | 139 | 7.121     | 7.121         | 0.000         | 98  | 106487   | 10.0       | 10.5         |       |
| 52 2,4-Dimethylphenol          | 107 | 7.153     | 7.153         | 0.000         | 98  | 209203   | 10.0       | 10.6         |       |
| 56 Benzoic acid                | 122 | 7.196     | 7.196         | 0.000         | 81  | 55532    | 10.0       | 8.50         | M     |
| 55 Bis(2-chloroethoxy)methane  | 93  | 7.239     | 7.239         | 0.000         | 97  | 208359   | 10.0       | 10.4         |       |
| 57 2,4-Dichlorophenol          | 162 | 7.346     | 7.346         | 0.000         | 95  | 175582   | 10.0       | 10.4         |       |
| 59 1,2,4-Trichlorobenzene      | 180 | 7.436     | 7.436         | 0.000         | 94  | 207252   | 10.0       | 10.2         |       |
| 60 Naphthalene                 | 128 | 7.511     | 7.511         | 0.000         | 97  | 596566   | 10.0       | 10.3         |       |
| 62 4-Chloroaniline             | 127 | 7.549     | 7.549         | 0.000         | 96  | 252553   | 10.0       | 10.6         |       |
| 63 2,6-Dichlorophenol          | 162 | 7.559     | 7.559         | 0.000         | 96  | 178546   | 10.0       | 10.5         |       |
| 64 Hexachlorobutadiene         | 225 | 7.629     | 7.629         | 0.000         | 96  | 135720   | 10.0       | 10.4         |       |
| 67 Caprolactam                 | 113 | 7.837     | 7.837         | 0.000         | 78  | 50427    | 10.0       | 9.92         |       |
| 70 4-Chloro-3-methylphenol     | 107 | 7.987     | 7.987         | 0.000         | 96  | 174727   | 10.0       | 10.4         |       |
| 72 2-Methylnaphthalene         | 142 | 8.158     | 8.158         | 0.000         | 91  | 420716   | 10.0       | 10.2         |       |
| 75 1-Methylnaphthalene         | 142 | 8.248     | 8.248         | 0.000         | 92  | 363823   | 10.0       | 10.1         |       |
| 76 Hexachlorocyclopentadiene   | 237 | 8.307     | 8.307         | 0.000         | 97  | 149399   | 10.0       | 10.6         |       |
| 77 1,2,4,5-Tetrachlorobenzene  | 216 | 8.313     | 8.313         | 0.000         | 98  | 216369   | 10.0       | 10.4         |       |
| 78 2,4,6-Trichlorophenol       | 196 | 8.409     | 8.409         | 0.000         | 93  | 135055   | 10.0       | 10.4         |       |
| 79 2,4,5-Trichlorophenol       | 196 | 8.441     | 8.441         | 0.000         | 93  | 142254   | 10.0       | 10.5         |       |
| 80 1,1'-Biphenyl               | 154 | 8.580     | 8.580         | 0.000         | 95  | 531753   | 10.0       | 10.5         |       |
| 81 2-Chloronaphthalene         | 162 | 8.612     | 8.612         | 0.000         | 97  | 411214   | 10.0       | 10.3         |       |
| 82 2-Nitroaniline              | 65  | 8.687     | 8.687         | 0.000         | 82  | 121138   | 10.0       | 10.8         |       |
| 86 Dimethyl phthalate          | 163 | 8.841     | 8.841         | 0.000         | 98  | 433347   | 10.0       | 10.2         |       |
| 87 1,3-Dinitrobenzene          | 168 | 8.873     | 8.873         | 0.000         | 86  | 67750    | 10.0       | 10.0         |       |
| 88 2,6-Dinitrotoluene          | 165 | 8.900     | 8.900         | 0.000         | 94  | 100319   | 10.0       | 10.4         |       |
| 89 Acenaphthylene              | 152 | 8.996     | 8.996         | 0.000         | 98  | 636764   | 10.0       | 10.4         |       |
| 90 3-Nitroaniline              | 138 | 9.060     | 9.060         | 0.000         | 91  | 109177   | 10.0       | 10.6         |       |
| 91 Acenaphthene                | 153 | 9.157     | 9.157         | 0.000         | 90  | 413191   | 10.0       | 10.7         |       |
| 92 2,4-Dinitrophenol           | 184 | 9.157     | 9.157         | 0.000         | 79  | 110082   | 20.0       | 18.5         |       |
| 93 4-Nitrophenol               | 109 | 9.194     | 9.194         | 0.000         | 89  | 144007   | 20.0       | 20.9         |       |
| 94 2,4-Dinitrotoluene          | 165 | 9.274     | 9.274         | 0.000         | 93  | 135793   | 10.0       | 10.5         |       |
| 95 Dibenzofuran                | 168 | 9.317     | 9.317         | 0.000         | 96  | 598462   | 10.0       | 10.4         |       |
| 97 2,3,5,6-Tetrachlorophenol   | 232 | 9.381     | 9.381         | 0.000         | 93  | 125764   | 10.0       | 10.1         |       |
| 99 2,3,4,6-Tetrachlorophenol   | 232 | 9.424     | 9.424         | 0.000         | 72  | 131643   | 10.0       | 10.4         |       |
| 100 2-Naphthylamine            | 143 | 9.450     | 9.450         | 0.000         | 97  | 415085   | 10.0       | 10.6         |       |
| 101 Diethyl phthalate          | 149 | 9.488     | 9.488         | 0.000         | 98  | 456132   | 10.0       | 10.3         |       |
| 102 Hexadecane                 | 57  | 9.493     | 9.493         | 0.000         | 95  | 304348   | 10.0       | 10.9         |       |
| 104 4-Chlorophenyl phenyl ethe | 204 | 9.616     | 9.616         | 0.000         | 93  | 246798   | 10.0       | 10.4         |       |
| 105 4-Nitroaniline             | 138 | 9.627     | 9.627         | 0.000         | 83  | 114302   | 10.0       | 10.5         |       |
| 106 Fluorene                   | 166 | 9.632     | 9.632         | 0.000         | 94  | 497068   | 10.0       | 10.5         |       |
| 108 4,6-Dinitro-2-methylphenol | 198 | 9.659     | 9.659         | 0.000         | 86  | 165565   | 20.0       | 20.3         |       |
| 109 N-Nitrosodiphenylamine     | 169 | 9.718     | 9.718         | 0.000         | 63  | 692525   | 20.0       | 20.8         |       |
| 61 Azobenzene                  | 77  | 9.760     | 9.760         | 0.000         | 100 | 485927   | 10.0       | 10.8         |       |
| 111 1,2-Diphenylhydrazine      | 77  | 9.760     | 9.760         | 0.000         | 99  | 485927   | 10.0       | 10.8         |       |
| 116 4-Bromophenyl phenyl ether | 248 | 10.070    | 10.070        | 0.000         | 67  | 141647   | 10.0       | 10.5         |       |
| 118 Hexachlorobenzene          | 284 | 10.156    | 10.156        | 0.000         | 93  | 148037   | 10.0       | 10.1         |       |
| 119 Atrazine                   | 200 | 10.188    | 10.188        | 0.000         | 93  | 140905   | 10.0       | 10.8         |       |
| 122 Pentachlorophenol          | 266 | 10.327    | 10.327        | 0.000         | 91  | 181579   | 20.0       | 18.1         |       |

| Compound                       | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q   | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|-----|----------|------------|--------------|-------|
| 121 n-Octadecane               | 57  | 10.337    | 10.337        | 0.000         | 96  | 324076   | 10.0       | 11.0         |       |
| 126 Phenanthrene               | 178 | 10.535    | 10.535        | 0.000         | 97  | 751020   | 10.0       | 10.3         |       |
| 128 Anthracene                 | 178 | 10.583    | 10.583        | 0.000         | 97  | 764639   | 10.0       | 10.5         |       |
| 130 Carbazole                  | 167 | 10.722    | 10.722        | 0.000         | 96  | 669248   | 10.0       | 10.4         |       |
| 132 Di-n-butyl phthalate       | 149 | 11.026    | 11.026        | 0.000         | 100 | 776911   | 10.0       | 10.5         |       |
| 137 Fluoranthene               | 202 | 11.838    | 11.838        | 0.000         | 97  | 808503   | 10.0       | 10.4         |       |
| 138 Benzidine                  | 184 | 11.967    | 11.967        | 0.000         | 99  | 339390   | 10.0       | 10.6         |       |
| 139 Pyrene                     | 202 | 12.143    | 12.143        | 0.000         | 98  | 842830   | 10.0       | 10.8         |       |
| 144 Butyl benzyl phthalate     | 149 | 13.014    | 13.014        | 0.000         | 99  | 335533   | 10.0       | 10.7         |       |
| 149 3,3'-Dichlorobenzidine     | 252 | 13.975    | 13.975        | 0.000         | 74  | 271127   | 10.0       | 9.81         |       |
| 151 Bis(2-ethylhexyl) phthalat | 149 | 14.034    | 14.034        | 0.000         | 96  | 466768   | 10.0       | 10.7         |       |
| 152 Benzo[a]anthracene         | 228 | 14.055    | 14.055        | 0.000         | 99  | 769643   | 10.0       | 10.4         |       |
| 153 Chrysene                   | 228 | 14.125    | 14.125        | 0.000         | 97  | 721253   | 10.0       | 10.4         |       |
| 156 Di-n-octyl phthalate       | 149 | 15.359    | 15.359        | 0.000         | 99  | 761128   | 10.0       | 9.80         |       |
| 157 7,12-Dimethylbenz(a)anthra | 256 | 16.208    | 16.208        | 0.000         | 90  | 343910   | 10.0       | 10.6         |       |
| 158 Benzo[b]fluoranthene       | 252 | 16.224    | 16.224        | 0.000         | 98  | 779148   | 10.0       | 10.5         |       |
| 159 Benzo[k]fluoranthene       | 252 | 16.278    | 16.278        | 0.000         | 99  | 794316   | 10.0       | 10.7         |       |
| 176 Benzo[e]pyrene             | 252 | 16.807    | 16.807        | 0.000         | 0   | 723563   | 10.0       | 10.4         |       |
| 160 Benzo[a]pyrene             | 252 | 16.913    | 16.913        | 0.000         | 77  | 739933   | 10.0       | 10.4         |       |
| 163 Indeno[1,2,3-cd]pyrene     | 276 | 19.275    | 19.275        | 0.000         | 99  | 848365   | 10.0       | 10.5         |       |
| 164 Dibenz(a,h)anthracene      | 278 | 19.312    | 19.312        | 0.000         | 87  | 706557   | 10.0       | 10.3         |       |
| 165 Benzo[g,h,i]perylene       | 276 | 19.889    | 19.889        | 0.000         | 98  | 721609   | 10.0       | 10.2         |       |
| S 208 Methyl Phenols, Total    | 108 |           |               |               | 0   |          | 20.0       | 21.6         |       |
| S 206 Total Cresols            | 108 |           |               |               | 0   |          | 20.0       | 21.6         |       |

**QC Flag Legend**

Review Flags

M - Manually Integrated

**Reagents:**

SVTAPSTD10i\_00124

Amount Added: 1.00

Units: mL

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901006.D

Injection Date: 31-Aug-2015 15:03:30

Instrument ID: CH731

Operator ID: 003200

Lims ID: ICIS

Worklist Smp#: 6

Client ID:

Injection Vol: 2.0 ul

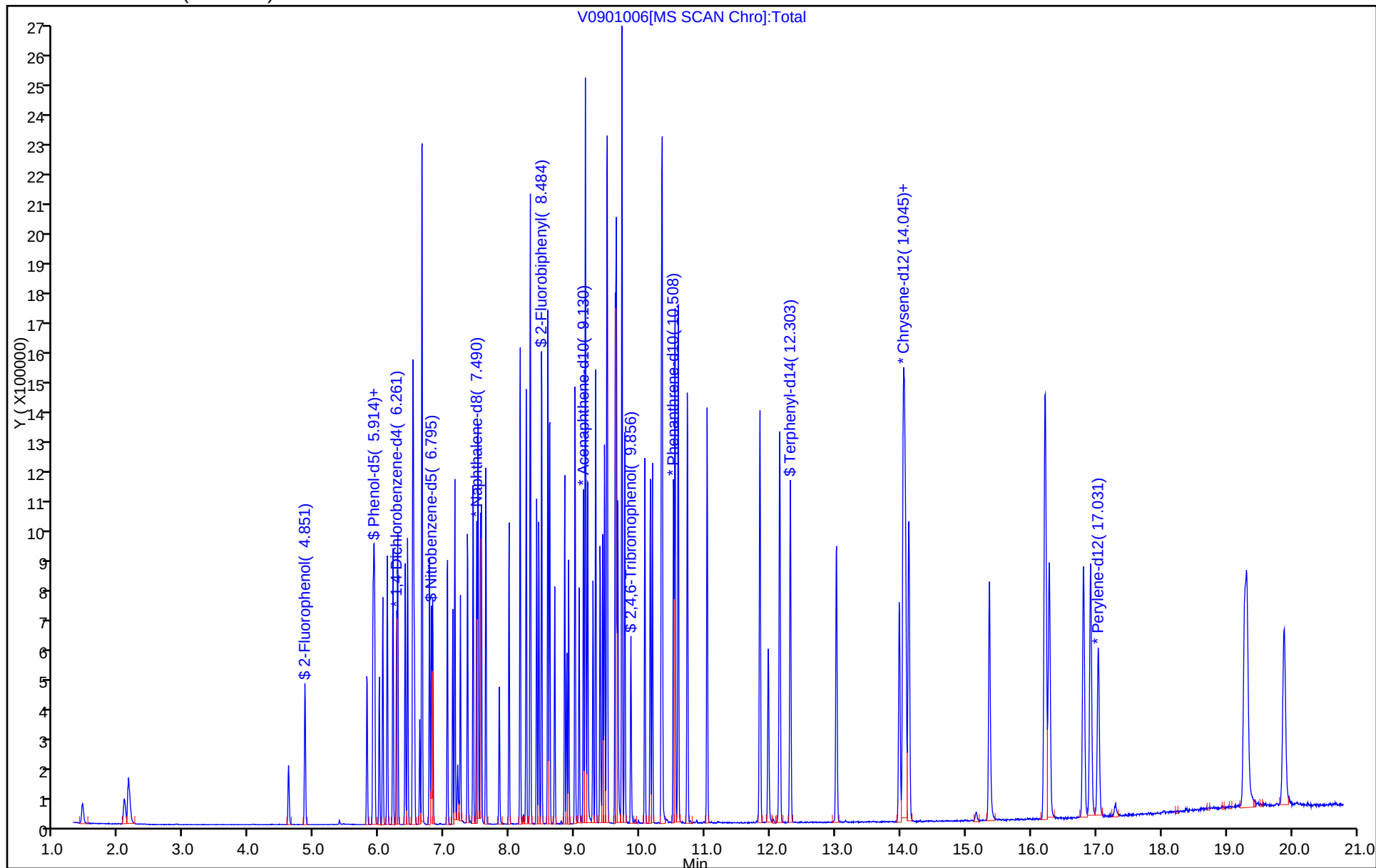
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: BNA\_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS ( 0.32 mm)



## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901006.D

Injection Date: 31-Aug-2015 15:03:30

Instrument ID: CH731

Lims ID: ICIS

Client ID:

Operator ID: 003200

ALS Bottle#:

5

Worklist Smp#: 6

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: BNA\_CH731

Limit Group: BNA 8270D ICAL

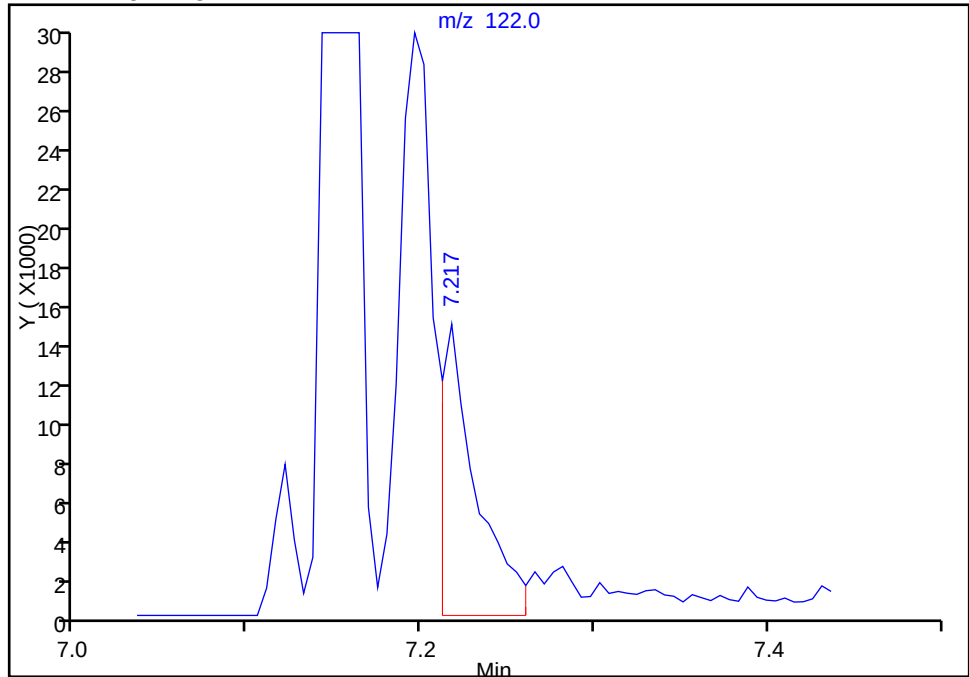
Column: Rxi-5SilMS ( 0.32 mm)

Detector: MS SCAN

## 56 Benzoic acid, CAS: 65-85-0

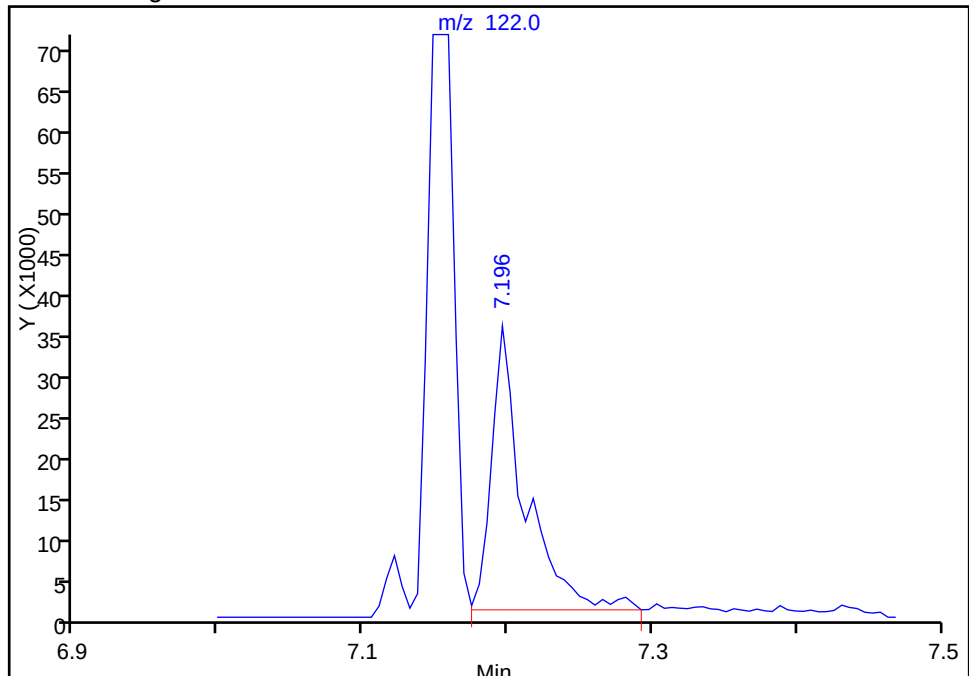
RT: 7.22  
Area: 20360  
Amount: 3.660887  
Amount Units: ng

## Processing Integration Results



RT: 7.20  
Area: 55532  
Amount: 8.496086  
Amount Units: ng

## Manual Integration Results



Reviewer: piccolinov, 01-Sep-2015 04:12:02

Audit Action: Manually Integrated

Audit Reason: Poor chromatography

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901007.D  
 Lims ID: IC  
 Client ID:  
 Sample Type: IC Calib Level: 5  
 Inject. Date: 31-Aug-2015 15:31:30 ALS Bottle#: 6 Worklist Smp#: 7  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Sample Info: 180-0008349-007  
 Operator ID: 003200 Instrument ID: CH731  
 Sublist: chrom-BNA\_CH731\*sub4  
 Method: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\BNA\_CH731.m  
 Limit Group: BNA 8270D ICAL  
 Last Update: 01-Sep-2015 04:26:38 Calib Date: 31-Aug-2015 16:55:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last Ical File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901010.D  
 Column 1 : Rxi-5SiIMS ( 0.32 mm) Det: MS SCAN  
 Process Host: XAWRK024

First Level Reviewer: piccolinov

Date: 01-Sep-2015 04:12:44

| Compound                      | Sig | RT<br>(min.) | Adj RT<br>(min.) | Dlt RT<br>(min.) | Q   | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|-------------------------------|-----|--------------|------------------|------------------|-----|----------|---------------|-----------------|-------|
| * 1 1,4-Dichlorobenzene-d4    | 152 | 6.266        | 6.261            | 0.005            | 94  | 104121   | 8.00          | 8.00            |       |
| * 2 Naphthalene-d8            | 136 | 7.495        | 7.490            | 0.005            | 100 | 415390   | 8.00          | 8.00            |       |
| * 3 Acenaphthene-d10          | 164 | 9.135        | 9.130            | 0.005            | 92  | 265063   | 8.00          | 8.00            |       |
| * 4 Phenanthrene-d10          | 188 | 10.519       | 10.508           | 0.011            | 97  | 493859   | 8.00          | 8.00            |       |
| * 5 Chrysene-d12              | 240 | 14.087       | 14.071           | 0.016            | 97  | 534907   | 8.00          | 8.00            |       |
| * 6 Perylene-d12              | 264 | 17.047       | 17.031           | 0.016            | 98  | 517173   | 8.00          | 8.00            |       |
| \$ 7 2-Fluorophenol           | 112 | 4.856        | 4.851            | 0.005            | 92  | 308134   | 20.0          | 20.1            |       |
| \$ 8 Phenol-d5                | 99  | 5.903        | 5.898            | 0.005            | 95  | 408662   | 20.0          | 20.4            |       |
| \$ 9 Nitrobenzene-d5          | 82  | 6.800        | 6.795            | 0.005            | 91  | 416340   | 20.0          | 20.6            |       |
| \$ 10 2-Fluorobiphenyl        | 172 | 8.489        | 8.484            | 0.005            | 99  | 937705   | 20.0          | 20.2            |       |
| \$ 11 2,4,6-Tribromophenol    | 330 | 9.861        | 9.856            | 0.005            | 93  | 147244   | 20.0          | 21.5            |       |
| \$ 12 Terphenyl-d14           | 244 | 12.314       | 12.303           | 0.011            | 100 | 1077468  | 20.0          | 21.2            |       |
| 13 1,4-Dioxane                | 88  | 1.432        | 1.437            | -0.005           | 91  | 105203   | 20.0          | 19.9            |       |
| 14 N-Nitrosodimethylamine     | 74  | 2.078        | 2.078            | 0.000            | 89  | 144862   | 20.0          | 21.6            |       |
| 15 Pyridine                   | 79  | 2.137        | 2.142            | -0.005           | 96  | 262838   | 20.0          | 20.9            |       |
| 22 Methyl methanesulfonate    | 80  | 4.599        | 4.600            | -0.001           | 89  | 179632   | 20.0          | 20.6            |       |
| 26 Benzaldehyde               | 77  | 5.807        | 5.802            | 0.005            | 93  | 206688   | 20.0          | 19.9            |       |
| 27 Phenol                     | 94  | 5.914        | 5.909            | 0.005            | 96  | 441274   | 20.0          | 20.2            |       |
| 28 Aniline                    | 93  | 5.924        | 5.919            | 0.005            | 94  | 507890   | 20.0          | 20.6            |       |
| 29 Bis(2-chloroethyl)ether    | 93  | 5.999        | 5.994            | 0.005            | 95  | 304156   | 20.0          | 20.1            |       |
| 31 2-Chlorophenol             | 128 | 6.053        | 6.048            | 0.005            | 96  | 374694   | 20.0          | 20.2            |       |
| 32 n-Decane                   | 43  | 6.122        | 6.117            | 0.005            | 89  | 364217   | 20.0          | 20.6            |       |
| 33 1,3-Dichlorobenzene        | 146 | 6.207        | 6.202            | 0.005            | 97  | 427222   | 20.0          | 20.1            |       |
| 34 1,4-Dichlorobenzene        | 146 | 6.282        | 6.277            | 0.005            | 92  | 432346   | 20.0          | 19.9            |       |
| 36 Benzyl alcohol             | 108 | 6.394        | 6.389            | 0.005            | 89  | 225733   | 20.0          | 20.4            |       |
| 37 1,2-Dichlorobenzene        | 146 | 6.432        | 6.427            | 0.005            | 96  | 417384   | 20.0          | 20.0            |       |
| 38 2-Methylphenol             | 108 | 6.512        | 6.507            | 0.005            | 97  | 326132   | 20.0          | 20.3            |       |
| 39 Indene                     | 116 | 6.523        | 6.518            | 0.005            | 91  | 632252   | 20.0          | 20.3            |       |
| 40 2,2'-oxybis[1-chloropropan | 45  | 6.533        | 6.534            | -0.001           | 90  | 447186   | 20.0          | 20.2            |       |
| 41 N-Nitrosopyrrolidine       | 100 | 6.624        | 6.614            | 0.010            | 86  | 147255   | 20.0          | 20.0            |       |
| 44 N-Nitrosodi-n-propylamine  | 70  | 6.651        | 6.646            | 0.005            | 71  | 241584   | 20.0          | 20.4            |       |



| Compound                       | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 43 Acetophenone                | 105 | 6.651     | 6.646         | 0.005         | 81 | 484244   | 20.0       | 19.8         |       |
| 45 4-Methylphenol              | 108 | 6.656     | 6.651         | 0.005         | 70 | 340648   | 20.0       | 20.1         |       |
| 47 Hexachloroethane            | 117 | 6.768     | 6.763         | 0.005         | 92 | 193936   | 20.0       | 20.4         |       |
| 48 Nitrobenzene                | 77  | 6.816     | 6.811         | 0.005         | 89 | 407395   | 20.0       | 20.6         |       |
| 50 Isophorone                  | 82  | 7.046     | 7.041         | 0.005         | 99 | 682023   | 20.0       | 21.0         |       |
| 51 2-Nitrophenol               | 139 | 7.126     | 7.121         | 0.005         | 98 | 210297   | 20.0       | 21.1         |       |
| 52 2,4-Dimethylphenol          | 107 | 7.158     | 7.153         | 0.005         | 98 | 402567   | 20.0       | 20.9         |       |
| 56 Benzoic acid                | 122 | 7.217     | 7.196         | 0.021         | 87 | 164640   | 20.0       | 19.6         |       |
| 55 Bis(2-chloroethoxy)methane  | 93  | 7.244     | 7.239         | 0.005         | 97 | 408194   | 20.0       | 20.9         |       |
| 57 2,4-Dichlorophenol          | 162 | 7.356     | 7.346         | 0.010         | 95 | 346426   | 20.0       | 20.9         |       |
| 59 1,2,4-Trichlorobenzene      | 180 | 7.441     | 7.436         | 0.005         | 94 | 402160   | 20.0       | 20.2         |       |
| 60 Naphthalene                 | 128 | 7.516     | 7.511         | 0.005         | 97 | 1159009  | 20.0       | 20.5         |       |
| 62 4-Chloroaniline             | 127 | 7.554     | 7.549         | 0.005         | 96 | 486250   | 20.0       | 20.8         |       |
| 63 2,6-Dichlorophenol          | 162 | 7.564     | 7.559         | 0.005         | 97 | 342783   | 20.0       | 20.7         |       |
| 64 Hexachlorobutadiene         | 225 | 7.634     | 7.629         | 0.005         | 96 | 267889   | 20.0       | 21.0         |       |
| 67 Caprolactam                 | 113 | 7.847     | 7.837         | 0.010         | 77 | 101850   | 20.0       | 20.5         |       |
| 70 4-Chloro-3-methylphenol     | 107 | 7.992     | 7.987         | 0.005         | 96 | 344404   | 20.0       | 21.0         |       |
| 72 2-Methylnaphthalene         | 142 | 8.163     | 8.158         | 0.005         | 92 | 816700   | 20.0       | 20.3         |       |
| 75 1-Methylnaphthalene         | 142 | 8.253     | 8.248         | 0.005         | 93 | 711948   | 20.0       | 20.1         |       |
| 76 Hexachlorocyclopentadiene   | 237 | 8.312     | 8.307         | 0.005         | 97 | 302691   | 20.0       | 21.2         |       |
| 77 1,2,4,5-Tetrachlorobenzene  | 216 | 8.318     | 8.313         | 0.005         | 98 | 422134   | 20.0       | 20.0         |       |
| 78 2,4,6-Trichlorophenol       | 196 | 8.414     | 8.409         | 0.005         | 92 | 267261   | 20.0       | 20.4         |       |
| 79 2,4,5-Trichlorophenol       | 196 | 8.451     | 8.441         | 0.010         | 93 | 294500   | 20.0       | 21.4         |       |
| 80 1,1'-Biphenyl               | 154 | 8.585     | 8.580         | 0.005         | 95 | 1040543  | 20.0       | 20.3         |       |
| 81 2-Chloronaphthalene         | 162 | 8.617     | 8.612         | 0.005         | 97 | 808559   | 20.0       | 20.1         |       |
| 82 2-Nitroaniline              | 65  | 8.692     | 8.687         | 0.006         | 83 | 237605   | 20.0       | 20.9         |       |
| 86 Dimethyl phthalate          | 163 | 8.846     | 8.841         | 0.005         | 98 | 870830   | 20.0       | 20.3         |       |
| 87 1,3-Dinitrobenzene          | 168 | 8.879     | 8.873         | 0.005         | 86 | 144305   | 20.0       | 21.2         |       |
| 88 2,6-Dinitrotoluene          | 165 | 8.905     | 8.900         | 0.005         | 94 | 204627   | 20.0       | 21.0         |       |
| 89 Acenaphthylene              | 152 | 9.007     | 8.996         | 0.011         | 98 | 1266666  | 20.0       | 20.5         |       |
| 90 3-Nitroaniline              | 138 | 9.065     | 9.060         | 0.005         | 93 | 223742   | 20.0       | 21.5         |       |
| 91 Acenaphthene                | 153 | 9.162     | 9.157         | 0.005         | 89 | 805607   | 20.0       | 20.6         |       |
| 92 2,4-Dinitrophenol           | 184 | 9.162     | 9.157         | 0.005         | 84 | 249612   | 40.0       | 38.5         |       |
| 93 4-Nitrophenol               | 109 | 9.199     | 9.194         | 0.005         | 85 | 300056   | 40.0       | 43.1         |       |
| 94 2,4-Dinitrotoluene          | 165 | 9.279     | 9.274         | 0.005         | 92 | 280619   | 20.0       | 21.5         |       |
| 95 Dibenzofuran                | 168 | 9.322     | 9.317         | 0.005         | 96 | 1194756  | 20.0       | 20.5         |       |
| 97 2,3,5,6-Tetrachlorophenol   | 232 | 9.391     | 9.381         | 0.010         | 93 | 269363   | 20.0       | 21.4         |       |
| 99 2,3,4,6-Tetrachlorophenol   | 232 | 9.429     | 9.424         | 0.005         | 72 | 272412   | 20.0       | 21.2         |       |
| 100 2-Naphthylamine            | 143 | 9.455     | 9.450         | 0.005         | 96 | 829799   | 20.0       | 20.9         |       |
| 101 Diethyl phthalate          | 149 | 9.493     | 9.488         | 0.005         | 98 | 912137   | 20.0       | 20.3         |       |
| 102 Hexadecane                 | 57  | 9.498     | 9.493         | 0.005         | 96 | 582121   | 20.0       | 21.4         |       |
| 104 4-Chlorophenyl phenyl ethe | 204 | 9.621     | 9.616         | 0.005         | 93 | 492206   | 20.0       | 20.5         |       |
| 105 4-Nitroaniline             | 138 | 9.632     | 9.627         | 0.005         | 84 | 233917   | 20.0       | 21.2         |       |
| 106 Fluorene                   | 166 | 9.637     | 9.632         | 0.005         | 94 | 989672   | 20.0       | 20.8         |       |
| 108 4,6-Dinitro-2-methylphenol | 198 | 9.664     | 9.659         | 0.005         | 87 | 365342   | 40.0       | 43.4         |       |
| 109 N-Nitrosodiphenylamine     | 169 | 9.728     | 9.718         | 0.010         | 62 | 1398657  | 40.0       | 40.8         |       |
| 61 Azobenzene                  | 77  | 9.771     | 9.760         | 0.011         | 99 | 965418   | 20.0       | 20.8         |       |
| 111 1,2-Diphenylhydrazine      | 77  | 9.771     | 9.760         | 0.011         | 98 | 965418   | 20.0       | 20.8         |       |
| 116 4-Bromophenyl phenyl ether | 248 | 10.075    | 10.070        | 0.005         | 66 | 291000   | 20.0       | 21.0         |       |
| 118 Hexachlorobenzene          | 284 | 10.161    | 10.156        | 0.005         | 94 | 315515   | 20.0       | 20.9         |       |
| 119 Atrazine                   | 200 | 10.193    | 10.188        | 0.005         | 94 | 290220   | 20.0       | 21.6         |       |
| 122 Pentachlorophenol          | 266 | 10.332    | 10.327        | 0.005         | 91 | 404974   | 40.0       | 39.1         |       |



| Compound                       | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q   | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|-----|----------|------------|--------------|-------|
| 121 n-Octadecane               | 57  | 10.342    | 10.337        | 0.005         | 96  | 634923   | 20.0       | 21.2         |       |
| 126 Phenanthrene               | 178 | 10.540    | 10.535        | 0.005         | 97  | 1547520  | 20.0       | 20.6         |       |
| 128 Anthracene                 | 178 | 10.588    | 10.583        | 0.005         | 97  | 1549689  | 20.0       | 20.7         |       |
| 130 Carbazole                  | 167 | 10.732    | 10.722        | 0.010         | 96  | 1371651  | 20.0       | 20.8         |       |
| 132 Di-n-butyl phthalate       | 149 | 11.031    | 11.026        | 0.005         | 100 | 1611079  | 20.0       | 21.2         |       |
| 137 Fluoranthene               | 202 | 11.843    | 11.838        | 0.005         | 97  | 1656336  | 20.0       | 20.6         |       |
| 138 Benzidine                  | 184 | 11.972    | 11.967        | 0.005         | 99  | 725455   | 20.0       | 21.5         |       |
| 139 Pyrene                     | 202 | 12.148    | 12.143        | 0.005         | 98  | 1728923  | 20.0       | 21.0         |       |
| 144 Butyl benzyl phthalate     | 149 | 13.019    | 13.014        | 0.005         | 98  | 708523   | 20.0       | 21.4         |       |
| 149 3,3'-Dichlorobenzidine     | 252 | 13.991    | 13.975        | 0.016         | 74  | 622565   | 20.0       | 21.4         |       |
| 151 Bis(2-ethylhexyl) phthalat | 149 | 14.044    | 14.034        | 0.010         | 96  | 990284   | 20.0       | 21.6         |       |
| 152 Benzo[a]anthracene         | 228 | 14.066    | 14.055        | 0.011         | 99  | 1598686  | 20.0       | 20.5         |       |
| 153 Chrysene                   | 228 | 14.135    | 14.125        | 0.010         | 97  | 1481921  | 20.0       | 20.3         |       |
| 156 Di-n-octyl phthalate       | 149 | 15.369    | 15.359        | 0.010         | 99  | 1669687  | 20.0       | 20.0         |       |
| 157 7,12-Dimethylbenz(a)anthra | 256 | 16.224    | 16.208        | 0.016         | 93  | 730487   | 20.0       | 21.0         |       |
| 158 Benzo[b]fluoranthene       | 252 | 16.240    | 16.224        | 0.016         | 97  | 1656570  | 20.0       | 20.7         |       |
| 159 Benzo[k]fluoranthene       | 252 | 16.293    | 16.278        | 0.015         | 99  | 1684888  | 20.0       | 21.0         |       |
| 176 Benzo[e]pyrene             | 252 | 16.822    | 16.807        | 0.015         | 0   | 1563201  | 20.0       | 21.0         |       |
| 160 Benzo[a]pyrene             | 252 | 16.929    | 16.913        | 0.016         | 77  | 1575640  | 20.0       | 20.7         |       |
| 163 Indeno[1,2,3-cd]pyrene     | 276 | 19.296    | 19.275        | 0.021         | 99  | 1846211  | 20.0       | 21.2         |       |
| 164 Dibenz(a,h)anthracene      | 278 | 19.333    | 19.312        | 0.021         | 88  | 1567050  | 20.0       | 21.2         |       |
| 165 Benzo[g,h,i]perylene       | 276 | 19.905    | 19.889        | 0.016         | 98  | 1577795  | 20.0       | 20.8         |       |
| S 208 Methyl Phenols, Total    | 108 |           |               |               | 0   |          | 40.0       | 40.3         |       |
| S 206 Total Cresols            | 108 |           |               |               | 0   |          | 40.0       | 40.3         |       |

**Reagents:**

SVTAPSTD20i\_00007

Amount Added: 1.00

Units: mL

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901007.D

Injection Date: 31-Aug-2015 15:31:30

Instrument ID: CH731

Operator ID: 003200

Lims ID: IC

Worklist Smp#: 7

Client ID:

Injection Vol: 2.0 ul

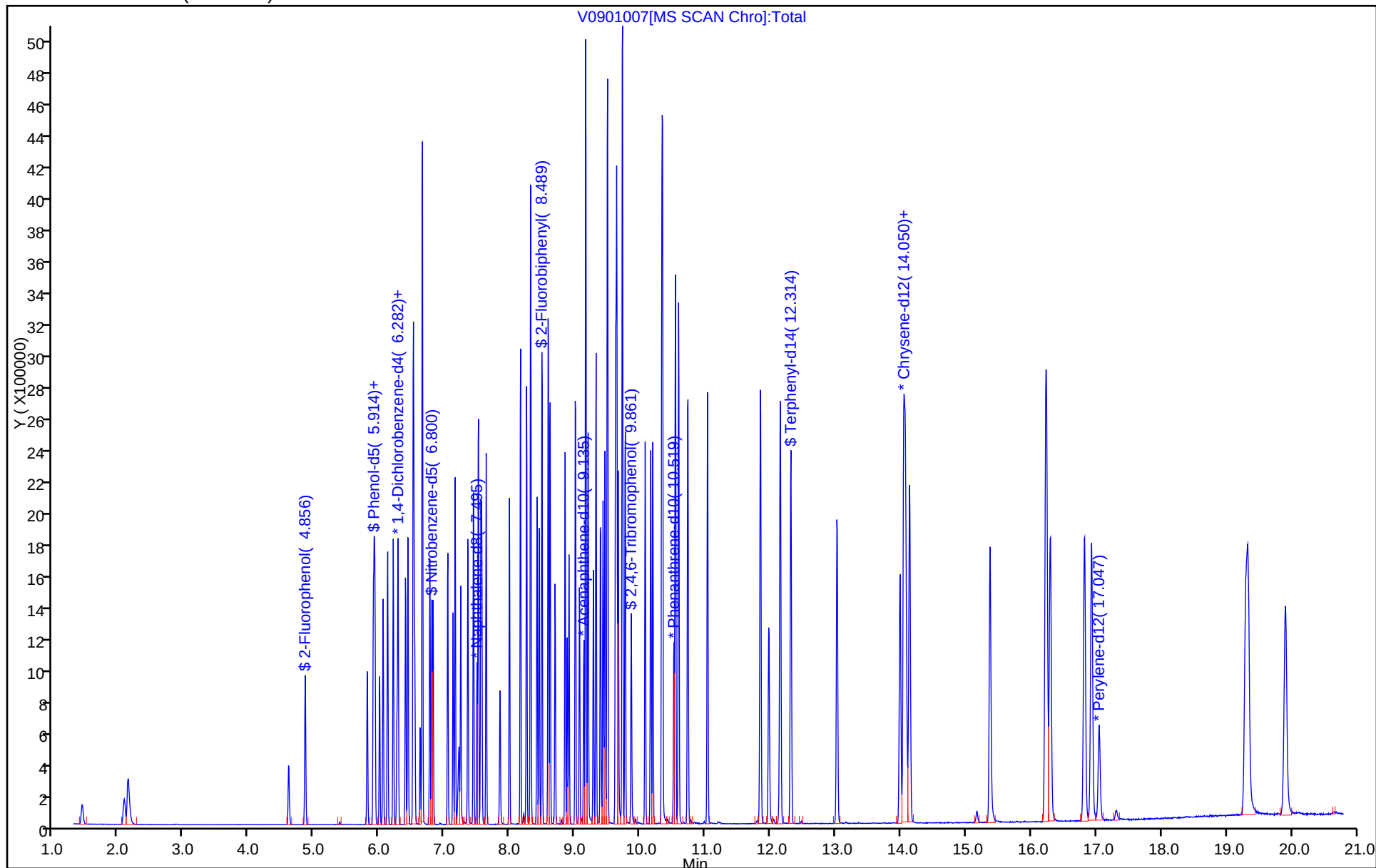
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: BNA\_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS ( 0.32 mm)



TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901008.D  
 Lims ID: IC  
 Client ID:  
 Sample Type: IC Calib Level: 6  
 Inject. Date: 31-Aug-2015 15:59:30 ALS Bottle#: 7 Worklist Smp#: 8  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Sample Info: 180-0008349-008  
 Operator ID: 003200 Instrument ID: CH731  
 Sublist: chrom-BNA\_CH731\*sub4  
 Method: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\BNA\_CH731.m  
 Limit Group: BNA 8270D ICAL  
 Last Update: 01-Sep-2015 04:26:41 Calib Date: 31-Aug-2015 16:55:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last Ical File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901010.D  
 Column 1 : Rxi-5SilMS ( 0.32 mm) Det: MS SCAN  
 Process Host: XAWRK024

First Level Reviewer: piccolinov

Date: 01-Sep-2015 04:13:59

| Compound                      | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q   | Response | Cal Amt ng | OnCol Amt ng | Flags |
|-------------------------------|-----|-----------|---------------|---------------|-----|----------|------------|--------------|-------|
| * 1 1,4-Dichlorobenzene-d4    | 152 | 6.256     | 6.261         | -0.005        | 94  | 103970   | 8.00       | 8.00         |       |
| * 2 Naphthalene-d8            | 136 | 7.485     | 7.490         | -0.005        | 100 | 428923   | 8.00       | 8.00         |       |
| * 3 Acenaphthene-d10          | 164 | 9.125     | 9.130         | -0.005        | 91  | 267687   | 8.00       | 8.00         |       |
| * 4 Phenanthrene-d10          | 188 | 10.508    | 10.508        | 0.000         | 97  | 498920   | 8.00       | 8.00         |       |
| * 5 Chrysene-d12              | 240 | 14.072    | 14.071        | 0.001         | 97  | 578473   | 8.00       | 8.00         |       |
| * 6 Perylene-d12              | 264 | 17.031    | 17.031        | 0.000         | 98  | 582677   | 8.00       | 8.00         |       |
| \$ 7 2-Fluorophenol           | 112 | 4.851     | 4.851         | 0.000         | 92  | 601129   | 40.0       | 39.3         |       |
| \$ 8 Phenol-d5                | 99  | 5.898     | 5.898         | 0.000         | 95  | 777332   | 40.0       | 38.9         |       |
| \$ 9 Nitrobenzene-d5          | 82  | 6.796     | 6.795         | 0.001         | 90  | 794610   | 40.0       | 38.1         |       |
| \$ 10 2-Fluorobiphenyl        | 172 | 8.484     | 8.484         | 0.000         | 100 | 1812070  | 40.0       | 38.7         |       |
| \$ 11 2,4,6-Tribromophenol    | 330 | 9.857     | 9.856         | 0.001         | 94  | 298800   | 40.0       | 43.2         |       |
| \$ 12 Terphenyl-d14           | 244 | 12.303    | 12.303        | 0.000         | 99  | 2187918  | 40.0       | 39.8         |       |
| 13 1,4-Dioxane                | 88  | 1.427     | 1.437         | -0.010        | 91  | 201364   | 40.0       | 38.2         |       |
| 14 N-Nitrosodimethylamine     | 74  | 2.073     | 2.078         | -0.005        | 89  | 275725   | 40.0       | 41.1         |       |
| 15 Pyridine                   | 79  | 2.132     | 2.142         | -0.010        | 96  | 513191   | 40.0       | 40.9         |       |
| 22 Methyl methanesulfonate    | 80  | 4.600     | 4.600         | 0.000         | 89  | 343206   | 40.0       | 39.3         |       |
| 26 Benzaldehyde               | 77  | 5.802     | 5.802         | 0.000         | 94  | 397070   | 40.0       | 38.3         |       |
| 27 Phenol                     | 94  | 5.909     | 5.909         | 0.000         | 98  | 835757   | 40.0       | 38.3         |       |
| 28 Aniline                    | 93  | 5.919     | 5.919         | 0.000         | 98  | 961258   | 40.0       | 39.1         |       |
| 29 Bis(2-chloroethyl)ether    | 93  | 5.994     | 5.994         | 0.000         | 96  | 590760   | 40.0       | 39.1         |       |
| 31 2-Chlorophenol             | 128 | 6.048     | 6.048         | 0.000         | 96  | 734589   | 40.0       | 39.7         |       |
| 32 n-Decane                   | 43  | 6.112     | 6.117         | -0.005        | 88  | 678691   | 40.0       | 38.5         |       |
| 33 1,3-Dichlorobenzene        | 146 | 6.203     | 6.202         | 0.001         | 97  | 833025   | 40.0       | 39.2         |       |
| 34 1,4-Dichlorobenzene        | 146 | 6.272     | 6.277         | -0.005        | 93  | 854038   | 40.0       | 39.3         |       |
| 36 Benzyl alcohol             | 108 | 6.390     | 6.389         | 0.001         | 90  | 437762   | 40.0       | 39.5         |       |
| 37 1,2-Dichlorobenzene        | 146 | 6.427     | 6.427         | 0.000         | 96  | 822563   | 40.0       | 39.5         |       |
| 38 2-Methylphenol             | 108 | 6.507     | 6.507         | 0.000         | 97  | 622346   | 40.0       | 38.7         |       |
| 39 Indene                     | 116 | 6.512     | 6.518         | -0.006        | 90  | 1214617  | 40.0       | 39.0         |       |
| 40 2,2'-oxybis[1-chloropropan | 45  | 6.528     | 6.534         | -0.006        | 90  | 825469   | 40.0       | 37.3         |       |
| 41 N-Nitrosopyrrolidine       | 100 | 6.619     | 6.614         | 0.005         | 84  | 285945   | 40.0       | 39.0         |       |
| 44 N-Nitrosodi-n-propylamine  | 70  | 6.646     | 6.646         | 0.000         | 69  | 441214   | 40.0       | 37.4         |       |

| Compound                       | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 43 Acetophenone                | 105 | 6.646     | 6.646         | 0.000         | 80 | 906914   | 40.0       | 37.2         |       |
| 45 4-Methylphenol              | 108 | 6.651     | 6.651         | 0.000         | 73 | 643394   | 40.0       | 38.0         |       |
| 47 Hexachloroethane            | 117 | 6.764     | 6.763         | 0.001         | 92 | 372580   | 40.0       | 39.3         |       |
| 48 Nitrobenzene                | 77  | 6.812     | 6.811         | 0.001         | 89 | 776952   | 40.0       | 38.1         |       |
| 50 Isophorone                  | 82  | 7.036     | 7.041         | -0.005        | 99 | 1277258  | 40.0       | 38.2         |       |
| 51 2-Nitrophenol               | 139 | 7.121     | 7.121         | 0.000         | 97 | 420234   | 40.0       | 40.9         |       |
| 52 2,4-Dimethylphenol          | 107 | 7.154     | 7.153         | 0.001         | 98 | 753151   | 40.0       | 37.8         |       |
| 56 Benzoic acid                | 122 | 7.228     | 7.196         | 0.032         | 89 | 375654   | 40.0       | 39.6         |       |
| 55 Bis(2-chloroethoxy)methane  | 93  | 7.239     | 7.239         | 0.000         | 98 | 770276   | 40.0       | 38.2         |       |
| 57 2,4-Dichlorophenol          | 162 | 7.346     | 7.346         | 0.000         | 95 | 667300   | 40.0       | 39.1         |       |
| 59 1,2,4-Trichlorobenzene      | 180 | 7.431     | 7.436         | -0.005        | 94 | 794260   | 40.0       | 38.6         |       |
| 60 Naphthalene                 | 128 | 7.506     | 7.511         | -0.005        | 97 | 2218172  | 40.0       | 38.0         |       |
| 62 4-Chloroaniline             | 127 | 7.543     | 7.549         | -0.006        | 96 | 925530   | 40.0       | 38.4         |       |
| 63 2,6-Dichlorophenol          | 162 | 7.560     | 7.559         | 0.001         | 97 | 665137   | 40.0       | 38.9         |       |
| 64 Hexachlorobutadiene         | 225 | 7.629     | 7.629         | 0.000         | 97 | 498986   | 40.0       | 37.9         |       |
| 67 Caprolactam                 | 113 | 7.848     | 7.837         | 0.011         | 77 | 195994   | 40.0       | 38.1         |       |
| 70 4-Chloro-3-methylphenol     | 107 | 7.987     | 7.987         | 0.000         | 96 | 648108   | 40.0       | 38.2         |       |
| 72 2-Methylnaphthalene         | 142 | 8.152     | 8.158         | -0.006        | 92 | 1592038  | 40.0       | 38.3         |       |
| 75 1-Methylnaphthalene         | 142 | 8.249     | 8.248         | 0.001         | 93 | 1385626  | 40.0       | 38.0         |       |
| 76 Hexachlorocyclopentadiene   | 237 | 8.307     | 8.307         | 0.000         | 96 | 608183   | 40.0       | 42.2         |       |
| 77 1,2,4,5-Tetrachlorobenzene  | 216 | 8.313     | 8.313         | 0.000         | 98 | 821465   | 40.0       | 38.6         |       |
| 78 2,4,6-Trichlorophenol       | 196 | 8.409     | 8.409         | 0.000         | 92 | 529802   | 40.0       | 40.0         |       |
| 79 2,4,5-Trichlorophenol       | 196 | 8.441     | 8.441         | 0.000         | 93 | 556002   | 40.0       | 40.0         |       |
| 80 1,1'-Biphenyl               | 154 | 8.580     | 8.580         | 0.000         | 94 | 2002667  | 40.0       | 38.8         |       |
| 81 2-Chloronaphthalene         | 162 | 8.607     | 8.612         | -0.005        | 96 | 1554017  | 40.0       | 38.3         |       |
| 82 2-Nitroaniline              | 65  | 8.687     | 8.687         | 0.001         | 83 | 462376   | 40.0       | 40.3         |       |
| 86 Dimethyl phthalate          | 163 | 8.842     | 8.841         | 0.001         | 99 | 1672530  | 40.0       | 38.6         |       |
| 87 1,3-Dinitrobenzene          | 168 | 8.874     | 8.873         | 0.001         | 86 | 283925   | 40.0       | 41.2         |       |
| 88 2,6-Dinitrotoluene          | 165 | 8.900     | 8.900         | 0.000         | 95 | 396407   | 40.0       | 40.3         |       |
| 89 Acenaphthylene              | 152 | 8.997     | 8.996         | 0.001         | 98 | 2416661  | 40.0       | 38.8         |       |
| 90 3-Nitroaniline              | 138 | 9.061     | 9.060         | 0.001         | 93 | 421304   | 40.0       | 40.0         |       |
| 91 Acenaphthene                | 153 | 9.157     | 9.157         | 0.000         | 86 | 1491106  | 40.0       | 37.8         |       |
| 92 2,4-Dinitrophenol           | 184 | 9.157     | 9.157         | 0.000         | 69 | 538395   | 80.0       | 79.5         |       |
| 93 4-Nitrophenol               | 109 | 9.194     | 9.194         | 0.000         | 87 | 574831   | 80.0       | 81.7         |       |
| 94 2,4-Dinitrotoluene          | 165 | 9.274     | 9.274         | 0.000         | 93 | 548279   | 40.0       | 41.5         |       |
| 95 Dibenzofuran                | 168 | 9.312     | 9.317         | -0.005        | 96 | 2254271  | 40.0       | 38.3         |       |
| 97 2,3,5,6-Tetrachlorophenol   | 232 | 9.381     | 9.381         | 0.000         | 93 | 533477   | 40.0       | 42.0         |       |
| 99 2,3,4,6-Tetrachlorophenol   | 232 | 9.424     | 9.424         | 0.000         | 72 | 531770   | 40.0       | 41.0         |       |
| 100 2-Naphthylamine            | 143 | 9.451     | 9.450         | 0.001         | 97 | 1523242  | 40.0       | 38.0         |       |
| 101 Diethyl phthalate          | 149 | 9.488     | 9.488         | 0.000         | 98 | 1702838  | 40.0       | 37.6         |       |
| 102 Hexadecane                 | 57  | 9.493     | 9.493         | 0.000         | 96 | 1028978  | 40.0       | 36.6         |       |
| 104 4-Chlorophenyl phenyl ethe | 204 | 9.616     | 9.616         | 0.000         | 90 | 956781   | 40.0       | 39.4         |       |
| 105 4-Nitroaniline             | 138 | 9.627     | 9.627         | 0.000         | 81 | 446405   | 40.0       | 40.1         |       |
| 106 Fluorene                   | 166 | 9.632     | 9.632         | 0.000         | 94 | 1834343  | 40.0       | 38.1         |       |
| 108 4,6-Dinitro-2-methylphenol | 198 | 9.654     | 9.659         | -0.005        | 89 | 755388   | 80.0       | 88.8         |       |
| 109 N-Nitrosodiphenylamine     | 169 | 9.718     | 9.718         | 0.000         | 61 | 2666058  | 80.0       | 77.0         |       |
| 61 Azobenzene                  | 77  | 9.760     | 9.760         | 0.000         | 99 | 1794860  | 40.0       | 38.3         |       |
| 111 1,2-Diphenylhydrazine      | 77  | 9.760     | 9.760         | 0.000         | 98 | 1794860  | 40.0       | 38.3         |       |
| 116 4-Bromophenyl phenyl ether | 248 | 10.070    | 10.070        | 0.000         | 65 | 574987   | 40.0       | 41.0         |       |
| 118 Hexachlorobenzene          | 284 | 10.156    | 10.156        | 0.000         | 95 | 622415   | 40.0       | 40.8         |       |
| 119 Atrazine                   | 200 | 10.188    | 10.188        | 0.000         | 94 | 561004   | 40.0       | 41.3         |       |
| 122 Pentachlorophenol          | 266 | 10.321    | 10.327        | -0.006        | 92 | 829971   | 80.0       | 79.4         |       |

| Compound                       | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q   | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|-----|----------|------------|--------------|-------|
| 121 n-Octadecane               | 57  | 10.332    | 10.337        | -0.005        | 96  | 1131057  | 40.0       | 37.8         |       |
| 126 Phenanthrene               | 178 | 10.530    | 10.535        | -0.005        | 97  | 2880228  | 40.0       | 37.9         |       |
| 128 Anthracene                 | 178 | 10.583    | 10.583        | 0.000         | 96  | 2933520  | 40.0       | 38.7         |       |
| 130 Carbazole                  | 167 | 10.722    | 10.722        | 0.000         | 96  | 2629503  | 40.0       | 39.4         |       |
| 132 Di-n-butyl phthalate       | 149 | 11.021    | 11.026        | -0.005        | 100 | 3082799  | 40.0       | 40.2         |       |
| 137 Fluoranthene               | 202 | 11.833    | 11.838        | -0.005        | 97  | 3264797  | 40.0       | 40.2         |       |
| 138 Benzidine                  | 184 | 11.961    | 11.967        | -0.006        | 99  | 1562314  | 40.0       | 42.7         |       |
| 139 Pyrene                     | 202 | 12.138    | 12.143        | -0.005        | 98  | 3379936  | 40.0       | 37.9         |       |
| 144 Butyl benzyl phthalate     | 149 | 13.008    | 13.014        | -0.006        | 98  | 1451542  | 40.0       | 40.5         |       |
| 149 3,3'-Dichlorobenzidine     | 252 | 13.975    | 13.975        | 0.000         | 74  | 1328092  | 40.0       | 42.1         |       |
| 151 Bis(2-ethylhexyl) phthalat | 149 | 14.029    | 14.034        | -0.005        | 96  | 2049564  | 40.0       | 41.3         |       |
| 152 Benzo[a]anthracene         | 228 | 14.056    | 14.055        | 0.001         | 98  | 3279613  | 40.0       | 38.9         |       |
| 153 Chrysene                   | 228 | 14.125    | 14.125        | 0.000         | 97  | 3138949  | 40.0       | 39.7         |       |
| 156 Di-n-octyl phthalate       | 149 | 15.354    | 15.359        | -0.005        | 99  | 3629195  | 40.0       | 38.6         |       |
| 157 7,12-Dimethylbenz(a)anthra | 256 | 16.214    | 16.208        | 0.006         | 91  | 1601028  | 40.0       | 40.8         |       |
| 158 Benzo[b]fluoranthene       | 252 | 16.230    | 16.224        | 0.006         | 98  | 3629886  | 40.0       | 40.2         |       |
| 159 Benzo[k]fluoranthene       | 252 | 16.283    | 16.278        | 0.005         | 99  | 3569072  | 40.0       | 39.6         |       |
| 176 Benzo[e]pyrene             | 252 | 16.807    | 16.807        | 0.000         | 0   | 3386071  | 40.0       | 40.3         |       |
| 160 Benzo[a]pyrene             | 252 | 16.919    | 16.913        | 0.006         | 85  | 3529029  | 40.0       | 41.1         |       |
| 163 Indeno[1,2,3-cd]pyrene     | 276 | 19.285    | 19.275        | 0.010         | 99  | 4026833  | 40.0       | 41.0         |       |
| 164 Dibenz(a,h)anthracene      | 278 | 19.318    | 19.312        | 0.006         | 93  | 3444565  | 40.0       | 41.4         |       |
| 165 Benzo[g,h,i]perylene       | 276 | 19.889    | 19.889        | 0.000         | 99  | 3440452  | 40.0       | 40.2         |       |
| S 208 Methyl Phenols, Total    | 108 |           |               |               | 0   |          | 80.0       | 76.7         |       |
| S 206 Total Cresols            | 108 |           |               |               | 0   |          | 80.0       | 76.7         |       |

**Reagents:**

SVTAPSTD40i\_00007

Amount Added: 1.00

Units: mL

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901008.D

Injection Date: 31-Aug-2015 15:59:30

Instrument ID: CH731

Operator ID: 003200

Lims ID: IC

Worklist Smp#: 8

Client ID:

Injection Vol: 2.0 ul

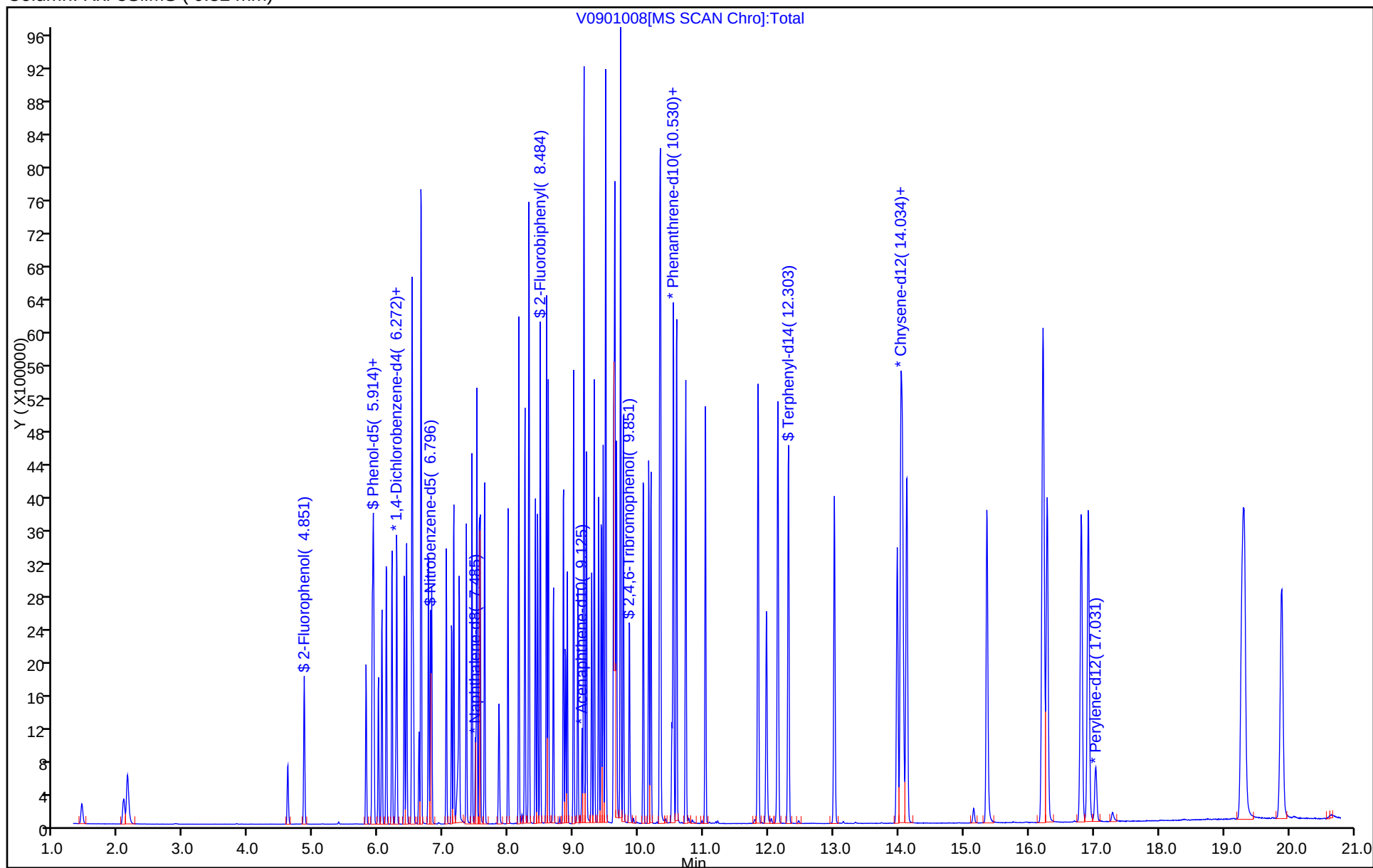
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: BNA\_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS ( 0.32 mm)



TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901009.D  
 Lims ID: IC  
 Client ID:  
 Sample Type: IC Calib Level: 7  
 Inject. Date: 31-Aug-2015 16:27:30 ALS Bottle#: 8 Worklist Smp#: 9  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Sample Info: 180-0008349-009  
 Operator ID: 003200 Instrument ID: CH731  
 Sublist: chrom-BNA\_CH731\*sub4  
 Method: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\BNA\_CH731.m  
 Limit Group: BNA 8270D ICAL  
 Last Update: 01-Sep-2015 04:26:43 Calib Date: 31-Aug-2015 16:55:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last Ical File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901010.D  
 Column 1 : Rxi-5SiIMS ( 0.32 mm) Det: MS SCAN  
 Process Host: XAWRK024

First Level Reviewer: piccolinov

Date: 01-Sep-2015 04:15:33

| Compound                      | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q   | Response | Cal Amt ng | OnCol Amt ng | Flags |
|-------------------------------|-----|-----------|---------------|---------------|-----|----------|------------|--------------|-------|
| * 1 1,4-Dichlorobenzene-d4    | 152 | 6.259     | 6.261         | -0.002        | 94  | 99714    | 8.00       | 8.00         |       |
| * 2 Naphthalene-d8            | 136 | 7.488     | 7.490         | -0.002        | 100 | 406271   | 8.00       | 8.00         |       |
| * 3 Acenaphthene-d10          | 164 | 9.128     | 9.130         | -0.002        | 92  | 264922   | 8.00       | 8.00         |       |
| * 4 Phenanthrene-d10          | 188 | 10.511    | 10.508        | 0.003         | 97  | 517551   | 8.00       | 8.00         |       |
| * 5 Chrysene-d12              | 240 | 14.080    | 14.071        | 0.009         | 97  | 607066   | 8.00       | 8.00         |       |
| * 6 Perylene-d12              | 264 | 17.040    | 17.031        | 0.009         | 98  | 619503   | 8.00       | 8.00         |       |
| \$ 7 2-Fluorophenol           | 112 | 4.854     | 4.851         | 0.003         | 92  | 838231   | 60.0       | 57.1         |       |
| \$ 8 Phenol-d5                | 99  | 5.901     | 5.898         | 0.003         | 96  | 1070228  | 60.0       | 55.8         |       |
| \$ 9 Nitrobenzene-d5          | 82  | 6.799     | 6.795         | 0.004         | 89  | 1113656  | 60.0       | 56.3         |       |
| \$ 10 2-Fluorobiphenyl        | 172 | 8.487     | 8.484         | 0.003         | 99  | 2610251  | 60.0       | 56.4         |       |
| \$ 11 2,4,6-Tribromophenol    | 330 | 9.860     | 9.856         | 0.004         | 94  | 473316   | 60.0       | 66.0         |       |
| \$ 12 Terphenyl-d14           | 244 | 12.306    | 12.303        | 0.003         | 99  | 3347581  | 60.0       | 58.1         |       |
| 13 1,4-Dioxane                | 88  | 1.430     | 1.437         | -0.007        | 91  | 279408   | 60.0       | 55.2         |       |
| 14 N-Nitrosodimethylamine     | 74  | 2.076     | 2.078         | -0.002        | 88  | 379885   | 60.0       | 59.1         |       |
| 15 Pyridine                   | 79  | 2.130     | 2.142         | -0.012        | 96  | 712099   | 60.0       | 59.2         |       |
| 22 Methyl methanesulfonate    | 80  | 4.603     | 4.600         | 0.003         | 89  | 474822   | 60.0       | 56.7         |       |
| 26 Benzaldehyde               | 77  | 5.805     | 5.802         | 0.003         | 94  | 547639   | 60.0       | 55.1         |       |
| 27 Phenol                     | 94  | 5.917     | 5.909         | 0.008         | 99  | 1151982  | 60.0       | 55.0         |       |
| 28 Aniline                    | 93  | 5.923     | 5.919         | 0.004         | 98  | 1324460  | 60.0       | 56.1         |       |
| 29 Bis(2-chloroethyl)ether    | 93  | 5.997     | 5.994         | 0.003         | 97  | 813920   | 60.0       | 56.2         |       |
| 31 2-Chlorophenol             | 128 | 6.051     | 6.048         | 0.003         | 96  | 999145   | 60.0       | 56.4         |       |
| 32 n-Decane                   | 43  | 6.115     | 6.117         | -0.002        | 88  | 933974   | 60.0       | 55.2         |       |
| 33 1,3-Dichlorobenzene        | 146 | 6.206     | 6.202         | 0.004         | 98  | 1169034  | 60.0       | 57.4         |       |
| 34 1,4-Dichlorobenzene        | 146 | 6.275     | 6.277         | -0.002        | 93  | 1200818  | 60.0       | 57.6         |       |
| 36 Benzyl alcohol             | 108 | 6.393     | 6.389         | 0.004         | 90  | 611039   | 60.0       | 57.5         |       |
| 37 1,2-Dichlorobenzene        | 146 | 6.430     | 6.427         | 0.003         | 96  | 1128307  | 60.0       | 56.6         |       |
| 38 2-Methylphenol             | 108 | 6.510     | 6.507         | 0.003         | 96  | 854410   | 60.0       | 55.4         |       |
| 39 Indene                     | 116 | 6.516     | 6.518         | -0.002        | 90  | 1679927  | 60.0       | 56.2         |       |
| 40 2,2'-oxybis[1-chloropropan | 45  | 6.532     | 6.534         | -0.002        | 91  | 1143395  | 60.0       | 53.9         |       |
| 41 N-Nitrosopyrrolidine       | 100 | 6.622     | 6.614         | 0.008         | 85  | 400584   | 60.0       | 56.9         |       |
| 44 N-Nitrosodi-n-propylamine  | 70  | 6.654     | 6.646         | 0.008         | 70  | 599779   | 60.0       | 53.0         |       |



| Compound                       | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 43 Acetophenone                | 105 | 6.649     | 6.646         | 0.003         | 81 | 1253461  | 60.0       | 53.5         |       |
| 45 4-Methylphenol              | 108 | 6.654     | 6.651         | 0.003         | 73 | 873748   | 60.0       | 53.8         |       |
| 47 Hexachloroethane            | 117 | 6.767     | 6.763         | 0.004         | 92 | 519024   | 60.0       | 57.1         |       |
| 48 Nitrobenzene                | 77  | 6.815     | 6.811         | 0.004         | 89 | 1066255  | 60.0       | 55.2         |       |
| 50 Isophorone                  | 82  | 7.039     | 7.041         | -0.002        | 99 | 1778003  | 60.0       | 56.1         |       |
| 51 2-Nitrophenol               | 139 | 7.125     | 7.121         | 0.004         | 98 | 583637   | 60.0       | 60.0         |       |
| 52 2,4-Dimethylphenol          | 107 | 7.157     | 7.153         | 0.004         | 97 | 1041480  | 60.0       | 55.2         |       |
| 56 Benzoic acid                | 122 | 7.247     | 7.196         | 0.051         | 91 | 594277   | 60.0       | 64.2         |       |
| 55 Bis(2-chloroethoxy)methane  | 93  | 7.242     | 7.239         | 0.003         | 99 | 1064713  | 60.0       | 55.7         |       |
| 57 2,4-Dichlorophenol          | 162 | 7.349     | 7.346         | 0.003         | 94 | 944141   | 60.0       | 58.4         |       |
| 59 1,2,4-Trichlorobenzene      | 180 | 7.434     | 7.436         | -0.002        | 94 | 1108717  | 60.0       | 56.9         |       |
| 60 Naphthalene                 | 128 | 7.509     | 7.511         | -0.002        | 97 | 3102774  | 60.0       | 56.1         |       |
| 62 4-Chloroaniline             | 127 | 7.547     | 7.549         | -0.002        | 96 | 1324788  | 60.0       | 58.0         |       |
| 63 2,6-Dichlorophenol          | 162 | 7.563     | 7.559         | 0.004         | 97 | 926626   | 60.0       | 57.2         |       |
| 64 Hexachlorobutadiene         | 225 | 7.627     | 7.629         | -0.002        | 96 | 725569   | 60.0       | 58.2         |       |
| 67 Caprolactam                 | 113 | 7.856     | 7.837         | 0.019         | 78 | 300973   | 60.0       | 61.8         |       |
| 70 4-Chloro-3-methylphenol     | 107 | 7.990     | 7.987         | 0.003         | 96 | 936942   | 60.0       | 58.3         |       |
| 72 2-Methylnaphthalene         | 142 | 8.156     | 8.158         | -0.002        | 93 | 2232756  | 60.0       | 56.7         |       |
| 75 1-Methylnaphthalene         | 142 | 8.252     | 8.248         | 0.004         | 93 | 1963496  | 60.0       | 56.8         |       |
| 76 Hexachlorocyclopentadiene   | 237 | 8.311     | 8.307         | 0.004         | 96 | 886261   | 60.0       | 62.2         |       |
| 77 1,2,4,5-Tetrachlorobenzene  | 216 | 8.316     | 8.313         | 0.003         | 97 | 1176134  | 60.0       | 55.9         |       |
| 78 2,4,6-Trichlorophenol       | 196 | 8.412     | 8.409         | 0.003         | 92 | 767943   | 60.0       | 58.6         |       |
| 79 2,4,5-Trichlorophenol       | 196 | 8.449     | 8.441         | 0.008         | 94 | 821214   | 60.0       | 59.8         |       |
| 80 1,1'-Biphenyl               | 154 | 8.583     | 8.580         | 0.003         | 94 | 2860874  | 60.0       | 55.9         |       |
| 81 2-Chloronaphthalene         | 162 | 8.610     | 8.612         | -0.002        | 96 | 2245596  | 60.0       | 55.9         |       |
| 82 2-Nitroaniline              | 65  | 8.690     | 8.687         | 0.004         | 84 | 675895   | 60.0       | 59.5         |       |
| 86 Dimethyl phthalate          | 163 | 8.845     | 8.841         | 0.004         | 99 | 2472869  | 60.0       | 57.7         |       |
| 87 1,3-Dinitrobenzene          | 168 | 8.877     | 8.873         | 0.004         | 87 | 433868   | 60.0       | 63.7         |       |
| 88 2,6-Dinitrotoluene          | 165 | 8.904     | 8.900         | 0.004         | 95 | 592384   | 60.0       | 60.9         |       |
| 89 Acenaphthylene              | 152 | 9.000     | 8.996         | 0.004         | 98 | 3497114  | 60.0       | 56.7         |       |
| 90 3-Nitroaniline              | 138 | 9.064     | 9.060         | 0.004         | 93 | 646266   | 60.0       | 62.0         |       |
| 91 Acenaphthene                | 153 | 9.160     | 9.157         | 0.003         | 85 | 2129611  | 60.0       | 54.5         |       |
| 92 2,4-Dinitrophenol           | 184 | 9.160     | 9.157         | 0.003         | 70 | 863873   | 120.0      | 127.3        |       |
| 93 4-Nitrophenol               | 109 | 9.203     | 9.194         | 0.009         | 89 | 881491   | 120.0      | 126.6        |       |
| 94 2,4-Dinitrotoluene          | 165 | 9.277     | 9.274         | 0.003         | 93 | 826591   | 60.0       | 63.3         |       |
| 95 Dibenzofuran                | 168 | 9.315     | 9.317         | -0.002        | 96 | 3314307  | 60.0       | 57.0         |       |
| 97 2,3,5,6-Tetrachlorophenol   | 232 | 9.384     | 9.381         | 0.003         | 93 | 803463   | 60.0       | 64.0         |       |
| 99 2,3,4,6-Tetrachlorophenol   | 232 | 9.427     | 9.424         | 0.003         | 72 | 801901   | 60.0       | 62.4         |       |
| 100 2-Naphthylamine            | 143 | 9.454     | 9.450         | 0.004         | 97 | 2285872  | 60.0       | 57.7         |       |
| 101 Diethyl phthalate          | 149 | 9.491     | 9.488         | 0.003         | 98 | 2491639  | 60.0       | 55.6         |       |
| 102 Hexadecane                 | 57  | 9.496     | 9.493         | 0.003         | 97 | 1397088  | 60.0       | 52.4         |       |
| 104 4-Chlorophenyl phenyl ethe | 204 | 9.614     | 9.616         | -0.002        | 92 | 1404700  | 60.0       | 58.4         |       |
| 105 4-Nitroaniline             | 138 | 9.635     | 9.627         | 0.008         | 56 | 674066   | 60.0       | 61.2         |       |
| 106 Fluorene                   | 166 | 9.635     | 9.632         | 0.003         | 95 | 2695516  | 60.0       | 56.5         |       |
| 108 4,6-Dinitro-2-methylphenol | 198 | 9.662     | 9.659         | 0.003         | 90 | 1188730  | 120.0      | 134.7        |       |
| 109 N-Nitrosodiphenylamine     | 169 | 9.721     | 9.718         | 0.003         | 61 | 3965267  | 120.0      | 110.4        |       |
| 61 Azobenzene                  | 77  | 9.764     | 9.760         | 0.004         | 99 | 2591039  | 60.0       | 53.4         |       |
| 111 1,2-Diphenylhydrazine      | 77  | 9.764     | 9.760         | 0.004         | 98 | 2591039  | 60.0       | 53.4         |       |
| 116 4-Bromophenyl phenyl ether | 248 | 10.073    | 10.070        | 0.003         | 64 | 856180   | 60.0       | 58.9         |       |
| 118 Hexachlorobenzene          | 284 | 10.154    | 10.156        | -0.002        | 95 | 947897   | 60.0       | 59.9         |       |
| 119 Atrazine                   | 200 | 10.191    | 10.188        | 0.003         | 94 | 848278   | 60.0       | 60.1         |       |
| 122 Pentachlorophenol          | 266 | 10.325    | 10.327        | -0.002        | 92 | 1292579  | 120.0      | 119.2        |       |



| Compound                       | Sig | RT<br>(min.) | Adj RT<br>(min.) | Dlt RT<br>(min.) | Q   | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|--------------------------------|-----|--------------|------------------|------------------|-----|----------|---------------|-----------------|-------|
| 121 n-Octadecane               | 57  | 10.335       | 10.337           | -0.002           | 96  | 1541202  | 60.0          | 53.8            |       |
| 126 Phenanthrene               | 178 | 10.533       | 10.535           | -0.002           | 97  | 4342458  | 60.0          | 55.1            |       |
| 128 Anthracene                 | 178 | 10.586       | 10.583           | 0.003            | 97  | 4408878  | 60.0          | 56.1            |       |
| 130 Carbazole                  | 167 | 10.725       | 10.722           | 0.003            | 96  | 3955502  | 60.0          | 57.1            |       |
| 132 Di-n-butyl phthalate       | 149 | 11.024       | 11.026           | -0.002           | 100 | 4709352  | 60.0          | 59.2            |       |
| 137 Fluoranthene               | 202 | 11.842       | 11.838           | 0.004            | 97  | 4990877  | 60.0          | 59.3            |       |
| 138 Benzidine                  | 184 | 11.970       | 11.967           | 0.003            | 99  | 2535078  | 60.0          | 66.1            |       |
| 139 Pyrene                     | 202 | 12.146       | 12.143           | 0.003            | 98  | 5158428  | 60.0          | 55.2            |       |
| 144 Butyl benzyl phthalate     | 149 | 13.012       | 13.014           | -0.002           | 98  | 2212652  | 60.0          | 58.8            |       |
| 149 3,3'-Dichlorobenzidine     | 252 | 13.984       | 13.975           | 0.009            | 69  | 2048467  | 60.0          | 61.9            |       |
| 151 Bis(2-ethylhexyl) phthalat | 149 | 14.032       | 14.034           | -0.002           | 96  | 3085719  | 60.0          | 59.2            |       |
| 152 Benzo[a]anthracene         | 228 | 14.059       | 14.055           | 0.004            | 96  | 5081417  | 60.0          | 57.4            |       |
| 153 Chrysene                   | 228 | 14.128       | 14.125           | 0.003            | 94  | 4792327  | 60.0          | 57.8            |       |
| 156 Di-n-octyl phthalate       | 149 | 15.362       | 15.359           | 0.003            | 99  | 5602751  | 60.0          | 56.0            |       |
| 157 7,12-Dimethylbenz(a)anthra | 256 | 16.222       | 16.208           | 0.014            | 71  | 2472560  | 60.0          | 59.3            |       |
| 158 Benzo[b]fluoranthene       | 252 | 16.238       | 16.224           | 0.014            | 95  | 5446463  | 60.0          | 56.8            |       |
| 159 Benzo[k]fluoranthene       | 252 | 16.297       | 16.278           | 0.019            | 98  | 5539285  | 60.0          | 57.8            |       |
| 176 Benzo[e]pyrene             | 252 | 16.821       | 16.807           | 0.014            | 0   | 5228496  | 60.0          | 58.5            |       |
| 160 Benzo[a]pyrene             | 252 | 16.927       | 16.913           | 0.014            | 73  | 5413285  | 60.0          | 59.3            |       |
| 163 Indeno[1,2,3-cd]pyrene     | 276 | 19.299       | 19.275           | 0.024            | 94  | 6175786  | 60.0          | 59.2            |       |
| 164 Dibenz(a,h)anthracene      | 278 | 19.331       | 19.312           | 0.019            | 59  | 5337190  | 60.0          | 60.4            |       |
| 165 Benzo[g,h,i]perylene       | 276 | 19.908       | 19.889           | 0.019            | 91  | 5401597  | 60.0          | 59.4            |       |
| S 208 Methyl Phenols, Total    | 108 |              |                  |                  | 0   |          | 120.0         | 109.2           |       |
| S 206 Total Cresols            | 108 |              |                  |                  | 0   |          | 120.0         | 109.2           |       |

**Reagents:**

SVTAPSTD60i\_00007

Amount Added: 1.00

Units: mL

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901009.D

Injection Date: 31-Aug-2015 16:27:30

Instrument ID: CH731

Operator ID: 003200

Lims ID: IC

Worklist Smp#: 9

Client ID:

Injection Vol: 2.0 ul

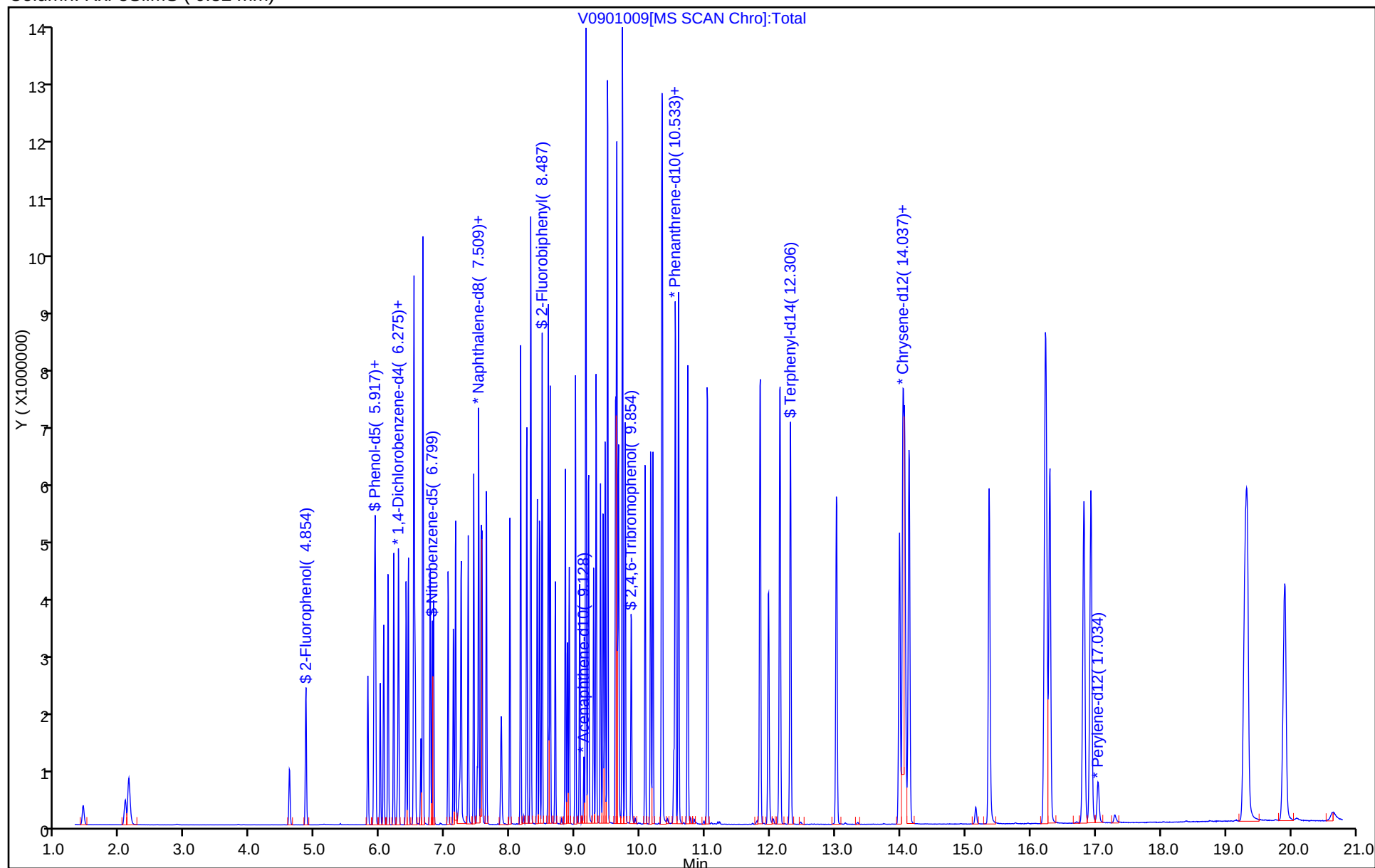
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: BNA\_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS ( 0.32 mm)



TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901010.D  
 Lims ID: IC  
 Client ID:  
 Sample Type: IC Calib Level: 8  
 Inject. Date: 31-Aug-2015 16:55:30 ALS Bottle#: 9 Worklist Smp#: 10  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Sample Info: 180-0008349-010  
 Operator ID: 003200 Instrument ID: CH731  
 Sublist: chrom-BNA\_CH731\*sub4  
 Method: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\BNA\_CH731.m  
 Limit Group: BNA 8270D ICAL  
 Last Update: 01-Sep-2015 04:26:45 Calib Date: 31-Aug-2015 16:55:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last Ical File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901010.D  
 Column 1 : Rxi-5SilMS ( 0.32 mm) Det: MS SCAN  
 Process Host: XAWRK024

First Level Reviewer: piccolinov

Date: 01-Sep-2015 04:17:13

| Compound                      | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|-------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| * 1 1,4-Dichlorobenzene-d4    | 152 | 6.262     | 6.261         | 0.001         | 95 | 98464    | 8.00       | 8.00         |       |
| * 2 Naphthalene-d8            | 136 | 7.491     | 7.490         | 0.001         | 99 | 395755   | 8.00       | 8.00         |       |
| * 3 Acenaphthene-d10          | 164 | 9.131     | 9.130         | 0.001         | 91 | 258714   | 8.00       | 8.00         |       |
| * 4 Phenanthrene-d10          | 188 | 10.515    | 10.508        | 0.007         | 97 | 511081   | 8.00       | 8.00         |       |
| * 5 Chrysene-d12              | 240 | 14.083    | 14.071        | 0.012         | 97 | 623884   | 8.00       | 8.00         |       |
| * 6 Perylene-d12              | 264 | 17.037    | 17.031        | 0.006         | 98 | 632963   | 8.00       | 8.00         |       |
| \$ 7 2-Fluorophenol           | 112 | 4.852     | 4.851         | 0.001         | 92 | 1069551  | 80.0       | 73.8         |       |
| \$ 8 Phenol-d5                | 99  | 5.904     | 5.898         | 0.006         | 95 | 1350534  | 80.0       | 71.3         |       |
| \$ 9 Nitrobenzene-d5          | 82  | 6.797     | 6.795         | 0.002         | 89 | 1430717  | 80.0       | 74.3         |       |
| \$ 10 2-Fluorobiphenyl        | 172 | 8.485     | 8.484         | 0.001         | 99 | 3334934  | 80.0       | 73.8         |       |
| \$ 11 2,4,6-Tribromophenol    | 330 | 9.858     | 9.856         | 0.002         | 94 | 604617   | 80.0       | 85.4         |       |
| \$ 12 Terphenyl-d14           | 244 | 12.304    | 12.303        | 0.001         | 99 | 4425141  | 80.0       | 74.7         |       |
| 13 1,4-Dioxane                | 88  | 1.428     | 1.437         | -0.009        | 91 | 356294   | 80.0       | 71.3         |       |
| 14 N-Nitrosodimethylamine     | 74  | 2.074     | 2.078         | -0.004        | 88 | 486190   | 80.0       | 76.6         |       |
| 15 Pyridine                   | 79  | 2.128     | 2.142         | -0.014        | 96 | 895807   | 80.0       | 75.4         |       |
| 22 Methyl methanesulfonate    | 80  | 4.601     | 4.600         | 0.001         | 89 | 603096   | 80.0       | 73.0         |       |
| 26 Benzaldehyde               | 77  | 5.803     | 5.802         | 0.001         | 94 | 690724   | 80.0       | 70.3         |       |
| 27 Phenol                     | 94  | 5.915     | 5.909         | 0.006         | 98 | 1439322  | 80.0       | 69.6         |       |
| 28 Aniline                    | 93  | 5.926     | 5.919         | 0.007         | 98 | 1668289  | 80.0       | 71.6         |       |
| 29 Bis(2-chloroethyl)ether    | 93  | 5.995     | 5.994         | 0.001         | 96 | 1025923  | 80.0       | 71.8         |       |
| 31 2-Chlorophenol             | 128 | 6.049     | 6.048         | 0.001         | 96 | 1285834  | 80.0       | 73.5         |       |
| 32 n-Decane                   | 43  | 6.118     | 6.117         | 0.001         | 88 | 1170998  | 80.0       | 70.1         |       |
| 33 1,3-Dichlorobenzene        | 146 | 6.204     | 6.202         | 0.002         | 97 | 1491482  | 80.0       | 74.2         |       |
| 34 1,4-Dichlorobenzene        | 146 | 6.278     | 6.277         | 0.001         | 94 | 1538522  | 80.0       | 74.7         |       |
| 36 Benzyl alcohol             | 108 | 6.396     | 6.389         | 0.007         | 90 | 774191   | 80.0       | 73.8         |       |
| 37 1,2-Dichlorobenzene        | 146 | 6.428     | 6.427         | 0.001         | 96 | 1461140  | 80.0       | 74.2         |       |
| 38 2-Methylphenol             | 108 | 6.513     | 6.507         | 0.006         | 93 | 1072808  | 80.0       | 70.5         |       |
| 39 Indene                     | 116 | 6.519     | 6.518         | 0.001         | 90 | 2137786  | 80.0       | 72.5         |       |
| 40 2,2'-oxybis[1-chloropropan | 45  | 6.529     | 6.534         | -0.005        | 91 | 1427446  | 80.0       | 68.2         |       |
| 41 N-Nitrosopyrrolidine       | 100 | 6.626     | 6.614         | 0.012         | 85 | 516581   | 80.0       | 74.3         |       |
| 44 N-Nitrosodi-n-propylamine  | 70  | 6.652     | 6.646         | 0.006         | 79 | 741815   | 80.0       | 66.3         |       |

| Compound                       | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 43 Acetophenone                | 105 | 6.652     | 6.646         | 0.006         | 90 | 1562211  | 80.0       | 67.6         |       |
| 45 4-Methylphenol              | 108 | 6.652     | 6.651         | 0.001         | 88 | 1106901  | 80.0       | 69.0         |       |
| 47 Hexachloroethane            | 117 | 6.765     | 6.763         | 0.002         | 91 | 666391   | 80.0       | 74.2         |       |
| 48 Nitrobenzene                | 77  | 6.818     | 6.811         | 0.007         | 89 | 1349192  | 80.0       | 71.7         |       |
| 50 Isophorone                  | 82  | 7.042     | 7.041         | 0.001         | 99 | 2260645  | 80.0       | 73.2         |       |
| 51 2-Nitrophenol               | 139 | 7.122     | 7.121         | 0.001         | 97 | 748083   | 80.0       | 78.9         |       |
| 52 2,4-Dimethylphenol          | 107 | 7.154     | 7.153         | 0.001         | 97 | 1315779  | 80.0       | 71.6         |       |
| 56 Benzoic acid                | 122 | 7.251     | 7.196         | 0.055         | 89 | 705621   | 80.0       | 77.5         |       |
| 55 Bis(2-chloroethoxy)methane  | 93  | 7.240     | 7.239         | 0.001         | 99 | 1360002  | 80.0       | 73.0         |       |
| 57 2,4-Dichlorophenol          | 162 | 7.347     | 7.346         | 0.001         | 94 | 1215699  | 80.0       | 77.2         |       |
| 59 1,2,4-Trichlorobenzene      | 180 | 7.432     | 7.436         | -0.004        | 94 | 1419941  | 80.0       | 74.8         |       |
| 60 Naphthalene                 | 128 | 7.507     | 7.511         | -0.004        | 97 | 3961496  | 80.0       | 73.5         |       |
| 62 4-Chloroaniline             | 127 | 7.550     | 7.549         | 0.001         | 96 | 1691471  | 80.0       | 76.1         |       |
| 63 2,6-Dichlorophenol          | 162 | 7.560     | 7.559         | 0.001         | 97 | 1189347  | 80.0       | 75.3         |       |
| 64 Hexachlorobutadiene         | 225 | 7.630     | 7.629         | 0.001         | 96 | 932690   | 80.0       | 76.9         |       |
| 67 Caprolactam                 | 113 | 7.865     | 7.837         | 0.028         | 79 | 390460   | 80.0       | 82.4         |       |
| 70 4-Chloro-3-methylphenol     | 107 | 7.993     | 7.987         | 0.006         | 96 | 1193205  | 80.0       | 76.3         |       |
| 72 2-Methylnaphthalene         | 142 | 8.153     | 8.158         | -0.005        | 92 | 2845722  | 80.0       | 74.2         |       |
| 75 1-Methylnaphthalene         | 142 | 8.250     | 8.248         | 0.002         | 93 | 2510891  | 80.0       | 74.5         |       |
| 76 Hexachlorocyclopentadiene   | 237 | 8.308     | 8.307         | 0.001         | 96 | 1135006  | 80.0       | 81.5         |       |
| 77 1,2,4,5-Tetrachlorobenzene  | 216 | 8.314     | 8.313         | 0.001         | 97 | 1486780  | 80.0       | 72.3         |       |
| 78 2,4,6-Trichlorophenol       | 196 | 8.410     | 8.409         | 0.001         | 92 | 1010572  | 80.0       | 79.0         |       |
| 79 2,4,5-Trichlorophenol       | 196 | 8.447     | 8.441         | 0.006         | 94 | 1060563  | 80.0       | 79.0         |       |
| 80 1,1'-Biphenyl               | 154 | 8.581     | 8.580         | 0.001         | 93 | 3692898  | 80.0       | 73.9         |       |
| 81 2-Chloronaphthalene         | 162 | 8.613     | 8.612         | 0.001         | 96 | 2836533  | 80.0       | 72.3         |       |
| 82 2-Nitroaniline              | 65  | 8.688     | 8.687         | 0.002         | 84 | 856991   | 80.0       | 77.3         |       |
| 86 Dimethyl phthalate          | 163 | 8.843     | 8.841         | 0.002         | 99 | 3193164  | 80.0       | 76.3         |       |
| 87 1,3-Dinitrobenzene          | 168 | 8.875     | 8.873         | 0.002         | 87 | 563184   | 80.0       | 84.6         |       |
| 88 2,6-Dinitrotoluene          | 165 | 8.901     | 8.900         | 0.001         | 96 | 774781   | 80.0       | 81.5         |       |
| 89 Acenaphthylene              | 152 | 8.998     | 8.996         | 0.002         | 98 | 4484129  | 80.0       | 74.4         |       |
| 90 3-Nitroaniline              | 138 | 9.067     | 9.060         | 0.007         | 94 | 831142   | 80.0       | 81.7         |       |
| 91 Acenaphthene                | 153 | 9.158     | 9.157         | 0.001         | 85 | 2705975  | 80.0       | 70.9         |       |
| 92 2,4-Dinitrophenol           | 184 | 9.158     | 9.157         | 0.001         | 70 | 1151263  | 160.0      | 172.8        |       |
| 93 4-Nitrophenol               | 109 | 9.206     | 9.194         | 0.012         | 89 | 1135055  | 160.0      | 166.9        |       |
| 94 2,4-Dinitrotoluene          | 165 | 9.281     | 9.274         | 0.007         | 94 | 1086532  | 80.0       | 85.1         |       |
| 95 Dibenzofuran                | 168 | 9.318     | 9.317         | 0.001         | 96 | 4210142  | 80.0       | 74.1         |       |
| 97 2,3,5,6-Tetrachlorophenol   | 232 | 9.388     | 9.381         | 0.007         | 93 | 1064721  | 80.0       | 86.8         |       |
| 99 2,3,4,6-Tetrachlorophenol   | 232 | 9.425     | 9.424         | 0.001         | 71 | 1034946  | 80.0       | 82.5         |       |
| 100 2-Naphthylamine            | 143 | 9.457     | 9.450         | 0.007         | 97 | 2904871  | 80.0       | 75.0         |       |
| 101 Diethyl phthalate          | 149 | 9.494     | 9.488         | 0.006         | 98 | 3193948  | 80.0       | 72.9         |       |
| 102 Hexadecane                 | 57  | 9.494     | 9.493         | 0.001         | 96 | 1705323  | 80.0       | 65.7         |       |
| 104 4-Chlorophenyl phenyl ethe | 204 | 9.617     | 9.616         | 0.001         | 90 | 1819749  | 80.0       | 77.5         |       |
| 105 4-Nitroaniline             | 138 | 9.639     | 9.627         | 0.012         | 82 | 881666   | 80.0       | 82.0         |       |
| 106 Fluorene                   | 166 | 9.633     | 9.632         | 0.001         | 96 | 3469462  | 80.0       | 74.5         |       |
| 108 4,6-Dinitro-2-methylphenol | 198 | 9.665     | 9.659         | 0.006         | 91 | 1577783  | 160.0      | 181.1        |       |
| 109 N-Nitrosodiphenylamine     | 169 | 9.724     | 9.718         | 0.006         | 60 | 5134418  | 160.0      | 144.7        |       |
| 61 Azobenzene                  | 77  | 9.767     | 9.760         | 0.007         | 98 | 3287555  | 80.0       | 68.6         |       |
| 111 1,2-Diphenylhydrazine      | 77  | 9.767     | 9.760         | 0.007         | 97 | 3287555  | 80.0       | 68.6         |       |
| 116 4-Bromophenyl phenyl ether | 248 | 10.071    | 10.070        | 0.001         | 64 | 1113159  | 80.0       | 77.5         |       |
| 118 Hexachlorobenzene          | 284 | 10.157    | 10.156        | 0.001         | 96 | 1244142  | 80.0       | 79.6         |       |
| 119 Atrazine                   | 200 | 10.194    | 10.188        | 0.006         | 95 | 1098657  | 80.0       | 78.9         |       |
| 122 Pentachlorophenol          | 266 | 10.328    | 10.327        | 0.001         | 93 | 1697903  | 160.0      | 158.6        |       |

| Compound                       | Sig | RT<br>(min.) | Adj RT<br>(min.) | Dlt RT<br>(min.) | Q   | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|--------------------------------|-----|--------------|------------------|------------------|-----|----------|---------------|-----------------|-------|
| 121 n-Octadecane               | 57  | 10.338       | 10.337           | 0.001            | 97  | 1853282  | 80.0          | 65.5            |       |
| 126 Phenanthrene               | 178 | 10.536       | 10.535           | 0.001            | 97  | 5640236  | 80.0          | 72.5            |       |
| 128 Anthracene                 | 178 | 10.584       | 10.583           | 0.001            | 96  | 5748524  | 80.0          | 74.0            |       |
| 130 Carbazole                  | 167 | 10.728       | 10.722           | 0.006            | 96  | 5117901  | 80.0          | 74.9            |       |
| 132 Di-n-butyl phthalate       | 149 | 11.028       | 11.026           | 0.002            | 100 | 6102278  | 80.0          | 77.7            |       |
| 137 Fluoranthene               | 202 | 11.840       | 11.838           | 0.002            | 97  | 6477904  | 80.0          | 78.0            |       |
| 138 Benzidine                  | 184 | 11.968       | 11.967           | 0.001            | 99  | 3407934  | 80.0          | 86.4            |       |
| 139 Pyrene                     | 202 | 12.144       | 12.143           | 0.001            | 98  | 6781286  | 80.0          | 70.6            |       |
| 144 Butyl benzyl phthalate     | 149 | 13.015       | 13.014           | 0.001            | 97  | 2909727  | 80.0          | 75.3            |       |
| 149 3,3'-Dichlorobenzidine     | 252 | 13.987       | 13.975           | 0.012            | 65  | 2760473  | 80.0          | 81.2            |       |
| 151 Bis(2-ethylhexyl) phthalat | 149 | 14.035       | 14.034           | 0.001            | 95  | 4027626  | 80.0          | 75.2            |       |
| 152 Benzo[a]anthracene         | 228 | 14.062       | 14.055           | 0.007            | 96  | 6802828  | 80.0          | 74.7            |       |
| 153 Chrysene                   | 228 | 14.131       | 14.125           | 0.006            | 93  | 6394304  | 80.0          | 75.0            |       |
| 156 Di-n-octyl phthalate       | 149 | 15.365       | 15.359           | 0.006            | 99  | 7419754  | 80.0          | 72.6            |       |
| 157 7,12-Dimethylbenz(a)anthra | 256 | 16.231       | 16.208           | 0.023            | 68  | 3354970  | 80.0          | 78.7            |       |
| 158 Benzo[b]fluoranthene       | 252 | 16.247       | 16.224           | 0.023            | 92  | 7677405  | 80.0          | 78.3            |       |
| 159 Benzo[k]fluoranthene       | 252 | 16.300       | 16.278           | 0.022            | 98  | 7151269  | 80.0          | 73.0            |       |
| 176 Benzo[e]pyrene             | 252 | 16.824       | 16.807           | 0.017            | 0   | 6938914  | 80.0          | 76.0            |       |
| 160 Benzo[a]pyrene             | 252 | 16.931       | 16.913           | 0.018            | 73  | 7225435  | 80.0          | 77.4            |       |
| 163 Indeno[1,2,3-cd]pyrene     | 276 | 19.303       | 19.275           | 0.027            | 94  | 8349705  | 80.0          | 78.3            |       |
| 164 Dibenz(a,h)anthracene      | 278 | 19.335       | 19.312           | 0.023            | 67  | 7188461  | 80.0          | 79.6            |       |
| 165 Benzo[g,h,i]perylene       | 276 | 19.917       | 19.889           | 0.028            | 91  | 7315071  | 80.0          | 78.8            |       |
| S 208 Methyl Phenols, Total    | 108 |              |                  |                  | 0   |          | 160.0         | 139.4           |       |
| S 206 Total Cresols            | 108 |              |                  |                  | 0   |          | 160.0         | 139.4           |       |

**Reagents:**

SVTAPSTD80i\_00007

Amount Added: 1.00

Units: mL

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901010.D

Injection Date: 31-Aug-2015 16:55:30

Instrument ID: CH731

Operator ID: 003200

Lims ID: IC

Worklist Smp#: 10

Client ID:

Injection Vol: 2.0 ul

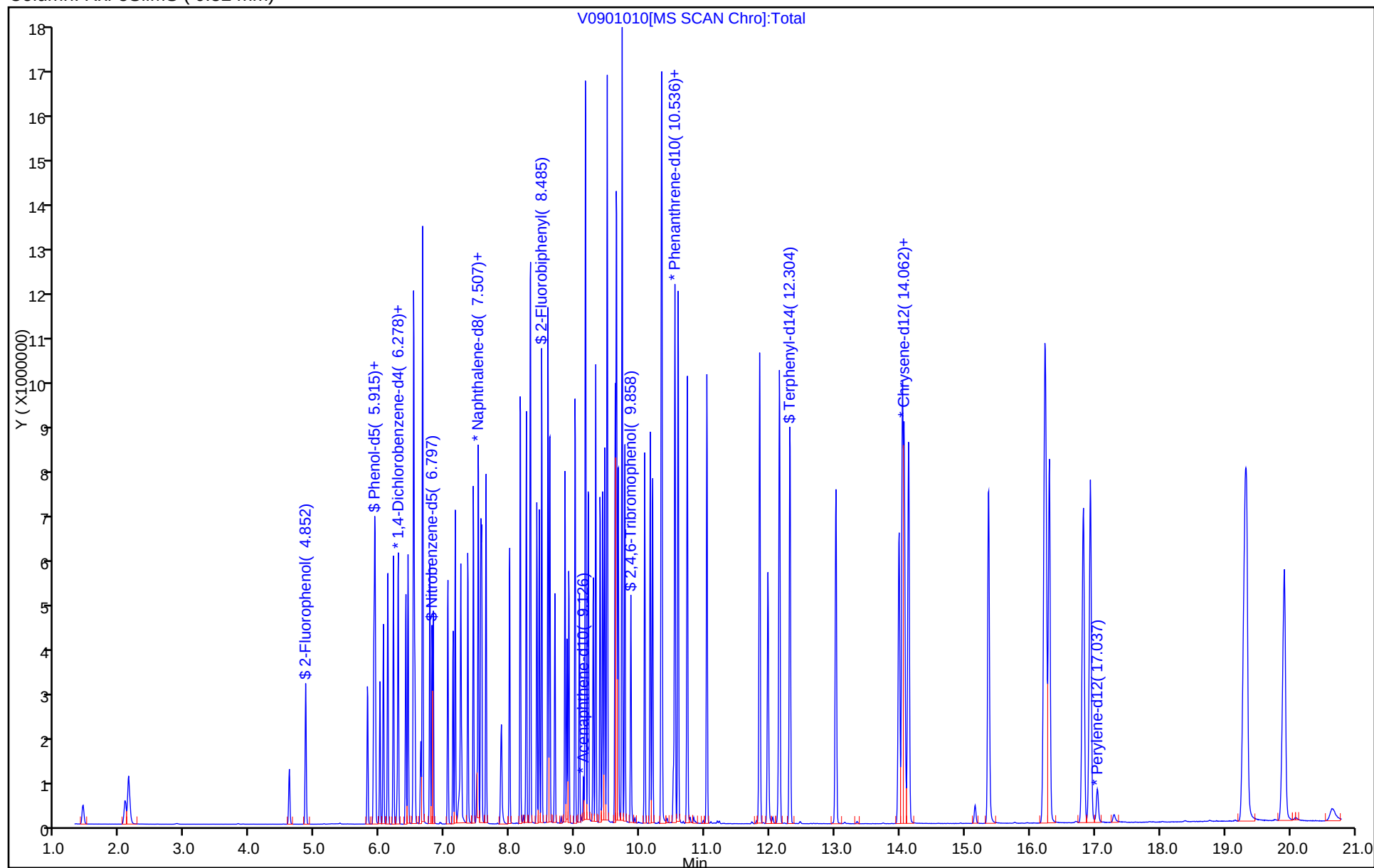
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: BNA\_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS ( 0.32 mm)



FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCVIS 180-156466/3 Calibration Date: 10/09/2015 09:18  
 Instrument ID: CH731 Calib Start Date: 08/31/2015 13:40  
 GC Column: Rxi-5SilMS ID: 0.32 (mm) Calib End Date: 08/31/2015 16:55  
 Lab File ID: V1009003.D Conc. Units: ng/uL

| ANALYTE                      | CURVE TYPE | AVE RRF | RRF    | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D    | MAX %D |
|------------------------------|------------|---------|--------|---------|-------------|--------------|-------|--------|
| 1,4-Dioxane                  | Ave        | 0.4059  | 0.4366 | 0.0100  | 5.38        | 5.00         | 7.5   | 20.0   |
| N-Nitrosodimethylamine       | Ave        | 0.5156  | 0.5917 | 0.0100  | 5.74        | 5.00         | 14.8  | 20.0   |
| Pyridine                     | Ave        | 0.9650  | 1.080  | 0.0100  | 5.59        | 5.00         | 11.9  | 20.0   |
| Methyl methanesulfonate      | Ave        | 0.6714  | 0.7645 | 0.0100  | 5.69        | 5.00         | 13.9  | 20.0   |
| Benzaldehyde                 | Ave        | 0.7981  | 1.067  | 0.0100  | 6.68        | 5.00         | 33.6* | 20.0   |
| Phenol                       | Ave        | 1.679   | 1.786  | 0.8000  | 5.32        | 5.00         | 6.3   | 20.0   |
| Aniline                      | Ave        | 1.894   | 2.029  | 0.0100  | 5.36        | 5.00         | 7.1   | 20.0   |
| Bis(2-chloroethyl)ether      | Ave        | 1.161   | 1.260  | 0.7000  | 5.42        | 5.00         | 8.5   | 20.0   |
| 2-Chlorophenol               | Ave        | 1.422   | 1.473  | 0.8000  | 5.18        | 5.00         | 3.6   | 20.0   |
| n-Decane                     | Ave        | 1.358   | 1.376  |         | 5.07        | 5.00         | 1.4   | 20.0   |
| 1,3-Dichlorobenzene          | Ave        | 1.633   | 1.639  | 0.0100  | 5.02        | 5.00         | 0.4   | 20.0   |
| 1,4-Dichlorobenzene          | Ave        | 1.673   | 1.701  | 0.0100  | 5.08        | 5.00         | 1.7   | 20.0   |
| Benzyl alcohol               | Ave        | 0.8520  | 0.8586 | 0.0100  | 5.04        | 5.00         | 0.8   | 20.0   |
| 1,2-Dichlorobenzene          | Ave        | 1.600   | 1.642  | 0.0100  | 5.13        | 5.00         | 2.6   | 20.0   |
| 2-Methylphenol               | Ave        | 1.237   | 1.307  | 0.7000  | 5.28        | 5.00         | 5.6   | 20.0   |
| Indene                       | Ave        | 2.396   | 2.478  | 0.0100  | 5.17        | 5.00         | 3.4   | 20.0   |
| 2,2'-oxybis[1-chloropropane] | Ave        | 1.702   | 1.828  | 0.0100  | 5.37        | 5.00         | 7.4   | 20.0   |
| N-Nitrosopyrrolidine         | Ave        | 0.5648  | 0.5706 | 0.0100  | 5.05        | 5.00         | 1.0   | 20.0   |
| Acetophenone                 | Ave        | 1.878   | 2.027  | 0.0100  | 5.40        | 5.00         | 7.9   | 20.0   |
| N-Nitrosodi-n-propylamine    | Ave        | 0.9087  | 1.006  | 0.5000  | 5.54        | 5.00         | 10.7  | 20.0   |
| Methylphenol, 3 & 4          | Ave        | 1.304   | 1.372  | 0.6000  | 5.26        | 5.00         | 5.3   | 20.0   |
| Hexachloroethane             | Ave        | 0.7293  | 0.7212 | 0.3000  | 4.94        | 5.00         | -1.1  | 20.0   |
| Nitrobenzene                 | Ave        | 0.3804  | 0.4025 | 0.2000  | 5.29        | 5.00         | 5.8   | 20.0   |
| Isophorone                   | Ave        | 0.6240  | 0.6670 | 0.4000  | 5.34        | 5.00         | 6.9   | 20.0   |
| 2-Nitrophenol                | Ave        | 0.1917  | 0.2042 | 0.1000  | 5.33        | 5.00         | 6.5   | 20.0   |
| 2,4-Dimethylphenol           | Ave        | 0.3716  | 0.3970 | 0.2000  | 5.34        | 5.00         | 6.8   | 20.0   |
| Benzoic acid                 | Lin1       |         | 0.1657 | 0.0100  | 5.84        | 5.00         | 16.8  | 20.0   |
| Bis(2-chloroethoxy)methane   | Ave        | 0.3765  | 0.3974 | 0.3000  | 5.28        | 5.00         | 5.5   | 20.0   |
| 2,4-Dichlorophenol           | Ave        | 0.3185  | 0.3392 | 0.2000  | 5.32        | 5.00         | 6.5   | 20.0   |
| 1,2,4-Trichlorobenzene       | Ave        | 0.3838  | 0.3956 | 0.0100  | 5.15        | 5.00         | 3.1   | 20.0   |
| Naphthalene                  | Ave        | 1.089   | 1.109  | 0.7000  | 5.09        | 5.00         | 1.8   | 20.0   |
| 4-Chloroaniline              | Ave        | 0.4495  | 0.4740 | 0.0100  | 5.27        | 5.00         | 5.5   | 20.0   |
| 2,6-Dichlorophenol           | Ave        | 0.3193  | 0.3276 | 0.0100  | 5.13        | 5.00         | 2.6   | 20.0   |
| Hexachlorobutadiene          | Ave        | 0.2453  | 0.2495 | 0.0100  | 5.09        | 5.00         | 1.7   | 20.0   |
| Caprolactam                  | Ave        | 0.0958  | 0.0960 | 0.0100  | 5.01        | 5.00         | 0.2   | 20.0   |
| 4-Chloro-3-methylphenol      | Ave        | 0.3163  | 0.3397 | 0.2000  | 5.37        | 5.00         | 7.4   | 20.0   |
| 2-Methylnaphthalene          | Ave        | 0.7752  | 0.7959 | 0.4000  | 5.13        | 5.00         | 2.7   | 20.0   |
| 1-Methylnaphthalene          | Ave        | 0.6809  | 0.7011 | 0.0100  | 5.15        | 5.00         | 3.0   | 20.0   |
| Hexachlorocyclopentadiene    | Ave        | 0.4305  | 0.4957 | 0.0500  | 5.76        | 5.00         | 15.2  | 20.0   |
| 1,2,4,5-Tetrachlorobenzene   | Ave        | 0.6358  | 0.6670 | 0.0100  | 5.24        | 5.00         | 4.9   | 20.0   |
| 2,4,6-Trichlorophenol        | Ave        | 0.3956  | 0.4277 | 0.2000  | 5.41        | 5.00         | 8.1   | 20.0   |

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCVIS 180-156466/3 Calibration Date: 10/09/2015 09:18

Instrument ID: CH731 Calib Start Date: 08/31/2015 13:40

GC Column: Rxi-5SilMS ID: 0.32 (mm) Calib End Date: 08/31/2015 16:55

Lab File ID: V1009003.D Conc. Units: ng/uL

| ANALYTE                               | CURVE TYPE | AVE RRF | RRF    | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D   | MAX %D |
|---------------------------------------|------------|---------|--------|---------|-------------|--------------|------|--------|
| 2,4,5-Trichlorophenol                 | Ave        | 0.4149  | 0.4520 | 0.2000  | 5.45        | 5.00         | 8.9  | 20.0   |
| 1,1'-Biphenyl                         | Ave        | 1.544   | 1.623  | 0.0100  | 5.25        | 5.00         | 5.1  | 20.0   |
| 2-Chloronaphthalene                   | Ave        | 1.213   | 1.263  | 0.8000  | 5.21        | 5.00         | 4.1  | 20.0   |
| 2-Nitroaniline                        | Ave        | 0.3429  | 0.3595 | 0.0100  | 5.24        | 5.00         | 4.8  | 20.0   |
| Dimethyl phthalate                    | Ave        | 1.294   | 1.401  | 0.0100  | 5.42        | 5.00         | 8.3  | 20.0   |
| 1,3-Dinitrobenzene                    | Ave        | 0.2058  | 0.2116 | 0.0100  | 5.14        | 5.00         | 2.8  | 20.0   |
| 2,6-Dinitrotoluene                    | Ave        | 0.2938  | 0.3180 | 0.2000  | 5.41        | 5.00         | 8.2  | 20.0   |
| Acenaphthylene                        | Ave        | 1.863   | 1.954  | 0.9000  | 5.25        | 5.00         | 4.9  | 20.0   |
| 3-Nitroaniline                        | Ave        | 0.3146  | 0.3274 | 0.0100  | 5.20        | 5.00         | 4.1  | 20.0   |
| 2,4-Dinitrophenol                     | Lin2       |         | 0.2066 | 0.0100  | 11.1        | 10.0         | 11.2 | 20.0   |
| Acenaphthene                          | Ave        | 1.180   | 1.250  | 0.9000  | 5.29        | 5.00         | 5.9  | 20.0   |
| 4-Nitrophenol                         | Ave        | 0.2103  | 0.2212 | 0.0100  | 10.5        | 10.0         | 5.2  | 20.0   |
| 2,4-Dinitrotoluene                    | Ave        | 0.3946  | 0.4281 | 0.2000  | 5.42        | 5.00         | 8.5  | 20.0   |
| Dibenzofuran                          | Ave        | 1.757   | 1.854  | 0.8000  | 5.28        | 5.00         | 5.5  | 20.0   |
| 2,3,5,6-Tetrachlorophenol             | Ave        | 0.3792  | 0.4264 | 0.0100  | 5.62        | 5.00         | 12.4 | 20.0   |
| 2,3,4,6-Tetrachlorophenol             | Ave        | 0.3880  | 0.4070 | 0.0100  | 5.24        | 5.00         | 4.9  | 20.0   |
| 2-Naphthylamine                       | Ave        | 1.197   | 1.252  | 0.0100  | 5.23        | 5.00         | 4.6  | 20.0   |
| Diethyl phthalate                     | Ave        | 1.354   | 1.399  | 0.0100  | 5.17        | 5.00         | 3.3  | 20.0   |
| Hexadecane                            | Ave        | 0.5246  | 0.5600 |         | 5.34        | 5.00         | 6.8  | 20.0   |
| 4-Chlorophenyl phenyl ether           | Ave        | 0.7262  | 0.7909 | 0.4000  | 5.45        | 5.00         | 8.9  | 20.0   |
| 4-Nitroaniline                        | Ave        | 0.3326  | 0.3275 | 0.0100  | 4.92        | 5.00         | -1.5 | 20.0   |
| Fluorene                              | Ave        | 1.440   | 1.517  | 0.9000  | 5.27        | 5.00         | 5.4  | 20.0   |
| 4,6-Dinitro-2-methylphenol            | Ave        | 0.1364  | 0.1506 | 0.0100  | 11.0        | 10.0         | 10.4 | 20.0   |
| N-Nitrosodiphenylamine                | Ave        | 0.5553  | 0.5700 | 0.0100  | 10.3        | 10.0         | 2.7  | 20.0   |
| 1,2-Diphenylhydrazine (as Azobenzene) | Ave        | 0.7505  | 0.7708 | 0.0100  | 5.14        | 5.00         | 2.7  | 20.0   |
| 4-Bromophenyl phenyl ether            | Ave        | 0.2248  | 0.2373 | 0.1000  | 5.28        | 5.00         | 5.5  | 20.0   |
| Hexachlorobenzene                     | Ave        | 0.2447  | 0.2545 | 0.1000  | 5.20        | 5.00         | 4.0  | 20.0   |
| Atrazine                              | Ave        | 0.2181  | 0.2260 | 0.0100  | 5.18        | 5.00         | 3.7  | 20.0   |
| Pentachlorophenol                     | Ave        | 0.1676  | 0.1582 | 0.0500  | 9.44        | 10.0         | -5.6 | 20.0   |
| n-Octadecane                          | Ave        | 2.300   | 2.423  |         | 5.27        | 5.00         | 5.4  | 20.0   |
| Phenanthrene                          | Ave        | 1.218   | 1.227  | 0.7000  | 5.04        | 5.00         | 0.7  | 20.0   |
| Anthracene                            | Ave        | 1.216   | 1.249  | 0.7000  | 5.14        | 5.00         | 2.7  | 20.0   |
| Carbazole                             | Ave        | 1.070   | 1.061  | 0.0100  | 4.96        | 5.00         | -0.8 | 20.0   |
| Di-n-butyl phthalate                  | Ave        | 1.230   | 1.272  | 0.0100  | 5.17        | 5.00         | 3.4  | 20.0   |
| Fluoranthene                          | Ave        | 1.301   | 1.271  | 0.6000  | 4.88        | 5.00         | -2.3 | 20.0   |
| Benzidine                             | Ave        | 0.5055  | 0.5994 | 0.0100  | 5.93        | 5.00         | 18.6 | 20.0   |
| Pyrene                                | Ave        | 1.232   | 1.451  | 0.6000  | 5.89        | 5.00         | 17.8 | 20.0   |
| Butyl benzyl phthalate                | Ave        | 0.4956  | 0.5484 | 0.0100  | 5.53        | 5.00         | 10.6 | 20.0   |
| 3,3'-Dichlorobenzidine                | Ave        | 0.4358  | 0.4237 | 0.0100  | 4.86        | 5.00         | -2.8 | 20.0   |
| Bis(2-ethylhexyl) phthalate           | Ave        | 0.6866  | 0.7549 | 0.0100  | 5.50        | 5.00         | 10.0 | 20.0   |



FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCVIS 180-156466/3 Calibration Date: 10/09/2015 09:18  
 Instrument ID: CH731 Calib Start Date: 08/31/2015 13:40  
 GC Column: Rxi-5SilMS ID: 0.32 (mm) Calib End Date: 08/31/2015 16:55  
 Lab File ID: V1009003.D Conc. Units: ng/uL

| ANALYTE                        | CURVE<br>TYPE | AVE RRF | RRF    | MIN RRF | CALC<br>AMOUNT | SPIKE<br>AMOUNT | %D   | MAX<br>%D |
|--------------------------------|---------------|---------|--------|---------|----------------|-----------------|------|-----------|
| Benzo[a]anthracene             | Ave           | 1.167   | 1.196  | 0.8000  | 5.13           | 5.00            | 2.5  | 20.0      |
| Chrysene                       | Ave           | 1.093   | 1.116  | 0.7000  | 5.10           | 5.00            | 2.1  | 20.0      |
| Di-n-octyl phthalate           | Ave           | 1.291   | 1.421  | 0.0100  | 5.50           | 5.00            | 10.1 | 20.0      |
| 7,12-Dimethylbenz(a)anthracene | Ave           | 0.5386  | 0.5860 | 0.0100  | 5.44           | 5.00            | 8.8  | 20.0      |
| Benzo[b]fluoranthene           | Ave           | 1.239   | 1.334  | 0.7000  | 5.38           | 5.00            | 7.6  | 20.0      |
| Benzo[k]fluoranthene           | Ave           | 1.238   | 1.283  | 0.7000  | 5.18           | 5.00            | 3.6  | 20.0      |
| Benzo[e]pyrene                 | Ave           | 1.154   | 1.189  | 0.0100  | 5.15           | 5.00            | 3.0  | 20.0      |
| Benzo[a]pyrene                 | Ave           | 1.180   | 1.211  | 0.7000  | 5.13           | 5.00            | 2.7  | 20.0      |
| Indeno[1,2,3-cd]pyrene         | Ave           | 1.348   | 1.247  | 0.5000  | 4.63           | 5.00            | -7.5 | 20.0      |
| Dibenz(a,h)anthracene          | Ave           | 1.141   | 1.056  | 0.4000  | 4.63           | 5.00            | -7.5 | 20.0      |
| Benzo[g,h,i]perylene           | Ave           | 1.174   | 1.065  | 0.5000  | 4.54           | 5.00            | -9.3 | 20.0      |
| 2-Fluorophenol (Surr)          | Ave           | 1.178   | 1.216  |         | 5.16           | 5.00            | 3.2  | 20.0      |
| Phenol-d5 (Surr)               | Ave           | 1.538   | 1.626  |         | 5.28           | 5.00            | 5.7  | 20.0      |
| Nitrobenzene-d5 (Surr)         | Ave           | 0.3892  | 0.4025 |         | 5.17           | 5.00            | 3.4  | 20.0      |
| 2-Fluorobiphenyl               | Ave           | 1.398   | 1.482  |         | 5.30           | 5.00            | 6.0  | 20.0      |
| 2,4,6-Tribromophenol (Surr)    | Ave           | 0.1109  | 0.1160 | 0.0100  | 5.23           | 5.00            | 4.6  | 20.0      |
| Terphenyl-d14 (Surr)           | Ave           | 0.7597  | 0.8927 |         | 5.87           | 5.00            | 17.5 | 20.0      |

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20151009-8910.b\V1009003.D  
 Lims ID: CCVIS  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 09-Oct-2015 09:18:30 ALS Bottle#: 2 Worklist Smp#: 3  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Sample Info: 180-0008910-003  
 Operator ID: 003200 Instrument ID: CH731  
 Sublist: chrom-BNA\_CH731\*sub4  
 Method: \\ChromNA\Pittsburgh\ChromData\CH731\20151009-8910.b\BNA\_CH731.m  
 Limit Group: BNA 8270D ICAL  
 Last Update: 11-Oct-2015 08:06:48 Calib Date: 01-Sep-2015 07:35:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last Ical File: \\ChromNA\Pittsburgh\ChromData\CH731\20150901-8368.b\V0901N11.D  
 Column 1 : Rxi-5SiIMS ( 0.32 mm) Det: MS SCAN  
 Process Host: XAWRK031

First Level Reviewer: piccolinov

Date: 09-Oct-2015 11:51:09

| Compound                      | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q   | Response | Cal Amt ng | OnCol Amt ng | Flags |
|-------------------------------|-----|-----------|---------------|---------------|-----|----------|------------|--------------|-------|
| * 1 1,4-Dichlorobenzene-d4    | 152 | 6.310     | 6.310         | 0.000         | 94  | 197119   | 8.00       | 8.00         |       |
| * 2 Naphthalene-d8            | 136 | 7.539     | 7.539         | 0.000         | 100 | 804831   | 8.00       | 8.00         |       |
| * 3 Acenaphthene-d10          | 164 | 9.179     | 9.179         | 0.000         | 92  | 505326   | 8.00       | 8.00         |       |
| * 4 Phenanthrene-d10          | 188 | 10.573    | 10.573        | 0.000         | 97  | 951658   | 8.00       | 8.00         |       |
| * 5 Chrysene-d12              | 240 | 14.184    | 14.184        | 0.000         | 96  | 864459   | 8.00       | 8.00         |       |
| * 6 Perylene-d12              | 264 | 17.171    | 17.171        | 0.000         | 98  | 713136   | 8.00       | 8.00         |       |
| \$ 7 2-Fluorophenol           | 112 | 4.900     | 4.900         | 0.000         | 92  | 299653   | 10.0       | 10.3         |       |
| \$ 8 Phenol-d5                | 99  | 5.941     | 5.941         | 0.000         | 96  | 400520   | 10.0       | 10.6         |       |
| \$ 9 Nitrobenzene-d5          | 82  | 6.844     | 6.844         | 0.000         | 91  | 404937   | 10.0       | 10.3         |       |
| \$ 10 2-Fluorobiphenyl        | 172 | 8.538     | 8.538         | 0.000         | 100 | 935825   | 10.0       | 10.6         |       |
| \$ 11 2,4,6-Tribromophenol    | 330 | 9.911     | 9.911         | 0.000         | 93  | 137994   | 10.0       | 10.5         |       |
| \$ 12 Terphenyl-d14           | 244 | 12.389    | 12.389        | 0.000         | 99  | 964581   | 10.0       | 11.7         |       |
| 13 1,4-Dioxane                | 88  | 1.502     | 1.502         | 0.000         | 92  | 107575   | 10.0       | 10.8         |       |
| 14 N-Nitrosodimethylamine     | 74  | 2.159     | 2.159         | 0.000         | 88  | 145794   | 10.0       | 11.5         |       |
| 15 Pyridine                   | 79  | 2.234     | 2.234         | 0.000         | 96  | 266023   | 10.0       | 11.2         |       |
| 22 Methyl methanesulfonate    | 80  | 4.649     | 4.649         | 0.000         | 90  | 188379   | 10.0       | 11.4         |       |
| 26 Benzaldehyde               | 77  | 5.851     | 5.851         | 0.000         | 94  | 262816   | 10.0       | 13.4         |       |
| 27 Phenol                     | 94  | 5.957     | 5.957         | 0.000         | 98  | 439947   | 10.0       | 10.6         |       |
| 28 Aniline                    | 93  | 5.968     | 5.968         | 0.000         | 93  | 499845   | 10.0       | 10.7         |       |
| 29 Bis(2-chloroethyl)ether    | 93  | 6.038     | 6.038         | 0.000         | 96  | 310361   | 10.0       | 10.8         |       |
| 31 2-Chlorophenol             | 128 | 6.096     | 6.096         | 0.000         | 96  | 362982   | 10.0       | 10.4         |       |
| 32 n-Decane                   | 43  | 6.160     | 6.160         | 0.000         | 88  | 339120   | 10.0       | 10.1         |       |
| 33 1,3-Dichlorobenzene        | 146 | 6.251     | 6.251         | 0.000         | 96  | 403891   | 10.0       | 10.0         |       |
| 34 1,4-Dichlorobenzene        | 146 | 6.326     | 6.326         | 0.000         | 92  | 419197   | 10.0       | 10.2         |       |
| 36 Benzyl alcohol             | 108 | 6.438     | 6.438         | 0.000         | 89  | 211550   | 10.0       | 10.1         |       |
| 37 1,2-Dichlorobenzene        | 146 | 6.476     | 6.476         | 0.000         | 95  | 404653   | 10.0       | 10.3         |       |
| 38 2-Methylphenol             | 108 | 6.556     | 6.556         | 0.000         | 97  | 321923   | 10.0       | 10.6         |       |
| 39 Indene                     | 116 | 6.567     | 6.567         | 0.000         | 92  | 610626   | 10.0       | 10.3         |       |
| 40 2,2'-oxybis[1-chloropropan | 45  | 6.577     | 6.577         | 0.000         | 89  | 450309   | 10.0       | 10.7         |       |
| 41 N-Nitrosopyrrolidine       | 100 | 6.668     | 6.668         | 0.000         | 81  | 140604   | 10.0       | 10.1         |       |
| 43 Acetophenone               | 105 | 6.695     | 6.695         | 0.000         | 79  | 499456   | 10.0       | 10.8         |       |

| Compound                       | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q   | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|-----|----------|------------|--------------|-------|
| 44 N-Nitrosodi-n-propylamine   | 70  | 6.695     | 6.695         | 0.000         | 71  | 247931   | 10.0       | 11.1         |       |
| 45 4-Methylphenol              | 108 | 6.700     | 6.700         | 0.000         | 66  | 338107   | 10.0       | 10.5         |       |
| 47 Hexachloroethane            | 117 | 6.818     | 6.818         | 0.000         | 92  | 177713   | 10.0       | 9.89         |       |
| 48 Nitrobenzene                | 77  | 6.866     | 6.866         | 0.000         | 89  | 404973   | 10.0       | 10.6         |       |
| 50 Isophorone                  | 82  | 7.090     | 7.090         | 0.000         | 99  | 671001   | 10.0       | 10.7         |       |
| 51 2-Nitrophenol               | 139 | 7.170     | 7.170         | 0.000         | 98  | 205459   | 10.0       | 10.7         |       |
| 52 2,4-Dimethylphenol          | 107 | 7.202     | 7.202         | 0.000         | 98  | 399396   | 10.0       | 10.7         |       |
| 56 Benzoic acid                | 122 | 7.256     | 7.256         | 0.000         | 89  | 166703   | 10.0       | 11.7         |       |
| 55 Bis(2-chloroethoxy)methane  | 93  | 7.288     | 7.288         | 0.000         | 97  | 399756   | 10.0       | 10.6         |       |
| 57 2,4-Dichlorophenol          | 162 | 7.400     | 7.400         | 0.000         | 95  | 341222   | 10.0       | 10.6         |       |
| 59 1,2,4-Trichlorobenzene      | 180 | 7.485     | 7.485         | 0.000         | 94  | 398028   | 10.0       | 10.3         |       |
| 60 Naphthalene                 | 128 | 7.560     | 7.560         | 0.000         | 97  | 1116009  | 10.0       | 10.2         |       |
| 62 4-Chloroaniline             | 127 | 7.598     | 7.598         | 0.000         | 95  | 476878   | 10.0       | 10.5         |       |
| 63 2,6-Dichlorophenol          | 162 | 7.614     | 7.614         | 0.000         | 96  | 329603   | 10.0       | 10.3         |       |
| 64 Hexachlorobutadiene         | 225 | 7.683     | 7.683         | 0.000         | 96  | 251041   | 10.0       | 10.2         |       |
| 67 Caprolactam                 | 113 | 7.886     | 7.886         | 0.000         | 76  | 96611    | 10.0       | 10.0         |       |
| 70 4-Chloro-3-methylphenol     | 107 | 8.036     | 8.036         | 0.000         | 97  | 341715   | 10.0       | 10.7         |       |
| 72 2-Methylnaphthalene         | 142 | 8.207     | 8.207         | 0.000         | 92  | 800734   | 10.0       | 10.3         |       |
| 75 1-Methylnaphthalene         | 142 | 8.303     | 8.303         | 0.000         | 92  | 705291   | 10.0       | 10.3         |       |
| 76 Hexachlorocyclopentadiene   | 237 | 8.361     | 8.361         | 0.000         | 96  | 313133   | 10.0       | 11.5         |       |
| 77 1,2,4,5-Tetrachlorobenzene  | 216 | 8.367     | 8.367         | 0.000         | 98  | 421307   | 10.0       | 10.5         |       |
| 78 2,4,6-Trichlorophenol       | 196 | 8.463     | 8.463         | 0.000         | 92  | 270161   | 10.0       | 10.8         |       |
| 79 2,4,5-Trichlorophenol       | 196 | 8.495     | 8.495         | 0.000         | 94  | 285502   | 10.0       | 10.9         |       |
| 80 1,1'-Biphenyl               | 154 | 8.634     | 8.634         | 0.000         | 94  | 1024995  | 10.0       | 10.5         |       |
| 81 2-Chloronaphthalene         | 162 | 8.661     | 8.661         | 0.000         | 96  | 797907   | 10.0       | 10.4         |       |
| 82 2-Nitroaniline              | 65  | 8.741     | 8.741         | 0.000         | 81  | 227061   | 10.0       | 10.5         |       |
| 86 Dimethyl phthalate          | 163 | 8.890     | 8.890         | 0.000         | 98  | 885223   | 10.0       | 10.8         |       |
| 87 1,3-Dinitrobenzene          | 168 | 8.922     | 8.922         | 0.000         | 85  | 133642   | 10.0       | 10.3         |       |
| 88 2,6-Dinitrotoluene          | 165 | 8.954     | 8.954         | 0.000         | 94  | 200888   | 10.0       | 10.8         |       |
| 89 Acenaphthylene              | 152 | 9.051     | 9.051         | 0.000         | 98  | 1234386  | 10.0       | 10.5         |       |
| 90 3-Nitroaniline              | 138 | 9.115     | 9.115         | 0.000         | 91  | 206822   | 10.0       | 10.4         |       |
| 92 2,4-Dinitrophenol           | 184 | 9.211     | 9.211         | 0.000         | 83  | 260998   | 20.0       | 22.2         |       |
| 91 Acenaphthene                | 153 | 9.211     | 9.211         | 0.000         | 88  | 789313   | 10.0       | 10.6         |       |
| 93 4-Nitrophenol               | 109 | 9.248     | 9.248         | 0.000         | 86  | 279455   | 20.0       | 21.0         |       |
| 94 2,4-Dinitrotoluene          | 165 | 9.328     | 9.328         | 0.000         | 93  | 270440   | 10.0       | 10.8         |       |
| 95 Dibenzofuran                | 168 | 9.371     | 9.371         | 0.000         | 96  | 1171379  | 10.0       | 10.6         |       |
| 97 2,3,5,6-Tetrachlorophenol   | 232 | 9.441     | 9.441         | 0.000         | 93  | 269339   | 10.0       | 11.2         |       |
| 99 2,3,4,6-Tetrachlorophenol   | 232 | 9.478     | 9.478         | 0.000         | 73  | 257060   | 10.0       | 10.5         |       |
| 100 2-Naphthylamine            | 143 | 9.510     | 9.510         | 0.000         | 96  | 790961   | 10.0       | 10.5         |       |
| 101 Diethyl phthalate          | 149 | 9.537     | 9.537         | 0.000         | 98  | 883808   | 10.0       | 10.3         |       |
| 102 Hexadecane                 | 57  | 9.542     | 9.542         | 0.000         | 96  | 563386   | 10.0       | 10.7         |       |
| 104 4-Chlorophenyl phenyl ethe | 204 | 9.670     | 9.670         | 0.000         | 91  | 499559   | 10.0       | 10.9         |       |
| 105 4-Nitroaniline             | 138 | 9.681     | 9.681         | 0.000         | 83  | 206882   | 10.0       | 9.85         |       |
| 106 Fluorene                   | 166 | 9.692     | 9.692         | 0.000         | 95  | 958305   | 10.0       | 10.5         |       |
| 108 4,6-Dinitro-2-methylphenol | 198 | 9.713     | 9.713         | 0.000         | 88  | 358269   | 20.0       | 22.1         |       |
| 109 N-Nitrosodiphenylamine     | 169 | 9.777     | 9.777         | 0.000         | 62  | 1356136  | 20.0       | 20.5         |       |
| 61 Azobenzene                  | 77  | 9.815     | 9.815         | 0.000         | 100 | 916870   | 10.0       | 10.3         |       |
| 111 1,2-Diphenylhydrazine      | 77  | 9.815     | 9.815         | 0.000         | 99  | 916870   | 10.0       | 10.3         |       |
| 116 4-Bromophenyl phenyl ether | 248 | 10.124    | 10.124        | 0.000         | 66  | 282296   | 10.0       | 10.6         |       |
| 118 Hexachlorobenzene          | 284 | 10.215    | 10.215        | 0.000         | 94  | 302773   | 10.0       | 10.4         |       |
| 119 Atrazine                   | 200 | 10.242    | 10.242        | 0.000         | 94  | 268872   | 10.0       | 10.4         |       |
| 122 Pentachlorophenol          | 266 | 10.381    | 10.381        | 0.000         | 90  | 376329   | 20.0       | 18.9         |       |

| Compound                       | Sig | RT<br>(min.) | Adj RT<br>(min.) | Dlt RT<br>(min.) | Q   | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|--------------------------------|-----|--------------|------------------|------------------|-----|----------|---------------|-----------------|-------|
| 121 n-Octadecane               | 57  | 10.386       | 10.386           | 0.000            | 95  | 597092   | 10.0          | 10.5            |       |
| 126 Phenanthrene               | 178 | 10.594       | 10.594           | 0.000            | 97  | 1459595  | 10.0          | 10.1            |       |
| 128 Anthracene                 | 178 | 10.643       | 10.643           | 0.000            | 97  | 1485242  | 10.0          | 10.3            |       |
| 130 Carbazole                  | 167 | 10.787       | 10.787           | 0.000            | 96  | 1262296  | 10.0          | 9.92            |       |
| 132 Di-n-butyl phthalate       | 149 | 11.086       | 11.086           | 0.000            | 100 | 1512804  | 10.0          | 10.3            |       |
| 137 Fluoranthene               | 202 | 11.919       | 11.919           | 0.000            | 97  | 1511455  | 10.0          | 9.77            |       |
| 138 Benzidine                  | 184 | 12.048       | 12.048           | 0.000            | 99  | 647648   | 10.0          | 11.9            |       |
| 139 Pyrene                     | 202 | 12.229       | 12.229           | 0.000            | 99  | 1567934  | 10.0          | 11.8            |       |
| 144 Butyl benzyl phthalate     | 149 | 13.100       | 13.100           | 0.000            | 98  | 592555   | 10.0          | 11.1            |       |
| 149 3,3'-Dichlorobenzidine     | 252 | 14.083       | 14.083           | 0.000            | 74  | 457799   | 10.0          | 9.72            |       |
| 151 Bis(2-ethylhexyl) phthalat | 149 | 14.131       | 14.131           | 0.000            | 95  | 815764   | 10.0          | 11.0            |       |
| 152 Benzo[a]anthracene         | 228 | 14.168       | 14.168           | 0.000            | 97  | 1292649  | 10.0          | 10.3            |       |
| 153 Chrysene                   | 228 | 14.238       | 14.238           | 0.000            | 96  | 1205653  | 10.0          | 10.2            |       |
| 156 Di-n-octyl phthalate       | 149 | 15.466       | 15.466           | 0.000            | 100 | 1266952  | 10.0          | 11.0            |       |
| 157 7,12-Dimethylbenz(a)anthra | 256 | 16.337       | 16.337           | 0.000            | 90  | 522379   | 10.0          | 10.9            |       |
| 158 Benzo[b]fluoranthene       | 252 | 16.353       | 16.353           | 0.000            | 97  | 1189161  | 10.0          | 10.8            |       |
| 159 Benzo[k]fluoranthene       | 252 | 16.412       | 16.412           | 0.000            | 98  | 1143775  | 10.0          | 10.4            |       |
| 176 Benzo[e]pyrene             | 252 | 16.941       | 16.941           | 0.000            | 0   | 1059876  | 10.0          | 10.3            |       |
| 160 Benzo[a]pyrene             | 252 | 17.053       | 17.053           | 0.000            | 76  | 1079508  | 10.0          | 10.3            |       |
| 163 Indeno[1,2,3-cd]pyrene     | 276 | 19.452       | 19.452           | 0.000            | 99  | 1111959  | 10.0          | 9.25            |       |
| 164 Dibenz(a,h)anthracene      | 278 | 19.489       | 19.489           | 0.000            | 87  | 941082   | 10.0          | 9.25            |       |
| 165 Benzo[g,h,i]perylene       | 276 | 20.071       | 20.071           | 0.000            | 99  | 949080   | 10.0          | 9.07            |       |
| S 206 Total Cresols            | 108 |              |                  |                  | 0   |          | 20.0          | 21.1            |       |
| S 208 Methyl Phenols, Total    | 108 |              |                  |                  | 0   |          | 20.0          | 21.1            |       |

**Reagents:**

SVTAPSTD10i\_00129

Amount Added: 1.00

Units: mL

Report Date: 11-Oct-2015 08:06:48

Chrom Revision: 2.2 08-Sep-2015 13:41:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20151009-8910.b\1009003.D

Injection Date: 09-Oct-2015 09:18:30

Instrument ID: CH731

Operator ID: 003200

Lims ID: CCVIS

Worklist Smp#: 3

Client ID:

Injection Vol: 2.0 ul

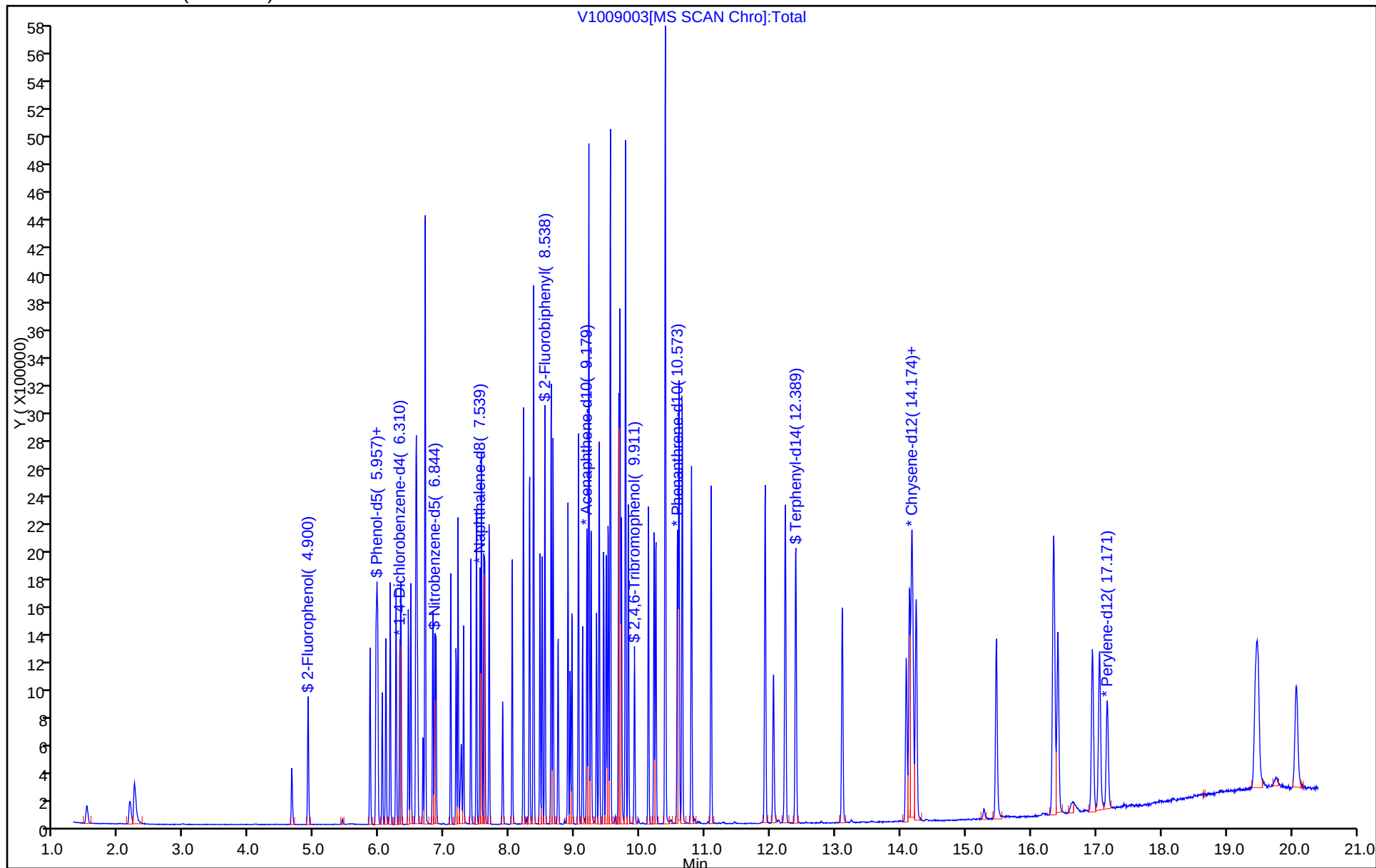
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: BNA\_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS ( 0.32 mm)



FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCVIS 180-156605/3 Calibration Date: 10/11/2015 09:33  
 Instrument ID: CH731 Calib Start Date: 08/31/2015 13:40  
 GC Column: Rxi-5SilMS ID: 0.32 (mm) Calib End Date: 08/31/2015 16:55  
 Lab File ID: V1011003.D Conc. Units: ng/uL

| ANALYTE                      | CURVE TYPE | AVE RRF | RRF    | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D    | MAX %D |
|------------------------------|------------|---------|--------|---------|-------------|--------------|-------|--------|
| 1,4-Dioxane                  | Ave        | 0.4059  | 0.4641 | 0.0100  | 5.72        | 5.00         | 14.3  | 20.0   |
| N-Nitrosodimethylamine       | Ave        | 0.5156  | 0.5796 | 0.0100  | 5.62        | 5.00         | 12.4  | 20.0   |
| Pyridine                     | Ave        | 0.9650  | 1.044  | 0.0100  | 5.41        | 5.00         | 8.2   | 20.0   |
| Methyl methanesulfonate      | Ave        | 0.6714  | 0.7538 | 0.0100  | 5.61        | 5.00         | 12.3  | 20.0   |
| Benzaldehyde                 | Ave        | 0.7981  | 1.073  | 0.0100  | 6.72        | 5.00         | 34.5* | 20.0   |
| Phenol                       | Ave        | 1.679   | 1.798  | 0.8000  | 5.35        | 5.00         | 7.1   | 20.0   |
| Aniline                      | Ave        | 1.894   | 2.027  | 0.0100  | 5.35        | 5.00         | 7.0   | 20.0   |
| Bis(2-chloroethyl)ether      | Ave        | 1.161   | 1.228  | 0.7000  | 5.29        | 5.00         | 5.7   | 20.0   |
| 2-Chlorophenol               | Ave        | 1.422   | 1.434  | 0.8000  | 5.04        | 5.00         | 0.8   | 20.0   |
| n-Decane                     | Ave        | 1.358   | 1.397  |         | 5.14        | 5.00         | 2.9   | 20.0   |
| 1,3-Dichlorobenzene          | Ave        | 1.633   | 1.642  | 0.0100  | 5.03        | 5.00         | 0.5   | 20.0   |
| 1,4-Dichlorobenzene          | Ave        | 1.673   | 1.691  | 0.0100  | 5.05        | 5.00         | 1.1   | 20.0   |
| Benzyl alcohol               | Ave        | 0.8520  | 0.8756 | 0.0100  | 5.14        | 5.00         | 2.8   | 20.0   |
| 1,2-Dichlorobenzene          | Ave        | 1.600   | 1.639  | 0.0100  | 5.12        | 5.00         | 2.4   | 20.0   |
| 2-Methylphenol               | Ave        | 1.237   | 1.271  | 0.7000  | 5.14        | 5.00         | 2.7   | 20.0   |
| Indene                       | Ave        | 2.396   | 2.463  | 0.0100  | 5.14        | 5.00         | 2.8   | 20.0   |
| 2,2'-oxybis[1-chloropropane] | Ave        | 1.702   | 1.804  | 0.0100  | 5.30        | 5.00         | 6.0   | 20.0   |
| N-Nitrosopyrrolidine         | Ave        | 0.5648  | 0.5656 | 0.0100  | 5.01        | 5.00         | 0.2   | 20.0   |
| Acetophenone                 | Ave        | 1.878   | 2.000  | 0.0100  | 5.33        | 5.00         | 6.5   | 20.0   |
| Methylphenol, 3 & 4          | Ave        | 1.304   | 1.356  | 0.6000  | 5.20        | 5.00         | 4.0   | 20.0   |
| N-Nitrosodi-n-propylamine    | Ave        | 0.9087  | 0.9544 | 0.5000  | 5.25        | 5.00         | 5.0   | 20.0   |
| Hexachloroethane             | Ave        | 0.7293  | 0.7325 | 0.3000  | 5.02        | 5.00         | 0.4   | 20.0   |
| Nitrobenzene                 | Ave        | 0.3804  | 0.3973 | 0.2000  | 5.22        | 5.00         | 4.5   | 20.0   |
| Isophorone                   | Ave        | 0.6240  | 0.6627 | 0.4000  | 5.31        | 5.00         | 6.2   | 20.0   |
| 2-Nitrophenol                | Ave        | 0.1917  | 0.2075 | 0.1000  | 5.41        | 5.00         | 8.2   | 20.0   |
| 2,4-Dimethylphenol           | Ave        | 0.3716  | 0.4046 | 0.2000  | 5.44        | 5.00         | 8.9   | 20.0   |
| Benzoic acid                 | Lin1       |         | 0.1626 | 0.0100  | 5.76        | 5.00         | 15.2  | 20.0   |
| Bis(2-chloroethoxy)methane   | Ave        | 0.3765  | 0.4010 | 0.3000  | 5.33        | 5.00         | 6.5   | 20.0   |
| 2,4-Dichlorophenol           | Ave        | 0.3185  | 0.3428 | 0.2000  | 5.38        | 5.00         | 7.6   | 20.0   |
| 1,2,4-Trichlorobenzene       | Ave        | 0.3838  | 0.4056 | 0.0100  | 5.29        | 5.00         | 5.7   | 20.0   |
| Naphthalene                  | Ave        | 1.089   | 1.134  | 0.7000  | 5.21        | 5.00         | 4.1   | 20.0   |
| 4-Chloroaniline              | Ave        | 0.4495  | 0.4787 | 0.0100  | 5.33        | 5.00         | 6.5   | 20.0   |
| 2,6-Dichlorophenol           | Ave        | 0.3193  | 0.3250 | 0.0100  | 5.09        | 5.00         | 1.8   | 20.0   |
| Hexachlorobutadiene          | Ave        | 0.2453  | 0.2503 | 0.0100  | 5.10        | 5.00         | 2.0   | 20.0   |
| Caprolactam                  | Ave        | 0.0958  | 0.0981 | 0.0100  | 5.12        | 5.00         | 2.4   | 20.0   |
| 4-Chloro-3-methylphenol      | Ave        | 0.3163  | 0.3350 | 0.2000  | 5.30        | 5.00         | 5.9   | 20.0   |
| 2-Methylnaphthalene          | Ave        | 0.7752  | 0.8082 | 0.4000  | 5.21        | 5.00         | 4.3   | 20.0   |
| 1-Methylnaphthalene          | Ave        | 0.6809  | 0.7000 | 0.0100  | 5.14        | 5.00         | 2.8   | 20.0   |
| Hexachlorocyclopentadiene    | Ave        | 0.4305  | 0.4659 | 0.0500  | 5.41        | 5.00         | 8.2   | 20.0   |
| 1,2,4,5-Tetrachlorobenzene   | Ave        | 0.6358  | 0.6692 | 0.0100  | 5.26        | 5.00         | 5.2   | 20.0   |
| 2,4,6-Trichlorophenol        | Ave        | 0.3956  | 0.4230 | 0.2000  | 5.35        | 5.00         | 6.9   | 20.0   |

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

Lab Sample ID: CCVIS 180-156605/3 Calibration Date: 10/11/2015 09:33

Instrument ID: CH731 Calib Start Date: 08/31/2015 13:40

GC Column: Rxi-5SilMS ID: 0.32 (mm) Calib End Date: 08/31/2015 16:55

Lab File ID: V1011003.D Conc. Units: ng/uL

| ANALYTE                               | CURVE<br>TYPE | AVE RRF | RRF    | MIN RRF | CALC<br>AMOUNT | SPIKE<br>AMOUNT | %D   | MAX<br>%D |
|---------------------------------------|---------------|---------|--------|---------|----------------|-----------------|------|-----------|
| 2,4,5-Trichlorophenol                 | Ave           | 0.4149  | 0.4524 | 0.2000  | 5.45           | 5.00            | 9.0  | 20.0      |
| 1,1'-Biphenyl                         | Ave           | 1.544   | 1.616  | 0.0100  | 5.23           | 5.00            | 4.6  | 20.0      |
| 2-Chloronaphthalene                   | Ave           | 1.213   | 1.241  | 0.8000  | 5.12           | 5.00            | 2.3  | 20.0      |
| 2-Nitroaniline                        | Ave           | 0.3429  | 0.3629 | 0.0100  | 5.29           | 5.00            | 5.8  | 20.0      |
| Dimethyl phthalate                    | Ave           | 1.294   | 1.402  | 0.0100  | 5.42           | 5.00            | 8.4  | 20.0      |
| 1,3-Dinitrobenzene                    | Ave           | 0.2058  | 0.2181 | 0.0100  | 5.30           | 5.00            | 5.9  | 20.0      |
| 2,6-Dinitrotoluene                    | Ave           | 0.2938  | 0.3181 | 0.2000  | 5.41           | 5.00            | 8.3  | 20.0      |
| Acenaphthylene                        | Ave           | 1.863   | 1.915  | 0.9000  | 5.14           | 5.00            | 2.8  | 20.0      |
| 3-Nitroaniline                        | Ave           | 0.3146  | 0.3362 | 0.0100  | 5.34           | 5.00            | 6.9  | 20.0      |
| 2,4-Dinitrophenol                     | Lin2          |         | 0.2182 | 0.0100  | 11.7           | 10.0            | 16.7 | 20.0      |
| Acenaphthene                          | Ave           | 1.180   | 1.255  | 0.9000  | 5.32           | 5.00            | 6.3  | 20.0      |
| 4-Nitrophenol                         | Ave           | 0.2103  | 0.2493 | 0.0100  | 11.9           | 10.0            | 18.5 | 20.0      |
| 2,4-Dinitrotoluene                    | Ave           | 0.3946  | 0.4332 | 0.2000  | 5.49           | 5.00            | 9.8  | 20.0      |
| Dibenzofuran                          | Ave           | 1.757   | 1.844  | 0.8000  | 5.25           | 5.00            | 4.9  | 20.0      |
| 2,3,5,6-Tetrachlorophenol             | Ave           | 0.3792  | 0.4132 | 0.0100  | 5.45           | 5.00            | 9.0  | 20.0      |
| 2,3,4,6-Tetrachlorophenol             | Ave           | 0.3880  | 0.4121 | 0.0100  | 5.31           | 5.00            | 6.2  | 20.0      |
| 2-Naphthylamine                       | Ave           | 1.197   | 1.298  | 0.0100  | 5.42           | 5.00            | 8.4  | 20.0      |
| Diethyl phthalate                     | Ave           | 1.354   | 1.437  | 0.0100  | 5.31           | 5.00            | 6.1  | 20.0      |
| Hexadecane                            | Ave           | 0.5246  | 0.5511 |         | 5.25           | 5.00            | 5.1  | 20.0      |
| 4-Chlorophenyl phenyl ether           | Ave           | 0.7262  | 0.7663 | 0.4000  | 5.28           | 5.00            | 5.5  | 20.0      |
| 4-Nitroaniline                        | Ave           | 0.3326  | 0.3517 | 0.0100  | 5.29           | 5.00            | 5.7  | 20.0      |
| Fluorene                              | Ave           | 1.440   | 1.522  | 0.9000  | 5.29           | 5.00            | 5.7  | 20.0      |
| 4,6-Dinitro-2-methylphenol            | Ave           | 0.1364  | 0.1556 | 0.0100  | 11.4           | 10.0            | 14.1 | 20.0      |
| N-Nitrosodiphenylamine                | Ave           | 0.5553  | 0.5672 | 0.0100  | 10.2           | 10.0            | 2.1  | 20.0      |
| 1,2-Diphenylhydrazine (as Azobenzene) | Ave           | 0.7505  | 0.7580 | 0.0100  | 5.05           | 5.00            | 1.0  | 20.0      |
| 4-Bromophenyl phenyl ether            | Ave           | 0.2248  | 0.2336 | 0.1000  | 5.20           | 5.00            | 3.9  | 20.0      |
| Hexachlorobenzene                     | Ave           | 0.2447  | 0.2489 | 0.1000  | 5.08           | 5.00            | 1.7  | 20.0      |
| Atrazine                              | Ave           | 0.2181  | 0.2404 | 0.0100  | 5.51           | 5.00            | 10.2 | 20.0      |
| n-Octadecane                          | Ave           | 2.300   | 2.314  |         | 5.03           | 5.00            | 0.6  | 20.0      |
| Pentachlorophenol                     | Ave           | 0.1676  | 0.1614 | 0.0500  | 9.63           | 10.0            | -3.7 | 20.0      |
| Phenanthrene                          | Ave           | 1.218   | 1.254  | 0.7000  | 5.15           | 5.00            | 2.9  | 20.0      |
| Anthracene                            | Ave           | 1.216   | 1.259  | 0.7000  | 5.18           | 5.00            | 3.6  | 20.0      |
| Carbazole                             | Ave           | 1.070   | 1.124  | 0.0100  | 5.25           | 5.00            | 5.0  | 20.0      |
| Di-n-butyl phthalate                  | Ave           | 1.230   | 1.311  | 0.0100  | 5.33           | 5.00            | 6.5  | 20.0      |
| Fluoranthene                          | Ave           | 1.301   | 1.415  | 0.6000  | 5.44           | 5.00            | 8.8  | 20.0      |
| Benzidine                             | Ave           | 0.5055  | 0.5950 | 0.0100  | 5.89           | 5.00            | 17.7 | 20.0      |
| Pyrene                                | Ave           | 1.232   | 1.266  | 0.6000  | 5.14           | 5.00            | 2.7  | 20.0      |
| Butyl benzyl phthalate                | Ave           | 0.4956  | 0.5103 | 0.0100  | 5.15           | 5.00            | 3.0  | 20.0      |
| 3,3'-Dichlorobenzidine                | Ave           | 0.4358  | 0.4496 | 0.0100  | 5.16           | 5.00            | 3.2  | 20.0      |
| Bis(2-ethylhexyl) phthalate           | Ave           | 0.6866  | 0.7269 | 0.0100  | 5.29           | 5.00            | 5.9  | 20.0      |

FORM VII  
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Lab Sample ID: CCVIS 180-156605/3 Calibration Date: 10/11/2015 09:33  
 Instrument ID: CH731 Calib Start Date: 08/31/2015 13:40  
 GC Column: Rxi-5SilMS ID: 0.32 (mm) Calib End Date: 08/31/2015 16:55  
 Lab File ID: V1011003.D Conc. Units: ng/uL

| ANALYTE                          | CURVE<br>TYPE | AVE RRF | RRF    | MIN RRF | CALC<br>AMOUNT | SPIKE<br>AMOUNT | %D   | MAX<br>%D |
|----------------------------------|---------------|---------|--------|---------|----------------|-----------------|------|-----------|
| Benzo[a]anthracene               | Ave           | 1.167   | 1.210  | 0.8000  | 5.18           | 5.00            | 3.7  | 20.0      |
| Chrysene                         | Ave           | 1.093   | 1.127  | 0.7000  | 5.16           | 5.00            | 3.1  | 20.0      |
| Di-n-octyl phthalate             | Ave           | 1.291   | 1.278  | 0.0100  | 4.95           | 5.00            | -1.0 | 20.0      |
| 7,12-Dimethylbenz (a) anthracene | Ave           | 0.5386  | 0.5469 | 0.0100  | 5.08           | 5.00            | 1.5  | 20.0      |
| Benzo[b]fluoranthene             | Ave           | 1.239   | 1.236  | 0.7000  | 4.99           | 5.00            | -0.3 | 20.0      |
| Benzo[k]fluoranthene             | Ave           | 1.238   | 1.316  | 0.7000  | 5.31           | 5.00            | 6.3  | 20.0      |
| Benzo[e]pyrene                   | Ave           | 1.154   | 1.196  | 0.0100  | 5.18           | 5.00            | 3.6  | 20.0      |
| Benzo[a]pyrene                   | Ave           | 1.180   | 1.228  | 0.7000  | 5.21           | 5.00            | 4.1  | 20.0      |
| Indeno[1,2,3-cd]pyrene           | Ave           | 1.348   | 1.373  | 0.5000  | 5.09           | 5.00            | 1.9  | 20.0      |
| Dibenz (a,h) anthracene          | Ave           | 1.141   | 1.158  | 0.4000  | 5.08           | 5.00            | 1.5  | 20.0      |
| Benzo[g,h,i]perylene             | Ave           | 1.174   | 1.166  | 0.5000  | 4.97           | 5.00            | -0.6 | 20.0      |
| 2-Fluorophenol (Surr)            | Ave           | 1.178   | 1.194  |         | 5.07           | 5.00            | 1.4  | 20.0      |
| Phenol-d5 (Surr)                 | Ave           | 1.538   | 1.589  |         | 5.16           | 5.00            | 3.3  | 20.0      |
| Nitrobenzene-d5 (Surr)           | Ave           | 0.3892  | 0.4134 |         | 5.31           | 5.00            | 6.2  | 20.0      |
| 2-Fluorobiphenyl                 | Ave           | 1.398   | 1.451  |         | 5.19           | 5.00            | 3.8  | 20.0      |
| 2,4,6-Tribromophenol (Surr)      | Ave           | 0.1109  | 0.1116 | 0.0100  | 5.03           | 5.00            | 0.6  | 20.0      |
| Terphenyl-d14 (Surr)             | Ave           | 0.7597  | 0.7974 |         | 5.25           | 5.00            | 5.0  | 20.0      |



TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20151011-8939.b\V1011003.D  
 Lims ID: CCVIS  
 Client ID:  
 Sample Type: CCVIS  
 Inject. Date: 11-Oct-2015 09:33:30 ALS Bottle#: 2 Worklist Smp#: 3  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Sample Info: 180-0008939-003  
 Operator ID: 003200 Instrument ID: CH731  
 Sublist: chrom-BNA\_CH731\*sub4  
 Method: \\ChromNA\Pittsburgh\ChromData\CH731\20151011-8939.b\BNA\_CH731.m  
 Limit Group: BNA 8270D ICAL  
 Last Update: 12-Oct-2015 06:37:50 Calib Date: 01-Sep-2015 07:35:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last Ical File: \\ChromNA\Pittsburgh\ChromData\CH731\20150901-8368.b\V0901N11.D  
 Column 1 : Rxi-5SiIMS ( 0.32 mm) Det: MS SCAN  
 Process Host: XAWRK051

First Level Reviewer: piccolinov

Date: 11-Oct-2015 11:15:33

| Compound                      | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|-------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| * 1 1,4-Dichlorobenzene-d4    | 152 | 6.301     | 6.301         | 0.000         | 94 | 135067   | 8.00       | 8.00         |       |
| * 2 Naphthalene-d8            | 136 | 7.525     | 7.525         | 0.000         | 99 | 531363   | 8.00       | 8.00         |       |
| * 3 Acenaphthene-d10          | 164 | 9.159     | 9.159         | 0.000         | 92 | 333175   | 8.00       | 8.00         |       |
| * 4 Phenanthrene-d10          | 188 | 10.543    | 10.543        | 0.000         | 97 | 643030   | 8.00       | 8.00         |       |
| * 5 Chrysene-d12              | 240 | 14.128    | 14.128        | 0.000         | 97 | 744112   | 8.00       | 8.00         |       |
| * 6 Perylene-d12              | 264 | 17.103    | 17.103        | 0.000         | 98 | 716576   | 8.00       | 8.00         |       |
| \$ 7 2-Fluorophenol           | 112 | 4.912     | 4.912         | 0.000         | 93 | 201648   | 10.0       | 10.1         |       |
| \$ 8 Phenol-d5                | 99  | 5.938     | 5.938         | 0.000         | 95 | 268192   | 10.0       | 10.3         |       |
| \$ 9 Nitrobenzene-d5          | 82  | 6.830     | 6.830         | 0.000         | 91 | 274572   | 10.0       | 10.6         |       |
| \$ 10 2-Fluorobiphenyl        | 172 | 8.513     | 8.513         | 0.000         | 99 | 604149   | 10.0       | 10.4         |       |
| \$ 11 2,4,6-Tribromophenol    | 330 | 9.886     | 9.886         | 0.000         | 92 | 89677    | 10.0       | 10.1         |       |
| \$ 12 Terphenyl-d14           | 244 | 12.343    | 12.343        | 0.000         | 99 | 741735   | 10.0       | 10.5         |       |
| 13 1,4-Dioxane                | 88  | 1.526     | 1.526         | 0.000         | 94 | 78354    | 10.0       | 11.4         |       |
| 14 N-Nitrosodimethylamine     | 74  | 2.204     | 2.204         | 0.000         | 84 | 97860    | 10.0       | 11.2         |       |
| 15 Pyridine                   | 79  | 2.273     | 2.273         | 0.000         | 95 | 176292   | 10.0       | 10.8         |       |
| 22 Methyl methanesulfonate    | 80  | 4.667     | 4.667         | 0.000         | 89 | 127269   | 10.0       | 11.2         |       |
| 26 Benzaldehyde               | 77  | 5.847     | 5.847         | 0.000         | 94 | 181210   | 10.0       | 13.4         |       |
| 27 Phenol                     | 94  | 5.949     | 5.949         | 0.000         | 98 | 303585   | 10.0       | 10.7         |       |
| 28 Aniline                    | 93  | 5.965     | 5.965         | 0.000         | 93 | 342222   | 10.0       | 10.7         |       |
| 29 Bis(2-chloroethyl)ether    | 93  | 6.034     | 6.034         | 0.000         | 95 | 207284   | 10.0       | 10.6         |       |
| 31 2-Chlorophenol             | 128 | 6.088     | 6.088         | 0.000         | 96 | 242112   | 10.0       | 10.1         |       |
| 32 n-Decane                   | 43  | 6.152     | 6.152         | 0.000         | 88 | 235812   | 10.0       | 10.3         |       |
| 33 1,3-Dichlorobenzene        | 146 | 6.243     | 6.243         | 0.000         | 97 | 277181   | 10.0       | 10.1         |       |
| 34 1,4-Dichlorobenzene        | 146 | 6.317     | 6.317         | 0.000         | 92 | 285498   | 10.0       | 10.1         |       |
| 36 Benzyl alcohol             | 108 | 6.430     | 6.430         | 0.000         | 89 | 147834   | 10.0       | 10.3         |       |
| 37 1,2-Dichlorobenzene        | 146 | 6.467     | 6.467         | 0.000         | 95 | 276737   | 10.0       | 10.2         |       |
| 38 2-Methylphenol             | 108 | 6.542     | 6.542         | 0.000         | 97 | 214531   | 10.0       | 10.3         |       |
| 39 Indene                     | 116 | 6.552     | 6.552         | 0.000         | 90 | 415807   | 10.0       | 10.3         |       |
| 40 2,2'-oxybis[1-chloropropan | 45  | 6.568     | 6.568         | 0.000         | 91 | 304498   | 10.0       | 10.6         |       |
| 41 N-Nitrosopyrrolidine       | 100 | 6.654     | 6.654         | 0.000         | 83 | 95498    | 10.0       | 10.0         |       |
| 44 N-Nitrosodi-n-propylamine  | 70  | 6.686     | 6.686         | 0.000         | 70 | 161132   | 10.0       | 10.5         |       |

| Compound                       | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 43 Acetophenone                | 105 | 6.686     | 6.686         | 0.000         | 81 | 337729   | 10.0       | 10.7         |       |
| 45 4-Methylphenol              | 108 | 6.686     | 6.686         | 0.000         | 64 | 229019   | 10.0       | 10.4         |       |
| 47 Hexachloroethane            | 117 | 6.804     | 6.804         | 0.000         | 91 | 123672   | 10.0       | 10.0         |       |
| 48 Nitrobenzene                | 77  | 6.852     | 6.852         | 0.000         | 91 | 263903   | 10.0       | 10.4         |       |
| 50 Isophorone                  | 82  | 7.076     | 7.076         | 0.000         | 99 | 440151   | 10.0       | 10.6         |       |
| 51 2-Nitrophenol               | 139 | 7.156     | 7.156         | 0.000         | 98 | 137822   | 10.0       | 10.8         |       |
| 52 2,4-Dimethylphenol          | 107 | 7.188     | 7.188         | 0.000         | 98 | 268710   | 10.0       | 10.9         |       |
| 56 Benzoic acid                | 122 | 7.231     | 7.231         | 0.000         | 90 | 107976   | 10.0       | 11.5         |       |
| 55 Bis(2-chloroethoxy)methane  | 93  | 7.268     | 7.268         | 0.000         | 97 | 266327   | 10.0       | 10.7         |       |
| 57 2,4-Dichlorophenol          | 162 | 7.380     | 7.380         | 0.000         | 95 | 227706   | 10.0       | 10.8         |       |
| 59 1,2,4-Trichlorobenzene      | 180 | 7.466     | 7.466         | 0.000         | 93 | 269428   | 10.0       | 10.6         |       |
| 60 Naphthalene                 | 128 | 7.541     | 7.541         | 0.000         | 97 | 753246   | 10.0       | 10.4         |       |
| 62 4-Chloroaniline             | 127 | 7.578     | 7.578         | 0.000         | 95 | 317976   | 10.0       | 10.7         |       |
| 63 2,6-Dichlorophenol          | 162 | 7.594     | 7.594         | 0.000         | 96 | 215887   | 10.0       | 10.2         |       |
| 64 Hexachlorobutadiene         | 225 | 7.664     | 7.664         | 0.000         | 97 | 166279   | 10.0       | 10.2         |       |
| 67 Caprolactam                 | 113 | 7.867     | 7.867         | 0.000         | 77 | 65170    | 10.0       | 10.2         |       |
| 70 4-Chloro-3-methylphenol     | 107 | 8.016     | 8.016         | 0.000         | 97 | 222510   | 10.0       | 10.6         |       |
| 72 2-Methylnaphthalene         | 142 | 8.187     | 8.187         | 0.000         | 92 | 536775   | 10.0       | 10.4         |       |
| 75 1-Methylnaphthalene         | 142 | 8.278     | 8.278         | 0.000         | 93 | 464932   | 10.0       | 10.3         |       |
| 76 Hexachlorocyclopentadiene   | 237 | 8.337     | 8.337         | 0.000         | 96 | 194018   | 10.0       | 10.8         |       |
| 77 1,2,4,5-Tetrachlorobenzene  | 216 | 8.342     | 8.342         | 0.000         | 98 | 278701   | 10.0       | 10.5         |       |
| 78 2,4,6-Trichlorophenol       | 196 | 8.438     | 8.438         | 0.000         | 93 | 176179   | 10.0       | 10.7         |       |
| 79 2,4,5-Trichlorophenol       | 196 | 8.470     | 8.470         | 0.000         | 94 | 188421   | 10.0       | 10.9         |       |
| 80 1,1'-Biphenyl               | 154 | 8.609     | 8.609         | 0.000         | 95 | 673027   | 10.0       | 10.5         |       |
| 81 2-Chloronaphthalene         | 162 | 8.641     | 8.641         | 0.000         | 97 | 516993   | 10.0       | 10.2         |       |
| 82 2-Nitroaniline              | 65  | 8.716     | 8.716         | 0.000         | 81 | 151136   | 10.0       | 10.6         |       |
| 86 Dimethyl phthalate          | 163 | 8.866     | 8.866         | 0.000         | 98 | 583755   | 10.0       | 10.8         |       |
| 87 1,3-Dinitrobenzene          | 168 | 8.903     | 8.903         | 0.000         | 83 | 90814    | 10.0       | 10.6         |       |
| 88 2,6-Dinitrotoluene          | 165 | 8.930     | 8.930         | 0.000         | 93 | 132495   | 10.0       | 10.8         |       |
| 89 Acenaphthylene              | 152 | 9.031     | 9.031         | 0.000         | 98 | 797346   | 10.0       | 10.3         |       |
| 90 3-Nitroaniline              | 138 | 9.090     | 9.090         | 0.000         | 93 | 140012   | 10.0       | 10.7         |       |
| 92 2,4-Dinitrophenol           | 184 | 9.186     | 9.186         | 0.000         | 85 | 181737   | 20.0       | 23.3         |       |
| 91 Acenaphthene                | 153 | 9.191     | 9.191         | 0.000         | 93 | 522582   | 10.0       | 10.6         |       |
| 93 4-Nitrophenol               | 109 | 9.218     | 9.218         | 0.000         | 82 | 207626   | 20.0       | 23.7         |       |
| 94 2,4-Dinitrotoluene          | 165 | 9.304     | 9.304         | 0.000         | 92 | 180418   | 10.0       | 11.0         |       |
| 95 Dibenzofuran                | 168 | 9.346     | 9.346         | 0.000         | 96 | 767939   | 10.0       | 10.5         |       |
| 97 2,3,5,6-Tetrachlorophenol   | 232 | 9.411     | 9.411         | 0.000         | 93 | 172080   | 10.0       | 10.9         |       |
| 99 2,3,4,6-Tetrachlorophenol   | 232 | 9.453     | 9.453         | 0.000         | 73 | 171606   | 10.0       | 10.6         |       |
| 100 2-Naphthylamine            | 143 | 9.480     | 9.480         | 0.000         | 97 | 540543   | 10.0       | 10.8         |       |
| 101 Diethyl phthalate          | 149 | 9.512     | 9.512         | 0.000         | 98 | 598541   | 10.0       | 10.6         |       |
| 102 Hexadecane                 | 57  | 9.517     | 9.517         | 0.000         | 95 | 366063   | 10.0       | 10.5         |       |
| 104 4-Chlorophenyl phenyl ethe | 204 | 9.646     | 9.646         | 0.000         | 91 | 319156   | 10.0       | 10.6         |       |
| 105 4-Nitroaniline             | 138 | 9.656     | 9.656         | 0.000         | 80 | 146476   | 10.0       | 10.6         |       |
| 106 Fluorene                   | 166 | 9.662     | 9.662         | 0.000         | 94 | 633743   | 10.0       | 10.6         |       |
| 108 4,6-Dinitro-2-methylphenol | 198 | 9.683     | 9.683         | 0.000         | 87 | 250200   | 20.0       | 22.8         |       |
| 109 N-Nitrosodiphenylamine     | 169 | 9.747     | 9.747         | 0.000         | 63 | 911846   | 20.0       | 20.4         |       |
| 61 Azobenzene                  | 77  | 9.790     | 9.790         | 0.000         | 99 | 609267   | 10.0       | 10.1         |       |
| 111 1,2-Diphenylhydrazine      | 77  | 9.790     | 9.790         | 0.000         | 98 | 609267   | 10.0       | 10.1         |       |
| 116 4-Bromophenyl phenyl ether | 248 | 10.100    | 10.100        | 0.000         | 67 | 187781   | 10.0       | 10.4         |       |
| 118 Hexachlorobenzene          | 284 | 10.185    | 10.185        | 0.000         | 94 | 200046   | 10.0       | 10.2         |       |
| 119 Atrazine                   | 200 | 10.212    | 10.212        | 0.000         | 94 | 193191   | 10.0       | 11.0         |       |
| 122 Pentachlorophenol          | 266 | 10.356    | 10.356        | 0.000         | 91 | 259398   | 20.0       | 19.3         |       |

| Compound                       | Sig | RT<br>(min.) | Adj RT<br>(min.) | Dlt RT<br>(min.) | Q   | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|--------------------------------|-----|--------------|------------------|------------------|-----|----------|---------------|-----------------|-------|
| 121 n-Octadecane               | 57  | 10.356       | 10.356           | 0.000            | 96  | 390709   | 10.0          | 10.1            |       |
| 126 Phenanthrene               | 178 | 10.564       | 10.564           | 0.000            | 97  | 1008163  | 10.0          | 10.3            |       |
| 128 Anthracene                 | 178 | 10.612       | 10.612           | 0.000            | 97  | 1011843  | 10.0          | 10.4            |       |
| 130 Carbazole                  | 167 | 10.757       | 10.757           | 0.000            | 96  | 903102   | 10.0          | 10.5            |       |
| 132 Di-n-butyl phthalate       | 149 | 11.056       | 11.056           | 0.000            | 100 | 1053486  | 10.0          | 10.7            |       |
| 137 Fluoranthene               | 202 | 11.879       | 11.879           | 0.000            | 97  | 1137635  | 10.0          | 10.9            |       |
| 138 Benzidine                  | 184 | 12.007       | 12.007           | 0.000            | 98  | 553463   | 10.0          | 11.8            |       |
| 139 Pyrene                     | 202 | 12.183       | 12.183           | 0.000            | 99  | 1177564  | 10.0          | 10.3            |       |
| 144 Butyl benzyl phthalate     | 149 | 13.054       | 13.054           | 0.000            | 98  | 474674   | 10.0          | 10.3            |       |
| 149 3,3'-Dichlorobenzidine     | 252 | 14.031       | 14.031           | 0.000            | 74  | 418173   | 10.0          | 10.3            |       |
| 151 Bis(2-ethylhexyl) phthalat | 149 | 14.074       | 14.074           | 0.000            | 95  | 676099   | 10.0          | 10.6            |       |
| 152 Benzo[a]anthracene         | 228 | 14.112       | 14.112           | 0.000            | 98  | 1125209  | 10.0          | 10.4            |       |
| 153 Chrysene                   | 228 | 14.181       | 14.181           | 0.000            | 96  | 1048248  | 10.0          | 10.3            |       |
| 156 Di-n-octyl phthalate       | 149 | 15.404       | 15.404           | 0.000            | 99  | 1144958  | 10.0          | 9.90            |       |
| 157 7,12-Dimethylbenz(a)anthra | 256 | 16.275       | 16.275           | 0.000            | 90  | 489842   | 10.0          | 10.2            |       |
| 158 Benzo[b]fluoranthene       | 252 | 16.297       | 16.297           | 0.000            | 97  | 1106730  | 10.0          | 9.97            |       |
| 159 Benzo[k]fluoranthene       | 252 | 16.350       | 16.350           | 0.000            | 99  | 1178894  | 10.0          | 10.6            |       |
| 176 Benzo[e]pyrene             | 252 | 16.879       | 16.879           | 0.000            | 0   | 1071367  | 10.0          | 10.4            |       |
| 160 Benzo[a]pyrene             | 252 | 16.991       | 16.991           | 0.000            | 76  | 1100282  | 10.0          | 10.4            |       |
| 163 Indeno[1,2,3-cd]pyrene     | 276 | 19.374       | 19.374           | 0.000            | 99  | 1229801  | 10.0          | 10.2            |       |
| 164 Dibenz(a,h)anthracene      | 278 | 19.406       | 19.406           | 0.000            | 91  | 1037660  | 10.0          | 10.2            |       |
| 165 Benzo[g,h,i]perylene       | 276 | 19.993       | 19.993           | 0.000            | 99  | 1044631  | 10.0          | 9.94            |       |
| S 206 Total Cresols            | 108 |              |                  |                  | 0   |          | 20.0          | 20.7            |       |
| S 208 Methyl Phenols, Total    | 108 |              |                  |                  | 0   |          | 20.0          | 20.7            |       |

**Reagents:**

SVTAPSTD10i\_00129

Amount Added: 1.00

Units: mL

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20151011-8939.b\V1011003.D

Injection Date: 11-Oct-2015 09:33:30

Instrument ID: CH731

Operator ID: 003200

Lims ID: CCVIS

Worklist Smp#: 3

Client ID:

Injection Vol: 2.0 ul

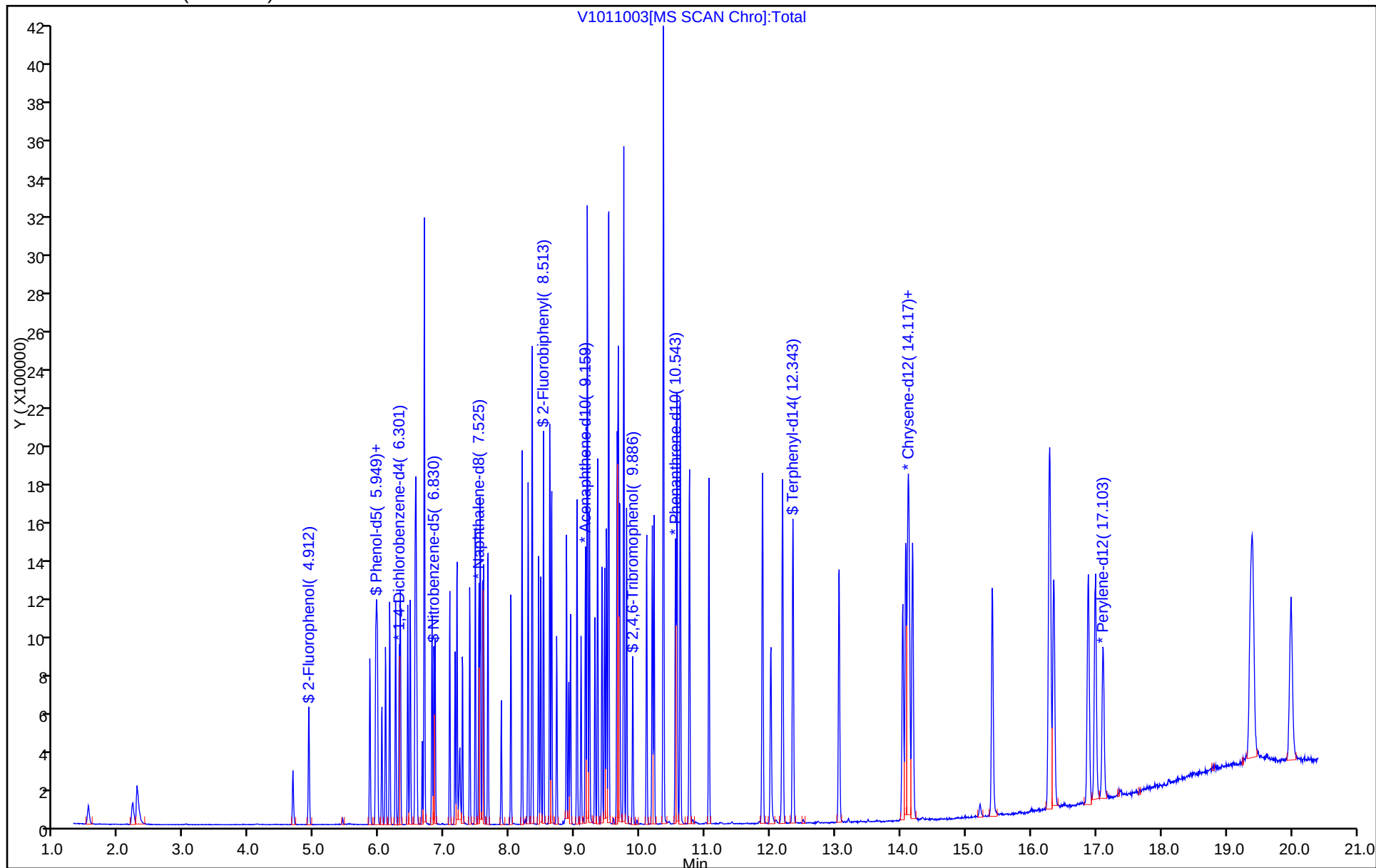
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: BNA\_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS ( 0.32 mm)



TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901002.D  
 Lims ID: DFTPP  
 Client ID:  
 Sample Type: DFTPP  
 Inject. Date: 31-Aug-2015 13:24:30 ALS Bottle#: 1 Worklist Smp#: 2  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Sample Info: 180-0008349-002  
 Misc. Info.: DFTPP  
 Operator ID: 003200 Instrument ID: CH731  
 Method: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\BNA\_CH731.m  
 Limit Group: BNA 8270D ICAL  
 Last Update: 01-Sep-2015 04:26:22 Calib Date: 31-Aug-2015 16:55:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901010.D  
 Column 1 : Rxi-5SiIMS ( 0.32 mm) Det: MS SCAN  
 Process Host: XAWRK024

First Level Reviewer: piccolinov

Date: 01-Sep-2015 04:06:56

| Compound                | Sig | RT<br>(min.) | Adj RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|-------------------------|-----|--------------|------------------|------------------|----|----------|---------------|-----------------|-------|
| 198 Pentachlorophenol_T | 266 | 5.377        | 5.377            | 0.000            | 90 | 195908   | NR            | NR              |       |
| 199 DFTPP               |     |              |                  |                  |    |          |               |                 |       |
| 200 Benzidine_T         | 184 | 8.006        | 8.006            | 0.000            | 99 | 1599239  | NR            | NR              |       |
| 201 4,4'-DDE            | 246 |              | 8.436            |                  |    |          |               | ND              |       |
| 202 4,4'-DDD            | 235 | 9.021        | 9.028            | -0.007           | 91 | 7061     |               | NR              |       |
| 203 4,4'-DDT            | 235 | 9.555        | 9.555            | 0.000            | 98 | 649669   | NR            | NR              |       |

**QC Flag Legend**

Processing Flags

NR - Missing Quant Standard

**Reagents:**

SVDFTPP50i\_00023

Amount Added: 1.00

Units: mL

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901002.D

Injection Date: 31-Aug-2015 13:24:30

Instrument ID: CH731

Lims ID: DFTPP

Client ID:

Operator ID: 003200

ALS Bottle#: 1 Worklist Smp#: 2

Injection Vol: 2.0 ul

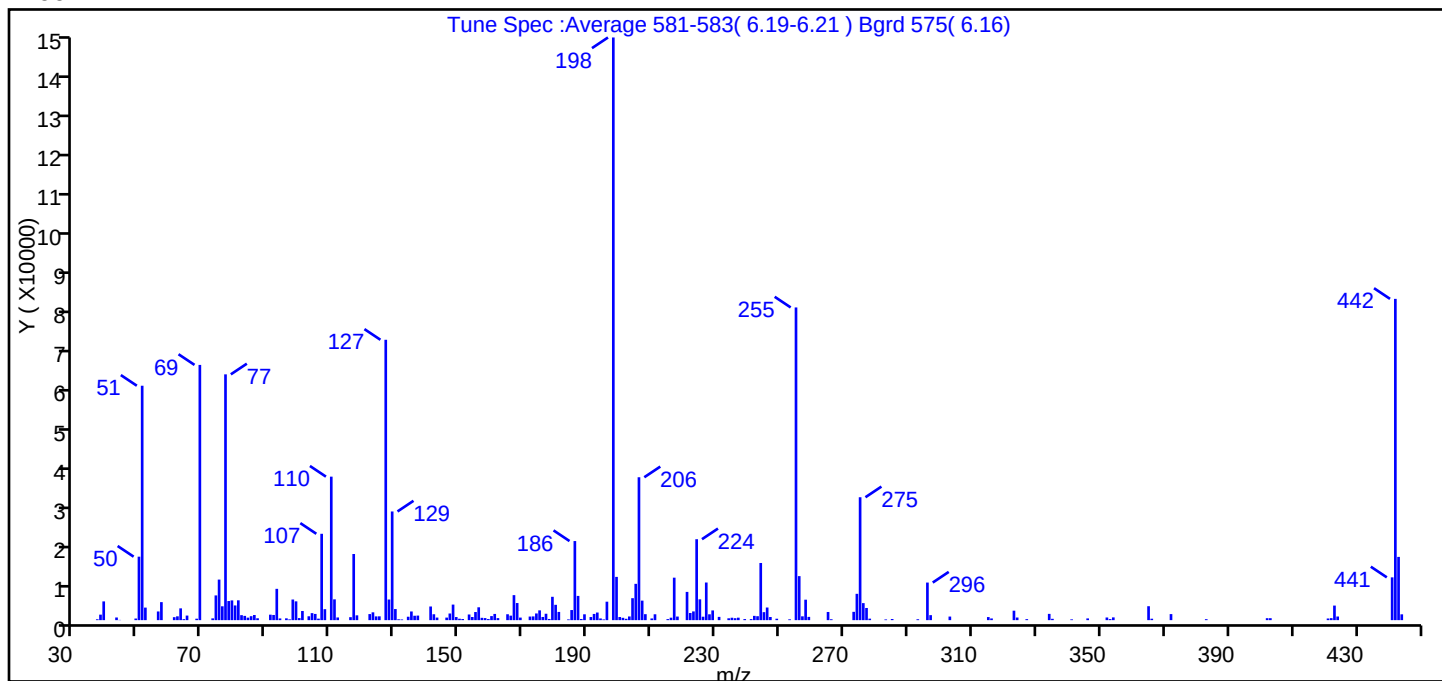
Dil. Factor: 1.0000

Method: BNA\_CH731

Limit Group: BNA 8270D ICAL

Tune Method: DFTPP Method 8270

## 199 DFTPP



| m/z | Ion Abundance Criteria             | % Relative Abundance |
|-----|------------------------------------|----------------------|
| 198 | Base peak, 100% relative abundance | 100.0                |
| 51  | 30-60% of mass 198                 | 40.2                 |
| 68  | <2% of mass 69                     | 0.2 (0.6)            |
| 69  | Present                            | 43.8                 |
| 70  | <2% of mass 69                     | 0.0 (0.0)            |
| 127 | 40-60% of mass 198                 | 48.1                 |
| 197 | <1% of mass 198                    | 0.0                  |
| 199 | 5-9% of mass 198                   | 7.4                  |
| 275 | 10-30% of mass 198                 | 21.1                 |
| 365 | >1% of mass 198                    | 2.4                  |
| 441 | Present but less than mass 443     | 7.3 (67.7)           |
| 442 | >40% of mass 198                   | 55.1                 |
| 443 | 17-23% of mass 442                 | 10.9 (19.7)          |

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901002.D\BNA\_CH731.rslt\spectra.d  
Injection Date: 31-Aug-2015 13:24:30  
Spectrum: Tune Spec :Average 581-583( 6.19-6.21 ) Bgrd 575( 6.16)  
Base Peak: 198.00  
Minimum % Base Peak: 0  
Number of Points: 201

| m/z   | Y     | m/z    | Y     | m/z    | Y      | m/z    | Y     |
|-------|-------|--------|-------|--------|--------|--------|-------|
| 37.00 | 216   | 112.00 | 672   | 181.00 | 2060   | 247.00 | 790   |
| 38.00 | 1381  | 116.00 | 745   | 184.00 | 186    | 249.00 | 359   |
| 39.00 | 4703  | 117.00 | 16592 | 185.00 | 2534   | 253.00 | 207   |
| 43.00 | 666   | 118.00 | 1206  | 186.00 | 19840  | 255.00 | 78448 |
| 44.00 | 55    | 122.00 | 1520  | 187.00 | 6078   | 256.00 | 11042 |
| 49.00 | 405   | 123.00 | 1962  | 188.00 | 288    | 257.00 | 958   |
| 50.00 | 15922 | 124.00 | 940   | 189.00 | 1467   | 258.00 | 5131  |
| 51.00 | 58808 | 125.00 | 959   | 191.00 | 779    | 259.00 | 817   |
| 52.00 | 3146  | 127.00 | 70336 | 192.00 | 1556   | 265.00 | 2048  |
| 56.00 | 2177  | 128.00 | 5171  | 193.00 | 1911   | 266.00 | 221   |
| 57.00 | 4519  | 129.00 | 27264 | 194.00 | 422    | 273.00 | 2084  |
| 61.00 | 744   | 130.00 | 2785  | 195.00 | 177    | 274.00 | 6603  |
| 62.00 | 958   | 131.00 | 216   | 196.00 | 4630   | 275.00 | 30832 |
| 63.00 | 2957  | 132.00 | 170   | 198.00 | 146176 | 276.00 | 4269  |
| 64.00 | 249   | 134.00 | 856   | 199.00 | 10851  | 277.00 | 3053  |
| 65.00 | 1147  | 135.00 | 2177  | 200.00 | 787    | 278.00 | 375   |
| 68.00 | 361   | 136.00 | 1106  | 201.00 | 584    | 283.00 | 177   |
| 69.00 | 64032 | 137.00 | 1144  | 202.00 | 341    | 285.00 | 281   |
| 73.00 | 448   | 141.00 | 3424  | 203.00 | 926    | 293.00 | 223   |
| 74.00 | 6204  | 142.00 | 1479  | 204.00 | 5510   | 296.00 | 9429  |
| 75.00 | 10174 | 143.00 | 645   | 205.00 | 9107   | 297.00 | 1253  |
| 76.00 | 3476  | 146.00 | 640   | 206.00 | 35848  | 303.00 | 899   |
| 77.00 | 61664 | 147.00 | 1667  | 207.00 | 4896   | 315.00 | 770   |
| 78.00 | 4792  | 148.00 | 3904  | 208.00 | 1498   | 316.00 | 426   |
| 79.00 | 4956  | 149.00 | 776   | 210.00 | 422    | 323.00 | 2373  |
| 80.00 | 3688  | 150.00 | 358   | 211.00 | 1472   | 324.00 | 656   |
| 81.00 | 4976  | 151.00 | 281   | 215.00 | 266    | 327.00 | 253   |
| 82.00 | 1250  | 153.00 | 1419  | 216.00 | 616    | 334.00 | 1571  |
| 83.00 | 1068  | 154.00 | 784   | 217.00 | 10655  | 335.00 | 336   |
| 84.00 | 626   | 155.00 | 2037  | 218.00 | 901    | 341.00 | 195   |
| 85.00 | 992   | 156.00 | 3223  | 221.00 | 7084   | 346.00 | 432   |
| 86.00 | 1291  | 157.00 | 582   | 222.00 | 1792   | 352.00 | 665   |
| 87.00 | 470   | 158.00 | 519   | 223.00 | 2190   | 353.00 | 269   |

Report Date: 01-Sep-2015 04:26:23

Chrom Revision: 2.2 23-Jul-2015 08:26:08

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901002.D\BNA\_CH731.rslt\spectra.d

Injection Date: 31-Aug-2015 13:24:30

Spectrum: Tune Spec :Average 581-583( 6.19-6.21 ) Bgrd 575( 6.16)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 201

| m/z    | Y     | m/z    | Y    | m/z    | Y     | m/z    | Y     |
|--------|-------|--------|------|--------|-------|--------|-------|
| 91.00  | 1372  | 159.00 | 273  | 224.00 | 20304 | 354.00 | 691   |
| 92.00  | 1297  | 160.00 | 1016 | 225.00 | 5220  | 365.00 | 3494  |
| 93.00  | 7854  | 161.00 | 1558 | 226.00 | 862   | 366.00 | 360   |
| 94.00  | 428   | 162.00 | 510  | 227.00 | 9440  | 372.00 | 1519  |
| 96.00  | 453   | 165.00 | 1478 | 228.00 | 1466  | 383.00 | 242   |
| 97.00  | 193   | 166.00 | 1126 | 229.00 | 2439  | 402.00 | 490   |
| 98.00  | 5175  | 167.00 | 6273 | 231.00 | 817   | 403.00 | 489   |
| 99.00  | 4716  | 168.00 | 4294 | 234.00 | 460   | 421.00 | 414   |
| 100.00 | 521   | 169.00 | 641  | 235.00 | 604   | 422.00 | 499   |
| 101.00 | 2290  | 172.00 | 902  | 236.00 | 489   | 423.00 | 3654  |
| 103.00 | 973   | 173.00 | 938  | 237.00 | 620   | 424.00 | 911   |
| 104.00 | 1758  | 174.00 | 1678 | 239.00 | 270   | 441.00 | 10734 |
| 105.00 | 1558  | 175.00 | 2454 | 241.00 | 258   | 442.00 | 80600 |
| 106.00 | 373   | 176.00 | 798  | 242.00 | 1074  | 443.00 | 15866 |
| 107.00 | 21664 | 177.00 | 1605 | 243.00 | 988   | 444.00 | 1461  |
| 108.00 | 2752  | 178.00 | 293  | 244.00 | 14338 |        |       |
| 110.00 | 36000 | 179.00 | 5856 | 245.00 | 2006  |        |       |
| 111.00 | 5217  | 180.00 | 3846 | 246.00 | 3168  |        |       |



## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901002.D

Injection Date: 31-Aug-2015 13:24:30

Instrument ID: CH731

Operator ID: 003200

Lims ID: DFTPP

Worklist Smp#: 2

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

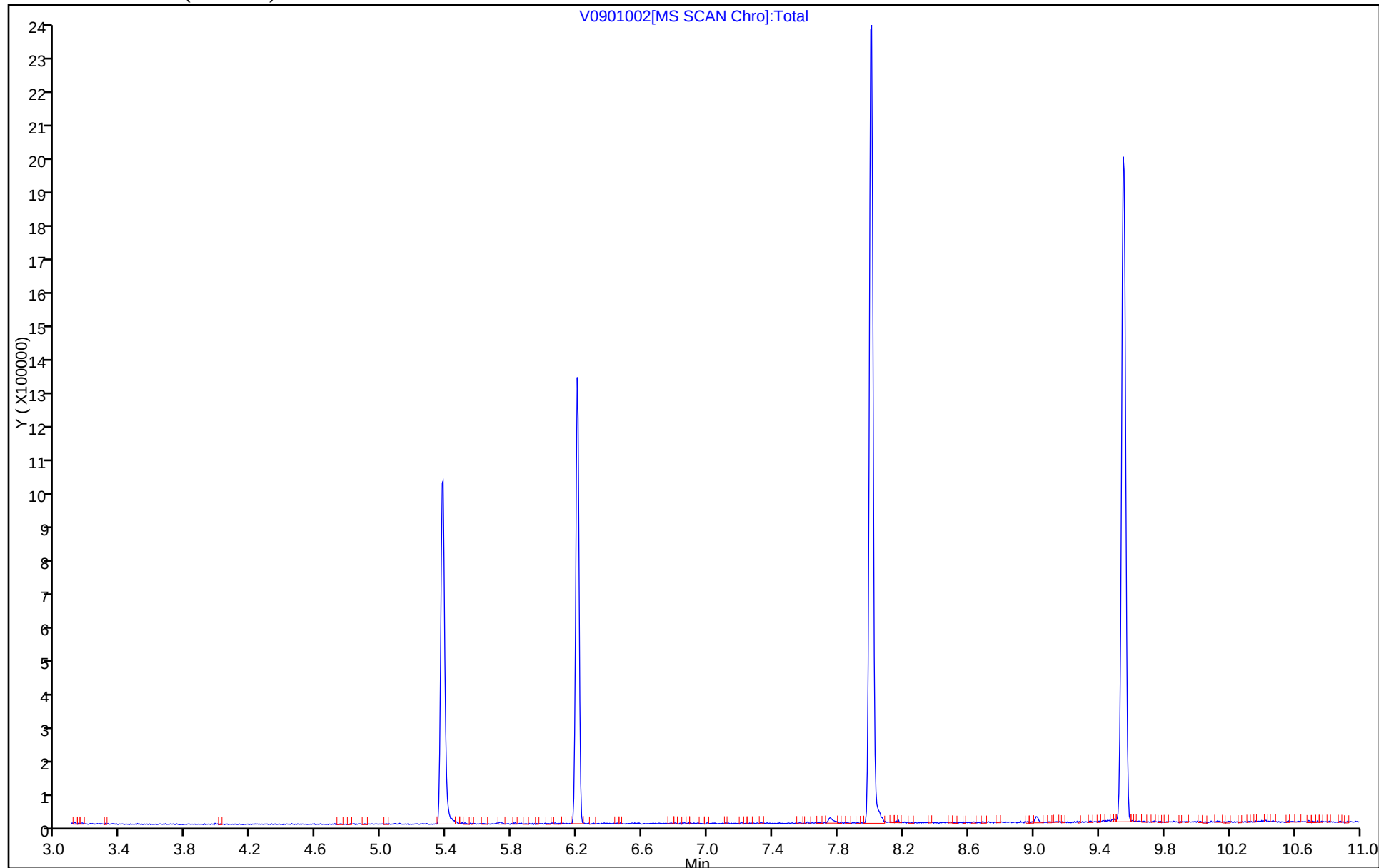
ALS Bottle#: 1

Method: BNA\_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS ( 0.32 mm)

V0901002[MS SCAN Chro]:Total



## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901002.D

Injection Date: 31-Aug-2015 13:24:30

Instrument ID: CH731

Lims ID: DFTPP

Client ID:

Operator ID: 003200

ALS Bottle#: 1 Worklist Smp#: 2

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: BNA\_CH731

Limit Group: BNA 8270D ICAL

203 4,4'-DDT, Detector: MS SCAN

## SW-846 Method

%Breakdown =

$$\left( \frac{\text{Area Breakdown Cpnds}}{\text{Total Area Breakdown Cpnds}} \right) * 100$$

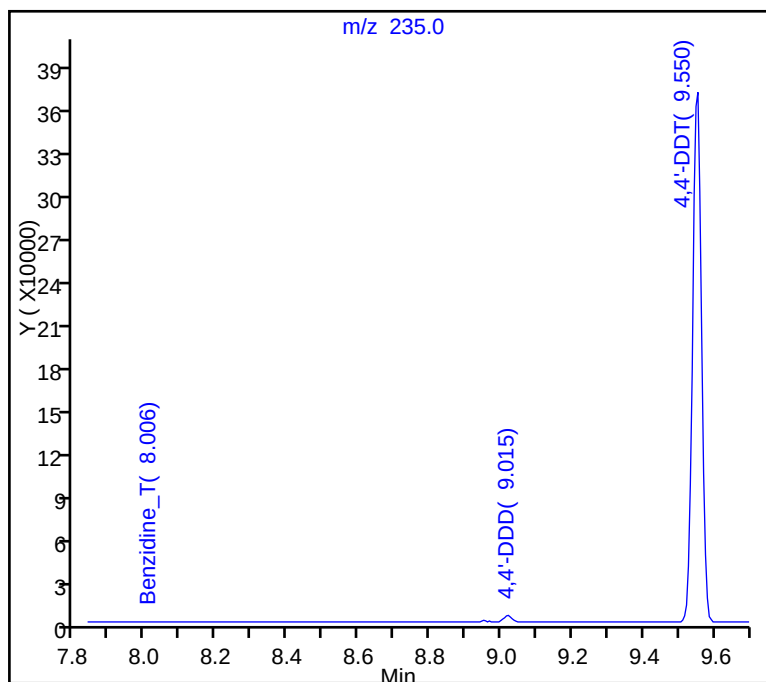
203 4,4'-DDT, Area = 649669

201 4,4'-DDE, Area = 0

202 4,4'-DDD, Area = 7061

%Breakdown: 1.08%, Max Limit: 20.00%

Passed



## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\V0901002.D

Injection Date: 31-Aug-2015 13:24:30

Instrument ID: CH731

Lims ID: DFTPP

Client ID:

Operator ID: 003200

ALS Bottle#: 1 Worklist Smp#: 2

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: BNA\_CH731

Limit Group: BNA 8270D ICAL

198 Pentachlorophenol\_T, Detector: MS SCAN

Peak Tailing Factor =

BackWidth/FrontWidth @ 10% Peak Height

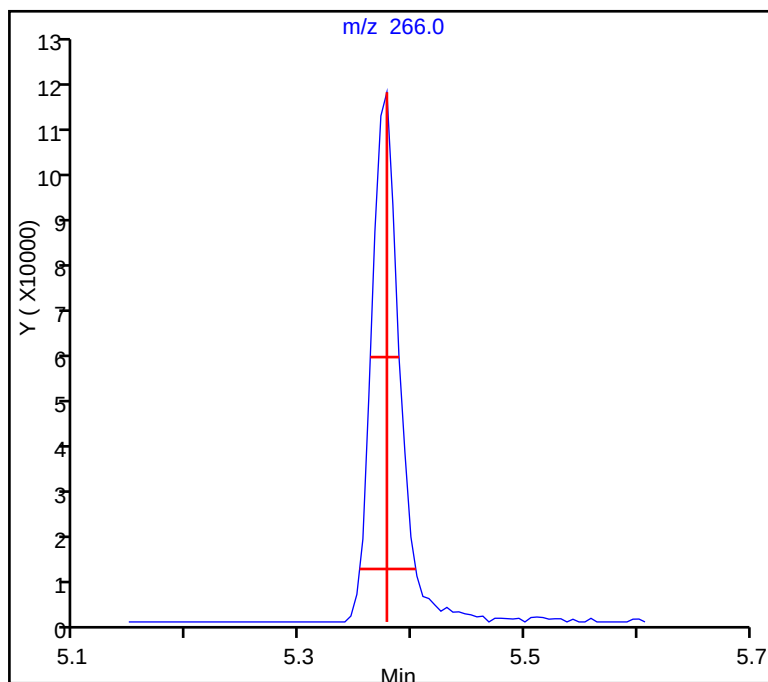
Back Width = 0.026 (min.)

Front Width = 0.024 (min.)

Tailing Factor = 1.1, Max. Tailing &lt; 2.00

Passed

-----



## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20150831-8349.b\0901002.D

Injection Date: 31-Aug-2015 13:24:30

Instrument ID: CH731

Lims ID: DFTPP

Client ID:

Operator ID: 003200

ALS Bottle#: 1 Worklist Smp#: 2

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: BNA\_CH731

Limit Group: BNA 8270D ICAL

200 Benzidine\_T, Detector: MS SCAN

Peak Tailing Factor =

BackWidth/FrontWidth @ 10% Peak Height

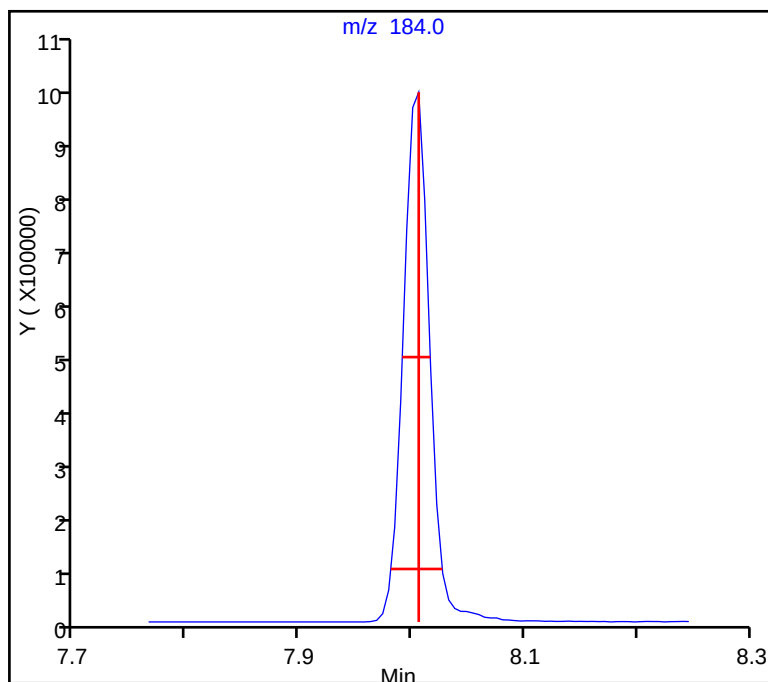
Back Width = 0.021 (min.)

Front Width = 0.025 (min.)

Tailing Factor = 0.8, Max. Tailing &lt; 2.00

Passed

-----



TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20151009-8910.b\V1009002.D  
 Lims ID: DFTPP  
 Client ID:  
 Sample Type: DFTPP  
 Inject. Date: 09-Oct-2015 09:01:30 ALS Bottle#: 1 Worklist Smp#: 2  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Sample Info: 180-0008910-002  
 Misc. Info.: DFTPP  
 Operator ID: 003200 Instrument ID: CH731  
 Method: \\ChromNA\Pittsburgh\ChromData\CH731\20151009-8910.b\BNA\_CH731.m  
 Limit Group: BNA 8270D ICAL  
 Last Update: 11-Oct-2015 08:06:46 Calib Date: 01-Sep-2015 07:35:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH731\20150901-8368.b\V0901N11.D  
 Column 1 : Rxi-5SilMS ( 0.32 mm) Det: MS SCAN  
 Process Host: XAWRK031

First Level Reviewer: piccolinov

Date: 09-Oct-2015 11:00:02

| Compound                | Sig | RT<br>(min.) | Adj RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|-------------------------|-----|--------------|------------------|------------------|----|----------|---------------|-----------------|-------|
| 198 Pentachlorophenol_T | 266 | 5.449        | 5.449            | 0.000            | 90 | 347203   | NR            | NR              |       |
| 199 DFTPP               |     |              |                  |                  |    |          |               |                 |       |
| 200 Benzidine_T         | 184 | 8.082        | 8.082            | 0.000            | 99 | 2255597  | NR            | NR              |       |
| 201 4,4'-DDE            | 246 |              | 8.435            |                  |    |          |               | ND              |       |
| 202 4,4'-DDD            | 235 | 9.108        | 9.028            | 0.080            | 95 | 11745    |               | NR              |       |
| 203 4,4'-DDT            | 235 | 9.647        | 9.647            | 0.000            | 97 | 1136417  | NR            | NR              |       |

**QC Flag Legend**

Processing Flags

NR - Missing Quant Standard

**Reagents:**

SVDFTPP50i\_00023

Amount Added: 1.00

Units: mL

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20151009-8910.b\V1009002.D

Injection Date: 09-Oct-2015 09:01:30

Instrument ID: CH731

Lims ID: DFTPP

Client ID:

Operator ID: 003200

ALS Bottle#: 1 Worklist Smp#: 2

Injection Vol: 2.0 ul

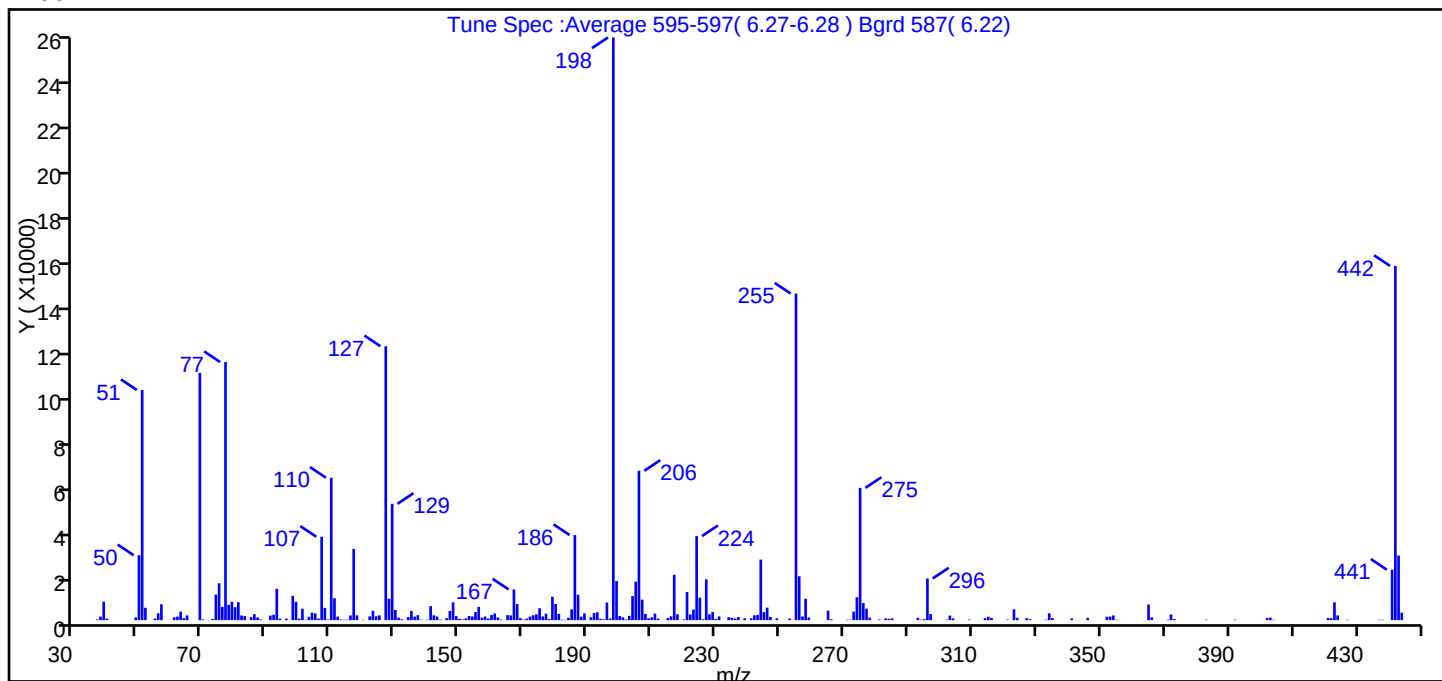
Dil. Factor: 1.0000

Method: BNA\_CH731

Limit Group: BNA 8270D ICAL

Tune Method: DFTPP Method 8270

## 199 DFTPP



| m/z | Ion Abundance Criteria             | % Relative Abundance |
|-----|------------------------------------|----------------------|
| 198 | Base peak, 100% relative abundance | 100.0                |
| 51  | 30-60% of mass 198                 | 39.5                 |
| 68  | <2% of mass 69                     | 0.0 (0.0)            |
| 69  | Present                            | 42.4                 |
| 70  | <2% of mass 69                     | 0.1 (0.3)            |
| 127 | 40-60% of mass 198                 | 47.0                 |
| 197 | <1% of mass 198                    | 0.3                  |
| 199 | 5-9% of mass 198                   | 6.7                  |
| 275 | 10-30% of mass 198                 | 22.7                 |
| 365 | >1% of mass 198                    | 2.7                  |
| 441 | Present but less than mass 443     | 8.7 (78.1)           |
| 442 | >40% of mass 198                   | 60.8                 |
| 443 | 17-23% of mass 442                 | 11.1 (18.2)          |

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20151009-8910.b\V1009002.D\BNA\_CH731.rsl\spectra.d  
Injection Date: 09-Oct-2015 09:01:30  
Spectrum: Tune Spec :Average 595-597( 6.27-6.28 ) Bgrd 587( 6.22)  
Base Peak: 198.00  
Minimum % Base Peak: 0  
Number of Points: 241

| m/z   | Y      | m/z    | Y      | m/z    | Y      | m/z    | Y     |
|-------|--------|--------|--------|--------|--------|--------|-------|
| 37.00 | 266    | 123.00 | 4064   | 189.00 | 2892   | 272.00 | 191   |
| 38.00 | 1517   | 124.00 | 1652   | 191.00 | 1272   | 273.00 | 3730  |
| 39.00 | 7973   | 125.00 | 2071   | 192.00 | 3084   | 274.00 | 9891  |
| 40.00 | 647    | 127.00 | 118632 | 193.00 | 3394   | 275.00 | 57288 |
| 49.00 | 1169   | 128.00 | 9236   | 194.00 | 562    | 276.00 | 7411  |
| 50.00 | 28120  | 129.00 | 50384  | 195.00 | 342    | 277.00 | 4988  |
| 51.00 | 99672  | 130.00 | 4425   | 196.00 | 7630   | 278.00 | 1062  |
| 52.00 | 5362   | 131.00 | 1084   | 197.00 | 669    | 281.00 | 276   |
| 55.00 | 698    | 132.00 | 407    | 198.00 | 252352 | 283.00 | 780   |
| 56.00 | 2984   | 134.00 | 1344   | 199.00 | 16944  | 284.00 | 610   |
| 57.00 | 6888   | 135.00 | 4015   | 200.00 | 1813   | 285.00 | 798   |
| 61.00 | 1247   | 136.00 | 1547   | 201.00 | 1238   | 293.00 | 1010  |
| 62.00 | 1514   | 137.00 | 2159   | 202.00 | 298    | 294.00 | 202   |
| 63.00 | 3711   | 138.00 | 216    | 203.00 | 1860   | 295.00 | 461   |
| 64.00 | 851    | 140.00 | 187    | 204.00 | 10394  | 296.00 | 18048 |
| 65.00 | 2054   | 141.00 | 6066   | 205.00 | 16648  | 297.00 | 2659  |
| 69.00 | 107104 | 142.00 | 2097   | 206.00 | 64688  | 302.00 | 203   |
| 70.00 | 345    | 143.00 | 1543   | 207.00 | 8898   | 303.00 | 1970  |
| 73.00 | 524    | 144.00 | 226    | 208.00 | 2666   | 304.00 | 763   |
| 74.00 | 11059  | 146.00 | 862    | 209.00 | 827    | 309.00 | 258   |
| 75.00 | 15983  | 147.00 | 3997   | 210.00 | 1249   | 314.00 | 877   |
| 76.00 | 5736   | 148.00 | 7706   | 211.00 | 2844   | 315.00 | 1447  |
| 77.00 | 111768 | 149.00 | 1747   | 212.00 | 657    | 316.00 | 994   |
| 78.00 | 6648   | 150.00 | 568    | 215.00 | 914    | 321.00 | 266   |
| 79.00 | 7923   | 151.00 | 307    | 216.00 | 1634   | 323.00 | 4660  |
| 80.00 | 5603   | 152.00 | 794    | 217.00 | 19656  | 324.00 | 1027  |
| 81.00 | 7758   | 153.00 | 1785   | 218.00 | 2551   | 327.00 | 834   |
| 82.00 | 2014   | 154.00 | 1598   | 220.00 | 342    | 328.00 | 441   |
| 83.00 | 1772   | 155.00 | 3500   | 221.00 | 12203  | 333.00 | 202   |
| 85.00 | 1310   | 156.00 | 5724   | 222.00 | 2472   | 334.00 | 2966  |
| 86.00 | 2569   | 157.00 | 1052   | 223.00 | 4570   | 335.00 | 887   |
| 87.00 | 1166   | 158.00 | 1572   | 224.00 | 36408  | 341.00 | 749   |
| 88.00 | 336    | 159.00 | 725    | 225.00 | 9755   | 346.00 | 1019  |

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20151009-8910.b\1009002.D\BNA\_CH731.rsl\spectra.d

Injection Date: 09-Oct-2015 09:01:30

Spectrum: Tune Spec :Average 595-597( 6.27-6.28 ) Bgrd 587( 6.22)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 241

| m/z    | Y     | m/z    | Y     | m/z    | Y      | m/z    | Y      |
|--------|-------|--------|-------|--------|--------|--------|--------|
| 91.00  | 1964  | 160.00 | 2236  | 226.00 | 377    | 352.00 | 1469   |
| 92.00  | 2328  | 161.00 | 2898  | 227.00 | 17656  | 353.00 | 1526   |
| 93.00  | 13560 | 162.00 | 1157  | 228.00 | 2524   | 354.00 | 2021   |
| 94.00  | 657   | 163.00 | 256   | 229.00 | 3544   | 355.00 | 170    |
| 96.00  | 680   | 165.00 | 2179  | 230.00 | 509    | 365.00 | 6764   |
| 98.00  | 10537 | 166.00 | 2041  | 231.00 | 1626   | 366.00 | 1228   |
| 99.00  | 7943  | 167.00 | 13290 | 234.00 | 1285   | 371.00 | 202    |
| 100.00 | 668   | 168.00 | 6955  | 235.00 | 990    | 372.00 | 2464   |
| 101.00 | 4945  | 169.00 | 879   | 236.00 | 682    | 373.00 | 495    |
| 102.00 | 167   | 170.00 | 206   | 237.00 | 1345   | 383.00 | 219    |
| 103.00 | 1433  | 171.00 | 682   | 239.00 | 834    | 392.00 | 229    |
| 104.00 | 3220  | 172.00 | 1564  | 241.00 | 772    | 402.00 | 892    |
| 105.00 | 2907  | 173.00 | 2117  | 242.00 | 2113   | 403.00 | 1081   |
| 106.00 | 672   | 174.00 | 2531  | 243.00 | 2243   | 404.00 | 192    |
| 107.00 | 36112 | 175.00 | 5143  | 244.00 | 26224  | 421.00 | 935    |
| 108.00 | 5314  | 176.00 | 1595  | 245.00 | 3470   | 422.00 | 814    |
| 109.00 | 265   | 177.00 | 2805  | 246.00 | 5422   | 423.00 | 7712   |
| 110.00 | 61688 | 178.00 | 483   | 247.00 | 1403   | 424.00 | 2038   |
| 111.00 | 9481  | 179.00 | 10149 | 249.00 | 823    | 427.00 | 192    |
| 112.00 | 1511  | 180.00 | 6992  | 253.00 | 710    | 437.00 | 193    |
| 113.00 | 283   | 181.00 | 2756  | 255.00 | 141440 | 438.00 | 182    |
| 114.00 | 184   | 182.00 | 207   | 256.00 | 19008  | 441.00 | 21848  |
| 115.00 | 185   | 183.00 | 171   | 257.00 | 1580   | 442.00 | 153408 |
| 116.00 | 2022  | 184.00 | 985   | 258.00 | 9274   | 443.00 | 27968  |
| 117.00 | 30848 | 185.00 | 4700  | 259.00 | 1121   | 444.00 | 3229   |
| 118.00 | 2068  | 186.00 | 36864 | 265.00 | 4101   |        |        |
| 120.00 | 168   | 187.00 | 11009 | 266.00 | 406    |        |        |
| 122.00 | 1633  | 188.00 | 1514  | 271.00 | 189    |        |        |



Report Date: 11-Oct-2015 08:06:46

Chrom Revision: 2.2 08-Sep-2015 13:41:46

TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20151009-8910.b\V1009002.D

Injection Date: 09-Oct-2015 09:01:30

Instrument ID: CH731

Operator ID: 003200

Lims ID: DFTPP

Worklist Smp#: 2

Client ID:

Injection Vol: 2.0 ul

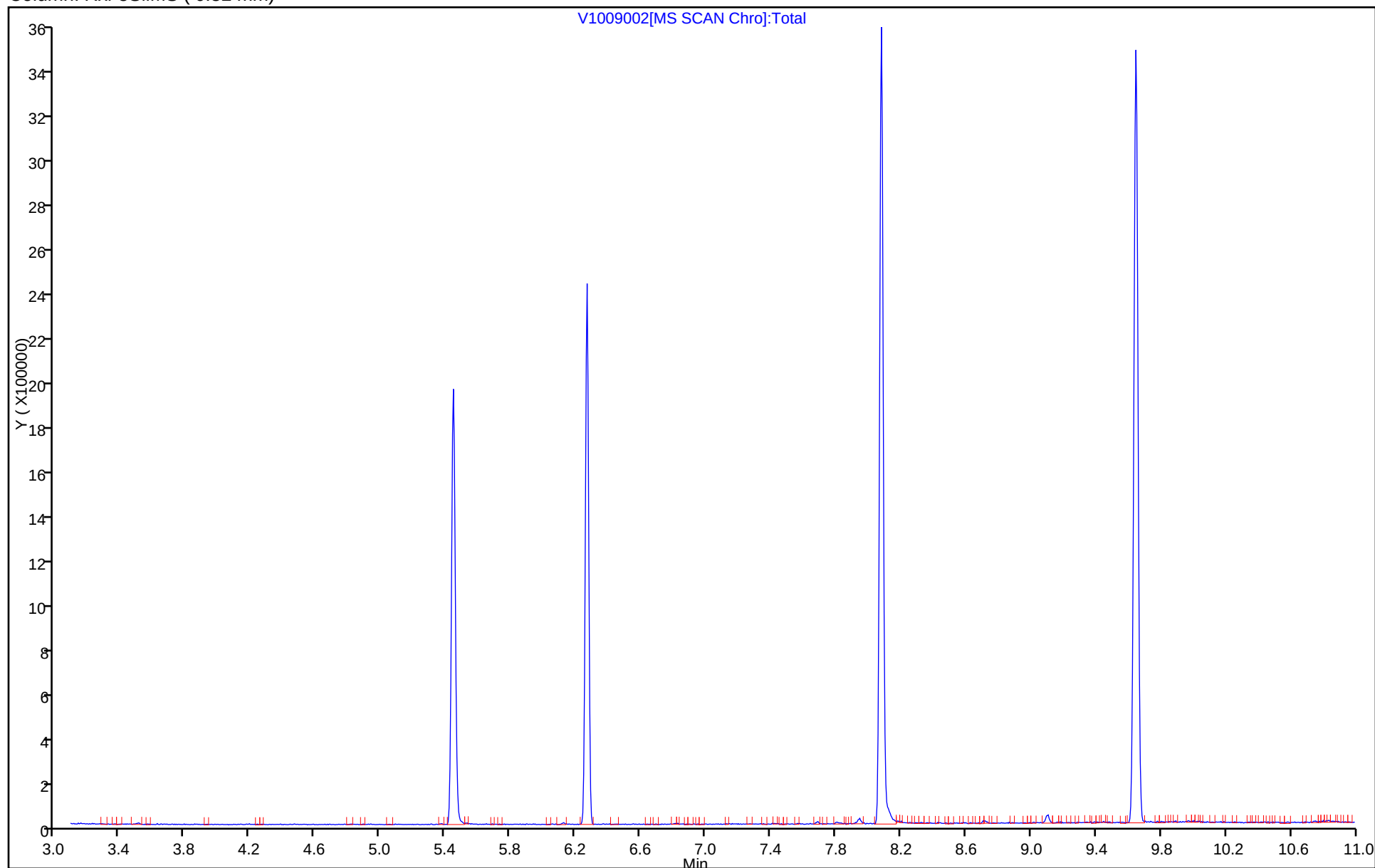
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: BNA\_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS ( 0.32 mm)



## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20151009-8910.b\V1009002.D

Injection Date: 09-Oct-2015 09:01:30

Instrument ID: CH731

Lims ID: DFTPP

Client ID:

Operator ID: 003200

ALS Bottle#: 1 Worklist Smp#: 2

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: BNA\_CH731

Limit Group: BNA 8270D ICAL

203 4,4'-DDT, Detector: MS SCAN

## SW-846 Method

%Breakdown =

$$\left( \frac{\text{Area Breakdown Cpnds}}{\text{Total Area Breakdown Cpnds}} \right) * 100$$

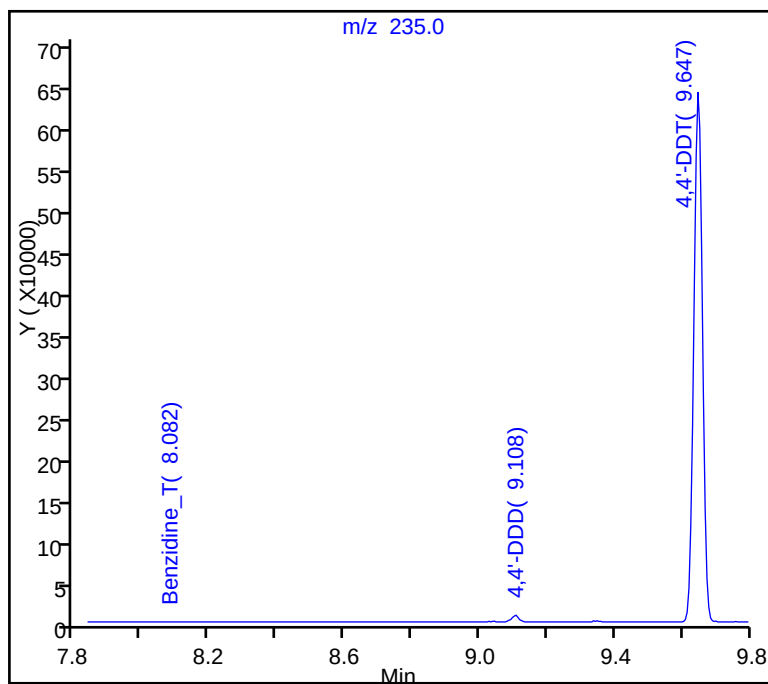
203 4,4'-DDT, Area = 1136417

201 4,4'-DDE, Area = 0

202 4,4'-DDD, Area = 11745

%Breakdown: 1.02%, Max Limit: 20.00%

Passed



## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20151009-8910.b\V1009002.D

Injection Date: 09-Oct-2015 09:01:30

Instrument ID: CH731

Lims ID: DFTPP

Client ID:

Operator ID: 003200

ALS Bottle#: 1 Worklist Smp#: 2

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: BNA\_CH731

Limit Group: BNA 8270D ICAL

198 Pentachlorophenol\_T, Detector: MS SCAN

Peak Tailing Factor =

BackWidth/FrontWidth @ 10% Peak Height

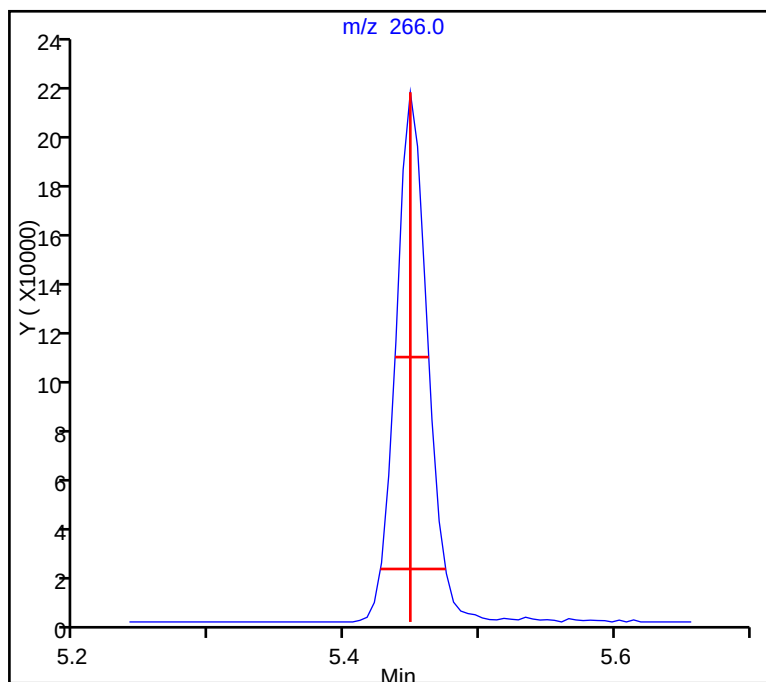
Back Width = 0.026 (min.)

Front Width = 0.022 (min.)

Tailing Factor = 1.2, Max. Tailing &lt; 2.00

Passed

-----



## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20151009-8910.b\V1009002.D

Injection Date: 09-Oct-2015 09:01:30

Instrument ID: CH731

Lims ID: DFTPP

Client ID:

Operator ID: 003200

ALS Bottle#: 1 Worklist Smp#: 2

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: BNA\_CH731

Limit Group: BNA 8270D ICAL

200 Benzidine\_T, Detector: MS SCAN

Peak Tailing Factor =

BackWidth/FrontWidth @ 10% Peak Height

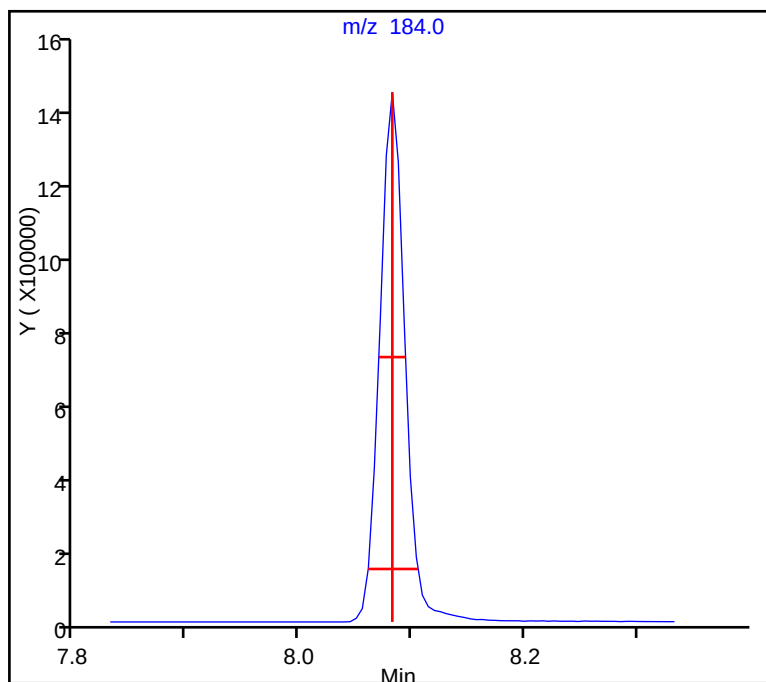
Back Width = 0.023 (min.)

Front Width = 0.021 (min.)

Tailing Factor = 1.1, Max. Tailing &lt; 2.00

Passed

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TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20151011-8939.b\V1011002.D  
 Lims ID: DFTPP  
 Client ID:  
 Sample Type: DFTPP  
 Inject. Date: 11-Oct-2015 09:16:30 ALS Bottle#: 1 Worklist Smp#: 2  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Sample Info: 180-0008939-002  
 Misc. Info.: DFTPP  
 Operator ID: 003200 Instrument ID: CH731  
 Method: \\ChromNA\Pittsburgh\ChromData\CH731\20151011-8939.b\BNA\_CH731.m  
 Limit Group: BNA 8270D ICAL  
 Last Update: 12-Oct-2015 06:37:48 Calib Date: 01-Sep-2015 07:35:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH731\20150901-8368.b\V0901N11.D  
 Column 1 : Rxi-5SiIMS ( 0.32 mm) Det: MS SCAN  
 Process Host: XAWRK051

First Level Reviewer: piccolinov

Date: 12-Oct-2015 05:04:23

| Compound                | Sig | RT<br>(min.) | Adj RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|-------------------------|-----|--------------|------------------|------------------|----|----------|---------------|-----------------|-------|
| 198 Pentachlorophenol_T | 266 | 5.441        | 5.441            | 0.000            | 90 | 408902   | NR            | NR              |       |
| 199 DFTPP               |     |              |                  |                  |    |          |               |                 |       |
| 200 Benzidine_T         | 184 | 8.058        | 8.058            | 0.000            | 99 | 2889921  | NR            | NR              |       |
| 201 4,4'-DDE            | 246 |              | 8.431            |                  |    |          |               | ND              |       |
| 202 4,4'-DDD            | 235 | 9.015        | 9.028            | -0.013           | 1  | 2110     |               | NR              |       |
| 203 4,4'-DDT            | 235 | 9.618        | 9.618            | 0.000            | 98 | 1403762  | NR            | NR              |       |

**QC Flag Legend**

Processing Flags

NR - Missing Quant Standard

**Reagents:**

SVDFTPP50i\_00023

Amount Added: 1.00

Units: mL

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20151011-8939.b\V1011002.D

Injection Date: 11-Oct-2015 09:16:30

Instrument ID: CH731

Lims ID: DFTPP

Client ID:

Operator ID: 003200

ALS Bottle#: 1 Worklist Smp#: 2

Injection Vol: 2.0 ul

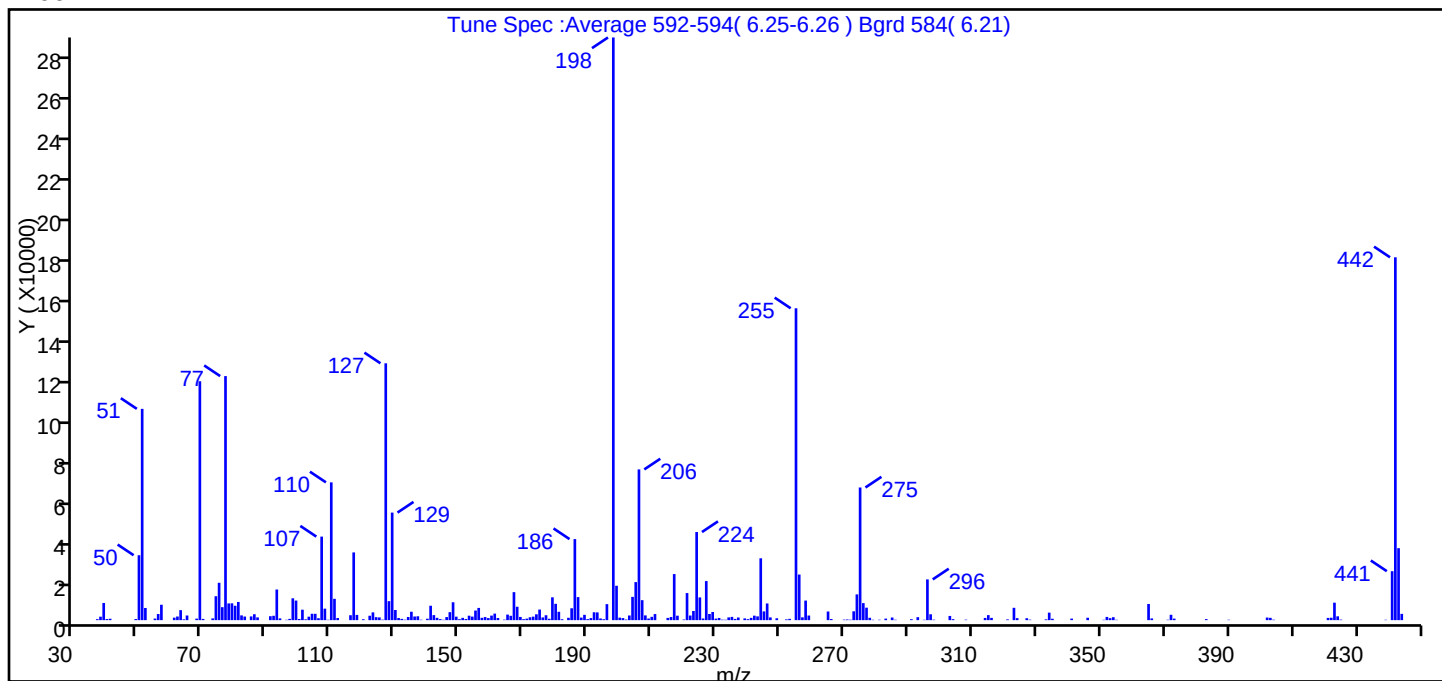
Dil. Factor: 1.0000

Method: BNA\_CH731

Limit Group: BNA 8270D ICAL

Tune Method: DFTPP Method 8270

## 199 DFTPP



| m/z | Ion Abundance Criteria             | % Relative Abundance |
|-----|------------------------------------|----------------------|
| 198 | Base peak, 100% relative abundance | 100.0                |
| 51  | 30-60% of mass 198                 | 36.3                 |
| 68  | <2% of mass 69                     | 0.3 (0.6)            |
| 69  | Present                            | 41.0                 |
| 70  | <2% of mass 69                     | 0.2 (0.5)            |
| 127 | 40-60% of mass 198                 | 44.1                 |
| 197 | <1% of mass 198                    | 0.0                  |
| 199 | 5-9% of mass 198                   | 5.9                  |
| 275 | 10-30% of mass 198                 | 22.8                 |
| 365 | >1% of mass 198                    | 2.8                  |
| 441 | Present but less than mass 443     | 8.4 (68.0)           |
| 442 | >40% of mass 198                   | 62.3                 |
| 443 | 17-23% of mass 442                 | 12.4 (19.8)          |

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20151011-8939.b\V1011002.D\BNA\_CH731.rsl\spectra.d  
Injection Date: 11-Oct-2015 09:16:30  
Spectrum: Tune Spec :Average 592-594( 6.25-6.26 ) Bgrd 584( 6.21)  
Base Peak: 198.00  
Minimum % Base Peak: 0  
Number of Points: 247

| m/z   | Y      | m/z    | Y      | m/z    | Y      | m/z    | Y     |
|-------|--------|--------|--------|--------|--------|--------|-------|
| 37.00 | 469    | 125.00 | 1321   | 190.00 | 492    | 270.00 | 248   |
| 38.00 | 1671   | 126.00 | 232    | 191.00 | 990    | 271.00 | 327   |
| 39.00 | 8301   | 127.00 | 124136 | 192.00 | 3805   | 272.00 | 216   |
| 40.00 | 528    | 128.00 | 9181   | 193.00 | 3737   | 273.00 | 4270  |
| 41.00 | 682    | 129.00 | 51984  | 194.00 | 803    | 274.00 | 12447 |
| 49.00 | 545    | 130.00 | 4892   | 195.00 | 439    | 275.00 | 64112 |
| 50.00 | 31376  | 131.00 | 1020   | 196.00 | 7736   | 276.00 | 8232  |
| 51.00 | 102112 | 132.00 | 607    | 198.00 | 281600 | 277.00 | 6030  |
| 52.00 | 5877   | 133.00 | 226    | 199.00 | 16608  | 278.00 | 1143  |
| 55.00 | 763    | 134.00 | 1515   | 200.00 | 1210   | 279.00 | 176   |
| 56.00 | 2955   | 135.00 | 4064   | 201.00 | 988    | 281.00 | 196   |
| 57.00 | 7442   | 136.00 | 1761   | 202.00 | 300    | 283.00 | 736   |
| 61.00 | 1212   | 137.00 | 1871   | 203.00 | 2252   | 285.00 | 1268  |
| 62.00 | 1757   | 138.00 | 200    | 204.00 | 11249  | 286.00 | 206   |
| 63.00 | 4840   | 140.00 | 686    | 205.00 | 18392  | 291.00 | 452   |
| 64.00 | 384    | 141.00 | 6955   | 206.00 | 72848  | 293.00 | 1439  |
| 65.00 | 2245   | 142.00 | 2425   | 207.00 | 9652   | 295.00 | 185   |
| 68.00 | 731    | 143.00 | 1113   | 208.00 | 2295   | 296.00 | 19696 |
| 69.00 | 115456 | 144.00 | 499    | 209.00 | 783    | 297.00 | 2829  |
| 70.00 | 601    | 145.00 | 173    | 210.00 | 1592   | 298.00 | 226   |
| 73.00 | 845    | 146.00 | 1473   | 211.00 | 2941   | 303.00 | 2025  |
| 74.00 | 11566  | 147.00 | 3857   | 215.00 | 1082   | 304.00 | 481   |
| 75.00 | 18056  | 148.00 | 8643   | 216.00 | 1493   | 308.00 | 234   |
| 76.00 | 6264   | 149.00 | 1676   | 217.00 | 22264  | 314.00 | 1066  |
| 77.00 | 117944 | 150.00 | 456    | 218.00 | 2152   | 315.00 | 2429  |
| 78.00 | 8080   | 151.00 | 1105   | 220.00 | 288    | 316.00 | 1099  |
| 79.00 | 8132   | 152.00 | 558    | 221.00 | 13088  | 321.00 | 373   |
| 80.00 | 6953   | 153.00 | 2142   | 222.00 | 2225   | 323.00 | 5960  |
| 81.00 | 8793   | 154.00 | 1706   | 223.00 | 4418   | 324.00 | 969   |
| 82.00 | 2301   | 155.00 | 4643   | 224.00 | 42584  | 327.00 | 927   |
| 83.00 | 1748   | 156.00 | 5907   | 225.00 | 10973  | 328.00 | 226   |
| 85.00 | 1794   | 157.00 | 1122   | 226.00 | 805    | 333.00 | 384   |
| 86.00 | 2855   | 158.00 | 1488   | 227.00 | 18880  | 334.00 | 3629  |

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20151011-8939.b\1011002.D\BNA\_CH731.rslt\spectra.d

Injection Date: 11-Oct-2015 09:16:30

Spectrum: Tune Spec :Average 592-594( 6.25-6.26 ) Bgrd 584( 6.21)

Base Peak: 198.00

Minimum % Base Peak: 0

Number of Points: 247

| m/z    | Y     | m/z    | Y     | m/z    | Y      | m/z    | Y      |
|--------|-------|--------|-------|--------|--------|--------|--------|
| 87.00  | 1324  | 159.00 | 991   | 228.00 | 2983   | 335.00 | 679    |
| 91.00  | 1909  | 160.00 | 2202  | 229.00 | 3936   | 341.00 | 745    |
| 92.00  | 2100  | 161.00 | 3159  | 230.00 | 726    | 346.00 | 1157   |
| 93.00  | 14802 | 162.00 | 1028  | 231.00 | 1056   | 351.00 | 176    |
| 94.00  | 848   | 164.00 | 243   | 232.00 | 237    | 352.00 | 1553   |
| 96.00  | 169   | 165.00 | 2688  | 233.00 | 202    | 353.00 | 958    |
| 97.00  | 609   | 166.00 | 2100  | 234.00 | 1313   | 354.00 | 1418   |
| 98.00  | 10550 | 167.00 | 13530 | 235.00 | 1567   | 355.00 | 181    |
| 99.00  | 9463  | 168.00 | 6473  | 236.00 | 599    | 365.00 | 7822   |
| 100.00 | 548   | 169.00 | 1546  | 237.00 | 1279   | 366.00 | 838    |
| 101.00 | 5045  | 170.00 | 478   | 239.00 | 843    | 371.00 | 192    |
| 102.00 | 385   | 171.00 | 730   | 240.00 | 472    | 372.00 | 2594   |
| 103.00 | 1666  | 172.00 | 1388  | 241.00 | 1095   | 373.00 | 736    |
| 104.00 | 3084  | 173.00 | 1695  | 242.00 | 2166   | 383.00 | 497    |
| 105.00 | 3064  | 174.00 | 2828  | 243.00 | 1822   | 390.00 | 192    |
| 106.00 | 923   | 175.00 | 5121  | 244.00 | 29896  | 402.00 | 1255   |
| 107.00 | 40376 | 176.00 | 1318  | 245.00 | 4220   | 403.00 | 1112   |
| 108.00 | 5551  | 177.00 | 2373  | 246.00 | 8060   | 404.00 | 224    |
| 109.00 | 190   | 178.00 | 675   | 247.00 | 1322   | 421.00 | 1081   |
| 110.00 | 66592 | 179.00 | 11030 | 249.00 | 908    | 422.00 | 1163   |
| 111.00 | 10309 | 180.00 | 7890  | 252.00 | 369    | 423.00 | 8444   |
| 112.00 | 1024  | 181.00 | 4036  | 253.00 | 626    | 424.00 | 1848   |
| 116.00 | 2381  | 182.00 | 434   | 255.00 | 150720 | 425.00 | 259    |
| 117.00 | 32736 | 184.00 | 1138  | 256.00 | 22040  | 439.00 | 178    |
| 118.00 | 2532  | 185.00 | 5738  | 257.00 | 1361   | 441.00 | 23664  |
| 120.00 | 435   | 186.00 | 39168 | 258.00 | 9457   | 442.00 | 175360 |
| 122.00 | 2124  | 187.00 | 11141 | 259.00 | 2227   | 443.00 | 34784  |
| 123.00 | 3758  | 188.00 | 1237  | 265.00 | 4175   | 444.00 | 3037   |
| 124.00 | 1446  | 189.00 | 2570  | 266.00 | 530    |        |        |



## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20151011-8939.b\V1011002.D

Injection Date: 11-Oct-2015 09:16:30

Instrument ID: CH731

Operator ID: 003200

Lims ID: DFTPP

Worklist Smp#: 2

Client ID:

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

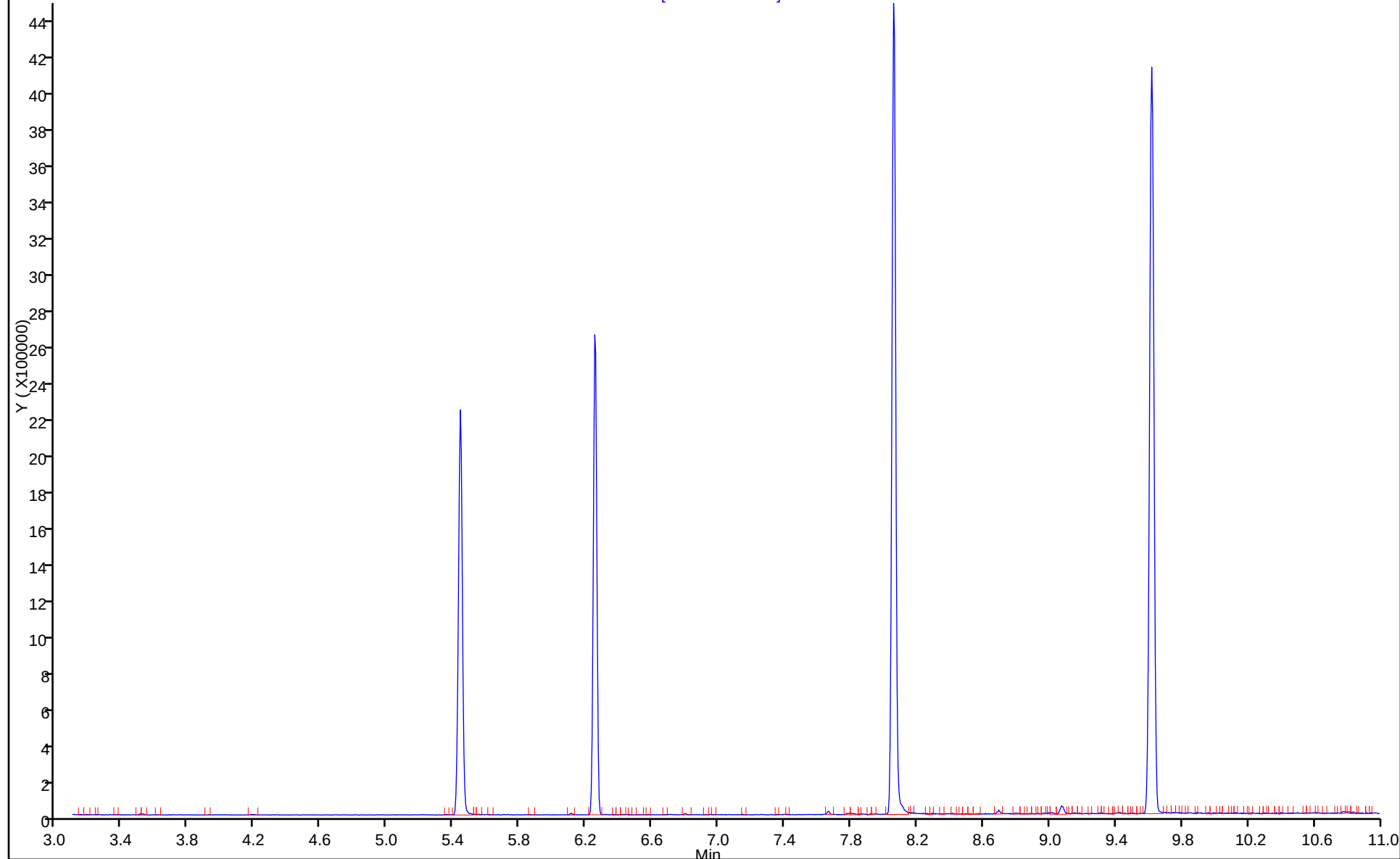
ALS Bottle#: 1

Method: BNA\_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS ( 0.32 mm)

V1011002[MS SCAN Chro]:Total



## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20151011-8939.b\V1011002.D

Injection Date: 11-Oct-2015 09:16:30

Instrument ID: CH731

Lims ID: DFTPP

Client ID:

Operator ID: 003200

ALS Bottle#: 1 Worklist Smp#: 2

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: BNA\_CH731

Limit Group: BNA 8270D ICAL

203 4,4'-DDT, Detector: MS SCAN

## SW-846 Method

%Breakdown =

$$\left( \frac{\text{Area Breakdown Cpnds}}{\text{Total Area Breakdown Cpnds}} \right) * 100$$

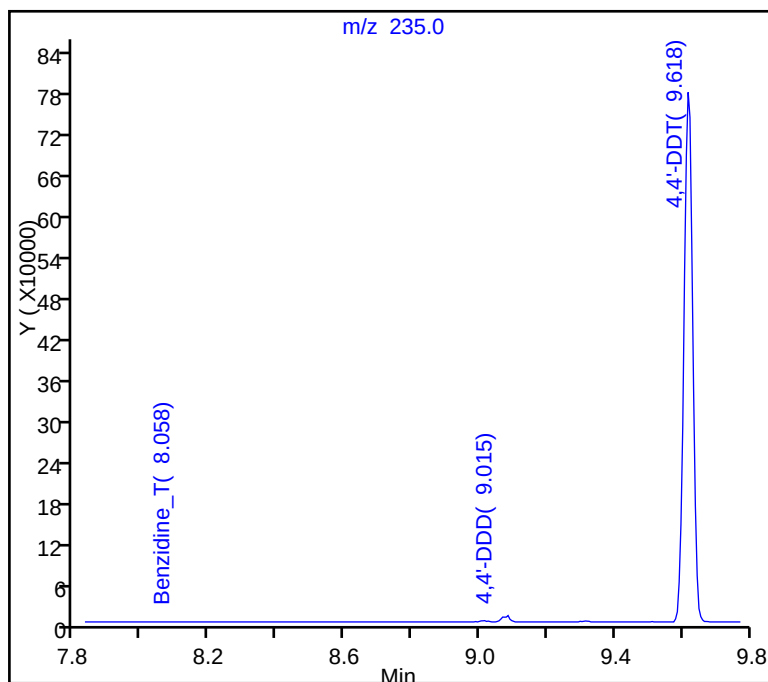
203 4,4'-DDT, Area = 1403762

201 4,4'-DDE, Area = 0

202 4,4'-DDD, Area = 2110

%Breakdown: 0.15%, Max Limit: 20.00%

Passed



## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20151011-8939.b\V1011002.D

Injection Date: 11-Oct-2015 09:16:30

Instrument ID: CH731

Lims ID: DFTPP

Client ID:

Operator ID: 003200

ALS Bottle#: 1 Worklist Smp#: 2

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: BNA\_CH731

Limit Group: BNA 8270D ICAL

198 Pentachlorophenol\_T, Detector: MS SCAN

Peak Tailing Factor =

BackWidth/FrontWidth @ 10% Peak Height

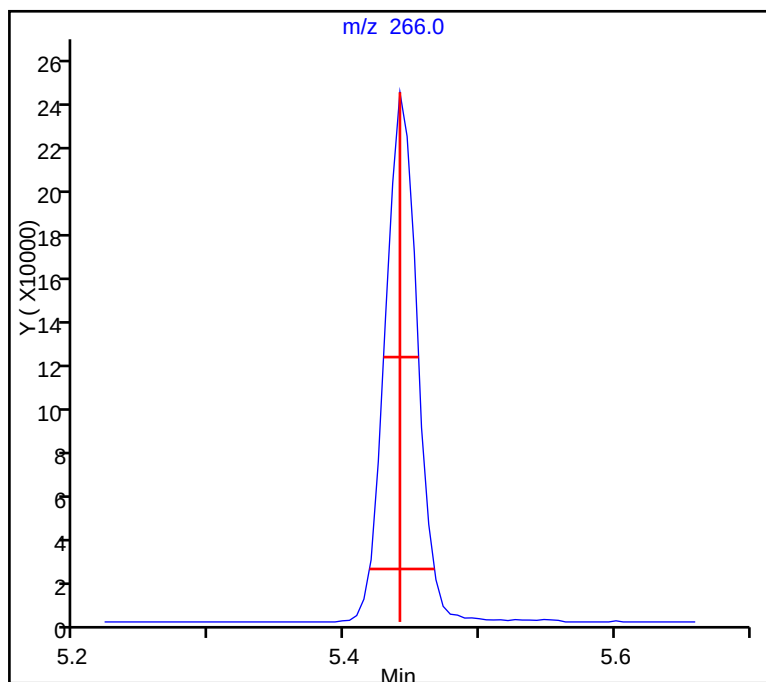
Back Width = 0.026 (min.)

Front Width = 0.023 (min.)

Tailing Factor = 1.1, Max. Tailing &lt; 2.00

Passed

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## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20151011-8939.b\V1011002.D

Injection Date: 11-Oct-2015 09:16:30

Instrument ID: CH731

Lims ID: DFTPP

Client ID:

Operator ID: 003200

ALS Bottle#: 1 Worklist Smp#: 2

Injection Vol: 2.0 ul

Dil. Factor: 1.0000

Method: BNA\_CH731

Limit Group: BNA 8270D ICAL

200 Benzidine\_T, Detector: MS SCAN

Peak Tailing Factor =

BackWidth/FrontWidth @ 10% Peak Height

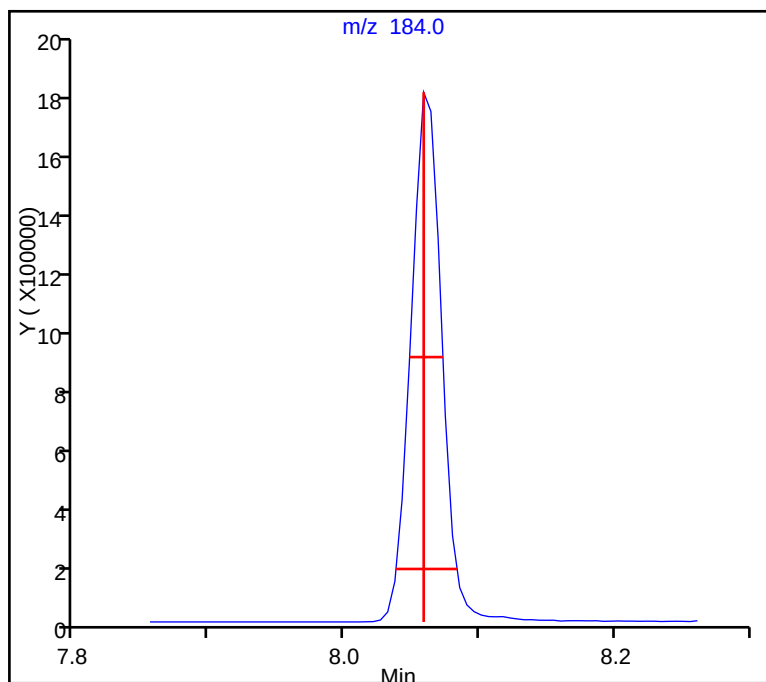
Back Width = 0.025 (min.)

Front Width = 0.021 (min.)

Tailing Factor = 1.2, Max. Tailing &lt; 2.00

Passed

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FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: MB 180-156027/1-A  
 Matrix: Water Lab File ID: V1009004.D  
 Analysis Method: 8270D LL Date Collected: \_\_\_\_\_  
 Extract. Method: 3520C Date Extracted: 10/06/2015 10:44  
 Sample wt/vol: 250 (mL) Date Analyzed: 10/09/2015 09:46  
 Con. Extract Vol.: 0.25 (mL) Dilution Factor: 1  
 Injection Volume: 2 (uL) Level: (low/med) Low  
 % Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 156466 Units: ug/L

| CAS NO.  | COMPOUND NAME | RESULT | Q | RL  | MDL   |
|----------|---------------|--------|---|-----|-------|
| 123-91-1 | 1,4-Dioxane   | ND     |   | 2.0 | 0.052 |

| CAS NO.   | SURROGATE                   | %REC | Q | LIMITS |
|-----------|-----------------------------|------|---|--------|
| 321-60-8  | 2-Fluorobiphenyl            | 60   |   | 28-109 |
| 367-12-4  | 2-Fluorophenol (Surr)       | 64   |   | 20-105 |
| 118-79-6  | 2,4,6-Tribromophenol (Surr) | 58   |   | 30-118 |
| 4165-60-0 | Nitrobenzene-d5 (Surr)      | 62   |   | 27-114 |
| 4165-62-2 | Phenol-d5 (Surr)            | 64   |   | 25-105 |
| 1718-51-0 | Terphenyl-d14 (Surr)        | 71   |   | 20-118 |

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20151009-8910.b\V1009004.D  
 Lims ID: MB 180-156027/1-A  
 Client ID:  
 Sample Type: MB  
 Inject. Date: 09-Oct-2015 09:46:30 ALS Bottle#: 3 Worklist Smp#: 4  
 Injection Vol: 2.0 ul Dil. Factor: 1.0000  
 Sample Info: 180-0008910-004  
 Operator ID: 003200 Instrument ID: CH731  
 Method: \\ChromNA\Pittsburgh\ChromData\CH731\20151009-8910.b\BNA\_CH731.m  
 Limit Group: BNA 8270D ICAL  
 Last Update: 11-Oct-2015 08:06:48 Calib Date: 01-Sep-2015 07:35:30  
 Integrator: RTE ID Type: Deconvolution ID  
 Quant Method: Internal Standard Quant By: Initial Calibration  
 Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH731\20150901-8368.b\V0901N11.D  
 Column 1 : Rxi-5SilMS ( 0.32 mm) Det: MS SCAN  
 Process Host: XAWRK031

First Level Reviewer: piccolinov

Date: 09-Oct-2015 13:50:49

| Compound                     | Sig | RT<br>(min.) | Adj RT<br>(min.) | Dlt RT<br>(min.) | Q   | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|------------------------------|-----|--------------|------------------|------------------|-----|----------|---------------|-----------------|-------|
| * 1 1,4-Dichlorobenzene-d4   | 152 | 6.307        | 6.310            | -0.003           | 94  | 182230   | 8.00          | 8.00            |       |
| * 2 Naphthalene-d8           | 136 | 7.535        | 7.539            | -0.004           | 100 | 765778   | 8.00          | 8.00            |       |
| * 3 Acenaphthene-d10         | 164 | 9.175        | 9.179            | -0.004           | 92  | 506044   | 8.00          | 8.00            |       |
| * 4 Phenanthrene-d10         | 188 | 10.564       | 10.573           | -0.009           | 97  | 955168   | 8.00          | 8.00            |       |
| * 5 Chrysene-d12             | 240 | 14.176       | 14.184           | -0.008           | 97  | 873334   | 8.00          | 8.00            |       |
| * 6 Perylene-d12             | 264 | 17.162       | 17.171           | -0.009           | 98  | 675530   | 8.00          | 8.00            |       |
| \$ 7 2-Fluorophenol          | 112 | 4.902        | 4.900            | 0.002            | 92  | 685156   | 40.0          | 25.5            |       |
| \$ 8 Phenol-d5               | 99  | 5.943        | 5.941            | 0.002            | 95  | 902287   | 40.0          | 25.8            |       |
| \$ 9 Nitrobenzene-d5         | 82  | 6.841        | 6.844            | -0.003           | 92  | 920148   | 40.0          | 24.7            |       |
| \$ 10 2-Fluorobiphenyl       | 172 | 8.534        | 8.538            | -0.004           | 100 | 2116032  | 40.0          | 23.9            |       |
| \$ 11 2,4,6-Tribromophenol   | 330 | 9.907        | 9.911            | -0.004           | 90  | 308492   | 40.0          | 23.3            |       |
| \$ 12 Terphenyl-d14          | 244 | 12.386       | 12.389           | -0.003           | 99  | 2344571  | 40.0          | 28.3            |       |
| 13 1,4-Dioxane               | 88  |              | 1.502            |                  |     |          |               | ND              |       |
| 14 N-Nitrosodimethylamine    | 74  |              | 2.159            |                  |     |          |               | ND              |       |
| 15 Pyridine                  | 79  |              | 2.234            |                  |     |          |               | ND              |       |
| 16 Dimethylformamide         | 73  |              | 3.147            |                  |     |          |               | ND              |       |
| 18 Dibromoacetonitrile       | 120 |              | 3.590            |                  |     |          |               | ND              |       |
| 19 2-Picoline                | 93  |              | 4.030            |                  |     |          |               | ND              |       |
| 20 N-Nitrosomethylethylamine | 88  |              | 4.233            |                  |     |          |               | ND              |       |
| 21 Acrylamide                | 71  | 4.896        | 4.597            | 0.300            | 26  | 3219     |               | NC              |       |
| 22 Methyl methanesulfonate   | 80  |              | 4.649            |                  |     |          |               | ND              |       |
| 23 Phenylmercaptan           | 110 | 4.902        | 5.000            | -0.098           | 44  | 3142     |               | NC              |       |
| 24 N-Nitrosodiethylamine     | 102 |              | 5.115            |                  |     |          |               | ND              |       |
| 25 Ethyl methanesulfonate    | 79  |              | 5.517            |                  |     |          |               | ND              |       |
| 26 Benzaldehyde              | 77  |              | 5.851            |                  |     |          |               | ND              |       |
| 27 Phenol                    | 94  |              | 5.957            |                  |     |          |               | ND              |       |
| 28 Aniline                   | 93  |              | 5.968            |                  |     |          |               | ND              |       |
| 30 Pentachloroethane         | 167 |              | 6.025            |                  |     |          |               | ND              |       |
| 29 Bis(2-chloroethyl)ether   | 93  |              | 6.038            |                  |     |          |               | ND              |       |
| 31 2-Chlorophenol            | 128 |              | 6.096            |                  |     |          |               | ND              |       |
| 32 n-Decane                  | 43  |              | 6.160            |                  |     |          |               | ND              |       |
| 33 1,3-Dichlorobenzene       | 146 |              | 6.251            |                  |     |          |               | ND              |       |

| Compound                      | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|-------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 34 1,4-Dichlorobenzene        | 146 |           | 6.326         |               |    |          |            | ND           |       |
| 35 1,2,3-Trimethylbenzene     | 105 |           | 6.341         |               |    |          |            | ND           |       |
| 36 Benzyl alcohol             | 108 |           | 6.438         |               |    |          |            | ND           |       |
| 37 1,2-Dichlorobenzene        | 146 |           | 6.476         |               |    |          |            | ND           |       |
| 38 2-Methylphenol             | 108 |           | 6.556         |               |    |          |            | ND           |       |
| 39 Indene                     | 116 |           | 6.567         |               |    |          |            | ND           |       |
| 40 2,2'-oxybis[1-chloropropan | 45  |           | 6.577         |               |    |          |            | ND           |       |
| 42 N-Nitrosomorpholine        | 116 | 6.307     | 6.632         | -0.325        | 41 | 7275     |            | NC           |       |
| 46 2-Toluidine                | 106 |           | 6.664         |               |    |          |            | ND           |       |
| 41 N-Nitrosopyrrolidine       | 100 |           | 6.668         |               |    |          |            | ND           |       |
| 43 Acetophenone               | 105 |           | 6.695         |               |    |          |            | ND           |       |
| 44 N-Nitrosodi-n-propylamine  | 70  |           | 6.695         |               |    |          |            | ND           |       |
| 45 4-Methylphenol             | 108 |           | 6.700         |               |    |          |            | ND           |       |
| 194 Benzotrichloride TIC      | 159 | 9.175     | 6.750         | 2.425         | 0  | 14866    |            | 0            |       |
| 47 Hexachloroethane           | 117 |           | 6.818         |               |    |          |            | ND           |       |
| 48 Nitrobenzene               | 77  |           | 6.866         |               |    |          |            | ND           |       |
| 49 N-Nitrosopiperidine        | 114 |           | 6.926         |               |    |          |            | ND           |       |
| 50 Isophorone                 | 82  |           | 7.090         |               |    |          |            | ND           |       |
| 51 2-Nitrophenol              | 139 |           | 7.170         |               |    |          |            | ND           |       |
| 54 o,o',o''-Triethylphosphoro | 198 |           | 7.182         |               |    |          |            | ND           |       |
| 52 2,4-Dimethylphenol         | 107 |           | 7.202         |               |    |          |            | ND           |       |
| 53 4-Chloro-3-nitro-alpha,alp | 179 |           | 7.228         |               |    |          |            | ND           |       |
| 56 Benzoic acid               | 122 |           | 7.256         |               |    |          |            | ND           |       |
| 55 Bis(2-chloroethoxy)methane | 93  |           | 7.288         |               |    |          |            | ND           |       |
| 58 alpha,alpha-Dimethyl phene | 58  | 7.541     | 7.353         | 0.188         | 26 | 966      |            | NC           |       |
| 57 2,4-Dichlorophenol         | 162 |           | 7.400         |               |    |          |            | ND           |       |
| 59 1,2,4-Trichlorobenzene     | 180 |           | 7.485         |               |    |          |            | ND           |       |
| 60 Naphthalene                | 128 |           | 7.560         |               |    |          |            | ND           |       |
| 62 4-Chloroaniline            | 127 |           | 7.598         |               |    |          |            | ND           |       |
| 63 2,6-Dichlorophenol         | 162 |           | 7.614         |               |    |          |            | ND           |       |
| 65 Hexachloropropene          | 213 |           | 7.627         |               |    |          |            | ND           |       |
| 64 Hexachlorobutadiene        | 225 |           | 7.683         |               |    |          |            | ND           |       |
| 66 Quinoline                  | 129 |           | 7.786         |               |    |          |            | ND           |       |
| 68 N-Nitrosodi-n-butylamine   | 84  |           | 7.818         |               |    |          |            | ND           |       |
| 69 p-Phenylene diamine        | 108 | 7.535     | 7.834         | -0.299        | 49 | 93642    |            | NC           |       |
| 67 Caprolactam                | 113 |           | 7.886         |               |    |          |            | ND           |       |
| 71 Safrole, Total             | 162 |           | 8.026         |               |    |          |            | ND           |       |
| 70 4-Chloro-3-methylphenol    | 107 |           | 8.036         |               |    |          |            | ND           |       |
| 74 Diphenamid                 | 168 |           | 8.200         |               |    |          |            | ND           |       |
| 72 2-Methylnaphthalene        | 142 |           | 8.207         |               |    |          |            | ND           |       |
| 73 Phthalic anhydride         | 104 | 8.534     | 8.211         | 0.323         | 34 | 2210     |            | NC           |       |
| 75 1-Methylnaphthalene        | 142 |           | 8.303         |               |    |          |            | ND           |       |
| 76 Hexachlorocyclopentadiene  | 237 |           | 8.361         |               |    |          |            | ND           |       |
| 77 1,2,4,5-Tetrachlorobenzene | 216 |           | 8.367         |               |    |          |            | ND           |       |
| 78 2,4,6-Trichlorophenol      | 196 |           | 8.463         |               |    |          |            | ND           |       |
| 79 2,4,5-Trichlorophenol      | 196 |           | 8.495         |               |    |          |            | ND           |       |
| 80 1,1'-Biphenyl              | 154 |           | 8.634         |               |    |          |            | ND           |       |
| 83 1-Chloronaphthalene        | 162 |           | 8.648         |               |    |          |            | ND           |       |
| 81 2-Chloronaphthalene        | 162 |           | 8.661         |               |    |          |            | ND           |       |
| 82 2-Nitroaniline             | 65  |           | 8.741         |               |    |          |            | ND           |       |
| 84 1,4-Dinitrobenzene         | 168 | 8.534     | 8.769         | -0.235        | 31 | 25983    |            | NC           |       |
| 85 1,4-Naphthoquinone         | 158 | 8.534     | 8.771         | -0.237        | 44 | 3794     |            | NC           |       |

| Compound                       | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 86 Dimethyl phthalate          | 163 |           | 8.890         |               |    |          |            | ND           |       |
| 87 1,3-Dinitrobenzene          | 168 |           | 8.922         |               |    |          |            | ND           |       |
| 88 2,6-Dinitrotoluene          | 165 |           | 8.954         |               |    |          |            | ND           |       |
| 89 Acenaphthylene              | 152 |           | 9.051         |               |    |          |            | ND           |       |
| 90 3-Nitroaniline              | 138 |           | 9.115         |               |    |          |            | ND           |       |
| 92 2,4-Dinitrophenol           | 184 |           | 9.211         |               |    |          |            | ND           |       |
| 91 Acenaphthene                | 153 |           | 9.211         |               |    |          |            | ND           |       |
| 93 4-Nitrophenol               | 109 |           | 9.248         |               |    |          |            | ND           |       |
| 96 Pentachlorobenzene          | 250 |           | 9.299         |               |    |          |            | ND           |       |
| 94 2,4-Dinitrotoluene          | 165 |           | 9.328         |               |    |          |            | ND           |       |
| 98 1-Naphthylamine             | 143 |           | 9.340         |               |    |          |            | ND           |       |
| 95 Dibenzofuran                | 168 |           | 9.371         |               |    |          |            | ND           |       |
| 97 2,3,5,6-Tetrachlorophenol   | 232 |           | 9.441         |               |    |          |            | ND           |       |
| 99 2,3,4,6-Tetrachlorophenol   | 232 |           | 9.478         |               |    |          |            | ND           |       |
| 100 2-Naphthylamine            | 143 |           | 9.510         |               |    |          |            | ND           |       |
| 101 Diethyl phthalate          | 149 | 9.533     | 9.537         | -0.004        | 95 | 10513    |            | 0.1227       |       |
| 102 Hexadecane                 | 57  |           | 9.542         |               |    |          |            | ND           |       |
| 107 N-Nitro-o-toluidine        | 152 | 9.907     | 9.586         | 0.321         | 41 | 4243     |            | NC           |       |
| 103 4-tert-Octylphenol         | 135 | 9.181     | 9.611         | -0.430        | 46 | 2465     |            | NC           |       |
| 104 4-Chlorophenyl phenyl ethe | 204 |           | 9.670         |               |    |          |            | ND           |       |
| 110 Diphenylamine              | 169 | 9.907     | 9.677         | 0.230         | 46 | 13828    |            | NC           |       |
| 105 4-Nitroaniline             | 138 |           | 9.681         |               |    |          |            | ND           |       |
| 106 Fluorene                   | 166 |           | 9.692         |               |    |          |            | ND           |       |
| 108 4,6-Dinitro-2-methylphenol | 198 |           | 9.713         |               |    |          |            | ND           |       |
| 109 N-Nitrosodiphenylamine     | 169 |           | 9.777         |               |    |          |            | ND           |       |
| 61 Azobenzene                  | 77  |           | 9.815         |               |    |          |            | ND           |       |
| 111 1,2-Diphenylhydrazine      | 77  |           | 9.815         |               |    |          |            | ND           |       |
| 112 1,3,5-Trinitrobenzene      | 213 |           | 9.896         |               |    |          |            | ND           |       |
| 113 Phenacetin                 | 108 |           | 9.939         |               |    |          |            | ND           |       |
| 114 Phorate                    | 121 |           | 9.944         |               |    |          |            | ND           |       |
| 115 2,3,7,8-TCDD TIC           | 322 |           | 10.000        |               |    |          |            | ND           |       |
| 117 Dimethoate                 | 87  |           | 10.099        |               |    |          |            | ND           |       |
| 116 4-Bromophenyl phenyl ether | 248 |           | 10.124        |               |    |          |            | ND           |       |
| 118 Hexachlorobenzene          | 284 |           | 10.215        |               |    |          |            | ND           |       |
| 119 Atrazine                   | 200 |           | 10.242        |               |    |          |            | ND           |       |
| 120 4-Aminobiphenyl            | 169 | 10.570    | 10.265        | 0.306         | 59 | 612      |            | NC           |       |
| 123 Pronamide                  | 173 | 9.907     | 10.297        | -0.390        | 56 | 7488     |            | NC           |       |
| 124 Pentachloronitrobenzene    | 237 |           | 10.302        |               |    |          |            | ND           |       |
| 122 Pentachlorophenol          | 266 |           | 10.381        |               |    |          |            | ND           |       |
| 121 n-Octadecane               | 57  |           | 10.386        |               |    |          |            | ND           |       |
| 125 Disulfoton                 | 88  |           | 10.419        |               |    |          |            | ND           |       |
| 127 Dinoseb                    | 211 |           | 10.475        |               |    |          |            | ND           |       |
| 126 Phenanthrene               | 178 |           | 10.594        |               |    |          |            | ND           |       |
| 129 Hexachlorophene TIC        | 198 |           | 10.600        |               |    |          |            | ND           |       |
| 128 Anthracene                 | 178 |           | 10.643        |               |    |          |            | ND           |       |
| 130 Carbazole                  | 167 |           | 10.787        |               |    |          |            | ND           |       |
| 131 Methyl parathion           | 109 |           | 10.793        |               |    |          |            | ND           |       |
| 132 Di-n-butyl phthalate       | 149 |           | 11.086        |               |    |          |            | ND           |       |
| 133 Ethyl Parathion            | 109 |           | 11.189        |               |    |          |            | ND           |       |
| 134 4-Nitroquinoline-1-oxide   | 190 |           | 11.263        |               |    |          |            | ND           |       |
| 135 Methapyrilene              | 58  |           | 11.317        |               |    |          |            | ND           |       |
| 136 Isodrin                    | 193 |           | 11.661        |               |    |          |            | ND           |       |



| Compound                       | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q  | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|----|----------|------------|--------------|-------|
| 137 Fluoranthene               | 202 |           | 11.919        |               |    |          |            | ND           |       |
| 138 Benzidine                  | 184 |           | 12.048        |               |    |          |            | ND           |       |
| 140 1,2,3,4 -Tetrachlorobenzen | 216 | 12.386    | 12.215        | 0.171         | 49 | 4717     |            | NC           |       |
| 139 Pyrene                     | 202 |           | 12.229        |               |    |          |            | ND           |       |
| 141 p-Dimethylamino azobenzene | 225 | 12.381    | 12.428        | -0.047        | 44 | 14704    |            | NC           |       |
| 142 Chlorobenzilate            | 139 |           | 12.542        |               |    |          |            | ND           |       |
| 143 Famphur                    | 218 |           | 12.850        |               |    |          |            | ND           |       |
| 145 3,3'-Dimethylbenzidine     | 212 |           | 12.936        |               |    |          |            | ND           |       |
| 146 Kepone                     | 272 |           | 13.030        |               |    |          |            | ND           |       |
| 144 Butyl benzyl phthalate     | 149 |           | 13.100        |               |    |          |            | ND           |       |
| 147 2-Acetylaminofluorene      | 181 |           | 13.363        |               |    |          |            | ND           |       |
| 148 Thionazin                  | 97  |           | 13.789        |               |    |          |            | ND           |       |
| 150 4,4'-Methylene bis(2-chlor | 231 |           | 13.881        |               |    |          |            | ND           |       |
| 149 3,3'-Dichlorobenzidine     | 252 |           | 14.083        |               |    |          |            | ND           |       |
| 151 Bis(2-ethylhexyl) phthalat | 149 |           | 14.131        |               |    |          |            | ND           |       |
| 152 Benzo[a]anthracene         | 228 |           | 14.168        |               |    |          |            | ND           |       |
| 153 Chrysene                   | 228 |           | 14.238        |               |    |          |            | ND           |       |
| 154 Sulfotepp                  | 97  |           | 14.530        |               |    |          |            | ND           |       |
| 155 6-Methylchrysene           | 242 |           | 14.907        |               |    |          |            | ND           |       |
| 156 Di-n-octyl phthalate       | 149 |           | 15.466        |               |    |          |            | ND           |       |
| 157 7,12-Dimethylbenz(a)anthra | 256 |           | 16.337        |               |    |          |            | ND           |       |
| 158 Benzo[b]fluoranthene       | 252 |           | 16.353        |               |    |          |            | ND           |       |
| 159 Benzo[k]fluoranthene       | 252 |           | 16.412        |               |    |          |            | ND           |       |
| 176 Benzo[e]pyrene             | 252 |           | 16.941        |               |    |          |            | ND           |       |
| 160 Benzo[a]pyrene             | 252 |           | 17.053        |               |    |          |            | ND           |       |
| 161 3-Methylcholanthrene       | 268 |           | 17.524        |               |    |          |            | ND           |       |
| 162 Dibenz[a,h]acridine        | 279 |           | 18.636        |               |    |          |            | ND           |       |
| 175 Dibenz[a,j]acridine        | 279 |           | 18.982        |               |    |          |            | ND           |       |
| 163 Indeno[1,2,3-cd]pyrene     | 276 |           | 19.452        |               |    |          |            | ND           |       |
| 164 Dibenz(a,h)anthracene      | 278 |           | 19.489        |               |    |          |            | ND           |       |
| 165 Benzo[g,h,i]perylene       | 276 |           | 20.071        |               |    |          |            | ND           |       |
| 171 Diallate Peak 2            | 86  |           | 0.000         |               |    |          |            | ND           |       |
| 167 o-Phenylphenol             | 1   |           | 0.000         |               |    |          |            | ND           |       |
| 178 1-Phenyl-1-(2,4-dimethylph | 1   |           | 0.000         |               |    |          |            | ND           |       |
| 174 2-Bromonaphthalene         | 127 |           | 0.000         |               |    |          |            | ND           |       |
| 187 1,2-Dibromo-3-Chloropropan | 157 |           | 0.000         |               |    |          |            | ND           |       |
| 192 4-Chlorobenzoic Acid       | 139 |           | 0.000         |               |    |          |            | ND           |       |
| 190 Octachlorostyrene          | 308 |           | 0.000         |               |    |          |            | ND           |       |
| 182 Aramite Peak 2             | 185 |           | 0.000         |               |    |          |            | ND           |       |
| 177 1-Phenyl-1-(4-methylphenyl | 1   |           | 0.000         |               |    |          |            | ND           |       |
| 184 3-Chlorobenzoic Acid       | 139 |           | 0.000         |               |    |          |            | ND           |       |
| 179 4-Nitrobiphenyl            | 199 |           | 0.000         |               |    |          |            | ND           |       |
| 191 2,3-Dichlorophenol         | 162 |           | 0.000         |               |    |          |            | ND           |       |
| 169 Diallate Peak 1            | 86  |           | 0.000         |               |    |          |            | ND           |       |
| 193 1,2,3,4-Tetrahydronaphthal | 104 |           | 0.000         |               |    |          |            | ND           |       |
| 166 2,5-Dichlorophenol         | 162 |           | 0.000         |               |    |          |            | ND           |       |
| 168 4-Methyl-1-cyclohexanemeth | 97  |           | 0.000         |               |    |          |            | ND           |       |
| 180 Aramite Peak 1             | 185 |           | 0.000         |               |    |          |            | ND           |       |
| 183 Octachlorocyclopentene     | 307 |           | 0.000         |               |    |          |            | ND           |       |
| 173 3-Methylphenol             | 1   |           | 0.000         |               |    |          |            | ND           |       |
| 172 4-Chlorophenol             | 128 |           | 0.000         |               |    |          |            | ND           |       |
| 170 2-Chlorobenzoic Acid       | 139 |           | 0.000         |               |    |          |            | ND           |       |

| Compound                         | Sig | RT<br>(min.) | Adj RT<br>(min.) | Dlt RT<br>(min.) | Q | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|----------------------------------|-----|--------------|------------------|------------------|---|----------|---------------|-----------------|-------|
| 185 4-Methyl-1-cyclohexanemeth   | 97  |              | 0.000            |                  |   |          |               | ND              |       |
| 186 n,n'-Dimethylaniline         | 120 |              | 0.000            |                  |   |          |               | ND              |       |
| 189 Benzotrichloride             | 159 |              | 0.000            |                  |   |          |               | ND              |       |
| 196 Trifluralin                  | 306 |              | 0.000            |                  |   |          |               | ND              |       |
| 181 Isosafrole                   | 162 |              | 0.000            |                  |   |          |               | ND              |       |
| 188 Carbaryl                     | 144 |              | 0.000            |                  |   |          |               | ND              |       |
| 198 Pentachlorophenol_T          | 266 |              | 5.449            |                  |   |          |               | ND              |       |
| 200 Benzidine_T                  | 184 |              | 8.082            |                  |   |          |               | ND              |       |
| 201 4,4'-DDE                     | 246 |              | 8.435            |                  |   |          |               | ND              |       |
| 202 4,4'-DDD                     | 235 |              | 9.028            |                  |   |          |               | ND              |       |
| 203 4,4'-DDT                     | 235 |              | 9.647            |                  |   |          |               | ND              |       |
| S 204 Aramite, Total             | 185 |              | 1.000            |                  |   |          |               | ND              |       |
| S 205 Diallate                   | 86  |              | 0.000            |                  |   |          |               | ND              |       |
| S 206 Total Cresols              | 108 |              | 0.000            |                  |   |          |               | ND              |       |
| S 207 4-Methyl-1-cyclohexanemeth | 97  |              | 0.000            |                  |   |          |               | ND              |       |
| S 208 Methyl Phenols, Total      | 108 |              | 0.000            |                  |   |          |               | ND              |       |
| T 195 1-Phenyl-1-(2,4-dimethylph | 195 |              | 9.600            |                  |   |          |               | ND              |       |
| T 197 1-Phenyl-1-(4-methylphenyl | 181 |              | 9.700            |                  |   |          |               | ND              |       |
| T 221 Phenyl ether TIC           | 170 | 12.381       | 11.472           | 0.881            | 0 | 23654    |               | 0.3739          |       |
| T 209 Quinoline TIC              | 129 |              | 0.000            |                  |   |          |               | ND              |       |

**QC Flag Legend**

Processing Flags

NC - Not Calibrated

**Reagents:**

SVTAPITINTRNi\_00009

Amount Added: 1.00

Units: uL

Run Reagent

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20151009-8910.b\V1009004.D

Injection Date: 09-Oct-2015 09:46:30

Instrument ID: CH731

Operator ID: 003200

Lims ID: MB 180-156027/1-A

Worklist Smp#: 4

Client ID:

Injection Vol: 2.0 ul

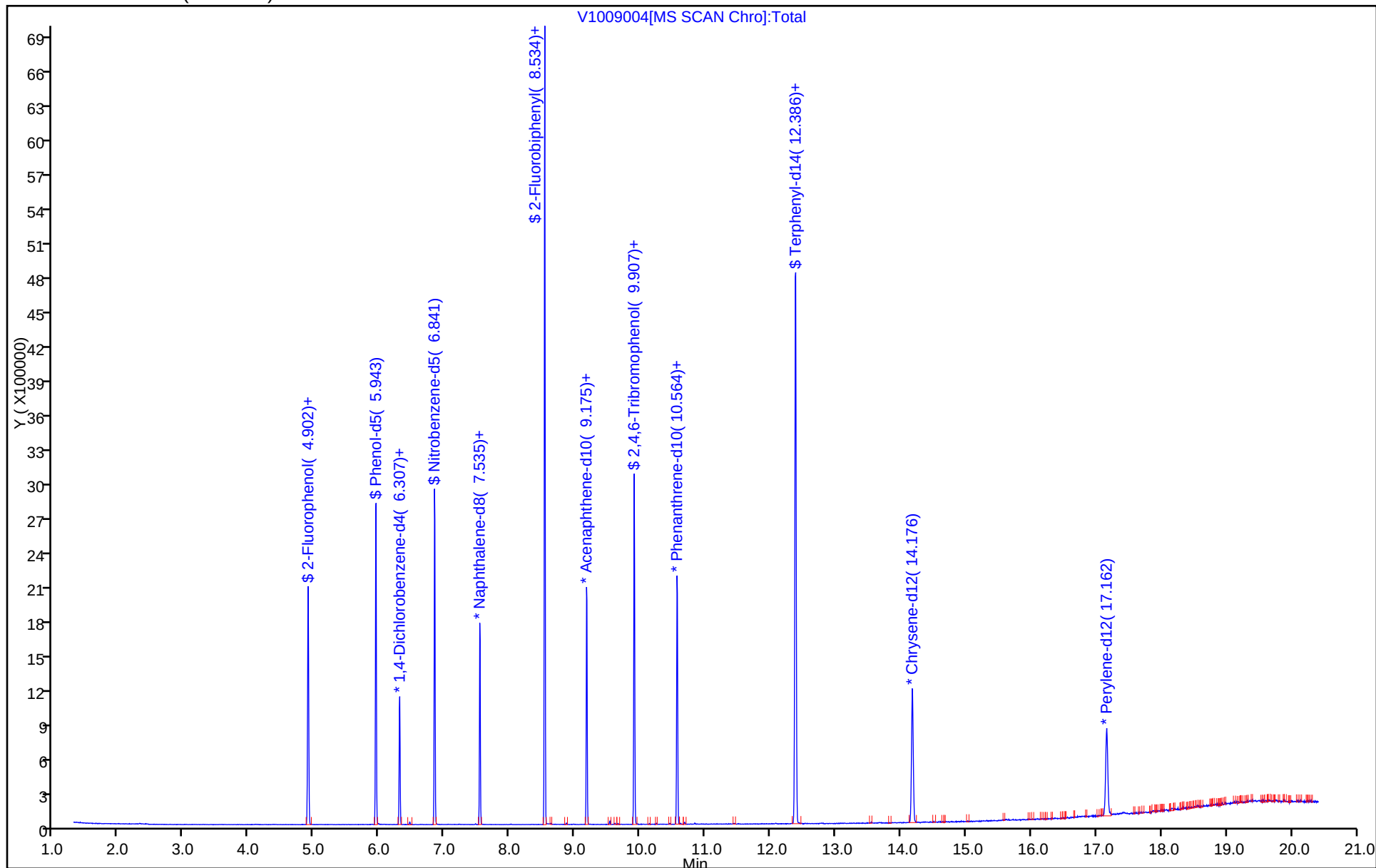
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: BNA\_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS ( 0.32 mm)



FORM I  
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1  
 SDG No.: \_\_\_\_\_  
 Client Sample ID: \_\_\_\_\_ Lab Sample ID: LCS 180-156027/2-A  
 Matrix: Water Lab File ID: V1009006.D  
 Analysis Method: 8270D LL Date Collected: \_\_\_\_\_  
 Extract. Method: 3520C Date Extracted: 10/06/2015 10:44  
 Sample wt/vol: 250 (mL) Date Analyzed: 10/09/2015 10:42  
 Con. Extract Vol.: 0.25 (mL) Dilution Factor: 1  
 Injection Volume: 2 (uL) Level: (low/med) Low  
 % Moisture: \_\_\_\_\_ GPC Cleanup: (Y/N) N  
 Analysis Batch No.: 156466 Units: ug/L

| CAS NO.  | COMPOUND NAME | RESULT | Q | RL  | MDL   |
|----------|---------------|--------|---|-----|-------|
| 123-91-1 | 1,4-Dioxane   | 14.4   |   | 2.0 | 0.052 |

| CAS NO.   | SURROGATE                   | %REC | Q | LIMITS |
|-----------|-----------------------------|------|---|--------|
| 321-60-8  | 2-Fluorobiphenyl            | 66   |   | 28-109 |
| 367-12-4  | 2-Fluorophenol (Surr)       | 67   |   | 20-105 |
| 118-79-6  | 2,4,6-Tribromophenol (Surr) | 73   |   | 30-118 |
| 4165-60-0 | Nitrobenzene-d5 (Surr)      | 68   |   | 27-114 |
| 4165-62-2 | Phenol-d5 (Surr)            | 67   |   | 25-105 |
| 1718-51-0 | Terphenyl-d14 (Surr)        | 78   |   | 20-118 |

TestAmerica Pittsburgh  
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20151009-8910.b\V1009006.D

Lims ID: LCS 180-156027/2-A

Client ID:

Sample Type: LCS

Inject. Date: 09-Oct-2015 10:42:30

ALS Bottle#:

5

Worklist Smp#:

6

Injection Vol: 2.0 ul

Dil. Factor:

1.0000

Sample Info: 180-0008910-006

Operator ID: 003200

Instrument ID:

CH731

Method: \\ChromNA\Pittsburgh\ChromData\CH731\20151009-8910.b\BNA\_CH731.m

Limit Group: BNA 8270D ICAL

Last Update: 11-Oct-2015 08:06:48

Calib Date:

01-Sep-2015 07:35:30

Integrator: RTE

ID Type:

Deconvolution ID

Quant Method: Internal Standard

Quant By:

Initial Calibration

Last ICal File: \\ChromNA\Pittsburgh\ChromData\CH731\20150901-8368.b\V0901N11.D

Column 1 : Rxi-5SilMS ( 0.32 mm)

Det: MS SCAN

Process Host: XAWRK031

First Level Reviewer: piccolinov

Date:

09-Oct-2015 13:52:11

| Compound                      | Sig | RT<br>(min.) | Adj RT<br>(min.) | Dlt RT<br>(min.) | Q   | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|-------------------------------|-----|--------------|------------------|------------------|-----|----------|---------------|-----------------|-------|
| * 1 1,4-Dichlorobenzene-d4    | 152 | 6.308        | 6.310            | -0.002           | 94  | 171890   | 8.00          | 8.00            |       |
| * 2 Naphthalene-d8            | 136 | 7.536        | 7.539            | -0.003           | 100 | 731792   | 8.00          | 8.00            |       |
| * 3 Acenaphthene-d10          | 164 | 9.176        | 9.179            | -0.003           | 91  | 500334   | 8.00          | 8.00            |       |
| * 4 Phenanthrene-d10          | 188 | 10.565       | 10.573           | -0.008           | 96  | 961061   | 8.00          | 8.00            |       |
| * 5 Chrysene-d12              | 240 | 14.177       | 14.184           | -0.007           | 97  | 853355   | 8.00          | 8.00            |       |
| * 6 Perylene-d12              | 264 | 17.152       | 17.171           | -0.019           | 98  | 704595   | 8.00          | 8.00            |       |
| \$ 7 2-Fluorophenol           | 112 | 4.903        | 4.900            | 0.003            | 93  | 682841   | 40.0          | 27.0            |       |
| \$ 8 Phenol-d5                | 99  | 5.944        | 5.941            | 0.003            | 94  | 891322   | 40.0          | 27.0            |       |
| \$ 9 Nitrobenzene-d5          | 82  | 6.842        | 6.844            | -0.002           | 91  | 968895   | 40.0          | 27.2            |       |
| \$ 10 2-Fluorobiphenyl        | 172 | 8.530        | 8.538            | -0.008           | 99  | 2307606  | 40.0          | 26.4            |       |
| \$ 11 2,4,6-Tribromophenol    | 330 | 9.908        | 9.911            | -0.003           | 93  | 388271   | 40.0          | 29.2            |       |
| \$ 12 Terphenyl-d14           | 244 | 12.376       | 12.389           | -0.013           | 99  | 2535568  | 40.0          | 31.3            |       |
| 13 1,4-Dioxane                | 88  | 1.516        | 1.502            | 0.014            | 91  | 251359   | 40.0          | 28.8            |       |
| 14 N-Nitrosodimethylamine     | 74  | 2.178        | 2.159            | 0.019            | 86  | 332168   | 40.0          | 30.0            |       |
| 15 Pyridine                   | 79  | 2.242        | 2.234            | 0.008            | 95  | 656723   | 40.0          | 31.7            |       |
| 26 Benzaldehyde               | 77  | 5.848        | 5.851            | -0.003           | 94  | 636513   | 40.0          | 37.1            |       |
| 27 Phenol                     | 94  | 5.955        | 5.957            | -0.002           | 98  | 978850   | 40.0          | 27.1            |       |
| 28 Aniline                    | 93  | 5.966        | 5.968            | -0.002           | 97  | 1067810  | 40.0          | 26.2            |       |
| 29 Bis(2-chloroethyl)ether    | 93  | 6.035        | 6.038            | -0.003           | 97  | 692729   | 40.0          | 27.8            |       |
| 31 2-Chlorophenol             | 128 | 6.094        | 6.096            | -0.002           | 96  | 819786   | 40.0          | 26.8            |       |
| 32 n-Decane                   | 43  | 6.158        | 6.160            | -0.002           | 88  | 741982   | 40.0          | 25.4            |       |
| 33 1,3-Dichlorobenzene        | 146 | 6.249        | 6.251            | -0.002           | 97  | 915470   | 40.0          | 26.1            |       |
| 34 1,4-Dichlorobenzene        | 146 | 6.324        | 6.326            | -0.002           | 92  | 938250   | 40.0          | 26.1            |       |
| 36 Benzyl alcohol             | 108 | 6.436        | 6.438            | -0.002           | 89  | 509177   | 40.0          | 27.8            |       |
| 37 1,2-Dichlorobenzene        | 146 | 6.473        | 6.476            | -0.003           | 95  | 893984   | 40.0          | 26.0            |       |
| 38 2-Methylphenol             | 108 | 6.553        | 6.556            | -0.003           | 96  | 760724   | 40.0          | 28.6            |       |
| 39 Indene                     | 116 | 6.564        | 6.567            | -0.002           | 91  | 1359622  | 40.0          | 26.4            |       |
| 40 2,2'-oxybis[1-chloropropan | 45  | 6.575        | 6.577            | -0.002           | 89  | 973624   | 40.0          | 26.6            |       |
| 43 Acetophenone               | 105 | 6.692        | 6.695            | -0.003           | 78  | 1068360  | 40.0          | 26.5            |       |
| 44 N-Nitrosodi-n-propylamine  | 70  | 6.692        | 6.695            | -0.003           | 72  | 559832   | 40.0          | 28.7            |       |
| 45 4-Methylphenol             | 108 | 6.698        | 6.700            | -0.002           | 71  | 796821   | 40.0          | 28.4            |       |
| 47 Hexachloroethane           | 117 | 6.810        | 6.818            | -0.008           | 90  | 414291   | 40.0          | 26.4            |       |

| Compound                       | Sig | RT (min.) | Adj RT (min.) | Dlt RT (min.) | Q   | Response | Cal Amt ng | OnCol Amt ng | Flags |
|--------------------------------|-----|-----------|---------------|---------------|-----|----------|------------|--------------|-------|
| 48 Nitrobenzene                | 77  | 6.858     | 6.866         | -0.008        | 91  | 922019   | 40.0       | 26.5         |       |
| 50 Isophorone                  | 82  | 7.088     | 7.090         | -0.002        | 98  | 1584051  | 40.0       | 27.7         |       |
| 51 2-Nitrophenol               | 139 | 7.168     | 7.170         | -0.002        | 98  | 492602   | 40.0       | 28.1         |       |
| 52 2,4-Dimethylphenol          | 107 | 7.200     | 7.202         | -0.002        | 98  | 954692   | 40.0       | 28.1         |       |
| 56 Benzoic acid                | 122 | 7.274     | 7.256         | 0.018         | 90  | 516910   | 40.0       | 32.5         |       |
| 55 Bis(2-chloroethoxy)methane  | 93  | 7.285     | 7.288         | -0.003        | 97  | 924824   | 40.0       | 26.9         |       |
| 57 2,4-Dichlorophenol          | 162 | 7.397     | 7.400         | -0.003        | 95  | 816139   | 40.0       | 28.0         |       |
| 59 1,2,4-Trichlorobenzene      | 180 | 7.483     | 7.485         | -0.002        | 94  | 943378   | 40.0       | 26.9         |       |
| 60 Naphthalene                 | 128 | 7.558     | 7.560         | -0.002        | 97  | 2640707  | 40.0       | 26.5         |       |
| 62 4-Chloroaniline             | 127 | 7.595     | 7.598         | -0.003        | 95  | 1131034  | 40.0       | 27.5         |       |
| 63 2,6-Dichlorophenol          | 162 | 7.606     | 7.614         | -0.008        | 96  | 814943   | 40.0       | 27.9         |       |
| 64 Hexachlorobutadiene         | 225 | 7.675     | 7.683         | -0.008        | 97  | 601672   | 40.0       | 26.8         |       |
| 67 Caprolactam                 | 113 | 7.894     | 7.886         | 0.008         | 76  | 235906   | 40.0       | 26.9         |       |
| 70 4-Chloro-3-methylphenol     | 107 | 8.033     | 8.036         | -0.003        | 97  | 830368   | 40.0       | 28.7         |       |
| 72 2-Methylnaphthalene         | 142 | 8.199     | 8.207         | -0.008        | 92  | 1944344  | 40.0       | 27.4         |       |
| 75 1-Methylnaphthalene         | 142 | 8.295     | 8.303         | -0.008        | 92  | 1730133  | 40.0       | 27.8         |       |
| 76 Hexachlorocyclopentadiene   | 237 | 8.354     | 8.361         | -0.007        | 97  | 761488   | 40.0       | 28.3         |       |
| 77 1,2,4,5-Tetrachlorobenzene  | 216 | 8.359     | 8.367         | -0.008        | 98  | 1035986  | 40.0       | 26.1         |       |
| 78 2,4,6-Trichlorophenol       | 196 | 8.455     | 8.463         | -0.008        | 93  | 707450   | 40.0       | 28.6         |       |
| 79 2,4,5-Trichlorophenol       | 196 | 8.493     | 8.495         | -0.003        | 93  | 737247   | 40.0       | 28.4         |       |
| 80 1,1'-Biphenyl               | 154 | 8.626     | 8.634         | -0.008        | 94  | 2523742  | 40.0       | 26.1         |       |
| 81 2-Chloronaphthalene         | 162 | 8.658     | 8.661         | -0.003        | 96  | 1992336  | 40.0       | 26.3         |       |
| 82 2-Nitroaniline              | 65  | 8.733     | 8.741         | -0.008        | 82  | 582822   | 40.0       | 27.2         |       |
| 86 Dimethyl phthalate          | 163 | 8.888     | 8.890         | -0.002        | 98  | 2245357  | 40.0       | 27.8         |       |
| 87 1,3-Dinitrobenzene          | 168 | 8.920     | 8.922         | -0.002        | 86  | 366417   | 40.0       | 28.5         |       |
| 88 2,6-Dinitrotoluene          | 165 | 8.947     | 8.954         | -0.007        | 94  | 520459   | 40.0       | 28.3         |       |
| 89 Acenaphthylene              | 152 | 9.043     | 9.051         | -0.008        | 98  | 3059605  | 40.0       | 26.3         |       |
| 90 3-Nitroaniline              | 138 | 9.112     | 9.115         | -0.003        | 93  | 543856   | 40.0       | 27.6         |       |
| 92 2,4-Dinitrophenol           | 184 | 9.203     | 9.211         | -0.008        | 84  | 725073   | 80.0       | 57.9         |       |
| 91 Acenaphthene                | 153 | 9.208     | 9.211         | -0.003        | 90  | 1962125  | 40.0       | 26.6         |       |
| 93 4-Nitrophenol               | 109 | 9.240     | 9.248         | -0.008        | 83  | 761920   | 80.0       | 57.9         |       |
| 94 2,4-Dinitrotoluene          | 165 | 9.326     | 9.328         | -0.002        | 93  | 719576   | 40.0       | 29.2         |       |
| 95 Dibenzofuran                | 168 | 9.363     | 9.371         | -0.008        | 96  | 2943258  | 40.0       | 26.8         |       |
| 99 2,3,4,6-Tetrachlorophenol   | 232 | 9.470     | 9.478         | -0.008        | 73  | 680129   | 40.0       | 28.0         |       |
| 101 Diethyl phthalate          | 149 | 9.534     | 9.537         | -0.003        | 98  | 2317082  | 40.0       | 27.4         |       |
| 102 Hexadecane                 | 57  | 9.534     | 9.542         | -0.008        | 96  | 1326292  | 40.0       | 27.6         |       |
| 104 4-Chlorophenyl phenyl ethe | 204 | 9.662     | 9.670         | -0.008        | 92  | 1291314  | 40.0       | 28.4         |       |
| 105 4-Nitroaniline             | 138 | 9.678     | 9.681         | -0.003        | 81  | 539987   | 40.0       | 26.0         |       |
| 106 Fluorene                   | 166 | 9.684     | 9.692         | -0.008        | 95  | 2436801  | 40.0       | 27.1         |       |
| 108 4,6-Dinitro-2-methylphenol | 198 | 9.705     | 9.713         | -0.008        | 89  | 981720   | 80.0       | 59.9         |       |
| 109 N-Nitrosodiphenylamine     | 169 | 9.769     | 9.777         | -0.008        | 61  | 3616168  | 80.0       | 54.2         |       |
| 61 Azobenzene                  | 77  | 9.812     | 9.815         | -0.003        | 98  | 2357332  | 40.0       | 26.1         |       |
| 111 1,2-Diphenylhydrazine      | 77  | 9.812     | 9.815         | -0.003        | 98  | 2357332  | 40.0       | 26.1         |       |
| 116 4-Bromophenyl phenyl ether | 248 | 10.117    | 10.124        | -0.008        | 65  | 779169   | 40.0       | 28.8         |       |
| 118 Hexachlorobenzene          | 284 | 10.207    | 10.215        | -0.008        | 95  | 822649   | 40.0       | 28.0         |       |
| 119 Atrazine                   | 200 | 10.234    | 10.242        | -0.008        | 94  | 566858   | 40.0       | 21.6         |       |
| 122 Pentachlorophenol          | 266 | 10.373    | 10.381        | -0.008        | 92  | 1089898  | 80.0       | 54.1         |       |
| 121 n-Octadecane               | 57  | 10.378    | 10.386        | -0.008        | 96  | 1400655  | 40.0       | 28.3         |       |
| 126 Phenanthrene               | 178 | 10.587    | 10.594        | -0.007        | 97  | 3838319  | 40.0       | 26.2         |       |
| 128 Anthracene                 | 178 | 10.640    | 10.643        | -0.003        | 96  | 3786001  | 40.0       | 25.9         |       |
| 130 Carbazole                  | 167 | 10.779    | 10.787        | -0.008        | 96  | 3269179  | 40.0       | 25.4         |       |
| 132 Di-n-butyl phthalate       | 149 | 11.078    | 11.086        | -0.008        | 100 | 3911997  | 40.0       | 26.5         |       |

| Compound                       | Sig | RT<br>(min.) | Adj RT<br>(min.) | Dlt RT<br>(min.) | Q  | Response | Cal Amt<br>ng | OnCol Amt<br>ng | Flags |
|--------------------------------|-----|--------------|------------------|------------------|----|----------|---------------|-----------------|-------|
| 137 Fluoranthene               | 202 | 11.911       | 11.919           | -0.008           | 96 | 3976695  | 40.0          | 25.5            |       |
| 138 Benzidine                  | 184 | 12.034       | 12.048           | -0.014           | 99 | 1103888  | 40.0          | 20.5            |       |
| 139 Pyrene                     | 202 | 12.216       | 12.229           | -0.013           | 99 | 3996326  | 40.0          | 30.4            |       |
| 144 Butyl benzyl phthalate     | 149 | 13.092       | 13.100           | -0.008           | 98 | 1538525  | 40.0          | 29.1            |       |
| 149 3,3'-Dichlorobenzidine     | 252 | 14.075       | 14.083           | -0.008           | 74 | 1145360  | 40.0          | 24.6            |       |
| 151 Bis(2-ethylhexyl) phthalat | 149 | 14.123       | 14.131           | -0.008           | 95 | 2120752  | 40.0          | 29.0            |       |
| 152 Benzo[a]anthracene         | 228 | 14.155       | 14.168           | -0.013           | 97 | 3409327  | 40.0          | 27.4            |       |
| 153 Chrysene                   | 228 | 14.225       | 14.238           | -0.013           | 96 | 3264605  | 40.0          | 28.0            |       |
| 156 Di-n-octyl phthalate       | 149 | 15.453       | 15.466           | -0.013           | 99 | 3348593  | 40.0          | 29.4            |       |
| 158 Benzo[b]fluoranthene       | 252 | 16.340       | 16.353           | -0.013           | 96 | 2945621  | 40.0          | 27.0            |       |
| 159 Benzo[k]fluoranthene       | 252 | 16.399       | 16.412           | -0.013           | 98 | 3107265  | 40.0          | 28.5            |       |
| 160 Benzo[a]pyrene             | 252 | 17.035       | 17.053           | -0.018           | 76 | 2849430  | 40.0          | 27.4            |       |
| 163 Indeno[1,2,3-cd]pyrene     | 276 | 19.428       | 19.452           | -0.024           | 99 | 2969577  | 40.0          | 25.0            |       |
| 164 Dibenz(a,h)anthracene      | 278 | 19.460       | 19.489           | -0.029           | 87 | 2562696  | 40.0          | 25.5            |       |
| 165 Benzo[g,h,i]perylene       | 276 | 20.053       | 20.071           | -0.018           | 99 | 2518979  | 40.0          | 24.4            |       |
| S 206 Total Cresols            | 108 |              |                  |                  | 0  |          | 80.0          | 57.1            |       |
| S 208 Methyl Phenols, Total    | 108 |              |                  |                  | 0  |          | 80.0          | 57.1            |       |

**Reagents:**

SVTAPITINTRNi\_00009

Amount Added: 1.00

Units: uL

Run Reagent

## TestAmerica Pittsburgh

Data File: \\ChromNA\Pittsburgh\ChromData\CH731\20151009-8910.b\1009006.D

Injection Date: 09-Oct-2015 10:42:30

Instrument ID: CH731

Operator ID: 003200

Lims ID: LCS 180-156027/2-A

Worklist Smp#: 6

Client ID:

Injection Vol: 2.0 ul

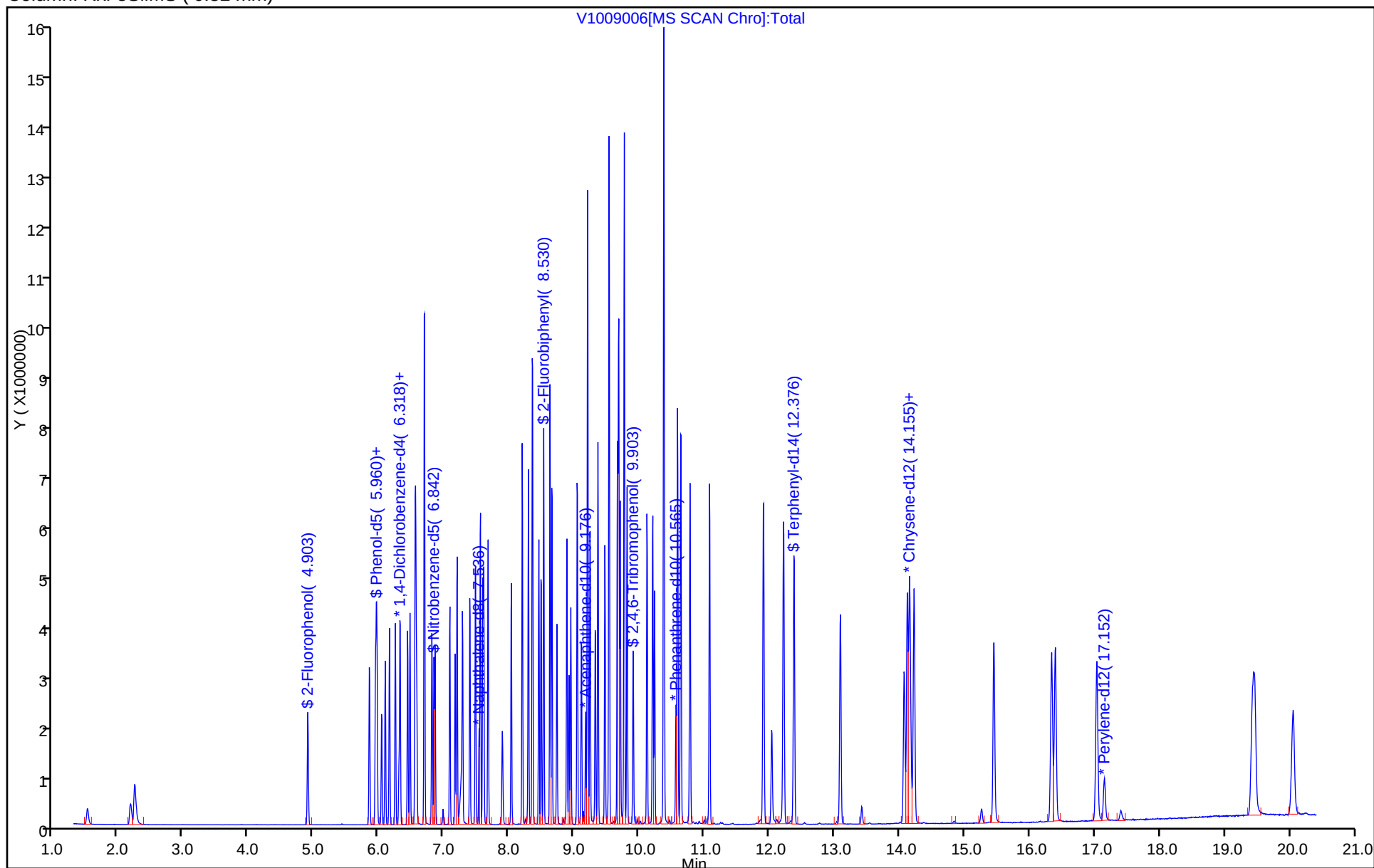
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: BNA\_CH731

Limit Group: BNA 8270D ICAL

Column: Rxi-5SilMS (0.32 mm)





## GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

Instrument ID: CH731 Start Date: 08/31/2015 13:24Analysis Batch Number: 152241 End Date: 08/31/2015 18:45

| LAB SAMPLE ID      | CLIENT SAMPLE ID | DATE ANALYZED    | DILUTION<br>FACTOR | LAB FILE ID | COLUMN ID            |
|--------------------|------------------|------------------|--------------------|-------------|----------------------|
| DFTPP 180-152241/2 |                  | 08/31/2015 13:24 | 1                  | V0901002.D  | Rxi-5SilMS 0.32 (mm) |
| IC 180-152241/3    |                  | 08/31/2015 13:40 | 1                  | V0901003.D  | Rxi-5SilMS 0.32 (mm) |
| IC 180-152241/4    |                  | 08/31/2015 14:08 | 1                  | V0901004.D  | Rxi-5SilMS 0.32 (mm) |
| IC 180-152241/5    |                  | 08/31/2015 14:36 | 1                  | V0901005.D  | Rxi-5SilMS 0.32 (mm) |
| ICIS 180-152241/6  |                  | 08/31/2015 15:03 | 1                  | V0901006.D  | Rxi-5SilMS 0.32 (mm) |
| IC 180-152241/7    |                  | 08/31/2015 15:31 | 1                  | V0901007.D  | Rxi-5SilMS 0.32 (mm) |
| IC 180-152241/8    |                  | 08/31/2015 15:59 | 1                  | V0901008.D  | Rxi-5SilMS 0.32 (mm) |
| IC 180-152241/9    |                  | 08/31/2015 16:27 | 1                  | V0901009.D  | Rxi-5SilMS 0.32 (mm) |
| IC 180-152241/10   |                  | 08/31/2015 16:55 | 1                  | V0901010.D  | Rxi-5SilMS 0.32 (mm) |
| ICV 180-152241/11  |                  | 08/31/2015 17:22 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ICV 180-152241/12  |                  | 08/31/2015 17:50 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ICV 180-152241/13  |                  | 08/31/2015 18:17 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ICV 180-152241/14  |                  | 08/31/2015 18:45 | 1                  |             | Rxi-5SilMS 0.32 (mm) |

## GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica PittsburghJob No.: 180-48309-1

SDG No.: \_\_\_\_\_

Instrument ID: CH731Start Date: 10/09/2015 09:01Analysis Batch Number: 156466End Date: 10/09/2015 19:36

| LAB SAMPLE ID      | CLIENT SAMPLE ID | DATE ANALYZED    | DILUTION<br>FACTOR | LAB FILE ID | COLUMN ID            |
|--------------------|------------------|------------------|--------------------|-------------|----------------------|
| DFTPP 180-156466/2 |                  | 10/09/2015 09:01 | 1                  | V1009002.D  | Rxi-5SilMS 0.32 (mm) |
| CCVIS 180-156466/3 |                  | 10/09/2015 09:18 | 1                  | V1009003.D  | Rxi-5SilMS 0.32 (mm) |
| MB 180-156027/1-A  |                  | 10/09/2015 09:46 | 1                  | V1009004.D  | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/09/2015 10:14 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| LCS 180-156027/2-A |                  | 10/09/2015 10:42 | 1                  | V1009006.D  | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/09/2015 11:10 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/09/2015 11:38 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/09/2015 12:06 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/09/2015 12:34 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/09/2015 13:02 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/09/2015 13:30 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/09/2015 13:58 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/09/2015 14:25 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/09/2015 14:54 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/09/2015 15:22 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/09/2015 15:50 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/09/2015 16:18 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/09/2015 16:47 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/09/2015 17:15 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/09/2015 17:43 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/09/2015 18:11 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/09/2015 18:39 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/09/2015 19:08 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/09/2015 19:36 | 1                  |             | Rxi-5SilMS 0.32 (mm) |

## GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica PittsburghJob No.: 180-48309-1

SDG No.: \_\_\_\_\_

Instrument ID: CH731Start Date: 10/11/2015 09:16Analysis Batch Number: 156605End Date: 10/11/2015 19:44

| LAB SAMPLE ID      | CLIENT SAMPLE ID | DATE ANALYZED    | DILUTION<br>FACTOR | LAB FILE ID | COLUMN ID            |
|--------------------|------------------|------------------|--------------------|-------------|----------------------|
| DFTPP 180-156605/2 |                  | 10/11/2015 09:16 | 1                  | V1011002.D  | Rxi-5SilMS 0.32 (mm) |
| CCVIS 180-156605/3 |                  | 10/11/2015 09:33 | 1                  | V1011003.D  | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/11/2015 10:02 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/11/2015 10:30 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/11/2015 10:55 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/11/2015 11:21 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/11/2015 11:49 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/11/2015 12:14 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/11/2015 13:05 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/11/2015 13:30 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/11/2015 13:59 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/11/2015 14:28 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/11/2015 14:57 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/11/2015 15:26 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/11/2015 15:54 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/11/2015 16:23 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/11/2015 16:52 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/11/2015 17:21 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/11/2015 17:49 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/11/2015 18:18 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/11/2015 18:47 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| ZZZZZ              |                  | 10/11/2015 19:16 | 1                  |             | Rxi-5SilMS 0.32 (mm) |
| 180-48309-1        | HD-MW-87-0/1-0   | 10/11/2015 19:44 | 1                  | V1011025.D  | Rxi-5SilMS 0.32 (mm) |

## GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Pittsburgh Job No.: 180-48309-1

SDG No.: \_\_\_\_\_

Batch Number: 156027 Batch Start Date: 10/06/15 13:50 Batch Analyst: Trout, BillBatch Method: 3520C Batch End Date: 10/07/15 08:50

| Lab Sample ID       | Client Sample ID | Method Chain       | Basis | Initial pH | InitialAmount | FinalAmount | FirstAdjustpH | OPLVISPKMIX1i<br>00044 | OPQL8270SURI<br>00034 |
|---------------------|------------------|--------------------|-------|------------|---------------|-------------|---------------|------------------------|-----------------------|
| MB 180-156027/1     |                  | 3520C, 8270D<br>LL |       | 5 SU       | 250 mL        | 0.25 mL     | 2             |                        | 25 uL                 |
| LCS<br>180-156027/2 |                  | 3520C, 8270D<br>LL |       | 5 SU       | 250 mL        | 0.25 mL     | 2             | 25 uL                  | 25 uL                 |
| 180-48309-A-1       | HD-MW-87-0/1-0   | 3520C, 8270D<br>LL | T     | 7 SU       | 270 mL        | 0.25 mL     | 2             |                        | 25 uL                 |

| Batch Notes                             |                    |
|-----------------------------------------|--------------------|
| Acid used for pH adjustment             | 1:1 Sulfuric acid  |
| Acid used for pH adjust Lot #           | 1654713            |
| Person's name who did the concentration | cdm                |
| Time the first extraction ended 24hr    | 0805               |
| Time the first extraction started 24 hr | 1350               |
| N-evap #                                | 1                  |
| Na2SO4 Lot Number                       | 1648567            |
| pH Paper Lot Number                     | Ph paper HC554612  |
| Prep Solvent Lot #                      | 1728829            |
| Prep Solvent Name                       | Methylene chloride |
| Prep Solvent Volume Used                | 100 mL             |
| Person's name who did the prep          | BT                 |
| Sufficient volume for MS/MSD?           | Yes                |
| Uncorrected N-evap Temperature          | 26 Degrees C       |
| Uncorrected Temperature                 | 75 Degrees C       |

| Basis | Basis Description |
|-------|-------------------|
| T     | Total/NA          |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# Shipping and Receiving Documents

TestAmerica Pittsburgh  
301 Alpha Drive

Pittsburgh, PA 15238  
phone 412.963.7058 fax 412.963.2470

Client Contact  
Groundwater Sciences Corporation  
2601 Market Place St Suite 310  
Harrisburg, PA 17110

Phone  
(717) 901-8180  
FAX  
(717) 657-1611

Project Name: 2015 Comprehensive Event  
Site: Harley-Davidson, York PA  
Quote # 18000557

## Chain of Custody Record

Project Manager: Jennifer S. Reese  
Tel/Fax: 717-901-8181 / (717) 657-1611

Analysis Turnaround Time

Calendar (C) or Work Days (W)

TAT if different from Below: Standard

☒ 2 weeks

☐ 1 week

☐ 5 days

☐ 1 day

Site Contact: Jennifer S. Reese  
Lab Contact: Carrie Gamber

Date Submitted: 9/30/2015

Carrier: FEDEX

Job No. 1801227

Container No. 1

SDG No.

TestAmerica Laboratories, Inc.

COC No. TAP-2015093001

of 1 CGCs

180-48309 Chain of Custody

Total CR 6+ (SW846 7196A)

Dissolved Cr 6+ (SW846 7196A)

1,4-Dioxane (SW846 8270D LL)

VOCs (8260C)

### Sample Identification

HD-MW-87-0/1-0

HD-MW-143S-0/1-0

HD-MW-143D-0/1-0

HD-MW-20M-0/1-0

HD-MW-92-0/1-0

HD-MW-64D-0/1-0

HD-QC12-0/1-2

Sample Date

Sample Time

Sample Type

Matrix

# of Cont.

9/30/15

10:37

Groundwater

Water

5

9/30/15

14:02

Groundwater

Water

3

9/30/15

12:42

Groundwater

Water

3

9/30/15

8:45

Groundwater

Water

3

9/30/15

8:25

Groundwater

Water

3

9/30/15

12:40

Groundwater

Water

3

9/30/15

12:00

Trip Blank

Water

2

9/30/15

10:37

Groundwater

Water

5

9/30/15

14:02

Groundwater

Water

3

9/30/15

12:42

Groundwater

Water

3

9/30/15

8:45

Groundwater

Water

3

9/30/15

8:25

Groundwater

Water

3

9/30/15

12:40

Groundwater

Water

3

9/30/15

12:00

Trip Blank

Water

2

9/30/15

10:37

Groundwater

Water

5

9/30/15

14:02

Groundwater

Water

3

9/30/15

12:42

Groundwater

Water

3

9/30/15

8:45

Groundwater

Water

3

9/30/15

8:25

Groundwater

Water

3

9/30/15

12:40

Groundwater

Water

3

9/30/15

12:00

Trip Blank

Water

2

9/30/15

10:37

Groundwater

Water

5

9/30/15

14:02

Groundwater

Water

3

9/30/15

12:42

Groundwater

Water

3

9/30/15

8:45

Groundwater

Water

3

9/30/15

8:25

Groundwater

Water

3

9/30/15

12:40

Groundwater

Water

3

9/30/15

12:00

Trip Blank

Water

2

9/30/15

10:37

Groundwater

Water

5

9/30/15

14:02

Groundwater

Water

3

9/30/15

12:42

Groundwater

Water

3

9/30/15

8:45

Groundwater

Water

3

9/30/15

8:25

Groundwater

Water

3

9/30/15

12:40

Groundwater

Water

3

9/30/15

12:00

Trip Blank

Water

2

9/30/15

10:37

Groundwater

Water

5

9/30/15

14:02

Groundwater

Water

3

9/30/15

12:42

Groundwater

Water

3

9/30/15

8:45

Groundwater

Water

3

9/30/15

8:25

Groundwater

Water

3

9/30/15

12:40

Groundwater

Water

3

9/30/15

12:00

Trip Blank

Water

2

9/30/15

10:37

Groundwater

Water

5

9/30/15

14:02

Groundwater

Water

3

9/30/15

12:42

Groundwater

Water

3

9/30/15

8:45

Groundwater

Water

3

9/30/15

8:25

Groundwater

Water

3

9/30/15

12:40

Groundwater

Water

3

9/30/15

12:00

Trip Blank

Water

2

9/30/15

10:37

Groundwater

Water

5

9/30/15

14:02

Groundwater

Water

3

9/30/15

12:42

Groundwater

Water

3

9/30/15

8:45

Groundwater

Water

3

9/30/15

8:25

Groundwater

Water

3

9/30/15

12:40

Groundwater

Water

3

9/30/15

12:00

Trip Blank

Water

2

9/30/15

10:37

Groundwater

Water

5

9/30/15

14:02

Groundwater

Water

3

9/30/15



180-48309 Waybill

ORIGIN ID: KPDA (610) 337-9992  
 SAMPLE RECEIPT  
 TEST AMERICA  
 1008 WEST 9TH AVE

KING OF PRUSSIA, PA 19406  
 UNITED STATES US

SHIP DATE: 30SEP  
 ACTWGT: 48.00 LB  
 CAD: 8490299/IN

BILL RECIPIENT

TO **SAMPLE RECEIPT**  
**TEST AMERICA - PITTSBURGH**  
**301 ALPHA DR**

**PITTSBURGH PA 15238**

(2) 961-7058

REF:

DEPT:



TRK# 7746 3545 4481  
 0201

THU - 01  
 STANDARD

**EV AGCA**

Part #: 156297-436 RIT2 07/15



Uncorrected temp 3.1 °C

Thermometer ID 7

CF A Initials DW

PT-WI-SR-001 effective 7/26/13

RT **197**

FZ **199**

5:00

**A**

4481

10:00

## Login Sample Receipt Checklist

Client: Groundwater Sciences Corporation

Job Number: 180-48309-1

**Login Number: 48309**

**List Source: TestAmerica Pittsburgh**

**List Number: 1**

**Creator: Watson, Debbie**

| Question                                                                                 | Answer | Comment |
|------------------------------------------------------------------------------------------|--------|---------|
| Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.      | True   |         |
| The cooler's custody seal, if present, is intact.                                        | True   |         |
| Sample custody seals, if present, are intact.                                            | True   |         |
| The cooler or samples do not appear to have been compromised or tampered with.           | True   |         |
| Samples were received on ice.                                                            | True   |         |
| Cooler Temperature is acceptable.                                                        | True   |         |
| Cooler Temperature is recorded.                                                          | True   |         |
| COC is present.                                                                          | True   |         |
| COC is filled out in ink and legible.                                                    | True   |         |
| COC is filled out with all pertinent information.                                        | True   |         |
| Is the Field Sampler's name present on COC?                                              | True   |         |
| There are no discrepancies between the containers received and the COC.                  | True   |         |
| Samples are received within Holding Time.                                                | True   |         |
| Sample containers have legible labels.                                                   | True   |         |
| Containers are not broken or leaking.                                                    | True   |         |
| Sample collection date/times are provided.                                               | True   |         |
| Appropriate sample containers are used.                                                  | True   |         |
| Sample bottles are completely filled.                                                    | True   |         |
| Sample Preservation Verified.                                                            | True   |         |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs         | True   |         |
| Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4"). | True   |         |
| Multiphasic samples are not present.                                                     | True   |         |
| Samples do not require splitting or compositing.                                         | True   |         |
| Residual Chlorine Checked.                                                               | N/A    |         |