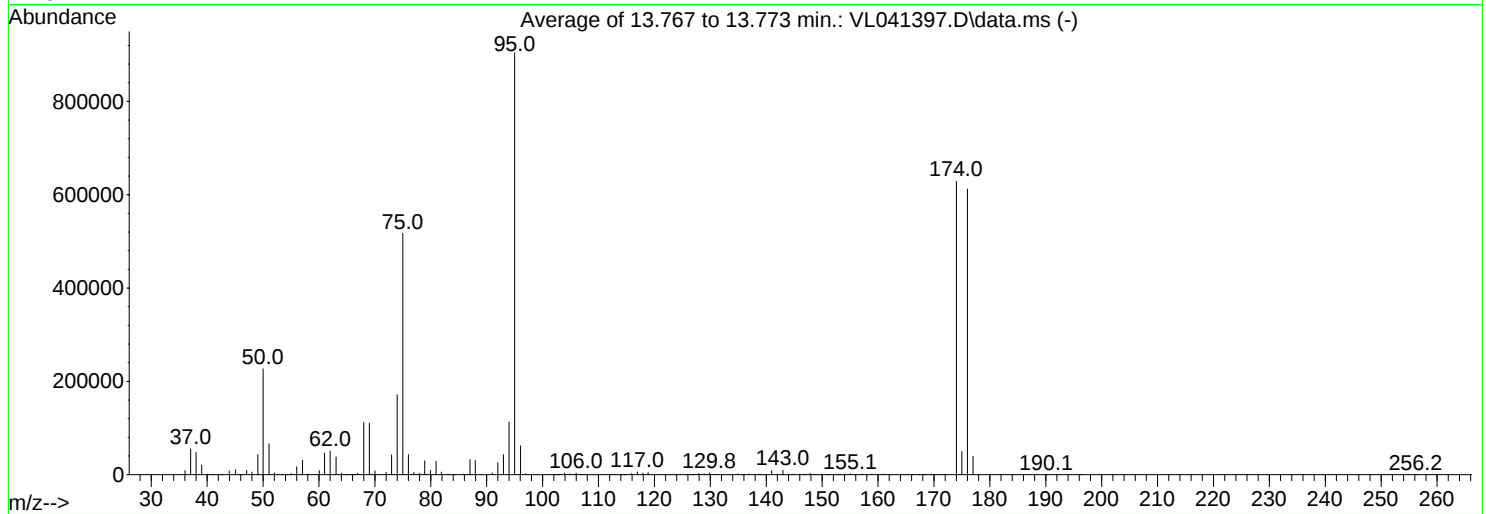
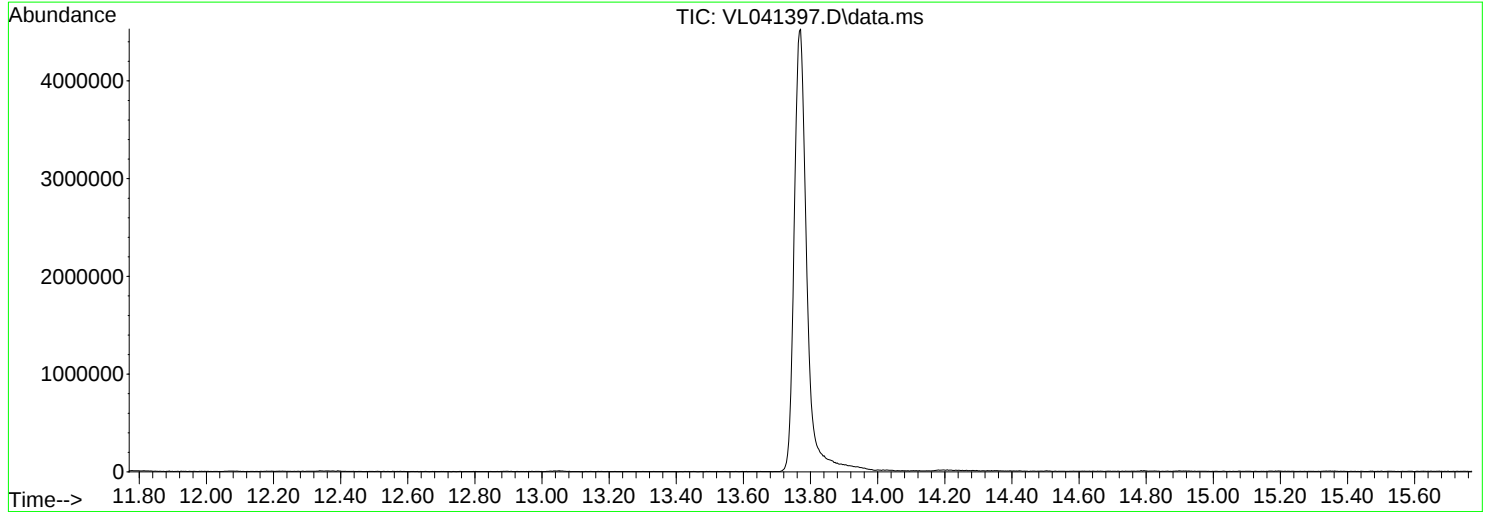


Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
Data File : VL041397.D  
Acq On : 25 Jul 2024 12:29  
Operator : SY/MD  
Sample : BFB  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M  
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
Last Update : Fri Jul 26 07:31:14 2024



AutoFind: Scans 3472, 3473, 3474; Background Corrected with Scan 3447

| Target | Rel. to | Lower  | Upper  | Rel.  | Raw    | Result    |
|--------|---------|--------|--------|-------|--------|-----------|
| Mass   | Mass    | Limit% | Limit% | Abn%  | Abn    | Pass/Fail |
| 50     | 95      | 8      | 40     | 25.1  | 226560 | PASS      |
| 75     | 95      | 30     | 66     | 57.2  | 517099 | PASS      |
| 95     | 95      | 100    | 100    | 100.0 | 904149 | PASS      |
| 96     | 95      | 5      | 9      | 6.8   | 61827  | PASS      |
| 173    | 174     | 0.00   | 2      | 0.0   | 0      | PASS      |
| 174    | 95      | 50     | 120    | 69.5  | 628715 | PASS      |
| 175    | 174     | 4      | 9      | 7.9   | 49563  | PASS      |
| 176    | 174     | 93     | 101    | 97.4  | 612373 | PASS      |
| 177    | 176     | 5      | 9      | 6.5   | 39536  | PASS      |

Method Path : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\

Method File : VL072524AIR.M

Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022

Last Update : Fri Jul 26 07:31:14 2024

Response Via : Initial Calibration

## Calibration Files

0.03=VL041404.D 0.1 =VL041403.D 0.5 =VL041398.D 1 =VL041401.D 2 =VL041400.D 10 =VL041399.D 15 =VL041405.D

| Compound                  | 0.03           | 0.1   | 0.5   | 1     | 2     | 10    | 15    | Avg    | %RSD  |
|---------------------------|----------------|-------|-------|-------|-------|-------|-------|--------|-------|
| -----                     |                |       |       |       |       |       |       |        |       |
| 1) I Bromochloromethane   | -----ISTD----- |       |       |       |       |       |       |        |       |
| 2) T Dichlorodifluo...    |                |       | 1.883 | 2.019 | 2.126 | 1.425 | 1.148 | 1.720  | 24.23 |
| 3) Chlorodifluoro...      |                |       | 1.302 | 1.262 | 1.264 | 1.070 | 1.054 | 1.190  | 9.97  |
| 4) Chloromethane          |                |       | 0.682 | 0.685 | 0.687 | 0.564 | 0.548 | 0.633  | 11.12 |
| 5) T Vinyl Chloride       | 0.719          | 0.563 | 0.628 | 0.663 | 0.653 | 0.570 | 0.571 | 0.624  | 9.45  |
| 6) T Bromomethane         |                |       | 0.331 | 0.344 | 0.333 | 0.295 | 0.301 | 0.321  | 6.69  |
| 7) Chloroethane           |                |       | 0.240 | 0.210 | 0.226 | 0.202 | 0.198 | 0.215  | 8.14  |
| 8) T Dichlorotetra...     |                |       | 1.593 | 1.646 | 1.681 | 1.381 | 1.321 | 1.524  | 10.69 |
| 9) T Propene              |                |       | 0.576 | 0.586 | 0.588 | 0.489 | 0.495 | 0.547  | 9.16  |
| 10) T Heptane             |                |       | 1.139 | 1.240 | 1.371 | 1.200 | 1.194 | 1.229  | 7.09  |
| 11) T Trichlorofluor...   |                |       | 1.621 | 1.638 | 1.636 | 1.383 | 1.362 | 1.528  | 9.32  |
| 12) T 1,1,2-Trichlor...   |                |       | 1.154 | 1.154 | 1.201 | 0.999 | 0.992 | 1.100  | 8.85  |
| 13) Ethanol               |                |       | 0.044 | 0.066 | 0.065 | 0.035 | 0.035 | 0.049# | 31.91 |
| 14) T Bromoethene         |                |       | 0.417 | 0.430 | 0.468 | 0.412 | 0.417 | 0.429  | 5.27  |
| 15) T Acetone             |                |       | 1.292 | 1.192 | 1.231 | 0.996 | 0.969 | 1.136  | 12.76 |
| 16) T 1,3-Butadiene       |                |       | 0.605 | 0.652 | 0.664 | 0.556 | 0.558 | 0.607  | 8.38  |
| 17) tert-Butyl alc...     |                |       | 1.032 | 1.100 | 0.986 | 1.053 | 1.011 | 1.036  | 4.17  |
| 18) T 1,1-Dichloroet...   |                |       | 0.460 | 0.479 | 0.515 | 0.455 | 0.444 | 0.471  | 5.93  |
| 19) T Isopropyl Alcohol   |                |       | 0.711 | 0.674 | 0.661 | 0.646 | 0.630 | 0.664  | 4.64  |
| 20) T Methylene Chlo...   |                |       | 0.502 | 0.430 | 0.444 | 0.371 | 0.372 | 0.424  | 12.91 |
| 21) T Allyl Chloride      |                |       | 0.714 | 0.783 | 0.796 | 0.726 | 0.707 | 0.745  | 5.53  |
| 22) T trans-1,2-Dich...   |                |       | 0.462 | 0.481 | 0.516 | 0.448 | 0.446 | 0.471  | 6.16  |
| 23) T Vinyl Acetate       |                |       | 0.777 | 0.874 | 0.939 | 0.884 | 0.865 | 0.868  | 6.71  |
| 24) T 1,1-Dichloroet...   |                |       | 1.083 | 1.045 | 1.116 | 0.941 | 0.923 | 1.022  | 8.40  |
| 25) T Ethyl Acetate       |                |       | 2.177 | 2.381 | 2.517 | 2.116 | 2.094 | 2.257  | 8.16  |
| 26) T Hexane              |                |       | 0.897 | 0.951 | 1.056 | 0.889 | 0.889 | 0.936  | 7.64  |
| 27) T Carbon Disulfide    |                |       | 1.055 | 1.020 | 1.160 | 1.120 | 1.122 | 1.095  | 5.18  |
| 28) T Methyl tert-Bu...   |                |       | 0.565 | 0.637 | 0.652 | 0.555 | 0.543 | 0.591  | 8.53  |
| 29) T Chloroform          |                |       | 1.554 | 1.612 | 1.659 | 1.414 | 1.398 | 1.527  | 7.65  |
| 30) T Cyclohexane         |                |       | 0.602 | 0.795 | 0.875 | 0.764 | 0.777 | 0.763  | 13.04 |
| 31) T cis-1,2-Dichlo...   |                |       | 0.879 | 0.937 | 1.022 | 0.890 | 0.896 | 0.925  | 6.35  |
| 32) T 1,1,1-Trichlor...   | 1.713          | 1.310 | 1.498 | 1.517 | 1.581 | 1.398 | 1.388 | 1.487  | 9.11  |
| -----                     |                |       |       |       |       |       |       |        |       |
| 33) I 1,4-Difluorobenzene | -----ISTD----- |       |       |       |       |       |       |        |       |
| 34) T 2-Butanone          |                |       | 0.465 | 0.491 | 0.528 | 0.467 | 0.467 | 0.484  | 5.58  |
| 35) T Carbon Tetrach...   | 0.584          | 0.500 | 0.542 | 0.558 | 0.589 | 0.548 | 0.540 | 0.552  | 5.42  |
| 36) T Benzene             |                |       | 0.691 | 0.778 | 0.792 | 0.705 | 0.689 | 0.731  | 6.82  |
| 37) T 1,2-Dichloroet...   |                |       | 0.413 | 0.416 | 0.428 | 0.393 | 0.396 | 0.409  | 3.55  |
| 38) T Trichloroethene     | 0.394          | 0.288 | 0.326 | 0.349 | 0.349 | 0.320 | 0.317 | 0.335  | 9.99  |
| 39) T 1,2-Dichloropr...   |                |       | 0.267 | 0.294 | 0.303 | 0.266 | 0.269 | 0.280  | 6.21  |

|                                                                                 |                   |       |       |       |       |       |       |       |       |       |
|---------------------------------------------------------------------------------|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Method Path : Z:\voasrv\HPCHEM1\MSVOA_L\methods\<br>Method File : VL072524AIR.M |                   |       |       |       |       |       |       |       |       |       |
| 40) T                                                                           | 1,4-Dioxane       |       |       | 0.130 | 0.110 | 0.106 | 0.115 | 0.101 | 0.112 | 9.70  |
| 41) T                                                                           | Tetrahydrofuran   |       |       | 0.226 | 0.291 | 0.308 | 0.278 | 0.280 | 0.277 | 11.09 |
| 42) T                                                                           | Bromodichlorom... |       |       | 0.573 | 0.613 | 0.622 | 0.576 | 0.568 | 0.591 | 4.26  |
| 43) T                                                                           | Methyl Methacr... |       |       | 0.205 | 0.252 | 0.287 | 0.283 | 0.284 | 0.262 | 13.30 |
| 44) T                                                                           | 2,2,4-Trimethy... |       |       | 1.168 | 1.294 | 1.342 | 1.165 | 1.132 | 1.220 | 7.54  |
| 45) T                                                                           | t-1,3-Dichloro... |       |       | 0.166 | 0.202 | 0.248 | 0.287 | 0.302 | 0.241 | 23.76 |
| 46) T                                                                           | cis-1,3-Dichlo... |       |       | 0.270 | 0.325 | 0.372 | 0.382 | 0.392 | 0.348 | 14.53 |
| 47) T                                                                           | 1,1,2-Trichlor... |       |       | 0.310 | 0.313 | 0.334 | 0.294 | 0.291 | 0.308 | 5.62  |
| 48) T                                                                           | Dibromochlorom... |       |       | 0.447 | 0.503 | 0.526 | 0.505 | 0.503 | 0.497 | 5.97  |
| 49) T                                                                           | Bromoform         |       |       | 0.354 | 0.401 | 0.455 | 0.446 | 0.443 | 0.420 | 10.10 |
| 50) T                                                                           | 4-Methyl-2-Pen... |       |       | 0.644 | 0.773 | 0.860 | 0.776 | 0.763 | 0.763 | 10.08 |
| 51) T                                                                           | 2-Hexanone        |       |       | 0.398 | 0.569 | 0.640 | 0.639 | 0.640 | 0.577 | 18.10 |
| 52) T                                                                           | Tetrachloroethene | 0.308 | 0.260 | 0.275 | 0.289 | 0.304 | 0.271 | 0.270 | 0.282 | 6.49  |
| 53) T                                                                           | Toluene           |       |       | 0.678 | 0.851 | 0.889 | 0.829 | 0.822 | 0.814 | 9.86  |
| 54) T                                                                           | 1,2-Dibromoethane | 0.340 |       | 0.377 | 0.424 | 0.463 | 0.429 | 0.429 | 0.410 | 10.74 |
| -----ISTD-----                                                                  |                   |       |       |       |       |       |       |       |       |       |
| 55) I                                                                           | Chlorobenzene-d5  |       |       |       |       |       |       |       |       |       |
| 56) T                                                                           | 1,1,1,2-Tetrac... |       |       | 0.401 | 0.401 | 0.412 | 0.372 | 0.353 | 0.388 | 6.36  |
| 57) T                                                                           | Chlorobenzene     |       |       | 0.747 | 0.762 | 0.758 | 0.667 | 0.626 | 0.712 | 8.71  |
| 58) T                                                                           | Ethyl Benzene     |       |       | 1.028 | 1.229 | 1.262 | 1.151 | 1.092 | 1.153 | 8.35  |
| 59) T                                                                           | m/p-Xylene        |       |       | 0.934 | 1.065 | 1.083 | 0.979 | 0.914 | 0.995 | 7.68  |
| 60) T                                                                           | o-Xylene          |       |       | 0.842 | 1.015 | 1.038 | 0.931 | 0.880 | 0.941 | 8.96  |
| 61) T                                                                           | Styrene           |       |       | 0.313 | 0.424 | 0.468 | 0.464 | 0.455 | 0.425 | 15.32 |
| 62) T                                                                           | Isopropylbenzene  |       |       | 1.404 | 1.552 | 1.560 | 1.368 | 1.270 | 1.431 | 8.68  |
| 63) T                                                                           | 1,1,2,2-Tetrac... | 0.575 | 0.568 | 0.626 | 0.641 | 0.650 | 0.569 | 0.533 | 0.594 | 7.45  |
| 64) T                                                                           | n-propylbenzene   |       |       | 0.353 | 0.393 | 0.408 | 0.370 | 0.347 | 0.374 | 6.89  |
| 65) T                                                                           | tert-Butylbenzene |       |       | 1.229 | 1.412 | 1.448 | 1.235 | 1.138 | 1.292 | 10.21 |
| 66) T                                                                           | Benzyl Chloride   |       |       | 0.069 | 0.076 | 0.080 | 0.092 | 0.097 | 0.083 | 13.50 |
| 67) T                                                                           | sec-Butylbenzene  |       |       | 1.641 | 1.940 | 2.017 | 1.719 | 1.586 | 1.781 | 10.59 |
| 68) S                                                                           | 1-Bromo-4-Fluo... | 0.772 | 0.783 | 0.774 | 0.764 | 0.764 | 0.782 | 0.747 | 0.770 | 1.63  |
| 69) T                                                                           | p-Isopropyltol... |       |       | 1.299 | 1.617 | 1.674 | 1.453 | 1.346 | 1.478 | 11.11 |
| 70) T                                                                           | n-Butylbenzene    |       |       | 1.347 | 1.622 | 1.731 | 1.488 | 1.386 | 1.515 | 10.64 |
| 71) T                                                                           | 2-Chlorotoluene   |       |       | 0.990 | 1.133 | 1.154 | 1.033 | 0.966 | 1.055 | 8.00  |
| 72) T                                                                           | 4-Ethyltoluene    |       |       | 0.976 | 1.143 | 1.229 | 1.138 | 1.054 | 1.108 | 8.70  |
| 73) T                                                                           | 1,3,5-Trimethy... |       |       | 0.831 | 0.987 | 1.072 | 0.974 | 0.909 | 0.955 | 9.46  |
| 74) T                                                                           | 1,2,4-Trimethy... |       |       | 1.034 | 1.199 | 1.238 | 1.074 | 1.003 | 1.110 | 9.32  |
| 75) T                                                                           | 1,3-Dichlorobe... |       |       | 0.663 | 0.751 | 0.768 | 0.672 | 0.634 | 0.698 | 8.33  |
| 76) T                                                                           | 1,4-Dichlorobe... |       |       | 0.673 | 0.710 | 0.716 | 0.656 | 0.623 | 0.676 | 5.74  |
| 77) T                                                                           | 1,2-Dichlorobe... |       |       | 0.692 | 0.731 | 0.767 | 0.654 | 0.614 | 0.692 | 8.73  |
| 78) T                                                                           | Hexachloro-1,3... |       |       | 0.621 | 0.680 | 0.665 | 0.499 | 0.484 | 0.590 | 15.69 |
| 79) T                                                                           | Naphthalene       | 0.490 |       | 0.808 | 1.106 | 1.252 | 1.125 | 1.096 | 0.980 | 28.67 |
| 80) T                                                                           | Naphthalene,2-... |       |       | 0.499 | 0.667 | 0.911 | 0.992 | 1.036 | 0.821 | 27.97 |
| 81) T                                                                           | 1,2,4-Trichlor... |       |       | 0.504 | 0.606 | 0.646 | 0.587 | 0.573 | 0.583 | 8.95  |

(#) = Out of Range

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
 Data File : VL041398.D  
 Acq On : 25 Jul 2024 13:19  
 Operator : SY/MD  
 Sample : VSTDICC0.5  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC0.5

### Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 07/26/2024  
 Supervised By :Mahesh Dadoda 07/29/2024

Quant Time: Jul 26 05:07:21 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_LFri Aug 2

QLast Update : Fri Jul 26 05:07:02 2024

Response via : Initial Calibration

| Compound                | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|--------|------|----------|--------|-------|----------|
| -----                   |        |      |          |        |       |          |
| Internal Standards      |        |      |          |        |       |          |
| 1) Bromochloromethane   | 5.176  | 49   | 1163290  | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 6.639  | 114  | 3245422  | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 11.458 | 117  | 3043708  | 10.000 | ppbv  | # 0.00   |

#### System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 13.770 95 2357044 10.071 ppbv 0.00  
 Spiked Amount 10.000 Range 65 - 135 Recovery = 100.700%

#### Target Compounds

|                               |       |     |        |       |        | Qvalue |
|-------------------------------|-------|-----|--------|-------|--------|--------|
| 2) Dichlorodifluoromethane    | 2.709 | 85  | 109541 | 0.539 | ppbv   | 98     |
| 3) Chlorodifluoromethane      | 2.655 | 51  | 75741  | 0.549 | ppbv   | 100    |
| 4) Chloromethane              | 2.793 | 50  | 39649  | 0.546 | ppbv   | 96     |
| 5) Vinyl Chloride             | 2.906 | 62  | 36538  | 0.508 | ppbv # | 87     |
| 6) Bromomethane               | 3.102 | 94  | 19255  | 0.523 | ppbv   | 93     |
| 7) Chloroethane               | 3.179 | 64  | 13984  | 0.572 | ppbv   | 92     |
| 8) Dichlorotetrafluoroethane  | 2.838 | 85  | 92652  | 0.521 | ppbv   | 93     |
| 9) Propene                    | 2.671 | 41  | 33491  | 0.523 | ppbv   | 98     |
| 10) Heptane                   | 7.568 | 43  | 66249  | 0.465 | ppbv   | 97     |
| 11) Trichlorofluoromethane    | 3.545 | 101 | 94267  | 0.536 | ppbv   | 100    |
| 12) 1,1,2-Trichlorotrifluo... | 4.050 | 101 | 67103  | 0.527 | ppbv   | 99     |
| 13) Ethanol                   | 3.237 | 45  | 2541m  | 0.454 | ppbv   |        |
| 14) Bromoethene               | 3.346 | 108 | 24275  | 0.495 | ppbv # | 90     |
| 15) Acetone                   | 3.462 | 43  | 75165  | 0.574 | ppbv   | 100    |
| 16) 1,3-Butadiene             | 2.963 | 39  | 35196m | 0.505 | ppbv   |        |
| 17) tert-Butyl alcohol        | 3.870 | 59  | 59997  | 0.504 | ppbv   | 99     |
| 18) 1,1-Dichloroethene        | 3.864 | 96  | 26744  | 0.484 | ppbv   | 90     |
| 19) Isopropyl Alcohol         | 3.568 | 45  | 41335m | 0.559 | ppbv   |        |
| 20) Methylene Chloride        | 3.915 | 84  | 29173  | 0.603 | ppbv # | 93     |
| 21) Allyl Chloride            | 3.979 | 41  | 41531  | 0.483 | ppbv   | 94     |
| 22) trans-1,2-Dichloroethene  | 4.433 | 96  | 26864  | 0.500 | ppbv   | 93     |
| 23) Vinyl Acetate             | 4.616 | 43  | 45209  | 0.444 | ppbv # | 97     |
| 24) 1,1-Dichloroethane        | 4.545 | 63  | 62999  | 0.542 | ppbv # | 97     |
| 25) Ethyl Acetate             | 5.195 | 43  | 126641 | 0.485 | ppbv   | 99     |
| 26) Hexane                    | 5.192 | 57  | 52190  | 0.475 | ppbv   | 91     |
| 27) Carbon Disulfide          | 4.111 | 76  | 61342  | 0.489 | ppbv # | 93     |
| 28) Methyl tert-Butyl Ether   | 4.581 | 73  | 32882  | 0.475 | ppbv   | 95     |
| 29) Chloroform                | 5.256 | 83  | 90359  | 0.503 | ppbv   | 99     |
| 30) Cyclohexane               | 6.594 | 84  | 35035  | 0.389 | ppbv # | 88     |
| 31) cis-1,2-Dichloroethene    | 5.063 | 61  | 51136  | 0.472 | ppbv # | 87     |
| 32) 1,1,1-Trichloroethane     | 5.989 | 97  | 87155  | 0.508 | ppbv   | 97     |
| 34) 2-Butanone                | 4.787 | 43  | 75522m | 0.481 | ppbv   |        |
| 35) Carbon Tetrachloride      | 6.478 | 117 | 88027  | 0.495 | ppbv   | 86     |
| 36) Benzene                   | 6.356 | 78  | 112067 | 0.470 | ppbv   | 95     |
| 37) 1,2-Dichloroethane        | 5.793 | 62  | 66949  | 0.507 | ppbv   | 98     |
| 38) Trichloroethene           | 7.282 | 130 | 52825  | 0.488 | ppbv   | 98     |
| 39) 1,2-Dichloropropane       | 7.060 | 63  | 43368  | 0.473 | ppbv   | 95     |
| 40) 1,4-Dioxane               | 7.304 | 88  | 21057m | 0.633 | ppbv   |        |
| 41) Tetrahydrofuran           | 5.568 | 42  | 36699  | 0.403 | ppbv   | 98     |
| 42) Bromodichloromethane      | 7.237 | 83  | 92906  | 0.486 | ppbv   | 98     |
| 43) Methyl Methacrylate       | 7.465 | 69  | 33258  | 0.386 | ppbv   | 91     |
| 44) 2,2,4-Trimethylpentane    | 7.314 | 57  | 189569 | 0.479 | ppbv   | 94     |
| 45) t-1,3-Dichloropropene     | 8.700 | 75  | 26864m | 0.341 | ppbv   |        |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
 Data File : VL041398.D  
 Acq On : 25 Jul 2024 13:19  
 Operator : SY/MD  
 Sample : VSTDICC0.5  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC0.5

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 07/26/2024  
 Supervised By :Mahesh Dadoda 07/29/2024

Quant Time: Jul 26 05:07:21 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_LFri Aug 2

QLast Update : Fri Jul 26 05:07:02 2024

Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc  | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|-------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 8.134  | 75   | 43823m   | 0.384 | ppbv   |          |
| 47) 1,1,2-Trichloroethane     | 8.886  | 97   | 50232    | 0.505 | ppbv   | 95       |
| 48) Dibromochloromethane      | 9.700  | 129  | 72480    | 0.452 | ppbv   | 100      |
| 49) Bromoform                 | 12.400 | 173  | 57383    | 0.423 | ppbv   | 95       |
| 50) 4-Methyl-2-Pentanone      | 8.185  | 43   | 104559m  | 0.417 | ppbv   |          |
| 51) 2-Hexanone                | 9.558  | 43   | 64659    | 0.338 | ppbv # | 97       |
| 52) Tetrachloroethene         | 10.600 | 164  | 44583    | 0.486 | ppbv   | 92       |
| 53) Toluene                   | 9.211  | 91   | 110057   | 0.411 | ppbv   | 98       |
| 54) 1,2-Dibromoethane         | 10.002 | 107  | 61242    | 0.455 | ppbv   | 89       |
| 56) 1,1,1,2-Tetrachloroethane | 11.497 | 131  | 61039    | 0.519 | ppbv # | 1        |
| 57) Chlorobenzene             | 11.516 | 112  | 113739   | 0.524 | ppbv   | 94       |
| 58) Ethyl Benzene             | 12.079 | 91   | 156513   | 0.441 | ppbv   | 96       |
| 59) m/p-Xylene                | 12.365 | 91   | 284326m  | 0.936 | ppbv   |          |
| 60) o-Xylene                  | 13.050 | 91   | 128195   | 0.440 | ppbv   | 99       |
| 61) Styrene                   | 12.889 | 104  | 47561    | 0.362 | ppbv   | 94       |
| 62) Isopropylbenzene          | 14.018 | 105  | 213603m  | 0.492 | ppbv   |          |
| 63) 1,1,2,2-Tetrachloroethane | 13.040 | 83   | 95214    | 0.526 | ppbv   | 97       |
| 64) n-propylbenzene           | 14.915 | 120  | 53748m   | 0.473 | ppbv   |          |
| 65) tert-Butylbenzene         | 16.082 | 119  | 187031m  | 0.476 | ppbv   |          |
| 66) Benzyl Chloride           | 16.323 | 91   | 10564m   | 0.422 | ppbv   |          |
| 67) sec-Butylbenzene          | 16.632 | 105  | 249741   | 0.458 | ppbv   | 99       |
| 69) p-Isopropyltoluene        | 16.992 | 119  | 197625   | 0.434 | ppbv   | 96       |
| 70) n-Butylbenzene            | 17.886 | 91   | 204999   | 0.443 | ppbv   | 98       |
| 71) 2-Chlorotoluene           | 14.796 | 91   | 150717   | 0.465 | ppbv   | 100      |
| 72) 4-Ethyltoluene            | 15.188 | 105  | 148551   | 0.441 | ppbv   | 97       |
| 73) 1,3,5-Trimethylbenzene    | 15.346 | 105  | 126480   | 0.429 | ppbv   | 92       |
| 74) 1,2,4-Trimethylbenzene    | 16.098 | 105  | 157396m  | 0.463 | ppbv   |          |
| 75) 1,3-Dichlorobenzene       | 16.326 | 146  | 100938   | 0.476 | ppbv   | 94       |
| 76) 1,4-Dichlorobenzene       | 16.468 | 146  | 102368m  | 0.492 | ppbv   |          |
| 77) 1,2-Dichlorobenzene       | 17.143 | 146  | 105386m  | 0.503 | ppbv   |          |
| 78) Hexachloro-1,3-Butadiene  | 22.631 | 225  | 94555m   | 0.520 | ppbv   |          |
| 79) Naphthalene               | 21.387 | 128  | 123028m  | 0.412 | ppbv   |          |
| 80) Naphthalene,2-methyl-     | 24.374 | 142  | 75989    | 0.313 | ppbv   | 93       |
| 81) 1,2,4-Trichlorobenzene    | 21.143 | 180  | 76641m   | 0.428 | ppbv   |          |

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
 Data File : VL041399.D  
 Acq On : 25 Jul 2024 13:59  
 Operator : SY/MD  
 Sample : VSTDICCC010  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICCC010

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 07/26/2024  
 Supervised By :Mahesh Dadoda 07/29/2024

Quant Time: Jul 26 05:05:14 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_LFri Aug 2

QLast Update : Fri Jul 26 04:51:44 2024

Response via : Initial Calibration

| Compound                | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|--------|------|----------|--------|-------|----------|
| -----                   |        |      |          |        |       |          |
| Internal Standards      |        |      |          |        |       |          |
| 1) Bromochloromethane   | 5.176  | 49   | 1227171  | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 6.645  | 114  | 3353351  | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 11.465 | 117  | 3260833m | 10.000 | ppbv  | 0.00     |

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 13.770 95 2550034 10.170 ppbv 0.00  
 Spiked Amount 10.000 Range 65 - 135 Recovery = 101.700%

Target Compounds

|                               |       |     |         |        |      | Qvalue |
|-------------------------------|-------|-----|---------|--------|------|--------|
| 2) Dichlorodifluoromethane    | 2.706 | 85  | 1748662 | 8.150  | ppbv | 100    |
| 3) Chlorodifluoromethane      | 2.652 | 51  | 1312868 | 9.025  | ppbv | 100    |
| 4) Chloromethane              | 2.790 | 50  | 692256  | 9.024  | ppbv | 99     |
| 5) Vinyl Chloride             | 2.899 | 62  | 699389  | 9.214  | ppbv | 100    |
| 6) Bromomethane               | 3.099 | 94  | 361665  | 9.227  | ppbv | 100    |
| 7) Chloroethane               | 3.176 | 64  | 248340  | 9.630  | ppbv | 100    |
| 8) Dichlorotetrafluoroethane  | 2.835 | 85  | 1694634 | 9.039  | ppbv | 100    |
| 9) Propene                    | 2.671 | 41  | 600396  | 8.889  | ppbv | 100    |
| 10) Heptane                   | 7.568 | 43  | 1472225 | 9.801  | ppbv | 99     |
| 11) Trichlorofluoromethane    | 3.542 | 101 | 1696907 | 9.145  | ppbv | 100    |
| 12) 1,1,2-Trichlorotrifluo... | 4.047 | 101 | 1226328 | 9.136  | ppbv | 100    |
| 13) Ethanol                   | 3.224 | 45  | 43077m  | 7.073  | ppbv |        |
| 14) Bromoethene               | 3.346 | 108 | 505960  | 9.786  | ppbv | 100    |
| 15) Acetone                   | 3.446 | 43  | 1222864 | 8.859  | ppbv | 100    |
| 16) 1,3-Butadiene             | 2.964 | 39  | 681843  | 9.269  | ppbv | 100    |
| 17) tert-Butyl alcohol        | 3.861 | 59  | 1291681 | 10.276 | ppbv | 100    |
| 18) 1,1-Dichloroethene        | 3.861 | 96  | 558470  | 9.575  | ppbv | 100    |
| 19) Isopropyl Alcohol         | 3.555 | 45  | 792740  | 10.155 | ppbv | 100    |
| 20) Methylene Chloride        | 3.915 | 84  | 455611  | 8.929  | ppbv | 100    |
| 21) Allyl Chloride            | 3.980 | 41  | 890718  | 9.827  | ppbv | 100    |
| 22) trans-1,2-Dichloroethene  | 4.430 | 96  | 549902  | 9.711  | ppbv | 100    |
| 23) Vinyl Acetate             | 4.610 | 43  | 1085315 | 10.104 | ppbv | 100    |
| 24) 1,1-Dichloroethane        | 4.549 | 63  | 1154644 | 9.415  | ppbv | 100    |
| 25) Ethyl Acetate             | 5.189 | 43  | 2597295 | 9.430  | ppbv | 100    |
| 26) Hexane                    | 5.198 | 57  | 1090849 | 9.420  | ppbv | 100    |
| 27) Carbon Disulfide          | 4.105 | 76  | 1375021 | 10.384 | ppbv | 99     |
| 28) Methyl tert-Butyl Ether   | 4.568 | 73  | 681033  | 9.329  | ppbv | 100    |
| 29) Chloroform                | 5.259 | 83  | 1735318 | 9.163  | ppbv | 100    |
| 30) Cyclohexane               | 6.590 | 84  | 937363  | 9.878  | ppbv | 100    |
| 31) cis-1,2-Dichloroethene    | 5.063 | 61  | 1091838 | 9.548  | ppbv | 100    |
| 32) 1,1,1-Trichloroethane     | 5.989 | 97  | 1715896 | 9.483  | ppbv | 100    |
| 34) 2-Butanone                | 4.771 | 43  | 1567685 | 9.654  | ppbv | 100    |
| 35) Carbon Tetrachloride      | 6.484 | 117 | 1836059 | 9.983  | ppbv | 100    |
| 36) Benzene                   | 6.359 | 78  | 2363293 | 9.591  | ppbv | 100    |
| 37) 1,2-Dichloroethane        | 5.796 | 62  | 1317693 | 9.664  | ppbv | 99     |
| 38) Trichloroethene           | 7.282 | 130 | 1074518 | 9.605  | ppbv | 100    |
| 39) 1,2-Dichloropropane       | 7.063 | 63  | 891517  | 9.403  | ppbv | 100    |
| 40) 1,4-Dioxane               | 7.275 | 88  | 384473  | 11.177 | ppbv | 100    |
| 41) Tetrahydrofuran           | 5.542 | 42  | 931064  | 9.892  | ppbv | 100    |
| 42) Bromodichloromethane      | 7.240 | 83  | 1932798 | 9.793  | ppbv | 100    |
| 43) Methyl Methacrylate       | 7.465 | 69  | 948521  | 10.646 | ppbv | 100    |
| 44) 2,2,4-Trimethylpentane    | 7.317 | 57  | 3907968 | 9.554  | ppbv | 100    |
| 45) t-1,3-Dichloropropene     | 8.703 | 75  | 963383  | 11.835 | ppbv | 100    |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
 Data File : VL041399.D  
 Acq On : 25 Jul 2024 13:59  
 Operator : SY/MD  
 Sample : VSTDICCC010  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICCC010

Manual Integrations  
 APPROVED

Reviewed By : Semsettin Yesilyurt 07/26/2024  
 Supervised By : Mahesh Dadoda 07/29/2024

Quant Time: Jul 26 05:05:14 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Fri Jul 26 04:51:44 2024

Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|--------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 8.134  | 75   | 1281640  | 10.855 | ppbv   | 100      |
| 47) 1,1,2-Trichloroethane     | 8.893  | 97   | 987016   | 9.602  | ppbv   | 100      |
| 48) Dibromochloromethane      | 9.706  | 129  | 1692234  | 10.224 | ppbv   | 100      |
| 49) Bromoform                 | 12.404 | 173  | 1496236  | 10.670 | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 8.172  | 43   | 2603717  | 10.051 | ppbv   | 100      |
| 51) 2-Hexanone                | 9.542  | 43   | 2141345  | 10.819 | ppbv   | 100      |
| 52) Tetrachloroethene         | 10.613 | 164  | 907950   | 9.585  | ppbv   | 100      |
| 53) Toluene                   | 9.214  | 91   | 2779504  | 10.036 | ppbv   | 100      |
| 54) 1,2-Dibromoethane         | 10.002 | 107  | 1438535  | 10.342 | ppbv   | 100      |
| 56) 1,1,1,2-Tetrachloroethane | 11.503 | 131  | 1213659  | 9.640  | ppbv # | 58       |
| 57) Chlorobenzene             | 11.523 | 112  | 2174265  | 9.343  | ppbv   | 100      |
| 58) Ethyl Benzene             | 12.085 | 91   | 3752771  | 9.870  | ppbv   | 100      |
| 59) m/p-Xylene                | 12.368 | 91   | 6382118m | 19.609 | ppbv   |          |
| 60) o-Xylene                  | 13.053 | 91   | 3036791  | 9.732  | ppbv   | 100      |
| 61) Styrene                   | 12.896 | 104  | 1513410  | 10.748 | ppbv   | 100      |
| 62) Isopropylbenzene          | 14.024 | 105  | 4462038  | 9.595  | ppbv   | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 13.040 | 83   | 1853886  | 9.567  | ppbv   | 100      |
| 64) n-propylbenzene           | 14.912 | 120  | 1205437  | 9.895  | ppbv   | 100      |
| 65) tert-Butylbenzene         | 16.085 | 119  | 4027165  | 9.564  | ppbv   | 100      |
| 66) Benzyl Chloride           | 16.323 | 91   | 299511   | 11.162 | ppbv   | 100      |
| 67) sec-Butylbenzene          | 16.635 | 105  | 5605419  | 9.602  | ppbv   | 100      |
| 69) p-Isopropyltoluene        | 16.989 | 119  | 4737222  | 9.713  | ppbv   | 100      |
| 70) n-Butylbenzene            | 17.883 | 91   | 4851380  | 9.796  | ppbv   | 100      |
| 71) 2-Chlorotoluene           | 14.799 | 91   | 3368997  | 9.707  | ppbv   | 100      |
| 72) 4-Ethyltoluene            | 15.188 | 105  | 3711228  | 10.293 | ppbv   | 99       |
| 73) 1,3,5-Trimethylbenzene    | 15.346 | 105  | 3175291  | 10.049 | ppbv   | 100      |
| 74) 1,2,4-Trimethylbenzene    | 16.105 | 105  | 3502689  | 9.621  | ppbv   | 100      |
| 75) 1,3-Dichlorobenzene       | 16.330 | 146  | 2192883  | 9.642  | ppbv   | 100      |
| 76) 1,4-Dichlorobenzene       | 16.471 | 146  | 2140459  | 9.596  | ppbv   | 100      |
| 77) 1,2-Dichlorobenzene       | 17.140 | 146  | 2131506  | 9.501  | ppbv   | 100      |
| 78) Hexachloro-1,3-Butadiene  | 22.628 | 225  | 1626038  | 8.347  | ppbv   | 100      |
| 79) Naphthalene               | 21.381 | 128  | 3669460  | 11.481 | ppbv   | 100      |
| 80) Naphthalene,2-methyl-     | 24.371 | 142  | 3235986  | 12.454 | ppbv   | 100      |
| 81) 1,2,4-Trichlorobenzene    | 21.133 | 180  | 1912951  | 9.962  | ppbv   | 100      |

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
 Data File : VL041400.D  
 Acq On : 25 Jul 2024 14:40  
 Operator : SY/MD  
 Sample : VSTDICC002  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC002

Manual Integrations  
 APPROVED

Reviewed By : Semsettin Yesilyurt 07/26/2024  
 Supervised By : Mahesh Dadoda 07/29/2024

Quant Time: Jul 25 15:37:54 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Thu Jul 25 14:31:18 2024

Response via : Initial Calibration

| Compound                | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|--------|------|----------|--------|-------|----------|
| -----                   |        |      |          |        |       |          |
| Internal Standards      |        |      |          |        |       |          |
| 1) Bromochloromethane   | 5.176  | 49   | 1187869  | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 6.642  | 114  | 3361544  | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 11.462 | 117  | 3300753  | 10.000 | ppbv  | # 0.00   |

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 13.773 95 2521024 10.190 ppbv 0.00  
 Spiked Amount 10.000 Range 65 - 135 Recovery = 101.900%

Target Compounds

|                               |       |     |         |       |      | Qvalue |
|-------------------------------|-------|-----|---------|-------|------|--------|
| 2) Dichlorodifluoromethane    | 2.710 | 85  | 505198  | 2.492 | ppbv | 99     |
| 3) Chlorodifluoromethane      | 2.652 | 51  | 300375  | 1.467 | ppbv | 99     |
| 4) Chloromethane              | 2.793 | 50  | 163139  | 2.084 | ppbv | 96     |
| 5) Vinyl Chloride             | 2.899 | 62  | 155185  | 1.835 | ppbv | 99     |
| 6) Bromomethane               | 3.102 | 94  | 79103   | 2.956 | ppbv | 98     |
| 7) Chloroethane               | 3.176 | 64  | 53717   | 1.922 | ppbv | 94     |
| 8) Dichlorotetrafluoroethane  | 2.835 | 85  | 399415  | 2.027 | ppbv | 100    |
| 9) Propene                    | 2.671 | 41  | 139773  | 1.972 | ppbv | 99     |
| 10) Heptane                   | 7.568 | 43  | 325614  | 1.956 | ppbv | 100    |
| 11) Trichlorofluoromethane    | 3.546 | 101 | 388765  | 1.970 | ppbv | 99     |
| 12) 1,1,2-Trichlorotrifluo... | 4.050 | 101 | 285420  | 2.064 | ppbv | 100    |
| 13) Ethanol                   | 3.237 | 45  | 15410m  | 0.980 | ppbv |        |
| 14) Bromoethene               | 3.346 | 108 | 111081  | 2.003 | ppbv | 93     |
| 15) Acetone                   | 3.456 | 43  | 292550  | 1.865 | ppbv | 99     |
| 16) 1,3-Butadiene             | 2.967 | 39  | 157764  | 2.113 | ppbv | 99     |
| 17) tert-Butyl alcohol        | 3.861 | 59  | 234318  | 1.936 | ppbv | 99     |
| 18) 1,1-Dichloroethene        | 3.861 | 96  | 122348  | 2.013 | ppbv | 97     |
| 19) Isopropyl Alcohol         | 3.562 | 45  | 156947m | 1.822 | ppbv |        |
| 20) Methylene Chloride        | 3.915 | 84  | 105428  | 1.852 | ppbv | 98     |
| 21) Allyl Chloride            | 3.980 | 41  | 189033  | 1.998 | ppbv | 90     |
| 22) trans-1,2-Dichloroethene  | 4.427 | 96  | 122560  | 2.030 | ppbv | 90     |
| 23) Vinyl Acetate             | 4.613 | 43  | 223002  | 1.442 | ppbv | # 98   |
| 24) 1,1-Dichloroethane        | 4.546 | 63  | 265124  | 1.977 | ppbv | 98     |
| 25) Ethyl Acetate             | 5.192 | 43  | 597999  | 2.070 | ppbv | 99     |
| 26) Hexane                    | 5.198 | 57  | 250786  | 1.961 | ppbv | 98     |
| 27) Carbon Disulfide          | 4.108 | 76  | 275637  | 1.771 | ppbv | 94     |
| 28) Methyl tert-Butyl Ether   | 4.578 | 73  | 154942  | 1.633 | ppbv | 97     |
| 29) Chloroform                | 5.259 | 83  | 394045  | 1.997 | ppbv | 99     |
| 30) Cyclohexane               | 6.587 | 84  | 207896  | 2.040 | ppbv | 93     |
| 31) cis-1,2-Dichloroethene    | 5.063 | 61  | 242910  | 1.981 | ppbv | 97     |
| 32) 1,1,1-Trichloroethane     | 5.992 | 97  | 375703  | 1.814 | ppbv | 97     |
| 34) 2-Butanone                | 4.774 | 43  | 355170  | 2.002 | ppbv | 98     |
| 35) Carbon Tetrachloride      | 6.481 | 117 | 395969  | 1.784 | ppbv | 98     |
| 36) Benzene                   | 6.359 | 78  | 532213  | 1.913 | ppbv | 97     |
| 37) 1,2-Dichloroethane        | 5.793 | 62  | 287587  | 1.802 | ppbv | 98     |
| 38) Trichloroethene           | 7.282 | 130 | 234513  | 1.935 | ppbv | 93     |
| 39) 1,2-Dichloropropane       | 7.060 | 63  | 203420  | 1.892 | ppbv | 96     |
| 40) 1,4-Dioxane               | 7.288 | 88  | 71274   | 2.068 | ppbv | # 1    |
| 41) Tetrahydrofuran           | 5.552 | 42  | 207220  | 1.886 | ppbv | 99     |
| 42) Bromodichloromethane      | 7.237 | 83  | 418292  | 1.873 | ppbv | 98     |
| 43) Methyl Methacrylate       | 7.468 | 69  | 192639  | 1.843 | ppbv | 94     |
| 44) 2,2,4-Trimethylpentane    | 7.317 | 57  | 902570  | 1.909 | ppbv | 99     |
| 45) t-1,3-Dichloropropene     | 8.700 | 75  | 166952  | 2.524 | ppbv | 95     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
 Data File : VL041400.D  
 Acq On : 25 Jul 2024 14:40  
 Operator : SY/MD  
 Sample : VSTDIC002  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC002

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 07/26/2024  
 Supervised By :Mahesh Dadoda 07/29/2024

Quant Time: Jul 25 15:37:54 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Thu Jul 25 14:31:18 2024

Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|----------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 8.134  | 75   | 249911   | 2.810    | ppbv   | 97       |
| 47) 1,1,2-Trichloroethane     | 8.889  | 97   | 224865   | 1.950    | ppbv   | 94       |
| 48) Dibromochloromethane      | 9.703  | 129  | 353718   | 1.910    | ppbv   | 100      |
| 49) Bromoform                 | 12.401 | 173  | 305646   | 2.073    | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 8.176  | 43   | 577958   | 2.029    | ppbv   | 99       |
| 51) 2-Hexanone                | 9.555  | 43   | 430093   | 2.124    | ppbv # | 96       |
| 52) Tetrachloroethene         | 10.606 | 164  | 204374   | 1.829    | ppbv   | 98       |
| 53) Toluene                   | 9.214  | 91   | 597804   | 1.905    | ppbv   | 100      |
| 54) 1,2-Dibromoethane         | 10.005 | 107  | 311374   | 2.182    | ppbv   | 98       |
| 56) 1,1,1,2-Tetrachloroethane | 11.503 | 131  | 272178   | 1.832    | ppbv # | 1        |
| 57) Chlorobenzene             | 11.520 | 112  | 500573   | 1.933    | ppbv   | 96       |
| 58) Ethyl Benzene             | 12.082 | 91   | 833428   | 1.887    | ppbv   | 96       |
| 59) m/p-Xylene                | 12.365 | 91   | 1430508m | 3.743    | ppbv   |          |
| 60) o-Xylene                  | 13.053 | 91   | 685320   | 1.900    | ppbv   | 99       |
| 61) Styrene                   | 12.896 | 104  | 308833   | 1.763    | ppbv   | 99       |
| 62) Isopropylbenzene          | 14.027 | 105  | 1029899  | 1.850    | ppbv   | 99       |
| 63) 1,1,2,2-Tetrachloroethane | 13.044 | 83   | 428827   | 1.509    | ppbv   | 98       |
| 64) n-propylbenzene           | 14.912 | 120  | 269236   | 1.852    | ppbv   | 91       |
| 65) tert-Butylbenzene         | 16.085 | 119  | 956093   | 1.928    | ppbv   | 100      |
| 66) Benzyl Chloride           | 16.326 | 91   | 52950m   | 1.625    | ppbv   |          |
| 67) sec-Butylbenzene          | 16.635 | 105  | 1331315  | 1.898    | ppbv   | 99       |
| 69) p-Isopropyltoluene        | 16.992 | 119  | 1105164  | 1.908    | ppbv   | 100      |
| 70) n-Butylbenzene            | 17.886 | 91   | 1142994  | 1.931    | ppbv   | 99       |
| 71) 2-Chlorotoluene           | 14.799 | 91   | 762002   | 1.842    | ppbv   | 99       |
| 72) 4-Ethyltoluene            | 15.188 | 105  | 811504   | 1.889    | ppbv   | 99       |
| 73) 1,3,5-Trimethylbenzene    | 15.349 | 105  | 707827   | 1.925    | ppbv   | 95       |
| 74) 1,2,4-Trimethylbenzene    | 16.105 | 105  | 817315   | 1.972    | ppbv   | 95       |
| 75) 1,3-Dichlorobenzene       | 16.326 | 146  | 506675   | 2.061    | ppbv   | 99       |
| 76) 1,4-Dichlorobenzene       | 16.468 | 146  | 472957   | 1.931    | ppbv   | 97       |
| 77) 1,2-Dichlorobenzene       | 17.140 | 146  | 506084   | 2.019    | ppbv   | 99       |
| 78) Hexachloro-1,3-Butadiene  | 22.628 | 225  | 438766   | 2.407    | ppbv   | 98       |
| 79) Naphthalene               | 21.384 | 128  | 826782   | 3.710    | ppbv   | 98       |
| 80) Naphthalene,2-methyl-     | 24.371 | 142  | 601537   | 1025.625 | ppbv   | 99       |
| 81) 1,2,4-Trichlorobenzene    | 21.140 | 180  | 426225   | 3.095    | ppbv   | 94       |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

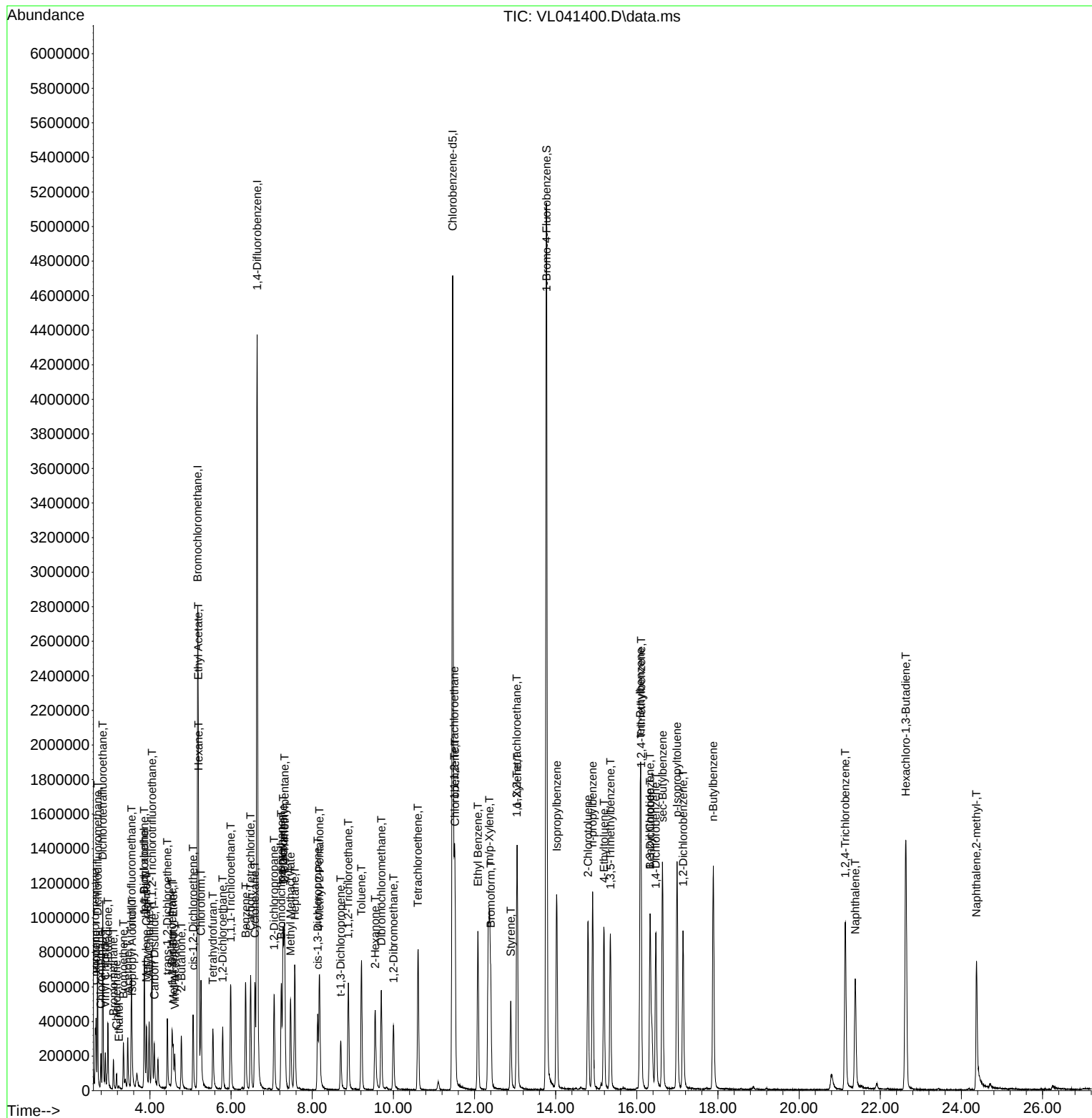
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
Data File : VL041400.D  
Acq On : 25 Jul 2024 14:40  
Operator : SY/MD  
Sample : VSTDIC002  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDIC002

Quant Time: Jul 25 15:37:54 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug  
QLast Update : Thu Jul 25 14:31:18 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By : Semsettin Yesilyurt 07/26/2024  
Supervised By : Mahesh Dadoda 07/29/2024



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
 Data File : VL041401.D  
 Acq On : 25 Jul 2024 15:19  
 Operator : SY/MD  
 Sample : VSTDICC001  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC001

Manual Integrations  
 APPROVED

Reviewed By : Semsettin Yesilyurt 07/26/2024  
 Supervised By : Mahesh Dadoda 07/29/2024

Quant Time: Jul 26 02:43:04 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Thu Jul 25 14:31:18 2024

Response via : Initial Calibration

| Compound                | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|--------|------|----------|--------|-------|----------|
| -----                   |        |      |          |        |       |          |
| Internal Standards      |        |      |          |        |       |          |
| 1) Bromochloromethane   | 5.176  | 49   | 1198624  | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 6.639  | 114  | 3342988  | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 11.459 | 117  | 3161618  | 10.000 | ppbv  | # 0.00   |

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 13.774 95 2414921 10.191 ppbv 0.00  
 Spiked Amount 10.000 Range 65 - 135 Recovery = 101.900%

Target Compounds

|                               |       |     |         |       |        | Qvalue |
|-------------------------------|-------|-----|---------|-------|--------|--------|
| 2) Dichlorodifluoromethane    | 2.706 | 85  | 241964  | 1.183 | ppbv   | 95     |
| 3) Chlorodifluoromethane      | 2.652 | 51  | 151299  | 0.732 | ppbv   | 98     |
| 4) Chloromethane              | 2.793 | 50  | 82099   | 1.039 | ppbv   | 96     |
| 5) Vinyl Chloride             | 2.899 | 62  | 79527   | 0.932 | ppbv   | 98     |
| 6) Bromomethane               | 3.099 | 94  | 41204   | 1.526 | ppbv   | 92     |
| 7) Chloroethane               | 3.179 | 64  | 25119   | 0.891 | ppbv   | 92     |
| 8) Dichlorotetrafluoroethane  | 2.835 | 85  | 197281  | 0.992 | ppbv   | 99     |
| 9) Propene                    | 2.674 | 41  | 70203   | 0.982 | ppbv   | 97     |
| 10) Heptane                   | 7.568 | 43  | 148675  | 0.885 | ppbv   | 96     |
| 11) Trichlorofluoromethane    | 3.542 | 101 | 196294  | 0.986 | ppbv   | 96     |
| 12) 1,1,2-Trichlorotrifluo... | 4.050 | 101 | 138368  | 0.992 | ppbv   | 99     |
| 13) Ethanol                   | 3.240 | 45  | 7925m   | 0.500 | ppbv   |        |
| 14) Bromoethene               | 3.350 | 108 | 51557   | 0.921 | ppbv # | 85     |
| 15) Acetone                   | 3.456 | 43  | 142863  | 0.902 | ppbv   | 97     |
| 16) 1,3-Butadiene             | 2.967 | 39  | 78187   | 1.038 | ppbv   | 96     |
| 17) tert-Butyl alcohol        | 3.867 | 59  | 131833  | 1.080 | ppbv   | 100    |
| 18) 1,1-Dichloroethene        | 3.861 | 96  | 57445   | 0.937 | ppbv   | 99     |
| 19) Isopropyl Alcohol         | 3.568 | 45  | 80830   | 0.930 | ppbv # | 98     |
| 20) Methylene Chloride        | 3.912 | 84  | 51566   | 0.898 | ppbv   | 96     |
| 21) Allyl Chloride            | 3.980 | 41  | 93864   | 0.983 | ppbv   | 95     |
| 22) trans-1,2-Dichloroethene  | 4.433 | 96  | 57666   | 0.947 | ppbv   | 91     |
| 23) Vinyl Acetate             | 4.613 | 43  | 104758  | 0.671 | ppbv # | 94     |
| 24) 1,1-Dichloroethane        | 4.546 | 63  | 125314  | 0.926 | ppbv   | 100    |
| 25) Ethyl Acetate             | 5.195 | 43  | 285442  | 0.979 | ppbv   | 98     |
| 26) Hexane                    | 5.198 | 57  | 113990  | 0.883 | ppbv   | 88     |
| 27) Carbon Disulfide          | 4.112 | 76  | 122266  | 0.779 | ppbv   | 97     |
| 28) Methyl tert-Butyl Ether   | 4.575 | 73  | 76370   | 0.798 | ppbv   | 99     |
| 29) Chloroform                | 5.259 | 83  | 193219  | 0.970 | ppbv   | 91     |
| 30) Cyclohexane               | 6.594 | 84  | 95243m  | 0.926 | ppbv   |        |
| 31) cis-1,2-Dichloroethene    | 5.066 | 61  | 112360  | 0.908 | ppbv   | 96     |
| 32) 1,1,1-Trichloroethane     | 5.986 | 97  | 181889  | 0.870 | ppbv   | 99     |
| 34) 2-Butanone                | 4.777 | 43  | 163975  | 0.930 | ppbv   | 97     |
| 35) Carbon Tetrachloride      | 6.481 | 117 | 186609  | 0.845 | ppbv   | 99     |
| 36) Benzene                   | 6.356 | 78  | 259942  | 0.940 | ppbv   | 95     |
| 37) 1,2-Dichloroethane        | 5.793 | 62  | 138981  | 0.875 | ppbv   | 100    |
| 38) Trichloroethene           | 7.279 | 130 | 116586m | 0.967 | ppbv   |        |
| 39) 1,2-Dichloropropane       | 7.063 | 63  | 98425m  | 0.921 | ppbv   |        |
| 40) 1,4-Dioxane               | 7.298 | 88  | 36813m  | 1.074 | ppbv   |        |
| 41) Tetrahydrofuran           | 5.558 | 42  | 97249   | 0.890 | ppbv   | 98     |
| 42) Bromodichloromethane      | 7.240 | 83  | 204988  | 0.923 | ppbv   | 99     |
| 43) Methyl Methacrylate       | 7.472 | 69  | 84268   | 0.811 | ppbv   | 88     |
| 44) 2,2,4-Trimethylpentane    | 7.317 | 57  | 432528  | 0.920 | ppbv   | 99     |
| 45) t-1,3-Dichloropropene     | 8.706 | 75  | 67675   | 1.029 | ppbv   | 99     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
 Data File : VL041401.D  
 Acq On : 25 Jul 2024 15:19  
 Operator : SY/MD  
 Sample : VSTDIC001  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC001

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 07/26/2024  
 Supervised By :Mahesh Dadoda 07/29/2024

Quant Time: Jul 26 02:43:04 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Thu Jul 25 14:31:18 2024

Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 8.134  | 75   | 108779   | 1.230   | ppbv   | 99       |
| 47) 1,1,2-Trichloroethane     | 8.889  | 97   | 104479   | 0.911   | ppbv   | 97       |
| 48) Dibromochloromethane      | 9.703  | 129  | 168168   | 0.913   | ppbv   | 97       |
| 49) Bromoform                 | 12.404 | 173  | 133988   | 0.914   | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 8.182  | 43   | 258275   | 0.912   | ppbv   | 96       |
| 51) 2-Hexanone                | 9.558  | 43   | 190138   | 0.944   | ppbv # | 100      |
| 52) Tetrachloroethene         | 10.613 | 164  | 96753m   | 0.871   | ppbv   |          |
| 53) Toluene                   | 9.211  | 91   | 284562   | 0.912   | ppbv   | 98       |
| 54) 1,2-Dibromoethane         | 10.005 | 107  | 141838   | 0.999   | ppbv   | 91       |
| 56) 1,1,1,2-Tetrachloroethane | 11.504 | 131  | 126753   | 0.891   | ppbv # | 1        |
| 57) Chlorobenzene             | 11.520 | 112  | 240871   | 0.971   | ppbv   | 95       |
| 58) Ethyl Benzene             | 12.086 | 91   | 388676   | 0.919   | ppbv   | 98       |
| 59) m/p-Xylene                | 12.368 | 91   | 673526m  | 1.840   | ppbv   |          |
| 60) o-Xylene                  | 13.053 | 91   | 320813   | 0.929   | ppbv   | 99       |
| 61) Styrene                   | 12.896 | 104  | 133924   | 0.798   | ppbv   | 99       |
| 62) Isopropylbenzene          | 14.024 | 105  | 490658   | 0.920   | ppbv   | 97       |
| 63) 1,1,2,2-Tetrachloroethane | 13.047 | 83   | 202749   | 0.745   | ppbv   | 98       |
| 64) n-propylbenzene           | 14.915 | 120  | 124102   | 0.891   | ppbv   | 83       |
| 65) tert-Butylbenzene         | 16.085 | 119  | 446299   | 0.940   | ppbv   | 99       |
| 66) Benzyl Chloride           | 16.326 | 91   | 24142m   | 0.774   | ppbv   |          |
| 67) sec-Butylbenzene          | 16.632 | 105  | 613358   | 0.913   | ppbv   | 99       |
| 69) p-Isopropyltoluene        | 16.992 | 119  | 511080   | 0.921   | ppbv   | 100      |
| 70) n-Butylbenzene            | 17.886 | 91   | 512783   | 0.904   | ppbv   | 98       |
| 71) 2-Chlorotoluene           | 14.796 | 91   | 358079   | 0.904   | ppbv   | 100      |
| 72) 4-Ethyltoluene            | 15.188 | 105  | 361470   | 0.878   | ppbv   | 97       |
| 73) 1,3,5-Trimethylbenzene    | 15.349 | 105  | 312184   | 0.886   | ppbv   | 98       |
| 74) 1,2,4-Trimethylbenzene    | 16.101 | 105  | 379183   | 0.955   | ppbv # | 91       |
| 75) 1,3-Dichlorobenzene       | 16.330 | 146  | 237337   | 1.008   | ppbv   | 99       |
| 76) 1,4-Dichlorobenzene       | 16.468 | 146  | 224373   | 0.956   | ppbv   | 98       |
| 77) 1,2-Dichlorobenzene       | 17.140 | 146  | 231111   | 0.963   | ppbv   | 98       |
| 78) Hexachloro-1,3-Butadiene  | 22.632 | 225  | 215079   | 1.232   | ppbv   | 99       |
| 79) Naphthalene               | 21.387 | 128  | 349592m  | 1.638   | ppbv   |          |
| 80) Naphthalene,2-methyl-     | 24.374 | 142  | 210840   | 375.304 | ppbv   | 98       |
| 81) 1,2,4-Trichlorobenzene    | 21.143 | 180  | 191623   | 1.452   | ppbv   | 98       |

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
 Data File : VL041403.D  
 Acq On : 25 Jul 2024 16:42  
 Operator : SY/MD  
 Sample : VSTDICC0.1  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC0.1

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 07/26/2024  
 Supervised By :Mahesh Dadoda 07/29/2024

Quant Time: Jul 26 02:44:42 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M

Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Thu Jul 25 14:31:18 2024

Response via : Initial Calibration

| Compound                      | R.T.   | QIon  | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|--------|----------|
| -----                         |        |       |          |          |        |          |
| Internal Standards            |        |       |          |          |        |          |
| 1) Bromochloromethane         | 5.176  | 49    | 1207844  | 10.000   | ppbv   | 0.00     |
| 33) 1,4-Difluorobenzene       | 6.639  | 114   | 3343894  | 10.000   | ppbv   | 0.00     |
| 55) Chlorobenzene-d5          | 11.458 | 117   | 3087423  | 10.000   | ppbv   | # 0.00   |
| System Monitoring Compounds   |        |       |          |          |        |          |
| 68) 1-Bromo-4-Fluorobenzene   | 13.767 | 95    | 2418801  | 10.453   | ppbv   | 0.00     |
| Spiked Amount                 | 10.000 | Range | 65 - 135 | Recovery | =      | 104.500% |
| Target Compounds              |        |       |          |          |        |          |
|                               |        |       |          |          | Qvalue |          |
| 5) Vinyl Chloride             | 2.899  | 62    | 6804     | 0.079    | ppbv   | 94       |
| 32) 1,1,1-Trichloroethane     | 5.989  | 97    | 15825m   | 0.075    | ppbv   |          |
| 35) Carbon Tetrachloride      | 6.478  | 117   | 16719m   | 0.076    | ppbv   |          |
| 38) Trichloroethene           | 7.278  | 130   | 9639m    | 0.080    | ppbv   |          |
| 52) Tetrachloroethene         | 10.593 | 164   | 8679m    | 0.078    | ppbv   |          |
| 54) 1,2-Dibromoethane         | 9.995  | 107   | 11367m   | 0.080    | ppbv   |          |
| 63) 1,1,2,2-Tetrachloroethane | 13.040 | 83    | 17530m   | 0.066    | ppbv   |          |
| 79) Naphthalene               | 21.403 | 128   | 15122m   | 0.073    | ppbv   |          |
| -----                         |        |       |          |          |        |          |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

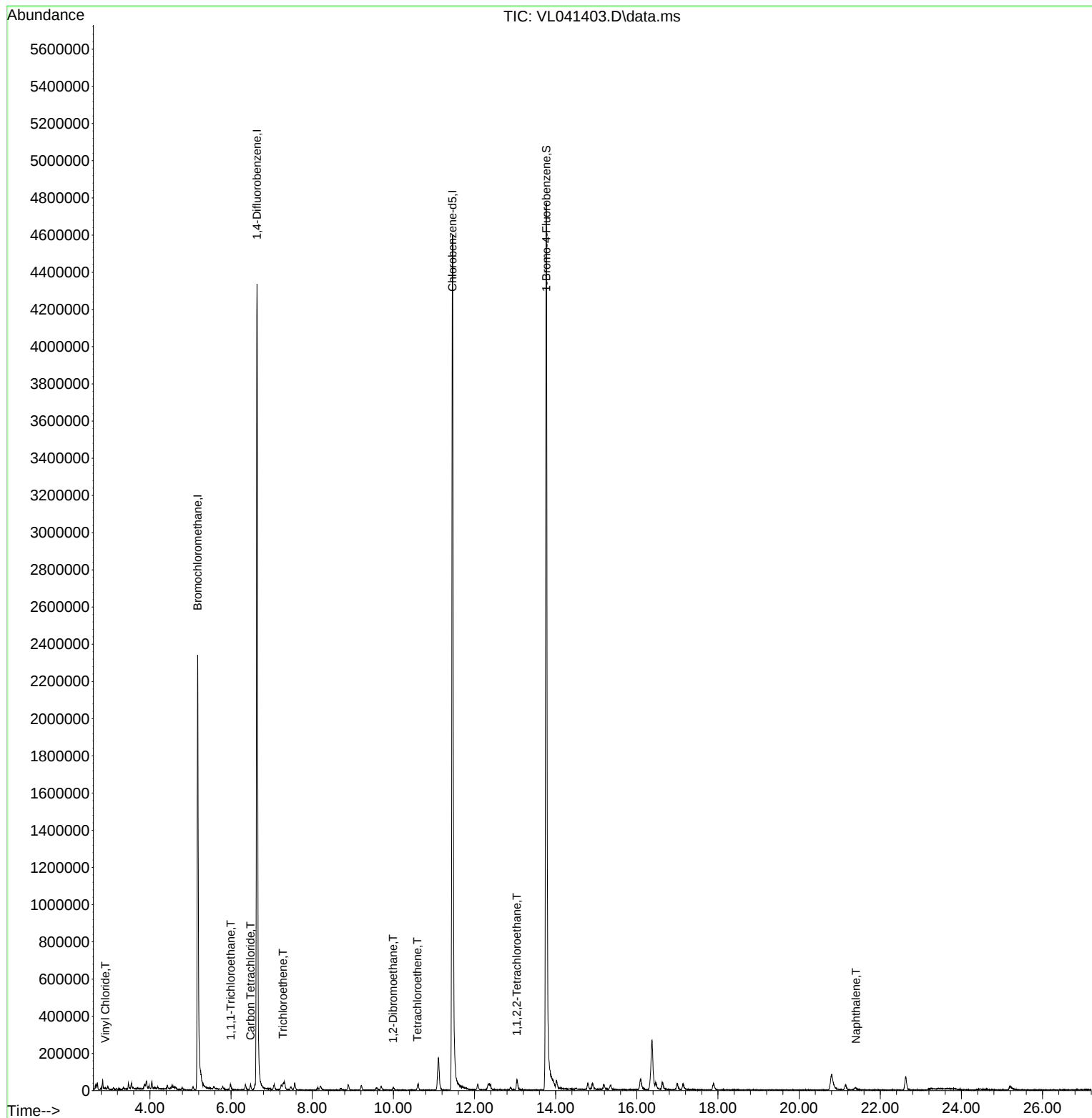
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
Data File : VL041403.D  
Acq On : 25 Jul 2024 16:42  
Operator : SY/MD  
Sample : VSTDICC0.1  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC0.1

Manual Integrations  
APPROVED

Reviewed By :Semsettin Yesilyurt 07/26/2024  
Supervised By :Mahesh Dadoda 07/29/2024

Quant Time: Jul 26 02:44:42 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_LFri Aug  
QLast Update : Thu Jul 25 14:31:18 2024  
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
 Data File : VL041404.D  
 Acq On : 25 Jul 2024 17:24  
 Operator : SY/MD  
 Sample : VSTDICC0.03  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC0.03

Manual Integrations  
 APPROVED

Reviewed By : Semsettin Yesilyurt 07/26/2024  
 Supervised By : Mahesh Dadoda 07/29/2024

Quant Time: Jul 26 02:45:18 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA\_L Fri Aug 2  
 QLast Update : Thu Jul 25 14:31:18 2024  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon  | Response | Conc     | Units      | Dev(Min) |
|-------------------------------|--------|-------|----------|----------|------------|----------|
| -----                         |        |       |          |          |            |          |
| Internal Standards            |        |       |          |          |            |          |
| 1) Bromochloromethane         | 5.176  | 49    | 1173154  | 10.000   | ppbv       | 0.00     |
| 33) 1,4-Difluorobenzene       | 6.639  | 114   | 3272729  | 10.000   | ppbv       | 0.00     |
| 55) Chlorobenzene-d5          | 11.458 | 117   | 3056197  | 10.000   | ppbv       | # 0.00   |
| System Monitoring Compounds   |        |       |          |          |            |          |
| 68) 1-Bromo-4-Fluorobenzene   | 13.767 | 95    | 2360153  | 10.303   | ppbv       | 0.00     |
| Spiked Amount                 | 10.000 | Range | 65 - 135 | Recovery | = 103.000% |          |
| Target Compounds              |        |       |          |          |            |          |
|                               |        |       |          |          | Qvalue     |          |
| 5) Vinyl Chloride             | 2.899  | 62    | 2531m    | 0.030    | ppbv       |          |
| 32) 1,1,1-Trichloroethane     | 5.983  | 97    | 6029m    | 0.029    | ppbv       |          |
| 35) Carbon Tetrachloride      | 6.478  | 117   | 5730m    | 0.027    | ppbv       |          |
| 38) Trichloroethene           | 7.275  | 130   | 3872m    | 0.033    | ppbv       |          |
| 52) Tetrachloroethene         | 10.610 | 164   | 3020m    | 0.028    | ppbv       |          |
| 63) 1,1,2,2-Tetrachloroethane | 13.037 | 83    | 5269m    | 0.020    | ppbv       |          |
| -----                         |        |       |          |          |            |          |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

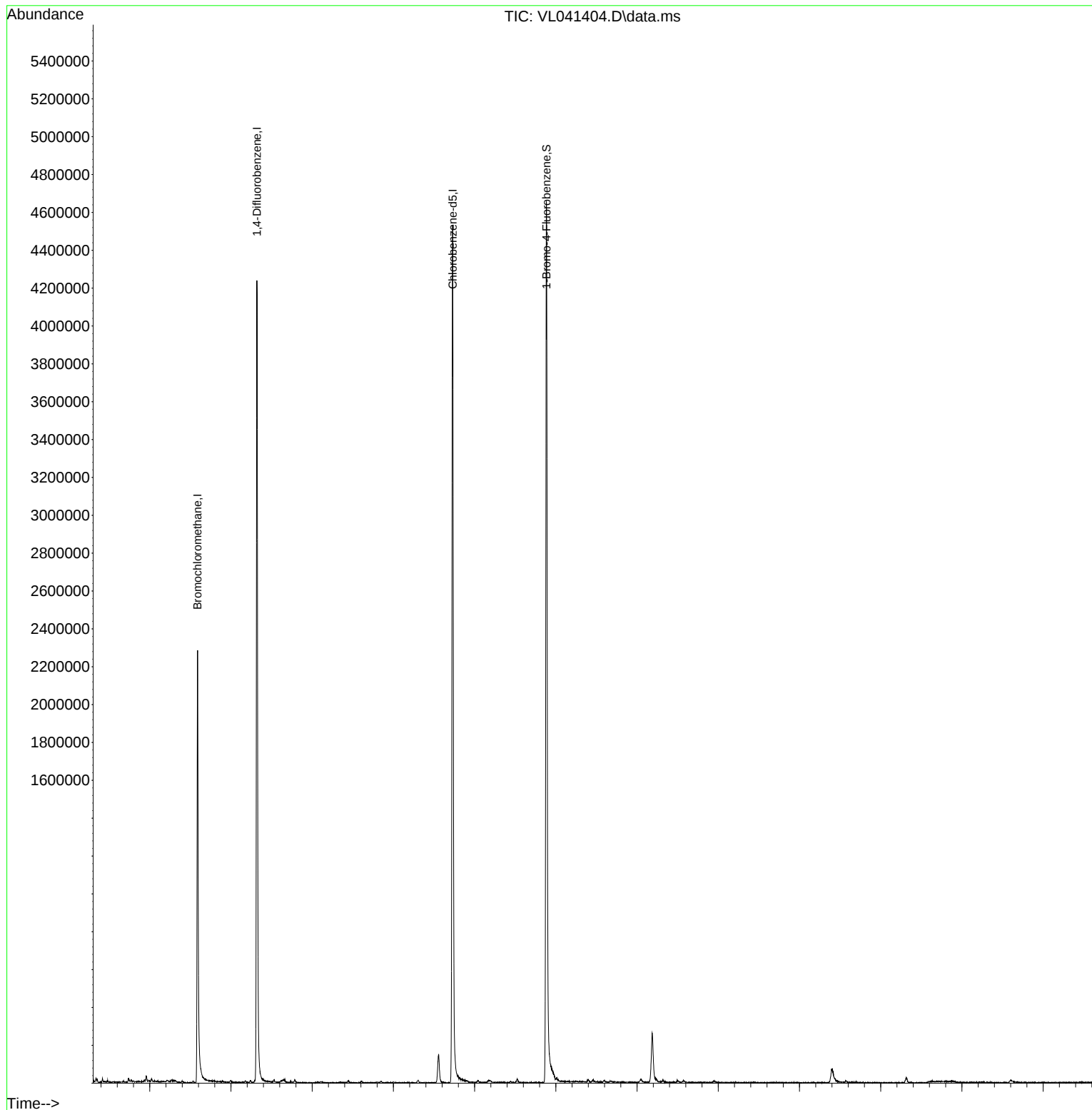
Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
Data File : VL041404.D  
Acq On : 25 Jul 2024 17:24  
Operator : SY/MD  
Sample : VSTDICC0.03  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VSTDICC0.03

Quant Time: Jul 26 02:45:18 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug  
QLast Update : Thu Jul 25 14:31:18 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By : Semsettin Yesilyurt 07/26/2024  
Supervised By : Mahesh Dadoda 07/29/2024



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
 Data File : VL041405.D  
 Acq On : 25 Jul 2024 18:06  
 Operator : SY/MD  
 Sample : VSTDICC015  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICC015

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 07/26/2024  
 Supervised By :Mahesh Dadoda 07/29/2024

Quant Time: Jul 26 02:45:39 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_LFri Aug 2

QLast Update : Thu Jul 25 14:31:18 2024

Response via : Initial Calibration

| Compound                | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|--------|------|----------|--------|-------|----------|
| -----                   |        |      |          |        |       |          |
| Internal Standards      |        |      |          |        |       |          |
| 1) Bromochloromethane   | 5.179  | 49   | 1211244  | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 6.642  | 114  | 3327019  | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 11.458 | 117  | 3365868  | 10.000 | ppbv  | # 0.00   |

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 13.770 95 2515088 9.970 ppbv 0.00  
 Spiked Amount 10.000 Range 65 - 135 Recovery = 99.700%

Target Compounds

|                               |       |     |         |        |      | Qvalue |
|-------------------------------|-------|-----|---------|--------|------|--------|
| 2) Dichlorodifluoromethane    | 2.706 | 85  | 2086477 | 10.095 | ppbv | 99     |
| 3) Chlorodifluoromethane      | 2.652 | 51  | 1914240 | 9.165  | ppbv | 100    |
| 4) Chloromethane              | 2.790 | 50  | 996482  | 12.485 | ppbv | 99     |
| 5) Vinyl Chloride             | 2.899 | 62  | 1038128 | 12.036 | ppbv | 98     |
| 6) Bromomethane               | 3.099 | 94  | 547488  | 20.067 | ppbv | 96     |
| 7) Chloroethane               | 3.176 | 64  | 360614  | 12.655 | ppbv | 95     |
| 8) Dichlorotetrafluoroethane  | 2.835 | 85  | 2399417 | 11.943 | ppbv | 99     |
| 9) Propene                    | 2.671 | 41  | 899840  | 12.451 | ppbv | 98     |
| 10) Heptane                   | 7.571 | 43  | 2169367 | 12.780 | ppbv | 99     |
| 11) Trichlorofluoromethane    | 3.542 | 101 | 2473823 | 12.296 | ppbv | 100    |
| 12) 1,1,2-Trichlorotrifluo... | 4.047 | 101 | 1802452 | 12.784 | ppbv | 99     |
| 13) Ethanol                   | 3.221 | 45  | 62897m  | 3.923  | ppbv |        |
| 14) Bromoethene               | 3.346 | 108 | 757933  | 13.400 | ppbv | 98     |
| 15) Acetone                   | 3.446 | 43  | 1760479 | 11.005 | ppbv | 99     |
| 16) 1,3-Butadiene             | 2.964 | 39  | 1014052 | 13.319 | ppbv | 99     |
| 17) tert-Butyl alcohol        | 3.857 | 59  | 1836705 | 14.883 | ppbv | 99     |
| 18) 1,1-Dichloroethene        | 3.861 | 96  | 806522  | 13.011 | ppbv | 100    |
| 19) Isopropyl Alcohol         | 3.555 | 45  | 1143994 | 13.027 | ppbv | 100    |
| 20) Methylene Chloride        | 3.915 | 84  | 675282  | 11.634 | ppbv | 99     |
| 21) Allyl Chloride            | 3.980 | 41  | 1284615 | 13.313 | ppbv | 97     |
| 22) trans-1,2-Dichloroethene  | 4.430 | 96  | 809963  | 13.156 | ppbv | 99     |
| 23) Vinyl Acetate             | 4.613 | 43  | 1570687 | 9.960  | ppbv | 98     |
| 24) 1,1-Dichloroethane        | 4.545 | 63  | 1677304 | 12.269 | ppbv | 99     |
| 25) Ethyl Acetate             | 5.189 | 43  | 3804371 | 12.915 | ppbv | 100    |
| 26) Hexane                    | 5.198 | 57  | 1615258 | 12.384 | ppbv | 98     |
| 27) Carbon Disulfide          | 4.105 | 76  | 2038049 | 12.842 | ppbv | 99     |
| 28) Methyl tert-Butyl Ether   | 4.568 | 73  | 986442  | 10.196 | ppbv | 100    |
| 29) Chloroform                | 5.263 | 83  | 2540539 | 12.624 | ppbv | 99     |
| 30) Cyclohexane               | 6.590 | 84  | 1411237 | 13.581 | ppbv | 96     |
| 31) cis-1,2-Dichloroethene    | 5.063 | 61  | 1628471 | 13.023 | ppbv | 100    |
| 32) 1,1,1-Trichloroethane     | 5.989 | 97  | 2522136 | 11.940 | ppbv | 100    |
| 34) 2-Butanone                | 4.771 | 43  | 2330483 | 13.274 | ppbv | 99     |
| 35) Carbon Tetrachloride      | 6.481 | 117 | 2695636 | 12.269 | ppbv | 98     |
| 36) Benzene                   | 6.359 | 78  | 3438269 | 12.487 | ppbv | 100    |
| 37) 1,2-Dichloroethane        | 5.793 | 62  | 1975307 | 12.503 | ppbv | 100    |
| 38) Trichloroethene           | 7.282 | 130 | 1582683 | 13.195 | ppbv | 98     |
| 39) 1,2-Dichloropropane       | 7.063 | 63  | 1340584 | 12.599 | ppbv | 96     |
| 40) 1,4-Dioxane               | 7.269 | 88  | 505735  | 14.825 | ppbv | 80     |
| 41) Tetrahydrofuran           | 5.542 | 42  | 1399340 | 12.868 | ppbv | 100    |
| 42) Bromodichloromethane      | 7.240 | 83  | 2836611 | 12.832 | ppbv | 99     |
| 43) Methyl Methacrylate       | 7.465 | 69  | 1415809 | 13.686 | ppbv | 100    |
| 44) 2,2,4-Trimethylpentane    | 7.314 | 57  | 5650271 | 12.075 | ppbv | 99     |
| 45) t-1,3-Dichloropropene     | 8.703 | 75  | 1508473 | 23.041 | ppbv | 99     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
 Data File : VL041405.D  
 Acq On : 25 Jul 2024 18:06  
 Operator : SY/MD  
 Sample : VSTDIC015  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC015

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 07/26/2024  
 Supervised By :Mahesh Dadoda 07/29/2024

Quant Time: Jul 26 02:45:39 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Thu Jul 25 14:31:18 2024

Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc     | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|----------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 8.134  | 75   | 1956016  | 22.219   | ppbv   | 96       |
| 47) 1,1,2-Trichloroethane     | 8.893  | 97   | 1451859  | 12.721   | ppbv   | 96       |
| 48) Dibromochloromethane      | 9.706  | 129  | 2512083  | 13.707   | ppbv   | 100      |
| 49) Bromoform                 | 12.404 | 173  | 2210280  | 15.143   | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 8.169  | 43   | 3807510  | 13.505   | ppbv   | 99       |
| 51) 2-Hexanone                | 9.542  | 43   | 3193628  | 15.936   | ppbv   | 100      |
| 52) Tetrachloroethene         | 10.610 | 164  | 1349134  | 12.202   | ppbv   | 98       |
| 53) Toluene                   | 9.214  | 91   | 4102245  | 13.210   | ppbv   | 99       |
| 54) 1,2-Dibromoethane         | 10.002 | 107  | 2140365  | 15.154   | ppbv   | 96       |
| 56) 1,1,1,2-Tetrachloroethane | 11.503 | 131  | 1780102  | 11.753   | ppbv # | 58       |
| 57) Chlorobenzene             | 11.523 | 112  | 3158639  | 11.963   | ppbv   | 98       |
| 58) Ethyl Benzene             | 12.082 | 91   | 5512808  | 12.242   | ppbv   | 99       |
| 59) m/p-Xylene                | 12.365 | 91   | 9224976m | 23.671   | ppbv   |          |
| 60) o-Xylene                  | 13.053 | 91   | 4441698  | 12.076   | ppbv   | 100      |
| 61) Styrene                   | 12.892 | 104  | 2297760  | 12.864   | ppbv   | 99       |
| 62) Isopropylbenzene          | 14.027 | 105  | 6413793  | 11.295   | ppbv   | 99       |
| 63) 1,1,2,2-Tetrachloroethane | 13.044 | 83   | 2691069  | 9.287    | ppbv   | 99       |
| 64) n-propylbenzene           | 14.915 | 120  | 1752978  | 11.826   | ppbv   | 100      |
| 65) tert-Butylbenzene         | 16.088 | 119  | 5746630  | 11.366   | ppbv   | 99       |
| 66) Benzyl Chloride           | 16.323 | 91   | 487926   | 14.686   | ppbv   | 99       |
| 67) sec-Butylbenzene          | 16.632 | 105  | 8009840  | 11.201   | ppbv   | 98       |
| 69) p-Isopropyltoluene        | 16.992 | 119  | 6796381  | 11.508   | ppbv   | 99       |
| 70) n-Butylbenzene            | 17.883 | 91   | 6996243  | 11.589   | ppbv   | 98       |
| 71) 2-Chlorotoluene           | 14.796 | 91   | 4875167  | 11.557   | ppbv   | 98       |
| 72) 4-Ethyltoluene            | 15.188 | 105  | 5320289  | 12.144   | ppbv   | 97       |
| 73) 1,3,5-Trimethylbenzene    | 15.349 | 105  | 4587750  | 12.234   | ppbv   | 99       |
| 74) 1,2,4-Trimethylbenzene    | 16.105 | 105  | 5066348  | 11.990   | ppbv   | 97       |
| 75) 1,3-Dichlorobenzene       | 16.330 | 146  | 3202871  | 12.778   | ppbv   | 100      |
| 76) 1,4-Dichlorobenzene       | 16.471 | 146  | 3142958  | 12.585   | ppbv   | 100      |
| 77) 1,2-Dichlorobenzene       | 17.140 | 146  | 3101661  | 12.137   | ppbv   | 99       |
| 78) Hexachloro-1,3-Butadiene  | 22.628 | 225  | 2444092  | 13.150   | ppbv   | 99       |
| 79) Naphthalene               | 21.381 | 128  | 5532989  | 24.347   | ppbv   | 99       |
| 80) Naphthalene,2-methyl-     | 24.368 | 142  | 5230189  | 8744.993 | ppbv   | 100      |
| 81) 1,2,4-Trichlorobenzene    | 21.136 | 180  | 2891669  | 20.588   | ppbv   | 99       |

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
 Data File : VL041406.D  
 Acq On : 25 Jul 2024 19:31  
 Operator : SY/MD  
 Sample : VSTDICV010  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICVVL072524

Quant Time: Jul 29 01:38:18 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
 QLast Update : Fri Jul 26 07:31:14 2024  
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 150%

|      | Compound                    | Amount | Calc.  | %Dev  | Area% | Dev(min) |
|------|-----------------------------|--------|--------|-------|-------|----------|
| 1 I  | Bromochloromethane          | 10.000 | 10.000 | 0.0   | 101   | 0.00     |
| 2 T  | Dichlorodifluoromethane     | 10.000 | 9.847  | 1.5   | 119   | 0.00     |
| 3    | Chlorodifluoromethane       | 10.000 | 8.981  | 10.2  | 100   | 0.00     |
| 4    | Chloromethane               | 10.000 | 8.963  | 10.4  | 101   | 0.00     |
| 5 T  | Vinyl Chloride              | 10.000 | 9.264  | 7.4   | 102   | 0.00     |
| 6 T  | Bromomethane                | 10.000 | 9.214  | 7.9   | 101   | 0.00     |
| 7    | Chloroethane                | 10.000 | 9.496  | 5.0   | 102   | 0.00     |
| 8 T  | Dichlorotetrafluoroethane   | 10.000 | 9.031  | 9.7   | 100   | 0.00     |
| 9 T  | Propene                     | 10.000 | 9.482  | 5.2   | 107   | 0.00     |
| 10 T | Heptane                     | 10.000 | 9.841  | 1.6   | 101   | 0.00     |
| 11 T | Trichlorofluoromethane      | 10.000 | 8.800  | 12.0  | 98    | 0.00     |
| 12 T | 1,1,2-Trichlorotrifluoroeth | 10.000 | 8.941  | 10.6  | 99    | 0.00     |
| 13   | Ethanol                     | 10.000 | 6.269  | 37.3# | 88    | 0.00     |
| 14 T | Bromoethene                 | 10.000 | 9.593  | 4.1   | 100   | 0.00     |
| 15 T | Acetone                     | 10.000 | 8.780  | 12.2  | 101   | 0.00     |
| 16 T | 1,3-Butadiene               | 10.000 | 8.923  | 10.8  | 98    | 0.00     |
| 17   | tert-Butyl alcohol          | 10.000 | 10.362 | -3.6  | 103   | 0.00     |
| 18 T | 1,1-Dichloroethene          | 10.000 | 9.602  | 4.0   | 100   | 0.00     |
| 19 T | Isopropyl Alcohol           | 10.000 | 8.805  | 12.0  | 91    | 0.00     |
| 20 T | Methylene Chloride          | 10.000 | 8.588  | 14.1  | 99    | 0.00     |
| 21 T | Allyl Chloride              | 10.000 | 9.744  | 2.6   | 101   | 0.00     |
| 22 T | trans-1,2-Dichloroethene    | 10.000 | 9.627  | 3.7   | 102   | 0.00     |
| 23 T | Vinyl Acetate               | 10.000 | 10.238 | -2.4  | 101   | 0.00     |
| 24 T | 1,1-Dichloroethane          | 10.000 | 8.974  | 10.3  | 98    | 0.00     |
| 25 T | Ethyl Acetate               | 10.000 | 9.581  | 4.2   | 103   | 0.00     |
| 26 T | Hexane                      | 10.000 | 9.737  | 2.6   | 103   | 0.00     |
| 27 T | Carbon Disulfide            | 10.000 | 9.875  | 1.3   | 97    | 0.00     |
| 28 T | Methyl tert-Butyl Ether     | 10.000 | 9.572  | 4.3   | 102   | 0.00     |
| 29 T | Chloroform                  | 10.000 | 9.179  | 8.2   | 100   | 0.00     |
| 30 T | Cyclohexane                 | 10.000 | 10.217 | -2.2  | 103   | 0.00     |
| 31 T | cis-1,2-Dichloroethene      | 10.000 | 9.817  | 1.8   | 103   | 0.00     |
| 32 T | 1,1,1-Trichloroethane       | 10.000 | 9.280  | 7.2   | 99    | 0.00     |
| 33 I | 1,4-Difluorobenzene         | 10.000 | 10.000 | 0.0   | 101   | 0.00     |
| 34 T | 2-Butanone                  | 10.000 | 9.886  | 1.1   | 103   | 0.00     |
| 35 T | Carbon Tetrachloride        | 10.000 | 9.425  | 5.7   | 96    | 0.00     |
| 36 T | Benzene                     | 10.000 | 9.678  | 3.2   | 101   | 0.00     |
| 37 T | 1,2-Dichloroethane          | 10.000 | 9.592  | 4.1   | 101   | 0.00     |
| 38 T | Trichloroethene             | 10.000 | 9.485  | 5.2   | 100   | 0.00     |
| 39 T | 1,2-Dichloropropane         | 10.000 | 9.722  | 2.8   | 103   | 0.00     |
| 40 T | 1,4-Dioxane                 | 10.000 | 7.654  | 23.5  | 76    | 0.00     |
| 41 T | Tetrahydrofuran             | 10.000 | 10.640 | -6.4  | 107   | 0.00     |
| 42 T | Bromodichloromethane        | 10.000 | 9.550  | 4.5   | 99    | 0.00     |
| 43   | Methyl Methacrylate         | 10.000 | 10.898 | -9.0  | 102   | 0.00     |
| 44 T | 2,2,4-Trimethylpentane      | 10.000 | 9.470  | 5.3   | 100   | 0.00     |
| 45 T | t-1,3-Dichloropropene       | 10.000 | 12.021 | -20.2 | 102   | 0.00     |
| 46 T | cis-1,3-Dichloropropene     | 10.000 | 11.015 | -10.2 | 102   | 0.00     |
| 47 T | 1,1,2-Trichloroethane       | 10.000 | 9.452  | 5.5   | 100   | 0.00     |
| 48 T | Dibromochloromethane        | 10.000 | 9.797  | 2.0   | 98    | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
 Data File : VL041406.D  
 Acq On : 25 Jul 2024 19:31  
 Operator : SY/MD  
 Sample : VSTDICV010  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICVVL072524

Quant Time: Jul 29 01:38:18 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
 QLast Update : Fri Jul 26 07:31:14 2024  
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 150%

|       | Compound                  | Amount | Calc.  | %Dev  | Area% | Dev(min) |
|-------|---------------------------|--------|--------|-------|-------|----------|
| ----- |                           |        |        |       |       |          |
| 49 T  | Bromoform                 | 10.000 | 10.340 | -3.4  | 98    | 0.00     |
| 50 T  | 4-Methyl-2-Pentanone      | 10.000 | 10.222 | -2.2  | 102   | 0.00     |
| 51 T  | 2-Hexanone                | 10.000 | 10.994 | -9.9  | 101   | 0.00     |
| 52 T  | Tetrachloroethene         | 10.000 | 9.604  | 4.0   | 101   | 0.00     |
| 53 T  | Toluene                   | 10.000 | 10.183 | -1.8  | 101   | 0.00     |
| 54 T  | 1,2-Dibromoethane         | 10.000 | 10.313 | -3.1  | 100   | 0.00     |
|       |                           |        |        |       |       |          |
| 55 I  | Chlorobenzene-d5          | 10.000 | 10.000 | 0.0   | 104   | 0.00     |
| 56    | 1,1,1,2-Tetrachloroethane | 10.000 | 8.940  | 10.6  | 97    | 0.00     |
| 57 T  | Chlorobenzene             | 10.000 | 8.892  | 11.1  | 99    | 0.00     |
| 58 T  | Ethyl Benzene             | 10.000 | 9.542  | 4.6   | 100   | 0.00     |
| 59 T  | m/p-Xylene                | 20.000 | 18.591 | 7.0   | 99    | 0.00     |
| 60 T  | o-Xylene                  | 10.000 | 9.434  | 5.7   | 100   | 0.00     |
| 61 T  | Styrene                   | 10.000 | 10.485 | -4.8  | 100   | 0.00     |
| 62    | Isopropylbenzene          | 10.000 | 9.026  | 9.7   | 99    | 0.00     |
| 63 T  | 1,1,2,2-Tetrachloroethane | 10.000 | 8.895  | 11.1  | 97    | 0.00     |
| 64    | n-propylbenzene           | 10.000 | 9.254  | 7.5   | 98    | 0.00     |
| 65    | tert-Butylbenzene         | 10.000 | 8.930  | 10.7  | 98    | 0.00     |
| 66 T  | Benzyl Chloride           | 10.000 | 11.045 | -10.4 | 104   | 0.00     |
| 67    | sec-Butylbenzene          | 10.000 | 9.010  | 9.9   | 97    | 0.00     |
| 68 S  | 1-Bromo-4-Fluorobenzene   | 10.000 | 9.830  | 1.7   | 101   | 0.00     |
| 69    | p-Isopropyltoluene        | 10.000 | 9.165  | 8.4   | 97    | 0.00     |
| 70    | n-Butylbenzene            | 10.000 | 9.165  | 8.4   | 97    | 0.00     |
| 71    | 2-Chlorotoluene           | 10.000 | 9.245  | 7.6   | 99    | 0.00     |
| 72 T  | 4-Ethyltoluene            | 10.000 | 9.535  | 4.6   | 97    | 0.00     |
| 73 T  | 1,3,5-Trimethylbenzene    | 10.000 | 9.563  | 4.4   | 98    | 0.00     |
| 74 T  | 1,2,4-Trimethylbenzene    | 10.000 | 9.057  | 9.4   | 98    | 0.00     |
| 75 T  | 1,3-Dichlorobenzene       | 10.000 | 9.027  | 9.7   | 98    | 0.00     |
| 76 T  | 1,4-Dichlorobenzene       | 10.000 | 9.089  | 9.1   | 98    | 0.00     |
| 77 T  | 1,2-Dichlorobenzene       | 10.000 | 8.874  | 11.3  | 98    | 0.00     |
| 78 T  | Hexachloro-1,3-Butadiene  | 10.000 | 8.012  | 19.9  | 99    | 0.00     |
| 79 T  | Naphthalene               | 10.000 | 10.810 | -8.1  | 98    | 0.00     |
| 80 T  | Naphthalene,2-methyl-     | 10.000 | 11.790 | -17.9 | 102   | 0.00     |
| 81 T  | 1,2,4-Trichlorobenzene    | 10.000 | 9.517  | 4.8   | 99    | 0.00     |
| ----- |                           |        |        |       |       |          |

(#) = Out of Range

SPCC's out = 0 CCC's out = 0



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
 Data File : VL041406.D  
 Acq On : 25 Jul 2024 19:31  
 Operator : SY/MD  
 Sample : VSTDICV010  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICVVL072524

Quant Time: Jul 29 01:38:18 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
 QLast Update : Fri Jul 26 07:31:14 2024  
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 150%

|      | Compound                    | AvgRF | CCRF   | %Dev  | Area% | Dev(min) |
|------|-----------------------------|-------|--------|-------|-------|----------|
| 1 I  | Bromochloromethane          | 1.000 | 1.000  | 0.0   | 101   | 0.00     |
| 2 T  | Dichlorodifluoromethane     | 1.720 | 1.694  | 1.5   | 119   | 0.00     |
| 3    | Chlorodifluoromethane       | 1.190 | 1.069  | 10.2  | 100   | 0.00     |
| 4    | Chloromethane               | 0.633 | 0.568  | 10.3  | 101   | 0.00     |
| 5 T  | Vinyl Chloride              | 0.624 | 0.578  | 7.4   | 102   | 0.00     |
| 6 T  | Bromomethane                | 0.321 | 0.296  | 7.8   | 101   | 0.00     |
| 7    | Chloroethane                | 0.215 | 0.205  | 4.7   | 102   | 0.00     |
| 8 T  | Dichlorotetrafluoroethane   | 1.524 | 1.377  | 9.6   | 100   | 0.00     |
| 9 T  | Propene                     | 0.547 | 0.519  | 5.1   | 107   | 0.00     |
| 10 T | Heptane                     | 1.229 | 1.209  | 1.6   | 101   | 0.00     |
| 11 T | Trichlorofluoromethane      | 1.528 | 1.345  | 12.0  | 98    | 0.00     |
| 12 T | 1,1,2-Trichlorotrifluoroeth | 1.100 | 0.984  | 10.5  | 99    | 0.00     |
| 13   | Ethanol                     | 0.049 | 0.031# | 36.7# | 88    | 0.00     |
| 14 T | Bromoethene                 | 0.429 | 0.411  | 4.2   | 100   | 0.00     |
| 15 T | Acetone                     | 1.136 | 0.998  | 12.1  | 101   | 0.00     |
| 16 T | 1,3-Butadiene               | 0.607 | 0.542  | 10.7  | 98    | 0.00     |
| 17   | tert-Butyl alcohol          | 1.036 | 1.074  | -3.7  | 103   | 0.00     |
| 18 T | 1,1-Dichloroethene          | 0.471 | 0.452  | 4.0   | 100   | 0.00     |
| 19 T | Isopropyl Alcohol           | 0.664 | 0.585  | 11.9  | 91    | 0.00     |
| 20 T | Methylene Chloride          | 0.424 | 0.364  | 14.2  | 99    | 0.00     |
| 21 T | Allyl Chloride              | 0.745 | 0.726  | 2.6   | 101   | 0.00     |
| 22 T | trans-1,2-Dichloroethene    | 0.471 | 0.453  | 3.8   | 102   | 0.00     |
| 23 T | Vinyl Acetate               | 0.868 | 0.888  | -2.3  | 101   | 0.00     |
| 24 T | 1,1-Dichloroethane          | 1.022 | 0.917  | 10.3  | 98    | 0.00     |
| 25 T | Ethyl Acetate               | 2.257 | 2.163  | 4.2   | 103   | 0.00     |
| 26 T | Hexane                      | 0.936 | 0.912  | 2.6   | 103   | 0.00     |
| 27 T | Carbon Disulfide            | 1.095 | 1.082  | 1.2   | 97    | 0.00     |
| 28 T | Methyl tert-Butyl Ether     | 0.591 | 0.565  | 4.4   | 102   | 0.00     |
| 29 T | Chloroform                  | 1.527 | 1.402  | 8.2   | 100   | 0.00     |
| 30 T | Cyclohexane                 | 0.763 | 0.779  | -2.1  | 103   | 0.00     |
| 31 T | cis-1,2-Dichloroethene      | 0.925 | 0.908  | 1.8   | 103   | 0.00     |
| 32 T | 1,1,1-Trichloroethane       | 1.487 | 1.380  | 7.2   | 99    | 0.00     |
| 33 I | 1,4-Difluorobenzene         | 1.000 | 1.000  | 0.0   | 101   | 0.00     |
| 34 T | 2-Butanone                  | 0.484 | 0.478  | 1.2   | 103   | 0.00     |
| 35 T | Carbon Tetrachloride        | 0.552 | 0.520  | 5.8   | 96    | 0.00     |
| 36 T | Benzene                     | 0.731 | 0.707  | 3.3   | 101   | 0.00     |
| 37 T | 1,2-Dichloroethane          | 0.409 | 0.392  | 4.2   | 101   | 0.00     |
| 38 T | Trichloroethene             | 0.335 | 0.318  | 5.1   | 100   | 0.00     |
| 39 T | 1,2-Dichloropropane         | 0.280 | 0.272  | 2.9   | 103   | 0.00     |
| 40 T | 1,4-Dioxane                 | 0.112 | 0.086  | 23.2  | 76    | 0.00     |
| 41 T | Tetrahydrofuran             | 0.277 | 0.294  | -6.1  | 107   | 0.00     |
| 42 T | Bromodichloromethane        | 0.591 | 0.564  | 4.6   | 99    | 0.00     |
| 43   | Methyl Methacrylate         | 0.262 | 0.286  | -9.2  | 102   | 0.00     |
| 44 T | 2,2,4-Trimethylpentane      | 1.220 | 1.156  | 5.2   | 100   | 0.00     |
| 45 T | t-1,3-Dichloropropene       | 0.241 | 0.290  | -20.3 | 102   | 0.00     |
| 46 T | cis-1,3-Dichloropropene     | 0.348 | 0.384  | -10.3 | 102   | 0.00     |
| 47 T | 1,1,2-Trichloroethane       | 0.308 | 0.291  | 5.5   | 100   | 0.00     |
| 48 T | Dibromochloromethane        | 0.497 | 0.487  | 2.0   | 98    | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL072524\  
 Data File : VL041406.D  
 Acq On : 25 Jul 2024 19:31  
 Operator : SY/MD  
 Sample : VSTDICV010  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 ICVVL072524

Quant Time: Jul 29 01:38:18 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
 QLast Update : Fri Jul 26 07:31:14 2024  
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 150%

|      | Compound                  | AvgRF | CCRF  | %Dev  | Area% | Dev(min) |
|------|---------------------------|-------|-------|-------|-------|----------|
| 49 T | Bromoform                 | 0.420 | 0.434 | -3.3  | 98    | 0.00     |
| 50 T | 4-Methyl-2-Pentanone      | 0.763 | 0.780 | -2.2  | 102   | 0.00     |
| 51 T | 2-Hexanone                | 0.577 | 0.634 | -9.9  | 101   | 0.00     |
| 52 T | Tetrachloroethene         | 0.282 | 0.271 | 3.9   | 101   | 0.00     |
| 53 T | Toluene                   | 0.814 | 0.829 | -1.8  | 101   | 0.00     |
| 54 T | 1,2-Dibromoethane         | 0.410 | 0.423 | -3.2  | 100   | 0.00     |
| 55 I | Chlorobenzene-d5          | 1.000 | 1.000 | 0.0   | 104   | 0.00     |
| 56   | 1,1,1,2-Tetrachloroethane | 0.388 | 0.347 | 10.6  | 97    | 0.00     |
| 57 T | Chlorobenzene             | 0.712 | 0.633 | 11.1  | 99    | 0.00     |
| 58 T | Ethyl Benzene             | 1.153 | 1.100 | 4.6   | 100   | 0.00     |
| 59 T | m/p-Xylene                | 0.995 | 0.925 | 7.0   | 99    | 0.00     |
| 60 T | o-Xylene                  | 0.941 | 0.888 | 5.6   | 100   | 0.00     |
| 61 T | Styrene                   | 0.425 | 0.445 | -4.7  | 100   | 0.00     |
| 62   | Isopropylbenzene          | 1.431 | 1.292 | 9.7   | 99    | 0.00     |
| 63 T | 1,1,2,2-Tetrachloroethane | 0.594 | 0.529 | 10.9  | 97    | 0.00     |
| 64   | n-propylbenzene           | 0.374 | 0.346 | 7.5   | 98    | 0.00     |
| 65   | tert-Butylbenzene         | 1.292 | 1.154 | 10.7  | 98    | 0.00     |
| 66 T | Benzyl Chloride           | 0.083 | 0.092 | -10.8 | 104   | 0.00     |
| 67   | sec-Butylbenzene          | 1.781 | 1.604 | 9.9   | 97    | 0.00     |
| 68 S | 1-Bromo-4-Fluorobenzene   | 0.770 | 0.756 | 1.8   | 101   | 0.00     |
| 69   | p-Isopropyltoluene        | 1.478 | 1.354 | 8.4   | 97    | 0.00     |
| 70   | n-Butylbenzene            | 1.515 | 1.388 | 8.4   | 97    | 0.00     |
| 71   | 2-Chlorotoluene           | 1.055 | 0.976 | 7.5   | 99    | 0.00     |
| 72 T | 4-Ethyltoluene            | 1.108 | 1.057 | 4.6   | 97    | 0.00     |
| 73 T | 1,3,5-Trimethylbenzene    | 0.955 | 0.913 | 4.4   | 98    | 0.00     |
| 74 T | 1,2,4-Trimethylbenzene    | 1.110 | 1.005 | 9.5   | 98    | 0.00     |
| 75 T | 1,3-Dichlorobenzene       | 0.698 | 0.630 | 9.7   | 98    | 0.00     |
| 76 T | 1,4-Dichlorobenzene       | 0.676 | 0.614 | 9.2   | 98    | 0.00     |
| 77 T | 1,2-Dichlorobenzene       | 0.692 | 0.614 | 11.3  | 98    | 0.00     |
| 78 T | Hexachloro-1,3-Butadiene  | 0.590 | 0.473 | 19.8  | 99    | 0.00     |
| 79 T | Naphthalene               | 0.980 | 1.059 | -8.1  | 98    | 0.00     |
| 80 T | Naphthalene,2-methyl-     | 0.821 | 0.968 | -17.9 | 102   | 0.00     |
| 81 T | 1,2,4-Trichlorobenzene    | 0.583 | 0.555 | 4.8   | 99    | 0.00     |

(#) = Out of Range

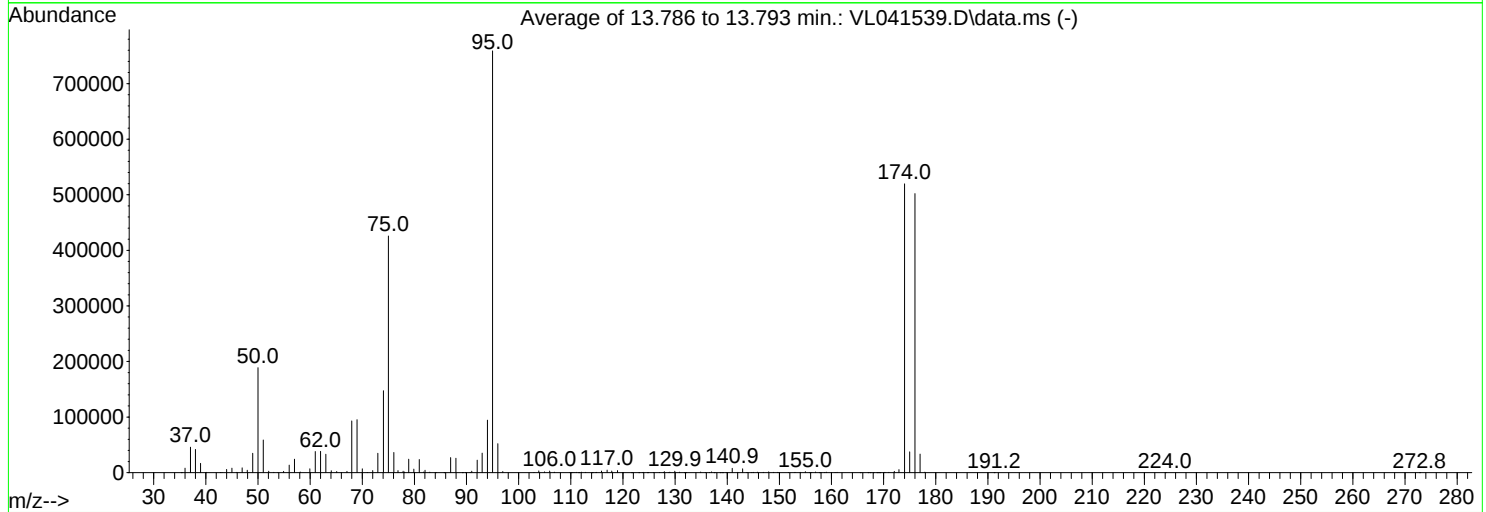
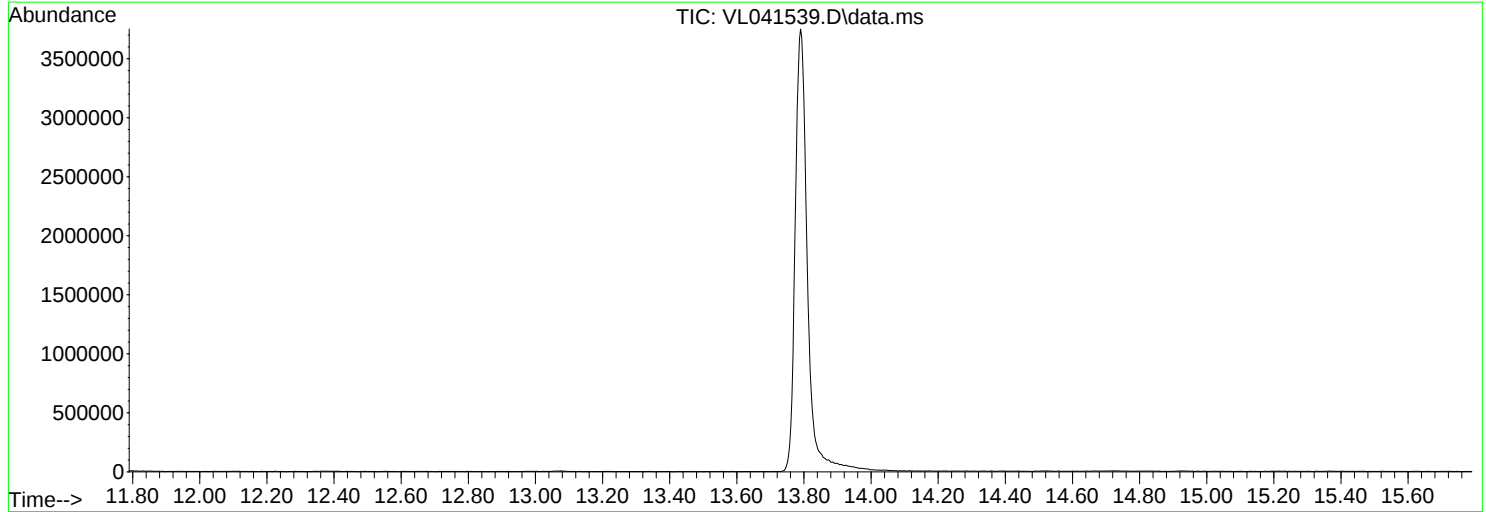
SPCC's out = 0 CCC's out = 0

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL081924\  
Data File : VL041539.D  
Acq On : 19 Aug 2024 8:10  
Operator : SY/MD  
Sample : BFB  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M  
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
Last Update : Tue Aug 20 02:10:04 2024



AutoFind: Scans 3478, 3479, 3480; Background Corrected with Scan 3456

| Target<br>Mass | Rel. to<br>Mass | Lower<br>Limit% | Upper<br>Limit% | Rel.<br>Abn% | Raw<br>Abn | Result<br>Pass/Fail |
|----------------|-----------------|-----------------|-----------------|--------------|------------|---------------------|
| 50             | 95              | 8               | 40              | 24.9         | 188907     | PASS                |
| 75             | 95              | 30              | 66              | 56.1         | 425728     | PASS                |
| 95             | 95              | 100             | 100             | 100.0        | 758997     | PASS                |
| 96             | 95              | 5               | 9               | 6.9          | 52083      | PASS                |
| 173            | 174             | 0.00            | 2               | 1.0          | 5439       | PASS                |
| 174            | 95              | 50              | 120             | 68.5         | 519701     | PASS                |
| 175            | 174             | 4               | 9               | 7.2          | 37573      | PASS                |
| 176            | 174             | 93              | 101             | 96.6         | 502080     | PASS                |
| 177            | 176             | 5               | 9               | 6.6          | 33307      | PASS                |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL081924\  
 Data File : VL041540.D  
 Acq On : 19 Aug 2024 8:59  
 Operator : SY/MD  
 Sample : VSTDCCC010  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

Manual Integrations  
 APPROVED

Reviewed By : Semsettin Yesilyurt 08/20/2024  
 Supervised By : Mahesh Dadoda 08/20/2024

Quant Time: Aug 20 02:13:28 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 20 02:13:28 2024

QLast Update : Tue Aug 20 02:10:04 2024

Response via : Initial Calibration

| Compound                | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|--------|------|----------|--------|-------|----------|
| -----                   |        |      |          |        |       |          |
| Internal Standards      |        |      |          |        |       |          |
| 1) Bromochloromethane   | 5.211  | 49   | 949994   | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 6.671  | 114  | 2559374  | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 11.491 | 117  | 2515938m | 10.000 | ppbv  | 0.00     |

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 13.799 95 1947516 10.059 ppbv 0.00  
 Spiked Amount 10.000 Range 65 - 135 Recovery = 100.600%

Target Compounds

|                               |       |     |         |        |        | Qvalue |
|-------------------------------|-------|-----|---------|--------|--------|--------|
| 2) Dichlorodifluoromethane    | 2.748 | 85  | 884681  | 5.413  | ppbv   | 99     |
| 3) Chlorodifluoromethane      | 2.693 | 51  | 1159695 | 10.254 | ppbv   | 100    |
| 4) Chloromethane              | 2.832 | 50  | 629369  | 10.463 | ppbv   | 99     |
| 5) Vinyl Chloride             | 2.938 | 62  | 619805  | 10.454 | ppbv   | 99     |
| 6) Bromomethane               | 3.137 | 94  | 327691  | 10.754 | ppbv   | 92     |
| 7) Chloroethane               | 3.214 | 64  | 229324  | 11.207 | ppbv   | 97     |
| 8) Dichlorotetrafluoroethane  | 2.874 | 85  | 1383474 | 9.554  | ppbv   | 100    |
| 9) Propene                    | 2.713 | 41  | 521016  | 10.029 | ppbv   | 98     |
| 10) Heptane                   | 7.597 | 43  | 1321671 | 11.323 | ppbv   | 99     |
| 11) Trichlorofluoromethane    | 3.581 | 101 | 1519219 | 10.467 | ppbv   | 98     |
| 12) 1,1,2-Trichlorotrifluo... | 4.082 | 101 | 1094070 | 10.468 | ppbv   | 98     |
| 13) Ethanol                   | 3.256 | 45  | 36044m  | 7.762  | ppbv   |        |
| 14) Bromoethene               | 3.385 | 108 | 440924  | 10.821 | ppbv   | 99     |
| 15) Acetone                   | 3.484 | 43  | 1130098 | 10.470 | ppbv   | 100    |
| 16) 1,3-Butadiene             | 3.002 | 39  | 624120  | 10.822 | ppbv   | 97     |
| 17) tert-Butyl alcohol        | 3.893 | 59  | 1096646 | 11.140 | ppbv   | 100    |
| 18) 1,1-Dichloroethene        | 3.899 | 96  | 487068  | 10.895 | ppbv   | 92     |
| 19) Isopropyl Alcohol         | 3.591 | 45  | 651343  | 10.322 | ppbv # | 96     |
| 20) Methylene Chloride        | 3.951 | 84  | 412911  | 10.258 | ppbv   | 98     |
| 21) Allyl Chloride            | 4.012 | 41  | 770702  | 10.888 | ppbv   | 100    |
| 22) trans-1,2-Dichloroethene  | 4.462 | 96  | 491446  | 10.994 | ppbv   | 98     |
| 23) Vinyl Acetate             | 4.642 | 43  | 966046  | 11.719 | ppbv # | 98     |
| 24) 1,1-Dichloroethane        | 4.581 | 63  | 1045215 | 10.768 | ppbv   | 99     |
| 25) Ethyl Acetate             | 5.221 | 43  | 2381732 | 11.107 | ppbv   | 99     |
| 26) Hexane                    | 5.230 | 57  | 979260  | 11.009 | ppbv   | 99     |
| 27) Carbon Disulfide          | 4.144 | 76  | 1163109 | 11.177 | ppbv   | 99     |
| 28) Methyl tert-Butyl Ether   | 4.603 | 73  | 587594  | 10.474 | ppbv   | 100    |
| 29) Chloroform                | 5.295 | 83  | 1547234 | 10.664 | ppbv   | 99     |
| 30) Cyclohexane               | 6.623 | 84  | 817710  | 11.288 | ppbv   | 99     |
| 31) cis-1,2-Dichloroethene    | 5.095 | 61  | 948884  | 10.798 | ppbv   | 98     |
| 32) 1,1,1-Trichloroethane     | 6.021 | 97  | 1527033 | 10.812 | ppbv   | 99     |
| 34) 2-Butanone                | 4.803 | 43  | 1405398 | 11.352 | ppbv   | 99     |
| 35) Carbon Tetrachloride      | 6.513 | 117 | 1609727 | 11.403 | ppbv   | 99     |
| 36) Benzene                   | 6.391 | 78  | 2059410 | 11.012 | ppbv   | 99     |
| 37) 1,2-Dichloroethane        | 5.825 | 62  | 1153588 | 11.021 | ppbv   | 99     |
| 38) Trichloroethene           | 7.311 | 130 | 978782  | 11.424 | ppbv   | 97     |
| 39) 1,2-Dichloropropane       | 7.095 | 63  | 811438  | 11.333 | ppbv   | 97     |
| 40) 1,4-Dioxane               | 7.307 | 88  | 311632  | 10.835 | ppbv   | 78     |
| 41) Tetrahydrofuran           | 5.574 | 42  | 831216  | 11.739 | ppbv   | 98     |
| 42) Bromodichloromethane      | 7.269 | 83  | 1693152 | 11.203 | ppbv   | 99     |
| 43) Methyl Methacrylate       | 7.494 | 69  | 821493  | 12.250 | ppbv   | 97     |
| 44) 2,2,4-Trimethylpentane    | 7.343 | 57  | 3513799 | 11.249 | ppbv   | 99     |
| 45) t-1,3-Dichloropropene     | 8.729 | 75  | 843236  | 13.661 | ppbv   | 95     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL081924\  
 Data File : VL041540.D  
 Acq On : 19 Aug 2024 8:59  
 Operator : SY/MD  
 Sample : VSTDCCC010  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010

Manual Integrations  
 APPROVED

Reviewed By : Semsettin Yesilyurt 08/20/2024  
 Supervised By : Mahesh Dadoda 08/20/2024

Quant Time: Aug 20 02:13:28 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 20 02:13:28 2024

QLast Update : Tue Aug 20 02:10:04 2024

Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|--------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 8.163  | 75   | 1113175  | 12.489 | ppbv   | 97       |
| 47) 1,1,2-Trichloroethane     | 8.918  | 97   | 874878   | 11.085 | ppbv   | 96       |
| 48) Dibromochloromethane      | 9.732  | 129  | 1471389  | 11.573 | ppbv   | 100      |
| 49) Bromoform                 | 12.429 | 173  | 1290363  | 12.015 | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 8.198  | 43   | 2348083  | 12.021 | ppbv   | 100      |
| 51) 2-Hexanone                | 9.571  | 43   | 1889904  | 12.796 | ppbv # | 98       |
| 52) Tetrachloroethene         | 10.635 | 164  | 785134   | 10.865 | ppbv   | 98       |
| 53) Toluene                   | 9.240  | 91   | 2434932  | 11.689 | ppbv   | 100      |
| 54) 1,2-Dibromoethane         | 10.031 | 107  | 1279830  | 12.183 | ppbv   | 99       |
| 56) 1,1,1,2-Tetrachloroethane | 11.529 | 131  | 1082376  | 11.093 | ppbv # | 57       |
| 57) Chlorobenzene             | 11.545 | 112  | 1917343  | 10.704 | ppbv   | 99       |
| 58) Ethyl Benzene             | 12.111 | 91   | 3295215  | 11.363 | ppbv   | 100      |
| 59) m/p-Xylene                | 12.394 | 91   | 5677231m | 22.679 | ppbv   |          |
| 60) o-Xylene                  | 13.079 | 91   | 2717555  | 11.476 | ppbv   | 100      |
| 61) Styrene                   | 12.918 | 104  | 1314555  | 12.305 | ppbv   | 99       |
| 62) Isopropylbenzene          | 14.050 | 105  | 3944805  | 10.958 | ppbv   | 99       |
| 63) 1,1,2,2-Tetrachloroethane | 13.069 | 83   | 1675653  | 11.206 | ppbv   | 99       |
| 64) n-propylbenzene           | 14.937 | 120  | 1056999  | 11.231 | ppbv   | 95       |
| 65) tert-Butylbenzene         | 16.111 | 119  | 3568987  | 10.976 | ppbv   | 100      |
| 66) Benzyl Chloride           | 16.346 | 91   | 294537   | 14.122 | ppbv   | 98       |
| 67) sec-Butylbenzene          | 16.658 | 105  | 5012445  | 11.189 | ppbv   | 99       |
| 69) p-Isopropyltoluene        | 17.018 | 119  | 4225410  | 11.366 | ppbv   | 100      |
| 70) n-Butylbenzene            | 17.908 | 91   | 4335585  | 11.376 | ppbv   | 100      |
| 71) 2-Chlorotoluene           | 14.822 | 91   | 2983953  | 11.240 | ppbv   | 99       |
| 72) 4-Ethyltoluene            | 15.214 | 105  | 3230798  | 11.588 | ppbv   | 98       |
| 73) 1,3,5-Trimethylbenzene    | 15.371 | 105  | 2794784  | 11.636 | ppbv   | 98       |
| 74) 1,2,4-Trimethylbenzene    | 16.127 | 105  | 3136247  | 11.232 | ppbv   | 97       |
| 75) 1,3-Dichlorobenzene       | 16.355 | 146  | 1953807  | 11.131 | ppbv   | 100      |
| 76) 1,4-Dichlorobenzene       | 16.494 | 146  | 1933808  | 11.378 | ppbv   | 98       |
| 77) 1,2-Dichlorobenzene       | 17.162 | 146  | 1900542  | 10.922 | ppbv   | 100      |
| 78) Hexachloro-1,3-Butadiene  | 22.657 | 225  | 1416463  | 9.546  | ppbv   | 99       |
| 79) Naphthalene               | 21.410 | 128  | 3145958  | 12.765 | ppbv   | 99       |
| 80) Naphthalene,2-methyl-     | 24.390 | 142  | 2696816  | 13.054 | ppbv   | 100      |
| 81) 1,2,4-Trichlorobenzene    | 21.162 | 180  | 1663658  | 11.343 | ppbv   | 99       |

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL081924\  
 Data File : VL041540.D  
 Acq On : 19 Aug 2024 8:59  
 Operator : SY/MD  
 Sample : VSTDCCC010  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 LabSampleId :  
 VSTDCCC010

Quant Time: Aug 20 02:13:28 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
 QLast Update : Tue Aug 20 02:10:04 2024  
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 150%

|      | Compound                    | AvgRF | CCRF   | %Dev   | Area% | Dev(min) |
|------|-----------------------------|-------|--------|--------|-------|----------|
| 1 I  | Bromochloromethane          | 1.000 | 1.000  | 0.0    | 77    | 0.00     |
| 2 T  | Dichlorodifluoromethane     | 1.720 | 0.931  | 45.9#  | 51    | 0.00     |
| 3    | Chlorodifluoromethane       | 1.190 | 1.221  | -2.6   | 88    | 0.00     |
| 4    | Chloromethane               | 0.633 | 0.662  | -4.6   | 91    | 0.00     |
| 5 T  | Vinyl Chloride              | 0.624 | 0.652  | -4.5   | 89    | 0.00     |
| 6 T  | Bromomethane                | 0.321 | 0.345  | -7.5   | 91    | 0.00     |
| 7    | Chloroethane                | 0.215 | 0.241  | -12.1  | 92    | 0.00     |
| 8 T  | Dichlorotetrafluoroethane   | 1.524 | 1.456  | 4.5    | 82    | 0.00     |
| 9 T  | Propene                     | 0.547 | 0.548  | -0.2   | 87    | 0.00     |
| 10 T | Heptane                     | 1.229 | 1.391  | -13.2  | 90    | 0.00     |
| 11 T | Trichlorofluoromethane      | 1.528 | 1.599  | -4.6   | 90    | 0.00     |
| 12 T | 1,1,2-Trichlorotrifluoroeth | 1.100 | 1.152  | -4.7   | 89    | 0.00     |
| 13   | Ethanol                     | 0.049 | 0.038# | 22.4   | 84    | 0.00     |
| 14 T | Bromoethene                 | 0.429 | 0.464  | -8.2   | 87    | 0.00     |
| 15 T | Acetone                     | 1.136 | 1.190  | -4.8   | 92    | 0.00     |
| 16 T | 1,3-Butadiene               | 0.607 | 0.657  | -8.2   | 92    | 0.00     |
| 17   | tert-Butyl alcohol          | 1.036 | 1.154  | -11.4  | 85    | 0.00     |
| 18 T | 1,1-Dichloroethene          | 0.471 | 0.513  | -8.9   | 87    | 0.00     |
| 19 T | Isopropyl Alcohol           | 0.664 | 0.686  | -3.3   | 82    | 0.00     |
| 20 T | Methylene Chloride          | 0.424 | 0.435  | -2.6   | 91    | 0.00     |
| 21 T | Allyl Chloride              | 0.745 | 0.811  | -8.9   | 87    | 0.00     |
| 22 T | trans-1,2-Dichloroethene    | 0.471 | 0.517  | -9.8   | 89    | 0.00     |
| 23 T | Vinyl Acetate               | 0.868 | 1.017  | -17.2  | 89    | 0.00     |
| 24 T | 1,1-Dichloroethane          | 1.022 | 1.100  | -7.6   | 91    | 0.00     |
| 25 T | Ethyl Acetate               | 2.257 | 2.507  | -11.1  | 92    | 0.00     |
| 26 T | Hexane                      | 0.936 | 1.031  | -10.1  | 90    | 0.00     |
| 27 T | Carbon Disulfide            | 1.095 | 1.224  | -11.8  | 85    | 0.00     |
| 28 T | Methyl tert-Butyl Ether     | 0.591 | 0.619  | -4.7   | 86    | 0.00     |
| 29 T | Chloroform                  | 1.527 | 1.629  | -6.7   | 89    | 0.00     |
| 30 T | Cyclohexane                 | 0.763 | 0.861  | -12.8  | 87    | 0.00     |
| 31 T | cis-1,2-Dichloroethene      | 0.925 | 0.999  | -8.0   | 87    | 0.00     |
| 32 T | 1,1,1-Trichloroethane       | 1.487 | 1.607  | -8.1   | 89    | 0.00     |
| 33 I | 1,4-Difluorobenzene         | 1.000 | 1.000  | 0.0    | 76    | 0.00     |
| 34 T | 2-Butanone                  | 0.484 | 0.549  | -13.4  | 90    | 0.00     |
| 35 T | Carbon Tetrachloride        | 0.552 | 0.629  | -13.9  | 88    | 0.00     |
| 36 T | Benzene                     | 0.731 | 0.805  | -10.1  | 87    | 0.00     |
| 37 T | 1,2-Dichloroethane          | 0.409 | 0.451  | -10.3  | 88    | 0.00     |
| 38 T | Trichloroethene             | 0.335 | 0.382  | -14.0  | 91    | 0.00     |
| 39 T | 1,2-Dichloropropane         | 0.280 | 0.317  | -13.2  | 91    | 0.00     |
| 40 T | 1,4-Dioxane                 | 0.112 | 0.122  | -8.9   | 81    | 0.00     |
| 41 T | Tetrahydrofuran             | 0.277 | 0.325  | -17.3  | 89    | 0.00     |
| 42 T | Bromodichloromethane        | 0.591 | 0.662  | -12.0  | 88    | 0.00     |
| 43   | Methyl Methacrylate         | 0.262 | 0.321  | -22.5  | 87    | 0.00     |
| 44 T | 2,2,4-Trimethylpentane      | 1.220 | 1.373  | -12.5  | 90    | 0.00     |
| 45 T | t-1,3-Dichloropropene       | 0.241 | 0.329  | -36.5# | 88    | 0.00     |
| 46 T | cis-1,3-Dichloropropene     | 0.348 | 0.435  | -25.0  | 87    | 0.00     |
| 47 T | 1,1,2-Trichloroethane       | 0.308 | 0.342  | -11.0  | 89    | 0.00     |
| 48 T | Dibromochloromethane        | 0.497 | 0.575  | -15.7  | 87    | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL081924\  
 Data File : VL041540.D  
 Acq On : 19 Aug 2024 8:59  
 Operator : SY/MD  
 Sample : VSTDCCC010  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 LabSampleId :  
 VSTDCCC010

Quant Time: Aug 20 02:13:28 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
 QLast Update : Tue Aug 20 02:10:04 2024  
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 150%

|      | Compound                  | AvgRF | CCRF  | %Dev   | Area% | Dev(min) |
|------|---------------------------|-------|-------|--------|-------|----------|
| 49 T | Bromoform                 | 0.420 | 0.504 | -20.0  | 86    | 0.00     |
| 50 T | 4-Methyl-2-Pentanone      | 0.763 | 0.917 | -20.2  | 90    | 0.00     |
| 51 T | 2-Hexanone                | 0.577 | 0.738 | -27.9  | 88    | 0.00     |
| 52 T | Tetrachloroethene         | 0.282 | 0.307 | -8.9   | 86    | 0.00     |
| 53 T | Toluene                   | 0.814 | 0.951 | -16.8  | 88    | 0.00     |
| 54 T | 1,2-Dibromoethane         | 0.410 | 0.500 | -22.0  | 89    | 0.00     |
| 55 I | Chlorobenzene-d5          | 1.000 | 1.000 | 0.0    | 77    | 0.00     |
| 56   | 1,1,1,2-Tetrachloroethane | 0.388 | 0.430 | -10.8  | 89    | 0.00     |
| 57 T | Chlorobenzene             | 0.712 | 0.762 | -7.0   | 88    | 0.00     |
| 58 T | Ethyl Benzene             | 1.153 | 1.310 | -13.6  | 88    | 0.00     |
| 59 T | m/p-Xylene                | 0.995 | 1.128 | -13.4  | 89    | 0.00     |
| 60 T | o-Xylene                  | 0.941 | 1.080 | -14.8  | 89    | 0.00     |
| 61 T | Styrene                   | 0.425 | 0.522 | -22.8  | 87    | 0.00     |
| 62   | Isopropylbenzene          | 1.431 | 1.568 | -9.6   | 88    | 0.00     |
| 63 T | 1,1,2,2-Tetrachloroethane | 0.594 | 0.666 | -12.1  | 90    | 0.00     |
| 64   | n-propylbenzene           | 0.374 | 0.420 | -12.3  | 88    | 0.00     |
| 65   | tert-Butylbenzene         | 1.292 | 1.419 | -9.8   | 89    | 0.00     |
| 66 T | Benzyl Chloride           | 0.083 | 0.117 | -41.0# | 98    | 0.00     |
| 67   | sec-Butylbenzene          | 1.781 | 1.992 | -11.8  | 89    | 0.00     |
| 68 S | 1-Bromo-4-Fluorobenzene   | 0.770 | 0.774 | -0.5   | 76    | 0.00     |
| 69   | p-Isopropyltoluene        | 1.478 | 1.679 | -13.6  | 89    | 0.00     |
| 70   | n-Butylbenzene            | 1.515 | 1.723 | -13.7  | 89    | 0.00     |
| 71   | 2-Chlorotoluene           | 1.055 | 1.186 | -12.4  | 89    | 0.00     |
| 72 T | 4-Ethyltoluene            | 1.108 | 1.284 | -15.9  | 87    | 0.00     |
| 73 T | 1,3,5-Trimethylbenzene    | 0.955 | 1.111 | -16.3  | 88    | 0.00     |
| 74 T | 1,2,4-Trimethylbenzene    | 1.110 | 1.247 | -12.3  | 90    | 0.00     |
| 75 T | 1,3-Dichlorobenzene       | 0.698 | 0.777 | -11.3  | 89    | 0.00     |
| 76 T | 1,4-Dichlorobenzene       | 0.676 | 0.769 | -13.8  | 90    | 0.00     |
| 77 T | 1,2-Dichlorobenzene       | 0.692 | 0.755 | -9.1   | 89    | 0.00     |
| 78 T | Hexachloro-1,3-Butadiene  | 0.590 | 0.563 | 4.6    | 87    | 0.00     |
| 79 T | Naphthalene               | 0.980 | 1.250 | -27.6  | 86    | 0.00     |
| 80 T | Naphthalene,2-methyl-     | 0.821 | 1.072 | -30.6# | 83    | 0.00     |
| 81 T | 1,2,4-Trichlorobenzene    | 0.583 | 0.661 | -13.4  | 87    | 0.00     |

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL081924\  
 Data File : VL041541.D  
 Acq On : 19 Aug 2024 10:07  
 Operator : SY/MD  
 Sample : VL0819ABL01  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0819ABL01

Quant Time: Aug 20 02:14:14 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
 QLast Update : Tue Aug 20 02:10:04 2024  
 Response via : Initial Calibration

| Compound                | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|--------|------|----------|--------|-------|----------|
| -----                   |        |      |          |        |       |          |
| Internal Standards      |        |      |          |        |       |          |
| 1) Bromochloromethane   | 5.211  | 49   | 895764   | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 6.671  | 114  | 2374230  | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 11.484 | 117  | 2131055  | 10.000 | ppbv  | # 0.00   |

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| System Monitoring Compounds |        |       |          |          |      |         |
| 68) 1-Bromo-4-Fluorobenzene | 13.799 | 95    | 1588219  | 9.684    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 96.800% |

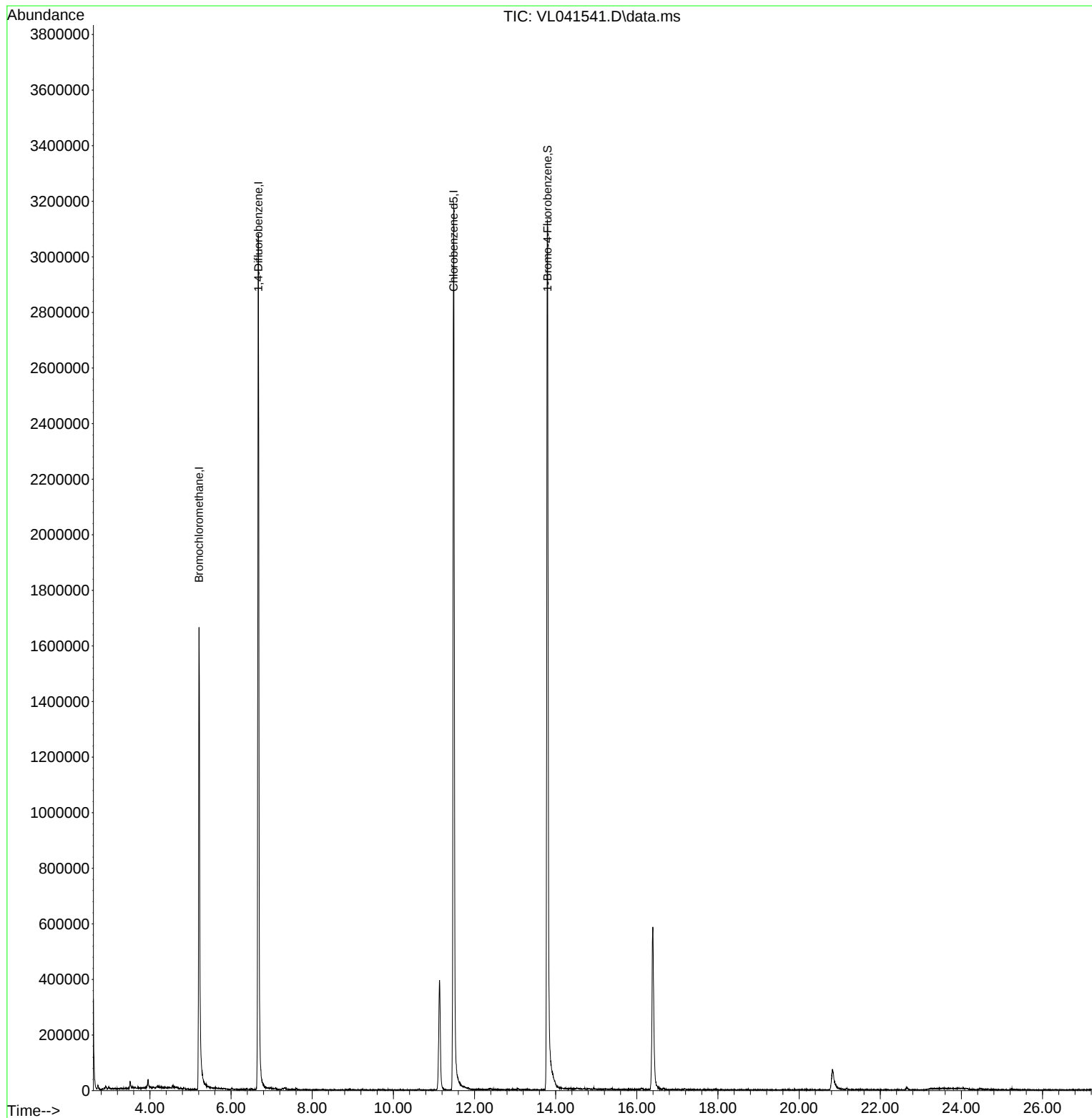
| Target Compounds | Qvalue |
|------------------|--------|
| -----            |        |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL081924\  
Data File : VL041541.D  
Acq On : 19 Aug 2024 10:07  
Operator : SY/MD  
Sample : VL0819ABL01  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
VL0819ABL01

Quant Time: Aug 20 02:14:14 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
QLast Update : Tue Aug 20 02:10:04 2024  
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL081924\  
 Data File : VL041542.D  
 Acq On : 19 Aug 2024 10:48  
 Operator : SY/MD  
 Sample : VL0819ABS01  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0819ABS01

Quant Time: Aug 20 02:14:35 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 2

QLast Update : Tue Aug 20 02:10:04 2024

Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By : Semsettin Yesilyurt 08/20/2024  
 Supervised By : Mahesh Dadoda 08/20/2024

| Compound                | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|--------|------|----------|--------|-------|----------|
| -----                   |        |      |          |        |       |          |
| Internal Standards      |        |      |          |        |       |          |
| 1) Bromochloromethane   | 5.211  | 49   | 953834   | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 6.674  | 114  | 2568604  | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 11.487 | 117  | 2570572  | 10.000 | ppbv  | # 0.00   |

#### System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 13.796 95 1934486 9.779 ppbv 0.00  
 Spiked Amount 10.000 Range 65 - 135 Recovery = 97.800%

#### Target Compounds

|                               |       |     |         |        |        | Qvalue |
|-------------------------------|-------|-----|---------|--------|--------|--------|
| 2) Dichlorodifluoromethane    | 2.748 | 85  | 866011  | 5.278  | ppbv   | 100    |
| 3) Chlorodifluoromethane      | 2.694 | 51  | 1148497 | 10.115 | ppbv   | 100    |
| 4) Chloromethane              | 2.832 | 50  | 626957  | 10.381 | ppbv   | 99     |
| 5) Vinyl Chloride             | 2.941 | 62  | 632244  | 10.621 | ppbv   | 96     |
| 6) Bromomethane               | 3.141 | 94  | 337860  | 11.043 | ppbv   | 98     |
| 7) Chloroethane               | 3.214 | 64  | 227400  | 11.069 | ppbv   | 96     |
| 8) Dichlorotetrafluoroethane  | 2.877 | 85  | 1381485 | 9.502  | ppbv   | 99     |
| 9) Propene                    | 2.713 | 41  | 529749  | 10.156 | ppbv   | 98     |
| 10) Heptane                   | 7.600 | 43  | 1331349 | 11.360 | ppbv   | 100    |
| 11) Trichlorofluoromethane    | 3.581 | 101 | 1495695 | 10.264 | ppbv   | 97     |
| 12) 1,1,2-Trichlorotrifluo... | 4.086 | 101 | 1072747 | 10.223 | ppbv   | 100    |
| 13) Ethanol                   | 3.259 | 45  | 36448m  | 7.818  | ppbv   |        |
| 14) Bromoethene               | 3.385 | 108 | 429951  | 10.510 | ppbv   | 99     |
| 15) Acetone                   | 3.488 | 43  | 1136536 | 10.487 | ppbv   | 99     |
| 16) 1,3-Butadiene             | 3.005 | 39  | 616058  | 10.640 | ppbv   | 99     |
| 17) tert-Butyl alcohol        | 3.896 | 59  | 1138725 | 11.521 | ppbv   | 100    |
| 18) 1,1-Dichloroethene        | 3.899 | 96  | 490575  | 10.929 | ppbv   | 96     |
| 19) Isopropyl Alcohol         | 3.594 | 45  | 662593  | 10.458 | ppbv # | 98     |
| 20) Methylene Chloride        | 3.951 | 84  | 468002  | 11.580 | ppbv   | 95     |
| 21) Allyl Chloride            | 4.015 | 41  | 776304  | 10.923 | ppbv   | 100    |
| 22) trans-1,2-Dichloroethene  | 4.465 | 96  | 469979  | 10.471 | ppbv   | 97     |
| 23) Vinyl Acetate             | 4.645 | 43  | 984169  | 11.890 | ppbv # | 98     |
| 24) 1,1-Dichloroethane        | 4.581 | 63  | 1033773 | 10.608 | ppbv   | 99     |
| 25) Ethyl Acetate             | 5.224 | 43  | 2417577 | 11.229 | ppbv   | 99     |
| 26) Hexane                    | 5.234 | 57  | 1027698 | 11.507 | ppbv   | 97     |
| 27) Carbon Disulfide          | 4.144 | 76  | 1155043 | 11.055 | ppbv   | 99     |
| 28) Methyl tert-Butyl Ether   | 4.603 | 73  | 589223  | 10.461 | ppbv   | 100    |
| 29) Chloroform                | 5.295 | 83  | 1534946 | 10.536 | ppbv   | 99     |
| 30) Cyclohexane               | 6.623 | 84  | 826550  | 11.364 | ppbv   | 99     |
| 31) cis-1,2-Dichloroethene    | 5.099 | 61  | 959317  | 10.873 | ppbv   | 99     |
| 32) 1,1,1-Trichloroethane     | 6.025 | 97  | 1517453 | 10.701 | ppbv   | 100    |
| 34) 2-Butanone                | 4.806 | 43  | 1409794 | 11.346 | ppbv   | 100    |
| 35) Carbon Tetrachloride      | 6.513 | 117 | 1592749 | 11.242 | ppbv   | 98     |
| 36) Benzene                   | 6.391 | 78  | 2079587 | 11.080 | ppbv   | 98     |
| 37) 1,2-Dichloroethane        | 5.829 | 62  | 1168791 | 11.126 | ppbv   | 100    |
| 38) Trichloroethene           | 7.311 | 130 | 970933  | 11.292 | ppbv   | 97     |
| 39) 1,2-Dichloropropane       | 7.095 | 63  | 802701  | 11.171 | ppbv   | 96     |
| 40) 1,4-Dioxane               | 7.308 | 88  | 276693  | 9.586  | ppbv # | 52     |
| 41) Tetrahydrofuran           | 5.574 | 42  | 830620  | 11.688 | ppbv   | 98     |
| 42) Bromodichloromethane      | 7.269 | 83  | 1674518 | 11.039 | ppbv   | 98     |
| 43) Methyl Methacrylate       | 7.494 | 69  | 830856  | 12.345 | ppbv   | 99     |
| 44) 2,2,4-Trimethylpentane    | 7.346 | 57  | 3498360 | 11.160 | ppbv   | 99     |
| 45) t-1,3-Dichloropropene     | 8.732 | 75  | 832465  | 13.438 | ppbv   | 96     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL081924\  
 Data File : VL041542.D  
 Acq On : 19 Aug 2024 10:48  
 Operator : SY/MD  
 Sample : VL0819ABS01  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0819ABS01

Manual Integrations  
 APPROVED

Reviewed By :Semsettin Yesilyurt 08/20/2024  
 Supervised By :Mahesh Dadoda 08/20/2024

Quant Time: Aug 20 02:14:35 2024

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_LFri Aug 2

QLast Update : Tue Aug 20 02:10:04 2024

Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|--------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 8.166  | 75   | 1134089  | 12.678 | ppbv   | 98       |
| 47) 1,1,2-Trichloroethane     | 8.922  | 97   | 871843   | 11.007 | ppbv   | 98       |
| 48) Dibromochloromethane      | 9.732  | 129  | 1455263  | 11.405 | ppbv   | 100      |
| 49) Bromoform                 | 12.430 | 173  | 1269504  | 11.778 | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 8.201  | 43   | 2350707  | 11.991 | ppbv   | 99       |
| 51) 2-Hexanone                | 9.571  | 43   | 1863582  | 12.572 | ppbv # | 99       |
| 52) Tetrachloroethene         | 10.639 | 164  | 782284   | 10.787 | ppbv   | 98       |
| 53) Toluene                   | 9.243  | 91   | 2430940  | 11.628 | ppbv   | 100      |
| 54) 1,2-Dibromoethane         | 10.031 | 107  | 1250868  | 11.865 | ppbv   | 97       |
| 56) 1,1,1,2-Tetrachloroethane | 11.529 | 131  | 1071372  | 10.747 | ppbv # | 59       |
| 57) Chlorobenzene             | 11.549 | 112  | 1920481  | 10.493 | ppbv   | 98       |
| 58) Ethyl Benzene             | 12.111 | 91   | 3271939  | 11.043 | ppbv   | 98       |
| 59) m/p-Xylene                | 12.391 | 91   | 5625619m | 21.995 | ppbv   |          |
| 60) o-Xylene                  | 13.079 | 91   | 2684986  | 11.097 | ppbv   | 100      |
| 61) Styrene                   | 12.918 | 104  | 1314788  | 12.045 | ppbv   | 98       |
| 62) Isopropylbenzene          | 14.050 | 105  | 3916892  | 10.649 | ppbv   | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 13.069 | 83   | 1660380  | 10.867 | ppbv   | 100      |
| 64) n-propylbenzene           | 14.937 | 120  | 1051699  | 10.937 | ppbv   | 95       |
| 65) tert-Butylbenzene         | 16.111 | 119  | 3561329  | 10.720 | ppbv   | 100      |
| 66) Benzyl Chloride           | 16.349 | 91   | 293870   | 13.791 | ppbv   | 99       |
| 67) sec-Butylbenzene          | 16.658 | 105  | 4963512  | 10.844 | ppbv   | 100      |
| 69) p-Isopropyltoluene        | 17.015 | 119  | 4185466  | 11.019 | ppbv   | 99       |
| 70) n-Butylbenzene            | 17.908 | 91   | 4322218  | 11.100 | ppbv   | 100      |
| 71) 2-Chlorotoluene           | 14.822 | 91   | 2956439  | 10.899 | ppbv   | 99       |
| 72) 4-Ethyltoluene            | 15.214 | 105  | 3303117  | 11.596 | ppbv   | 99       |
| 73) 1,3,5-Trimethylbenzene    | 15.372 | 105  | 2807444  | 11.440 | ppbv   | 98       |
| 74) 1,2,4-Trimethylbenzene    | 16.130 | 105  | 3111891  | 10.908 | ppbv   | 99       |
| 75) 1,3-Dichlorobenzene       | 16.352 | 146  | 1936719  | 10.799 | ppbv   | 100      |
| 76) 1,4-Dichlorobenzene       | 16.494 | 146  | 1874477  | 10.794 | ppbv   | 99       |
| 77) 1,2-Dichlorobenzene       | 17.166 | 146  | 1866349  | 10.498 | ppbv   | 100      |
| 78) Hexachloro-1,3-Butadiene  | 22.654 | 225  | 1419954  | 9.366  | ppbv   | 100      |
| 79) Naphthalene               | 21.407 | 128  | 3143301  | 12.483 | ppbv   | 99       |
| 80) Naphthalene,2-methyl-     | 24.394 | 142  | 2571622  | 12.183 | ppbv   | 99       |
| 81) 1,2,4-Trichlorobenzene    | 21.166 | 180  | 1655281  | 11.046 | ppbv   | 100      |

(#) = qualifier out of range (m) = manual integration (+) = signals summed



Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL081924\  
 Data File : VL041545.D  
 Acq On : 19 Aug 2024 12:51  
 Operator : SY/MD  
 Sample : QC081424 CAN 10054  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 QC081424 CAN 10054

Quant Time: Aug 20 02:16:06 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
 QLast Update : Tue Aug 20 02:10:04 2024  
 Response via : Initial Calibration

| Compound                | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|--------|------|----------|--------|-------|----------|
| -----                   |        |      |          |        |       |          |
| Internal Standards      |        |      |          |        |       |          |
| 1) Bromochloromethane   | 5.214  | 49   | 919015   | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 6.674  | 114  | 2504237  | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 11.491 | 117  | 2251168  | 10.000 | ppbv  | # 0.00   |

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| System Monitoring Compounds |        |       |          |          |      |         |
| 68) 1-Bromo-4-Fluorobenzene | 13.799 | 95    | 1729778  | 9.985    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 99.800% |

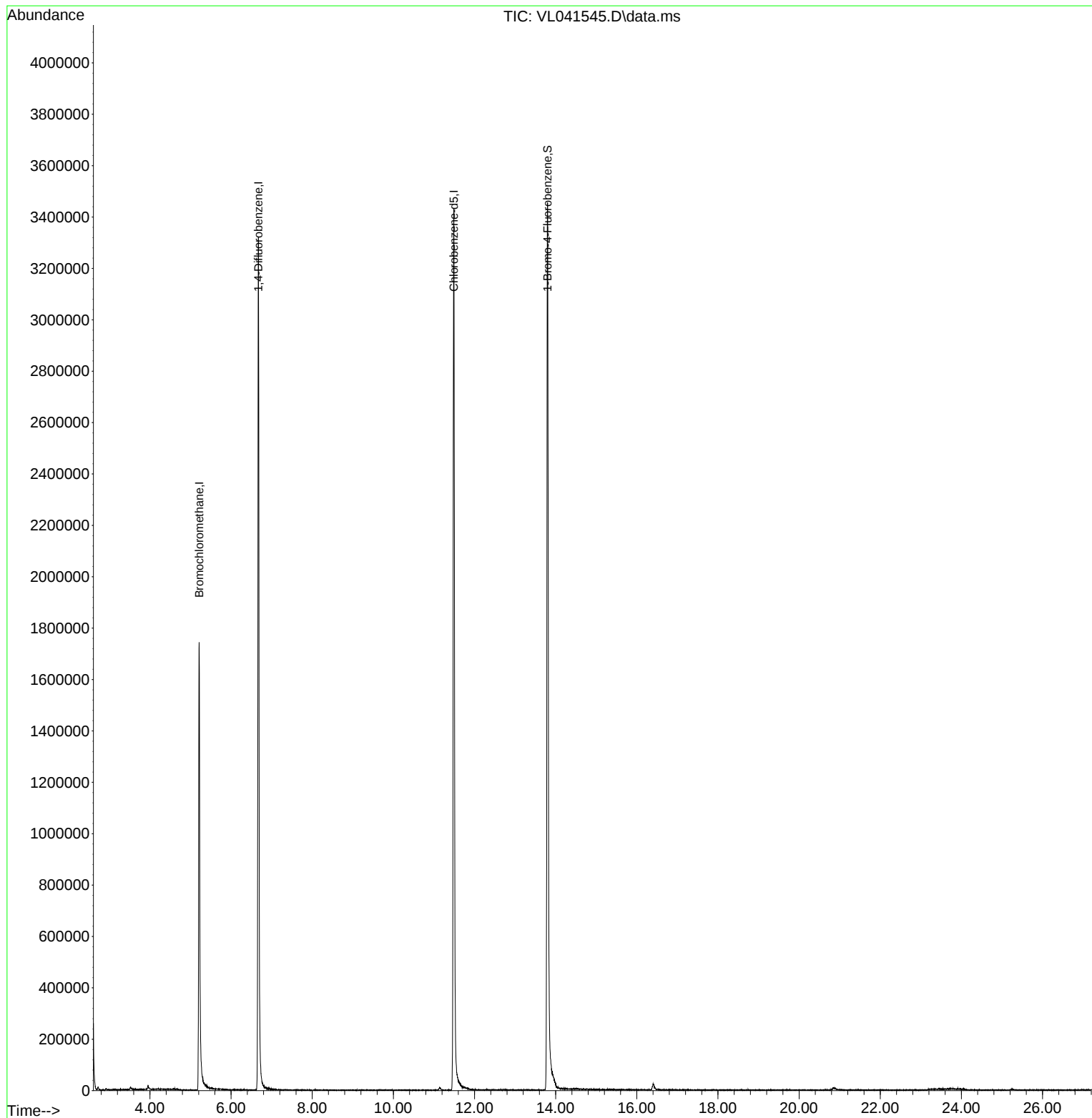
| Target Compounds | Qvalue |
|------------------|--------|
| -----            |        |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL081924\  
Data File : VL041545.D  
Acq On : 19 Aug 2024 12:51  
Operator : SY/MD  
Sample : QC081424 CAN 10054  
Misc : 400mL/MSVOA\_L  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_L  
ClientSampleId :  
QC081424 CAN 10054

Quant Time: Aug 20 02:16:06 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL072524AIR.M  
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
QLast Update : Tue Aug 20 02:10:04 2024  
Response via : Initial Calibration



Instrument ID: **MSVOA\_L**

**Daily Analysis Runlog For Sequence/QC Batch ID # VL072524**

|                          |                      |                      |                       |
|--------------------------|----------------------|----------------------|-----------------------|
| Review By                | Semsettin Yesilyurt  | Review On            | 7/29/2024 10:58:46 AM |
| Supervise By             | Mahesh Dadoda        | Supervise On         | 7/29/2024 5:57:16 PM  |
| SubDirectory             | VL072524             | HP Acquire Method    | AIR-TO15              |
|                          |                      | HP Processing Method | VL072524AIR.M         |
| <b>STD. NAME</b>         | <b>STD REF.#</b>     |                      |                       |
| Tune/Reschk              | AP2535               |                      |                       |
| Initial Calibration Stds | AP2539,AP2540,AP2541 |                      |                       |
| CCC                      | AP2539               |                      |                       |
| Internal Standard/PEM    | AP2535               |                      |                       |
| ICV/I.BLK                | AP2537               |                      |                       |
| Surrogate Standard       |                      |                      |                       |
| MS/MSD Standard          |                      |                      |                       |
| LCS Standard             |                      |                      |                       |

| Sr# | SampleId    | Data File Name | Date-Time         | Operator | Status   |
|-----|-------------|----------------|-------------------|----------|----------|
| 1   | BFB         | VL041397.D     | 25 Jul 2024 12:29 | SY/MD    | Ok       |
| 2   | VSTDICC0.5  | VL041398.D     | 25 Jul 2024 13:19 | SY/MD    | Ok,M     |
| 3   | VSTDICCC010 | VL041399.D     | 25 Jul 2024 13:59 | SY/MD    | Ok,M     |
| 4   | VSTDICC002  | VL041400.D     | 25 Jul 2024 14:40 | SY/MD    | Ok,M     |
| 5   | VSTDICC001  | VL041401.D     | 25 Jul 2024 15:19 | SY/MD    | Ok,M     |
| 6   | VSTDICC0.5  | VL041402.D     | 25 Jul 2024 16:00 | SY/MD    | Not Ok   |
| 7   | VSTDICC0.1  | VL041403.D     | 25 Jul 2024 16:42 | SY/MD    | Ok,M     |
| 8   | VSTDICC0.03 | VL041404.D     | 25 Jul 2024 17:24 | SY/MD    | Ok,M     |
| 9   | VSTDICC015  | VL041405.D     | 25 Jul 2024 18:06 | SY/MD    | Ok,M     |
| 10  | VSTDICV010  | VL041406.D     | 25 Jul 2024 19:31 | SY/MD    | Ok,M     |
| 11  | VL0725ABL01 | VL041407.D     | 25 Jul 2024 20:56 | SY/MD    | Ok       |
| 12  | VL0725ABS01 | VL041408.D     | 25 Jul 2024 21:38 | SY/MD    | Ok,M     |
| 13  | VIBLK       | VL041409.D     | 25 Jul 2024 22:20 | SY/MD    | Ok       |
| 14  | P3320-01    | VL041410.D     | 26 Jul 2024 7:22  | SY/MD    | Ok,M     |
| 15  | P3320-01DUP | VL041411.D     | 26 Jul 2024 8:02  | SY/MD    | Ok,M     |
| 16  | P3320-02    | VL041412.D     | 26 Jul 2024 8:43  | SY/MD    | Dilution |
| 17  | P3342-04    | VL041413.D     | 26 Jul 2024 9:24  | SY/MD    | Ok,M     |
| 18  | P3356-01    | VL041414.D     | 26 Jul 2024 10:04 | SY/MD    | Dilution |
| 19  | P3356-02    | VL041415.D     | 26 Jul 2024 10:45 | SY/MD    | Ok,M     |
| 20  | P3320-02DL  | VL041416.D     | 26 Jul 2024 11:25 | SY/MD    | Ok,M     |
| 21  | P3356-01DL  | VL041417.D     | 26 Jul 2024 12:05 | SY/MD    | Ok,M     |

Instrument ID: MSVOA\_L

**Daily Analysis Runlog For Sequence/QC Batch ID # VL072524**

| Review By                | Semsettin Yesilyurt  | Review On         | 7/29/2024 10:58:46 AM |                      |               |
|--------------------------|----------------------|-------------------|-----------------------|----------------------|---------------|
| Supervise By             | Mahesh Dadoda        | Supervise On      | 7/29/2024 5:57:16 PM  |                      |               |
| SubDirectory             | VL072524             | HP Acquire Method | AIR-TO15              | HP Processing Method | VL072524AIR.M |
| STD. NAME                | STD REF.#            |                   |                       |                      |               |
| Tune/Reschk              | AP2535               |                   |                       |                      |               |
| Initial Calibration Stds | AP2539,AP2540,AP2541 |                   |                       |                      |               |
| CCC                      | AP2539               |                   |                       |                      |               |
| Internal Standard/PEM    | AP2535               |                   |                       |                      |               |
| ICV/I.BLK                | AP2537               |                   |                       |                      |               |
| Surrogate Standard       |                      |                   |                       |                      |               |
| MS/MSD Standard          |                      |                   |                       |                      |               |
| LCS Standard             |                      |                   |                       |                      |               |

|    |            |            |                   |       |        |
|----|------------|------------|-------------------|-------|--------|
| 22 | VSTDCCC010 | VL041418.D | 26 Jul 2024 12:45 | SY/MD | Not Ok |
|----|------------|------------|-------------------|-------|--------|

M : Manual Integration

Instrument ID: **MSVOA\_L**

**Daily Analysis Runlog For Sequence/QC Batch ID # VL081924**

|                          |                      |                      |                      |
|--------------------------|----------------------|----------------------|----------------------|
| Review By                | Semsettin Yesilyurt  | Review On            | 8/20/2024 2:35:55 PM |
| Supervise By             | Mahesh Dadoda        | Supervise On         | 8/20/2024 4:35:44 PM |
| SubDirectory             | VL081924             | HP Acquire Method    | AIR-TO15             |
|                          |                      | HP Processing Method | VL072524AIR.M        |
| <b>STD. NAME</b>         | <b>STD REF.#</b>     |                      |                      |
| Tune/Reschk              | AP2536               |                      |                      |
| Initial Calibration Stds | AP2539,AP2540,AP2541 |                      |                      |
| CCC                      | AP2539               |                      |                      |
| Internal Standard/PEM    | AP2536               |                      |                      |
| ICV/I.BLK                | AP2537               |                      |                      |
| Surrogate Standard       |                      |                      |                      |
| MS/MSD Standard          |                      |                      |                      |
| LCS Standard             |                      |                      |                      |

| Sr# | SampleId           | Data File Name | Date-Time         | Operator | Status   |
|-----|--------------------|----------------|-------------------|----------|----------|
| 1   | BFB                | VL041539.D     | 19 Aug 2024 8:10  | SY/MD    | Ok       |
| 2   | VSTDCCC010         | VL041540.D     | 19 Aug 2024 8:59  | SY/MD    | Ok,M     |
| 3   | VL0819ABL01        | VL041541.D     | 19 Aug 2024 10:07 | SY/MD    | Ok       |
| 4   | VL0819ABS01        | VL041542.D     | 19 Aug 2024 10:48 | SY/MD    | Ok,M     |
| 5   | QC081324 CAN 10604 | VL041543.D     | 19 Aug 2024 11:29 | SY/MD    | Ok       |
| 6   | QC081424 CAN 10280 | VL041544.D     | 19 Aug 2024 12:10 | SY/MD    | Ok       |
| 7   | QC081424 CAN 10054 | VL041545.D     | 19 Aug 2024 12:51 | SY/MD    | Ok       |
| 8   | P3658-01           | VL041546.D     | 19 Aug 2024 13:33 | SY/MD    | Ok,M     |
| 9   | P3658-01DUP        | VL041547.D     | 19 Aug 2024 14:14 | SY/MD    | Ok,M     |
| 10  | P3658-02           | VL041548.D     | 19 Aug 2024 14:56 | SY/MD    | Ok,M     |
| 11  | P3659-01           | VL041549.D     | 19 Aug 2024 15:40 | SY/MD    | Ok,M     |
| 12  | P3658-03           | VL041550.D     | 19 Aug 2024 16:25 | SY/MD    | Ok,M     |
| 13  | P3658-03DL         | VL041551.D     | 19 Aug 2024 17:11 | SY/MD    | Not Ok   |
| 14  | P3658-04           | VL041552.D     | 19 Aug 2024 17:56 | SY/MD    | Ok,M     |
| 15  | P3658-04DL         | VL041553.D     | 19 Aug 2024 18:40 | SY/MD    | Not Ok   |
| 16  | P3658-05           | VL041554.D     | 19 Aug 2024 19:24 | SY/MD    | Ok,M     |
| 17  | P3658-05DL         | VL041555.D     | 19 Aug 2024 20:09 | SY/MD    | Not Ok   |
| 18  | P3659-02           | VL041556.D     | 19 Aug 2024 20:53 | SY/MD    | Dilution |
| 19  | P3659-02DL         | VL041557.D     | 19 Aug 2024 21:36 | SY/MD    | Dilution |

M : Manual Integration