

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL051623\  
 Data File : VL040431.D  
 Acq On : 16 May 2023 9:34  
 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 05/17/2023  
 Supervised By : Mahesh Dadoda 05/17/2023

Quant Time: May 16 10:11:11 2023

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL051623AIR.M

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

QLast Update : Thu Apr 13 14:37:02 2023

Response via : Initial Calibration

| Compound                | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|--------|------|----------|--------|-------|----------|
| -----                   |        |      |          |        |       |          |
| Internal Standards      |        |      |          |        |       |          |
| 1) Bromochloromethane   | 5.189  | 49   | 1103536  | 10.000 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 6.655  | 114  | 2763812  | 10.000 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 11.471 | 117  | 2673969  | 10.000 | ppbv  | 0.00     |

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 13.786 95 2139477 9.676 ppbv 0.00  
 Spiked Amount 10.000 Range 65 - 135 Recovery = 96.800%

Target Compounds

|                               |       |     |         |        |        | Qvalue |
|-------------------------------|-------|-----|---------|--------|--------|--------|
| 2) Dichlorodifluoromethane    | 2.719 | 85  | 2044682 | 10.276 | ppbv   | 98     |
| 3) Chlorodifluoromethane      | 2.665 | 51  | 1298849 | 9.007  | ppbv   | 99     |
| 4) Chloromethane              | 2.803 | 50  | 819492  | 8.996  | ppbv   | 95     |
| 5) Vinyl Chloride             | 2.909 | 62  | 680626  | 9.052  | ppbv   | 99     |
| 6) Bromomethane               | 3.112 | 94  | 225175  | 9.089  | ppbv   | 96     |
| 7) Chloroethane               | 3.189 | 64  | 262263  | 9.211  | ppbv   | 96     |
| 8) Dichlorotetrafluoroethane  | 2.848 | 85  | 1807780 | 9.297  | ppbv   | 100    |
| 9) Propene                    | 2.684 | 41  | 517793  | 9.089  | ppbv   | 100    |
| 10) Heptane                   | 7.581 | 43  | 1311800 | 10.132 | ppbv   | 100    |
| 11) Trichlorofluoromethane    | 3.555 | 101 | 1817215 | 9.022  | ppbv   | 98     |
| 12) 1,1,2-Trichlorotrifluo... | 4.060 | 101 | 1312696 | 9.318  | ppbv   | 99     |
| 13) Ethanol                   | 3.237 | 45  | 36719m  | 7.721  | ppbv   |        |
| 14) Bromoethene               | 3.359 | 108 | 537434  | 9.330  | ppbv   | 99     |
| 15) Acetone                   | 3.459 | 43  | 1241649 | 7.944  | ppbv   | 100    |
| 16) 1,3-Butadiene             | 2.973 | 39  | 617831  | 9.552  | ppbv   | 100    |
| 17) tert-Butyl alcohol        | 3.870 | 59  | 1384232 | 9.644  | ppbv   | 100    |
| 18) 1,1-Dichloroethene        | 3.874 | 96  | 597703  | 9.407  | ppbv   | 97     |
| 19) Isopropyl Alcohol         | 3.565 | 45  | 669162  | 9.383  | ppbv # | 98     |
| 20) Methylene Chloride        | 3.928 | 84  | 489727  | 7.848  | ppbv   | 96     |
| 21) Allyl Chloride            | 3.989 | 41  | 858806  | 9.670  | ppbv   | 99     |
| 22) trans-1,2-Dichloroethene  | 4.439 | 96  | 617809  | 9.726  | ppbv   | 98     |
| 23) Vinyl Acetate             | 4.623 | 43  | 385818m | 9.695  | ppbv   |        |
| 24) 1,1-Dichloroethane        | 4.558 | 63  | 1223612 | 9.239  | ppbv   | 99     |
| 25) Ethyl Acetate             | 5.201 | 43  | 2432129 | 9.247  | ppbv   | 100    |
| 26) Hexane                    | 5.208 | 57  | 1030307 | 9.292  | ppbv   | 99     |
| 27) Carbon Disulfide          | 4.118 | 76  | 1472945 | 10.265 | ppbv   | 99     |
| 28) Methyl tert-Butyl Ether   | 4.581 | 73  | 1094465 | 9.562  | ppbv   | 99     |
| 29) Chloroform                | 5.272 | 83  | 1827639 | 9.253  | ppbv   | 98     |
| 30) Cyclohexane               | 6.603 | 84  | 870901  | 10.142 | ppbv   | 99     |
| 31) cis-1,2-Dichloroethene    | 5.076 | 61  | 1091198 | 9.929  | ppbv   | 98     |
| 32) 1,1,1-Trichloroethane     | 6.002 | 97  | 1832893 | 9.551  | ppbv   | 100    |
| 34) 2-Butanone                | 4.783 | 43  | 1375545 | 9.230  | ppbv   | 100    |
| 35) Carbon Tetrachloride      | 6.494 | 117 | 1878383 | 9.655  | ppbv   | 99     |
| 36) Benzene                   | 6.372 | 78  | 2193353 | 9.727  | ppbv   | 99     |
| 37) 1,2-Dichloroethane        | 5.806 | 62  | 1429072 | 9.648  | ppbv   | 100    |
| 38) Trichloroethene           | 7.295 | 130 | 1358992 | 10.589 | ppbv   | 98     |
| 39) 1,2-Dichloropropane       | 7.076 | 63  | 846798  | 9.544  | ppbv   | 97     |
| 40) 1,4-Dioxane               | 7.295 | 88  | 309610  | 9.111  | ppbv # | 99     |
| 41) Tetrahydrofuran           | 5.555 | 42  | 830420  | 10.174 | ppbv   | 99     |
| 42) Bromodichloromethane      | 7.253 | 83  | 1996722 | 9.871  | ppbv   | 96     |
| 43) Methyl Methacrylate       | 7.478 | 69  | 889795  | 10.624 | ppbv   | 99     |
| 44) 2,2,4-Trimethylpentane    | 7.327 | 57  | 3637906 | 9.659  | ppbv   | 100    |
| 45) t-1,3-Dichloropropene     | 8.713 | 75  | 864365  | 11.554 | ppbv   | 96     |

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Instrument :  
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 APPROVED

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 Supervised By :Mahesh Dadoda 05/17/2023

Quant Time: May 16 10:11:11 2023

Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL051623AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_LFri Aug 2023

QLast Update : Thu Apr 13 14:37:02 2023

Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|--------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 8.147  | 75   | 1167464  | 11.212 | ppbv   | 98       |
| 47) 1,1,2-Trichloroethane     | 8.906  | 97   | 940547   | 9.668  | ppbv   | 97       |
| 48) Dibromochloromethane      | 9.716  | 129  | 1616958  | 10.321 | ppbv   | 100      |
| 49) Bromoform                 | 12.413 | 173  | 1313440  | 10.749 | ppbv   | 100      |
| 50) 4-Methyl-2-Pentanone      | 8.185  | 43   | 2299601  | 10.177 | ppbv   | 100      |
| 51) 2-Hexanone                | 9.555  | 43   | 1793713  | 10.742 | ppbv # | 100      |
| 52) Tetrachloroethene         | 10.622 | 164  | 757403   | 10.738 | ppbv   | 96       |
| 53) Toluene                   | 9.224  | 91   | 2520792  | 10.545 | ppbv   | 100      |
| 54) 1,2-Dibromoethane         | 10.015 | 107  | 1014217  | 10.283 | ppbv   | 96       |
| 56) 1,1,1,2-Tetrachloroethane | 11.516 | 131  | 1167148  | 9.563  | ppbv   | 96       |
| 57) Chlorobenzene             | 11.536 | 112  | 2002580  | 9.565  | ppbv   | 99       |
| 58) Ethyl Benzene             | 12.095 | 91   | 3483069  | 10.589 | ppbv   | 99       |
| 59) m/p-Xylene                | 12.381 | 91   | 6092296m | 20.140 | ppbv   |          |
| 60) o-Xylene                  | 13.066 | 91   | 2946642  | 10.150 | ppbv   | 100      |
| 61) Styrene                   | 12.902 | 104  | 1679724  | 11.551 | ppbv   | 100      |
| 62) Isopropylbenzene          | 14.037 | 105  | 4132781  | 9.885  | ppbv   | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 13.053 | 83   | 882195   | 8.304  | ppbv   | 100      |
| 64) n-propylbenzene           | 14.925 | 120  | 1050946  | 10.216 | ppbv   | 98       |
| 65) tert-Butylbenzene         | 16.101 | 119  | 3632838  | 9.876  | ppbv   | 100      |
| 66) Benzyl Chloride           | 16.333 | 91   | 228601   | 10.038 | ppbv   | 99       |
| 67) sec-Butylbenzene          | 16.642 | 105  | 5192715  | 9.828  | ppbv   | 99       |
| 69) p-Isopropyltoluene        | 17.005 | 119  | 4151223  | 10.062 | ppbv   | 100      |
| 70) n-Butylbenzene            | 17.895 | 91   | 4559036  | 9.969  | ppbv   | 100      |
| 71) 2-Chlorotoluene           | 14.809 | 91   | 3221445  | 10.036 | ppbv   | 99       |
| 72) 4-Ethyltoluene            | 15.201 | 105  | 3367530  | 10.508 | ppbv   | 99       |
| 73) 1,3,5-Trimethylbenzene    | 15.362 | 105  | 3027552  | 10.227 | ppbv   | 97       |
| 74) 1,2,4-Trimethylbenzene    | 16.117 | 105  | 3308085  | 9.776  | ppbv   | 95       |
| 75) 1,3-Dichlorobenzene       | 16.339 | 146  | 1822389  | 9.833  | ppbv   | 100      |
| 76) 1,4-Dichlorobenzene       | 16.484 | 146  | 1798505  | 9.822  | ppbv   | 100      |
| 77) 1,2-Dichlorobenzene       | 17.153 | 146  | 1759485  | 9.601  | ppbv   | 100      |
| 78) Hexachloro-1,3-Butadiene  | 22.641 | 225  | 1197286  | 8.149  | ppbv   | 100      |
| 79) Naphthalene               | 21.394 | 128  | 2518415  | 11.026 | ppbv   | 99       |
| 80) Naphthalene,2-methyl-     | 24.378 | 142  | 760324   | 11.183 | ppbv   | 99       |
| 81) 1,2,4-Trichlorobenzene    | 21.146 | 180  | 1328805  | 9.467  | ppbv   | 99       |

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

Reviewed By :Semsettin Yesilyurt 05/17/2023  
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[illegible]