

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL102521\  
 Data File : VL037907.D  
 Acq On : 26 Oct 2021 8:50  
 Operator : SY/AP  
 Sample : VSTDCCC010  
 Misc : 400mL/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA L  
 ClientSampleId :  
 VSTDCCC010EC

Manual Integrations  
 APPROVED

Reviewed By : Semsettin Yesilyurt 10/27/2021  
 Supervised By : Mahesh Dadoda 10/27/2021

Quant Time: Oct 27 12:16:38 2021  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL100421A  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument:  
 QLast Update : Mon Oct 04 17:43:54 2021  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.71  | 49   | 1481422  | 10.00 | ppbv  | 0.04     |
| 33) 1,4-Difluorobenzene | 7.22  | 114  | 4402414  | 10.00 | ppbv  | 0.04     |
| 55) Chlorobenzene-d5    | 12.13 | 117  | 3873949m | 10.00 | ppbv  | 0.04     |

## System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 14.46  | 95    | 2817989  | 10.40    | ppbv | 0.04    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 104.00% |

## Target Compounds

|                                |      |     |         |             | Ovalue |
|--------------------------------|------|-----|---------|-------------|--------|
| 2) Dichlorodifluoromethane     | 3.08 | 85  | 1905504 | 8.053 ppbv  | 97     |
| 3) Chlorodifluoromethane       | 3.02 | 51  | 2462251 | 8.650 ppbv  | 99     |
| 4) Chloromethane               | 3.18 | 50  | 857428  | 8.224 ppbv  | 95     |
| 5) Vinyl Chloride              | 3.29 | 62  | 877761  | 9.184 ppbv  | 96     |
| 6) Bromomethane                | 3.51 | 94  | 349724m | 6.765 ppbv  |        |
| 7) Chloroethane                | 3.59 | 64  | 300966  | 8.565 ppbv  | 90     |
| 8) Dichlorotetrafluoroethane   | 3.22 | 85  | 2027802 | 8.670 ppbv  | 99     |
| 9) Propene                     | 3.04 | 41  | 804502  | 7.681 ppbv  | 98     |
| 10) Heptane                    | 8.17 | 43  | 2130120 | 8.955 ppbv  | 99     |
| 11) Trichlorofluoromethane     | 3.99 | 101 | 1803738 | 8.544 ppbv  | 97     |
| 12) 1,1,2-Trichlorotrifluoroet | 4.52 | 101 | 1374728 | 8.594 ppbv  | 100    |
| 13) Ethanol                    | 3.64 | 45  | 85760   | 10.013 ppbv | 98     |
| 14) Bromoethene                | 3.78 | 108 | 602836  | 8.571 ppbv  | 96     |
| 15) Acetone                    | 3.89 | 43  | 1007657 | 7.577 ppbv  | 99     |
| 16) 1,3-Butadiene              | 3.36 | 39  | 899519  | 9.296 ppbv  | 92     |
| 17) tert-Butyl alcohol         | 4.32 | 59  | 1057239 | 7.719 ppbv  | 98     |
| 18) 1,1-Dichloroethene         | 4.33 | 96  | 617199  | 8.490 ppbv  | 95     |
| 19) Isopropyl Alcohol          | 4.00 | 45  | 672409  | 8.127 ppbv  | # 92   |
| 20) Methylene Chloride         | 4.38 | 84  | 511247  | 7.609 ppbv  | 95     |
| 21) Allyl Chloride             | 4.45 | 41  | 831649  | 7.059 ppbv  | 95     |
| 22) trans-1,2-Dichloroethene   | 4.93 | 96  | 636416  | 8.708 ppbv  | 99     |
| 23) Vinyl Acetate              | 5.11 | 43  | 1675523 | 8.407 ppbv  | 99     |
| 24) 1,1-Dichloroethane         | 5.05 | 63  | 1292737 | 8.911 ppbv  | 99     |
| 25) Ethyl Acetate              | 5.72 | 43  | 3085200 | 8.267 ppbv  | 99     |
| 26) Hexane                     | 5.73 | 57  | 1555595 | 8.466 ppbv  | 94     |
| 27) Carbon Disulfide           | 4.59 | 76  | 1522570 | 9.349 ppbv  | 98     |
| 28) Methyl tert-Butyl Ether    | 5.08 | 73  | 1172359 | 7.663 ppbv  | 100    |
| 29) Chloroform                 | 5.80 | 83  | 2219299 | 8.449 ppbv  | 97     |
| 30) Cyclohexane                | 7.18 | 84  | 1332143 | 8.549 ppbv  | 98     |
| 31) cis-1,2-Dichloroethene     | 5.59 | 61  | 1377963 | 8.260 ppbv  | 98     |
| 32) 1,1,1-Trichloroethane      | 6.56 | 97  | 2095686 | 8.416 ppbv  | 100    |
| 34) 2-Butanone                 | 5.28 | 43  | 1382551 | 7.779 ppbv  | 100    |
| 35) Carbon Tetrachloride       | 7.07 | 117 | 2169627 | 8.678 ppbv  | 98     |
| 36) Benzene                    | 6.94 | 78  | 3185730 | 8.472 ppbv  | 97     |
| 37) 1,2-Dichloroethane         | 6.35 | 62  | 1506341 | 8.508 ppbv  | 99     |
| 38) Trichloroethene            | 7.88 | 130 | 1267490 | 8.532 ppbv  | 95     |
| 39) 1,2-Dichloropropane        | 7.66 | 63  | 1220496 | 8.629 ppbv  | 99     |
| 40) 1,4-Dioxane                | 7.88 | 88  | 280532  | 7.926 ppbv  | # 100  |
| 41) Tetrahydrofuran            | 6.10 | 42  | 659073  | 7.573 ppbv  | 97     |
| 42) Bromodichloromethane       | 7.83 | 83  | 2341243 | 9.002 ppbv  | 100    |
| 43) Methyl Methacrylate        | 8.06 | 69  | 1171244 | 9.536 ppbv  | 98     |

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| Internal Standards            | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|--------|--------|----------|
| 44) 2,2,4-Trimethylpentane    | 7.92  | 57   | 5425003  | 8.587  | ppbv   | 98       |
| 45) t-1,3-Dichloropropene     | 9.33  | 75   | 443205m  | 5.245  | ppbv   |          |
| 46) cis-1,3-Dichloropropene   | 8.75  | 75   | 808300   | 6.901  | ppbv   | 98       |
| 47) 1,1,2-Trichloroethane     | 9.52  | 97   | 1315396  | 8.555  | ppbv   | 99       |
| 48) Dibromochloromethane      | 10.35 | 129  | 2086809  | 9.520  | ppbv   | 99       |
| 49) Bromoform                 | 13.09 | 173  | 1742433  | 10.389 | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 8.79  | 43   | 2181330  | 9.428  | ppbv   | 99       |
| 51) 2-Hexanone                | 10.18 | 43   | 1079689  | 10.453 | ppbv # | 100      |
| 52) Tetrachloroethene         | 11.27 | 164  | 1163502  | 7.953  | ppbv   | 97       |
| 53) Toluene                   | 9.85  | 91   | 3695867  | 8.869  | ppbv   | 99       |
| 54) 1,2-Dibromoethane         | 10.66 | 107  | 1717753  | 8.271  | ppbv   | 96       |
| 56) 1,1,1,2-Tetrachloroethane | 12.18 | 131  | 1485300  | 9.262  | ppbv   | 93       |
| 57) Chlorobenzene             | 12.19 | 112  | 2762390  | 8.692  | ppbv   | 98       |
| 58) Ethyl Benzene             | 12.76 | 91   | 4818499  | 9.263  | ppbv   | 100      |
| 59) m/p-Xylene                | 13.04 | 91   | 8172070m | 18.301 | ppbv   |          |
| 60) o-Xylene                  | 13.74 | 91   | 3871887  | 9.048  | ppbv   | 100      |
| 61) Styrene                   | 13.57 | 104  | 2019630  | 9.757  | ppbv   | 98       |
| 62) Isopropylbenzene          | 14.72 | 105  | 5580187  | 9.349  | ppbv   | 99       |
| 63) 1,1,2,2-Tetrachloroethane | 13.72 | 83   | 2937687  | 8.896  | ppbv   | 99       |
| 64) n-propylbenzene           | 15.61 | 120  | 1484977  | 9.977  | ppbv   | 95       |
| 65) tert-Butylbenzene         | 16.79 | 119  | 4886089  | 9.302  | ppbv   | 98       |
| 66) Benzyl Chloride           | 17.04 | 91   | 105558m  | 4.072  | ppbv   |          |
| 67) sec-Butylbenzene          | 17.34 | 105  | 6892920  | 9.595  | ppbv   | 100      |
| 69) p-Isopropyltoluene        | 17.70 | 119  | 5716819  | 9.843  | ppbv   | 99       |
| 70) n-Butylbenzene            | 18.59 | 91   | 5574630  | 10.104 | ppbv   | 99       |
| 71) 2-Chlorotoluene           | 15.50 | 91   | 4088172  | 9.699  | ppbv   | 99       |
| 72) 4-Ethyltoluene            | 15.89 | 105  | 4723676  | 9.721  | ppbv   | 99       |
| 73) 1,3,5-Trimethylbenzene    | 16.04 | 105  | 4179072  | 9.468  | ppbv   | 93       |
| 74) 1,2,4-Trimethylbenzene    | 16.81 | 105  | 4380944  | 9.452  | ppbv   | 95       |
| 75) 1,3-Dichlorobenzene       | 17.04 | 146  | 2767644  | 9.638  | ppbv   | 99       |
| 76) 1,4-Dichlorobenzene       | 17.18 | 146  | 2652442  | 9.683  | ppbv   | 100      |
| 77) 1,2-Dichlorobenzene       | 17.86 | 146  | 2673758  | 9.693  | ppbv   | 99       |
| 78) Hexachloro-1,3-Butadiene  | 23.42 | 225  | 2010716  | 8.927  | ppbv   | 99       |
| 79) Naphthalene               | 22.25 | 128  | 3161536  | 11.138 | ppbv   | 100      |
| 80) Naphthalene, 2-methyl-    | 25.00 | 142  | 676669   | 8.878  | ppbv   | 96       |
| 81) 1,2,4-Trichlorobenzene    | 21.98 | 180  | 1958208  | 10.786 | ppbv   | 100      |

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

