

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL112921\  
 Data File : VL038128.D  
 Acq On : 29 Nov 2021 10:07  
 Operator : SY/AP  
 Sample : VSTDCCC010  
 Misc : 400mL/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA L  
 ClientSampleId :  
 VSTDCCC010

Manual Integrations  
 APPROVED

Quant Time: Nov 30 05:33:54 2021  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL111821A  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument:  
 QLast Update : Thu Nov 18 13:16:09 2021  
 Response via : Initial Calibration

Reviewed By :Semsettin Yesilyurt 11/30/2021  
 Supervised By :Mahesh Dadoda 12/01/2021

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.67  | 49   | 978461   | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.19  | 114  | 2921885  | 10.00 | ppbv  | 0.01     |
| 55) Chlorobenzene-d5    | 12.09 | 117  | 2608002m | 10.00 | ppbv  | 0.01     |

## System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 14.42  | 95    | 2080096  | 11.06    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 110.60% |

## Target Compounds

|                                | R.T. | QIon | Response | Conc   | Units | Ovalue |
|--------------------------------|------|------|----------|--------|-------|--------|
| 2) Dichlorodifluoromethane     | 3.06 | 85   | 1328723  | 8.221  | ppbv  | 100    |
| 3) Chlorodifluoromethane       | 3.00 | 51   | 2078941  | 10.117 | ppbv  | 98     |
| 4) Chloromethane               | 3.15 | 50   | 695831   | 9.948  | ppbv  | 99     |
| 5) Vinyl Chloride              | 3.27 | 62   | 715565   | 10.428 | ppbv  | 99     |
| 6) Bromomethane                | 3.49 | 94   | 388193   | 10.560 | ppbv  | 96     |
| 7) Chloroethane                | 3.57 | 64   | 237466   | 9.751  | ppbv  | 90     |
| 8) Dichlorotetrafluoroethane   | 3.20 | 85   | 1669035  | 10.381 | ppbv  | 95     |
| 9) Propene                     | 3.02 | 41   | 687646   | 9.087  | ppbv  | 96     |
| 10) Heptane                    | 8.13 | 43   | 1771006  | 9.469  | ppbv  | 100    |
| 11) Trichlorofluoromethane     | 3.96 | 101  | 1678362  | 10.919 | ppbv  | 99     |
| 12) 1,1,2-Trichlorotrifluoroet | 4.50 | 101  | 1233432  | 11.344 | ppbv  | 97     |
| 13) Ethanol                    | 3.62 | 45   | 64980m   | 8.885  | ppbv  |        |
| 14) Bromoethene                | 3.75 | 108  | 510006   | 10.475 | ppbv  | 98     |
| 15) Acetone                    | 3.86 | 43   | 834224   | 9.834  | ppbv  | 98     |
| 16) 1,3-Butadiene              | 3.34 | 39   | 681957   | 10.304 | ppbv  | 96     |
| 17) tert-Butyl alcohol         | 4.30 | 59   | 1014183  | 9.855  | ppbv  | 99     |
| 18) 1,1-Dichloroethene         | 4.30 | 96   | 533605   | 10.698 | ppbv  | 98     |
| 19) Isopropyl Alcohol          | 3.98 | 45   | 540865   | 8.824  | ppbv  | # 98   |
| 20) Methylene Chloride         | 4.35 | 84   | 475776   | 10.013 | ppbv  | 97     |
| 21) Allyl Chloride             | 4.42 | 41   | 820954   | 10.455 | ppbv  | 99     |
| 22) trans-1,2-Dichloroethene   | 4.90 | 96   | 578472   | 11.450 | ppbv  | 97     |
| 23) Vinyl Acetate              | 5.08 | 43   | 1363456  | 11.102 | ppbv  | 99     |
| 24) 1,1-Dichloroethane         | 5.02 | 63   | 1143809  | 11.185 | ppbv  | 98     |
| 25) Ethyl Acetate              | 5.69 | 43   | 2652297  | 9.407  | ppbv  | 99     |
| 26) Hexane                     | 5.70 | 57   | 1253028  | 9.220  | ppbv  | 98     |
| 27) Carbon Disulfide           | 4.56 | 76   | 1315694  | 10.808 | ppbv  | 98     |
| 28) Methyl tert-Butyl Ether    | 5.04 | 73   | 1268919  | 10.992 | ppbv  | 99     |
| 29) Chloroform                 | 5.76 | 83   | 2012547  | 10.048 | ppbv  | 97     |
| 30) Cyclohexane                | 7.14 | 84   | 1146790  | 9.295  | ppbv  | 99     |
| 31) cis-1,2-Dichloroethene     | 5.56 | 61   | 1077764  | 8.337  | ppbv  | 97     |
| 32) 1,1,1-Trichloroethane      | 6.52 | 97   | 2082074  | 10.243 | ppbv  | 99     |
| 34) 2-Butanone                 | 5.25 | 43   | 888943   | 7.545  | ppbv  | 99     |
| 35) Carbon Tetrachloride       | 7.03 | 117  | 2121208  | 10.332 | ppbv  | 99     |
| 36) Benzene                    | 6.90 | 78   | 2775990  | 9.524  | ppbv  | 99     |
| 37) 1,2-Dichloroethane         | 6.31 | 62   | 1569775  | 11.152 | ppbv  | 98     |
| 38) Trichloroethene            | 7.84 | 130  | 984559   | 8.955  | ppbv  | 96     |
| 39) 1,2-Dichloropropane        | 7.62 | 63   | 1099004  | 9.830  | ppbv  | 95     |
| 40) 1,4-Dioxane                | 7.84 | 88   | 264973   | 9.097  | ppbv  | # 1    |
| 41) Tetrahydrofuran            | 6.06 | 42   | 672280   | 9.192  | ppbv  | 99     |
| 42) Bromodichloromethane       | 7.80 | 83   | 2248159  | 10.505 | ppbv  | 100    |
| 43) Methyl Methacrylate        | 8.02 | 69   | 1029501  | 10.324 | ppbv  | 98     |

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| Internal Standards            | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|--------|--------|----------|
| 44) 2,2,4-Trimethylpentane    | 7.88  | 57   | 4534161  | 9.298  | ppbv   | 99       |
| 45) t-1,3-Dichloropropene     | 9.28  | 75   | 925202   | 11.567 | ppbv   | 96       |
| 46) cis-1,3-Dichloropropene   | 8.71  | 75   | 1172278  | 10.836 | ppbv   | 96       |
| 47) 1,1,2-Trichloroethane     | 9.48  | 97   | 1111652  | 9.494  | ppbv   | 97       |
| 48) Dibromochloromethane      | 10.31 | 129  | 1820273  | 10.208 | ppbv   | 97       |
| 49) Bromoform                 | 13.05 | 173  | 1307292  | 10.247 | ppbv   | 98       |
| 50) 4-Methyl-2-Pentanone      | 8.75  | 43   | 1825438  | 10.202 | ppbv   | 99       |
| 51) 2-Hexanone                | 10.14 | 43   | 834458   | 9.913  | ppbv # | 99       |
| 52) Tetrachloroethene         | 11.23 | 164  | 911895   | 8.456  | ppbv   | 95       |
| 53) Toluene                   | 9.81  | 91   | 3128685  | 9.330  | ppbv   | 99       |
| 54) 1,2-Dibromoethane         | 10.62 | 107  | 1618251  | 9.784  | ppbv   | 98       |
| 56) 1,1,1,2-Tetrachloroethane | 12.13 | 131  | 1157912  | 9.780  | ppbv   | 98       |
| 57) Chlorobenzene             | 12.15 | 112  | 2172649  | 9.295  | ppbv   | 96       |
| 58) Ethyl Benzene             | 12.72 | 91   | 4087324  | 9.482  | ppbv   | 98       |
| 59) m/p-Xylene                | 13.00 | 91   | 6803081m | 18.748 | ppbv   |          |
| 60) o-Xylene                  | 13.70 | 91   | 3140815  | 9.331  | ppbv   | 97       |
| 61) Styrene                   | 13.53 | 104  | 1726793  | 9.568  | ppbv   | 97       |
| 62) Isopropylbenzene          | 14.67 | 105  | 4313266  | 9.027  | ppbv   | 99       |
| 63) 1,1,2,2-Tetrachloroethane | 13.68 | 83   | 2222516  | 8.889  | ppbv   | 100      |
| 64) n-propylbenzene           | 15.56 | 120  | 1120147  | 9.202  | ppbv   | 96       |
| 65) tert-Butylbenzene         | 16.75 | 119  | 3655356  | 8.683  | ppbv   | 97       |
| 66) Benzyl Chloride           | 17.00 | 91   | 190822   | 8.944  | ppbv # | 96       |
| 67) sec-Butylbenzene          | 17.29 | 105  | 5125638  | 8.738  | ppbv   | 99       |
| 69) p-Isopropyltoluene        | 17.66 | 119  | 4123920  | 8.988  | ppbv   | 98       |
| 70) n-Butylbenzene            | 18.55 | 91   | 4084952  | 9.311  | ppbv   | 99       |
| 71) 2-Chlorotoluene           | 15.46 | 91   | 3219470  | 9.216  | ppbv   | 98       |
| 72) 4-Ethyltoluene            | 15.84 | 105  | 3694640  | 9.467  | ppbv   | 98       |
| 73) 1,3,5-Trimethylbenzene    | 16.00 | 105  | 3218321  | 9.029  | ppbv   | 98       |
| 74) 1,2,4-Trimethylbenzene    | 16.77 | 105  | 3319509  | 9.037  | ppbv   | 92       |
| 75) 1,3-Dichlorobenzene       | 17.00 | 146  | 1839650  | 9.118  | ppbv   | 99       |
| 76) 1,4-Dichlorobenzene       | 17.14 | 146  | 1768628  | 8.711  | ppbv   | 99       |
| 77) 1,2-Dichlorobenzene       | 17.82 | 146  | 1710460  | 8.756  | ppbv   | 99       |
| 78) Hexachloro-1,3-Butadiene  | 23.38 | 225  | 947444   | 7.768  | ppbv   | 98       |
| 79) Naphthalene               | 22.20 | 128  | 1766787  | 9.133  | ppbv   | 99       |
| 80) Naphthalene,2-methyl-     | 24.98 | 142  | 382429   | 9.225  | ppbv   | 96       |
| 81) 1,2,4-Trichlorobenzene    | 21.93 | 180  | 979438   | 8.811  | ppbv   | 99       |

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

