

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL062921\  
 Data File : VL037265.D  
 Acq On : 30 Jun 2021 1:24  
 Operator : SY/AP  
 Sample : VSTDCCC010  
 Misc : 400mL/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleID :  
 VSTDCCC010EC

Manual Integrations  
 APPROVED

MMDadoda  
 7/5/2021 3:39:16 PM

Quant Time: Jun 30 09:04:12 2021  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL061621AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_LWed Jun 1  
 QLast Update : Wed Jun 16 14:06:32 2021  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.66  | 49   | 1587567  | 10.00 | ppbv  | -0.01    |
| 33) 1,4-Difluorobenzene | 7.17  | 114  | 4692276  | 10.00 | ppbv  | -0.01    |
| 55) Chlorobenzene-d5    | 12.08 | 117  | 4248004m | 10.00 | ppbv  | -0.02    |

## System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 14.41  | 95    | 3455979  | 10.74    | ppbv | -0.02   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 107.40% |

## Target Compounds

|                                | R.T. | QIon | Response | Conc  | Units  | Ovalue |
|--------------------------------|------|------|----------|-------|--------|--------|
| 2) Dichlorodifluoromethane     | 3.04 | 85   | 2566558  | 9.296 | ppbv   | 98     |
| 3) Chlorodifluoromethane       | 2.98 | 51   | 2616615  | 8.476 | ppbv   | 100    |
| 4) Chloromethane               | 3.14 | 50   | 858146   | 8.341 | ppbv   | 100    |
| 5) Vinyl Chloride              | 3.25 | 62   | 935419   | 8.273 | ppbv   | 96     |
| 6) Bromomethane                | 3.47 | 94   | 496674   | 7.363 | ppbv   | 99     |
| 7) Chloroethane                | 3.55 | 64   | 327476   | 8.102 | ppbv   | 97     |
| 8) Dichlorotetrafluoroethane   | 3.19 | 85   | 2327159  | 8.216 | ppbv   | 98     |
| 9) Propene                     | 3.01 | 41   | 814721   | 8.254 | ppbv   | 98     |
| 10) Heptane                    | 8.11 | 43   | 2059221  | 8.614 | ppbv   | 99     |
| 11) Trichlorofluoromethane     | 3.95 | 101  | 2428170  | 8.242 | ppbv   | 100    |
| 12) 1,1,2-Trichlorotrifluoroet | 4.48 | 101  | 1810439  | 8.718 | ppbv   | 100    |
| 13) Ethanol                    | 3.61 | 45   | 90598    | 5.934 | ppbv   | 53     |
| 14) Bromoethene                | 3.74 | 108  | 731811   | 8.443 | ppbv   | 99     |
| 15) Acetone                    | 3.85 | 43   | 1326163  | 7.408 | ppbv   | 96     |
| 16) 1,3-Butadiene              | 3.32 | 39   | 939537   | 8.877 | ppbv   | 96     |
| 17) tert-Butyl alcohol         | 4.29 | 59   | 1396507  | 8.440 | ppbv   | 99     |
| 18) 1,1-Dichloroethene         | 4.29 | 96   | 799405   | 8.687 | ppbv   | 95     |
| 19) Isopropyl Alcohol          | 3.97 | 45   | 786568   | 7.254 | ppbv # | 1      |
| 20) Methylene Chloride         | 4.34 | 84   | 697964m  | 6.512 | ppbv   |        |
| 21) Allyl Chloride             | 4.41 | 41   | 1116118  | 8.271 | ppbv   | 100    |
| 22) trans-1,2-Dichloroethene   | 4.88 | 96   | 833881   | 9.157 | ppbv   | 98     |
| 23) Vinyl Acetate              | 5.07 | 43   | 2088625  | 8.136 | ppbv   | 99     |
| 24) 1,1-Dichloroethane         | 5.01 | 63   | 1675148  | 8.105 | ppbv   | 100    |
| 25) Ethyl Acetate              | 5.67 | 43   | 3155763  | 8.142 | ppbv   | 99     |
| 26) Hexane                     | 5.68 | 57   | 1544882  | 7.887 | ppbv   | 97     |
| 27) Carbon Disulfide           | 4.55 | 76   | 1851581  | 9.648 | ppbv   | 99     |
| 28) Methyl tert-Butyl Ether    | 5.03 | 73   | 1731681  | 7.353 | ppbv   | 99     |
| 29) Chloroform                 | 5.75 | 83   | 2475886  | 8.182 | ppbv   | 100    |
| 30) Cyclohexane                | 7.12 | 84   | 1373551  | 8.416 | ppbv   | 99     |
| 31) cis-1,2-Dichloroethene     | 5.54 | 61   | 1556283  | 8.646 | ppbv   | 98     |
| 32) 1,1,1-Trichloroethane      | 6.51 | 97   | 2596250  | 8.018 | ppbv   | 99     |
| 34) 2-Butanone                 | 5.24 | 43   | 1388463  | 7.609 | ppbv   | 99     |
| 35) Carbon Tetrachloride       | 7.01 | 117  | 2700772  | 8.582 | ppbv   | 99     |
| 36) Benzene                    | 6.89 | 78   | 3225616  | 8.501 | ppbv   | 99     |
| 37) 1,2-Dichloroethane         | 6.30 | 62   | 1886761  | 8.560 | ppbv   | 99     |
| 38) Trichloroethene            | 7.83 | 130  | 1328069  | 7.363 | ppbv   | 100    |
| 39) 1,2-Dichloropropane        | 7.61 | 63   | 1237542  | 8.777 | ppbv   | 96     |
| 40) 1,4-Dioxane                | 7.83 | 88   | 317861   | 8.221 | ppbv   | 79     |
| 41) Tetrahydrofuran            | 6.05 | 42   | 701152   | 8.272 | ppbv   | 99     |
| 42) Bromodichloromethane       | 7.79 | 83   | 2660414  | 8.749 | ppbv   | 99     |
| 43) Methyl Methacrylate        | 8.01 | 69   | 1243174  | 9.487 | ppbv   | 99     |

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 QLast Update : Wed Jun 16 14:06:32 2021  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|--------|--------|----------|
| -----                         |       |      |          |        |        |          |
| 44) 2,2,4-Trimethylpentane    | 7.86  | 57   | 5368147  | 8.402  | ppbv   | 99       |
| 45) t-1,3-Dichloropropene     | 9.27  | 75   | 895439   | 7.745  | ppbv   | 97       |
| 46) cis-1,3-Dichloropropene   | 8.70  | 75   | 1198913  | 7.581  | ppbv   | 99       |
| 47) 1,1,2-Trichloroethane     | 9.47  | 97   | 1388167  | 8.630  | ppbv   | 98       |
| 48) Dibromochloromethane      | 10.30 | 129  | 2459214  | 9.685  | ppbv   | 100      |
| 49) Bromoform                 | 13.03 | 173  | 2084825  | 11.021 | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 8.74  | 43   | 2212029  | 8.825  | ppbv   | 100      |
| 51) 2-Hexanone                | 10.13 | 43   | 1155840  | 9.478  | ppbv # | 97       |
| 52) Tetrachloroethene         | 11.22 | 164  | 1349811  | 7.656  | ppbv   | 99       |
| 53) Toluene                   | 9.80  | 91   | 3915658  | 8.639  | ppbv   | 100      |
| 54) 1,2-Dibromoethane         | 10.60 | 107  | 2023135  | 8.752  | ppbv   | 96       |
| 56) 1,1,1,2-Tetrachloroethane | 12.12 | 131  | 1718041  | 9.250  | ppbv # | 55       |
| 57) Chlorobenzene             | 12.14 | 112  | 2967686  | 8.614  | ppbv   | 98       |
| 58) Ethyl Benzene             | 12.70 | 91   | 5257442  | 8.990  | ppbv   | 99       |
| 59) m/p-Xylene                | 12.99 | 91   | 8894854m | 17.948 | ppbv   |          |
| 60) o-Xylene                  | 13.69 | 91   | 4208097  | 8.918  | ppbv   | 99       |
| 61) Styrene                   | 13.52 | 104  | 2313385  | 9.499  | ppbv   | 98       |
| 62) Isopropylbenzene          | 14.66 | 105  | 6053998  | 9.022  | ppbv   | 99       |
| 63) 1,1,2,2-Tetrachloroethane | 13.67 | 83   | 2923504  | 9.305  | ppbv   | 99       |
| 64) n-propylbenzene           | 15.55 | 120  | 1609766  | 9.580  | ppbv   | 96       |
| 65) tert-Butylbenzene         | 16.74 | 119  | 5461740  | 9.177  | ppbv   | 99       |
| 66) Benzyl Chloride           | 16.98 | 91   | 167447m  | 6.640  | ppbv   |          |
| 67) sec-Butylbenzene          | 17.29 | 105  | 7320564  | 9.225  | ppbv   | 99       |
| 69) p-Isopropyltoluene        | 17.64 | 119  | 6322504  | 9.432  | ppbv   | 99       |
| 70) n-Butylbenzene            | 18.54 | 91   | 6029630  | 9.719  | ppbv   | 100      |
| 71) 2-Chlorotoluene           | 15.44 | 91   | 4469856  | 9.528  | ppbv   | 99       |
| 72) 4-Ethyltoluene            | 15.83 | 105  | 5124057  | 9.558  | ppbv   | 100      |
| 73) 1,3,5-Trimethylbenzene    | 15.99 | 105  | 4620163  | 8.916  | ppbv   | 97       |
| 74) 1,2,4-Trimethylbenzene    | 16.76 | 105  | 4866644  | 9.115  | ppbv   | 97       |
| 75) 1,3-Dichlorobenzene       | 16.99 | 146  | 3051612  | 9.400  | ppbv   | 98       |
| 76) 1,4-Dichlorobenzene       | 17.13 | 146  | 2950413  | 9.099  | ppbv   | 100      |
| 77) 1,2-Dichlorobenzene       | 17.81 | 146  | 3015444  | 9.602  | ppbv   | 100      |
| 78) Hexachloro-1,3-Butadiene  | 23.36 | 225  | 2078766  | 7.699  | ppbv   | 99       |
| 79) Naphthalene               | 22.19 | 128  | 3923585  | 8.814  | ppbv   | 98       |
| 80) Naphthalene, 2-methyl-    | 24.97 | 142  | 788963   | 6.758  | ppbv   | 97       |
| 81) 1,2,4-Trichlorobenzene    | 21.92 | 180  | 2279582  | 8.874  | ppbv   | 99       |
| -----                         |       |      |          |        |        |          |

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

