

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL081221\  
 Data File : VL037411.D  
 Acq On : 12 Aug 2021 12:18  
 Operator : SY/AP  
 Sample : VSTDIC001  
 Misc : 400mL/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC001

Manual Integrations  
 APPROVED

apatel  
 8/13/2021 11:06:45 AM

Quant Time: Aug 12 13:07:17 2021  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL081221AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Aug 12 13:07:17 2021  
 QLast Update : Thu Aug 12 11:34:23 2021  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.66  | 49   | 1299684  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.17  | 114  | 4078497  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.08 | 117  | 3612321  | 10.00 | ppbv  | 0.00     |

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| System Monitoring Compounds |        |       |          |          |      |        |
| 68) 1-Bromo-4-Fluorobenzene | 14.41  | 95    | 2487881  | 9.24     | ppbv | 0.00   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 92.40% |

| Target Compounds               | R.T. | QIon | Response | Conc  | Units  | Ovalue |
|--------------------------------|------|------|----------|-------|--------|--------|
| 2) Dichlorodifluoromethane     | 3.05 | 85   | 236224   | 1.006 | ppbv   | 98     |
| 3) Chlorodifluoromethane       | 2.99 | 51   | 278409   | 1.152 | ppbv   | 98     |
| 4) Chloromethane               | 3.13 | 50   | 102316   | 1.150 | ppbv   | 99     |
| 5) Vinyl Chloride              | 3.26 | 62   | 98517m   | 1.083 | ppbv   |        |
| 6) Bromomethane                | 3.47 | 94   | 57505m   | 1.154 | ppbv   |        |
| 7) Chloroethane                | 3.55 | 64   | 33630    | 1.080 | ppbv   | 95     |
| 8) Dichlorotetrafluoroethane   | 3.19 | 85   | 247303   | 1.207 | ppbv   | 95     |
| 9) Propene                     | 3.01 | 41   | 91969    | 1.118 | ppbv   | 94     |
| 10) Heptane                    | 8.12 | 43   | 209214   | 1.075 | ppbv   | 94     |
| 11) Trichlorofluoromethane     | 3.95 | 101  | 237392   | 1.202 | ppbv   | 91     |
| 12) 1,1,2-Trichlorotrifluoroet | 4.48 | 101  | 158965   | 1.131 | ppbv   | 91     |
| 13) Ethanol                    | 3.63 | 45   | 9139m    | 0.920 | ppbv   |        |
| 14) Bromoethene                | 3.74 | 108  | 67545    | 1.051 | ppbv # | 90     |
| 15) Acetone                    | 3.86 | 43   | 148693   | 1.201 | ppbv # | 62     |
| 16) 1,3-Butadiene              | 3.32 | 39   | 99804m   | 1.147 | ppbv   |        |
| 17) tert-Butyl alcohol         | 4.31 | 59   | 147221m  | 1.329 | ppbv   |        |
| 18) 1,1-Dichloroethene         | 4.29 | 96   | 71755    | 1.127 | ppbv   | 90     |
| 19) Isopropyl Alcohol          | 3.99 | 45   | 91053m   | 1.277 | ppbv   |        |
| 20) Methylene Chloride         | 4.34 | 84   | 78917    | 1.174 | ppbv # | 95     |
| 21) Allyl Chloride             | 4.41 | 41   | 115109   | 1.185 | ppbv   | 95     |
| 22) trans-1,2-Dichloroethene   | 4.88 | 96   | 64206    | 1.067 | ppbv   | 94     |
| 23) Vinyl Acetate              | 5.07 | 43   | 228962m  | 1.150 | ppbv   |        |
| 24) 1,1-Dichloroethane         | 5.01 | 63   | 181309   | 1.158 | ppbv   | 97     |
| 25) Ethyl Acetate              | 5.68 | 43   | 352388   | 1.112 | ppbv   | 98     |
| 26) Hexane                     | 5.68 | 57   | 175682   | 1.094 | ppbv   | 95     |
| 27) Carbon Disulfide           | 4.55 | 76   | 152452m  | 1.133 | ppbv   |        |
| 28) Methyl tert-Butyl Ether    | 5.04 | 73   | 201708   | 1.176 | ppbv   | 100    |
| 29) Chloroform                 | 5.74 | 83   | 244856   | 1.064 | ppbv   | 97     |
| 30) Cyclohexane                | 7.13 | 84   | 151537   | 1.140 | ppbv # | 73     |
| 31) cis-1,2-Dichloroethene     | 5.55 | 61   | 147597   | 1.026 | ppbv   | 95     |
| 32) 1,1,1-Trichloroethane      | 6.51 | 97   | 236024   | 1.057 | ppbv   | 96     |
| 34) 2-Butanone                 | 5.25 | 43   | 168177m  | 1.085 | ppbv   |        |
| 35) Carbon Tetrachloride       | 7.02 | 117  | 243279m  | 1.070 | ppbv   |        |
| 36) Benzene                    | 6.89 | 78   | 357811   | 1.106 | ppbv   | 99     |
| 37) 1,2-Dichloroethane         | 6.30 | 62   | 171815   | 1.038 | ppbv   | 96     |
| 38) Trichloroethene            | 7.83 | 130  | 142400m  | 1.033 | ppbv   |        |
| 39) 1,2-Dichloropropane        | 7.61 | 63   | 133297   | 1.127 | ppbv   | 97     |
| 40) 1,4-Dioxane                | 7.87 | 88   | 35742m   | 1.134 | ppbv   |        |
| 41) Tetrahydrofuran            | 6.07 | 42   | 79827m   | 1.096 | ppbv   |        |
| 42) Bromodichloromethane       | 7.79 | 83   | 243425   | 1.040 | ppbv   | 98     |
| 43) Methyl Methacrylate        | 8.01 | 69   | 109767m  | 0.974 | ppbv   |        |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL081221\  
 Data File : VL037411.D  
 Acq On : 12 Aug 2021 12:18  
 Operator : SY/AP  
 Sample : VSTDIC001  
 Misc : 400mL/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC001

Manual Integrations  
 APPROVED

apatel  
 8/13/2021 11:06:45 AM

Quant Time: Aug 12 13:07:17 2021  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL081221AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Aug 12 2021  
 QLast Update : Thu Aug 12 11:34:23 2021  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|-------|--------|----------|
| 44) 2,2,4-Trimethylpentane    | 7.87  | 57   | 614627   | 1.138 | ppbv   | 99       |
| 45) t-1,3-Dichloropropene     | 9.28  | 75   | 71516    | 0.846 | ppbv   | 93       |
| 46) cis-1,3-Dichloropropene   | 8.70  | 75   | 107950   | 0.944 | ppbv # | 84       |
| 47) 1,1,2-Trichloroethane     | 9.47  | 97   | 144611m  | 1.084 | ppbv   |          |
| 48) Dibromochloromethane      | 10.30 | 129  | 190018   | 0.966 | ppbv   | 95       |
| 49) Bromoform                 | 13.04 | 173  | 144051m  | 0.932 | ppbv   |          |
| 50) 4-Methyl-2-Pentanone      | 8.75  | 43   | 210999m  | 1.042 | ppbv   |          |
| 51) 2-Hexanone                | 10.17 | 43   | 93240m   | 1.039 | ppbv   |          |
| 52) Tetrachloroethene         | 11.22 | 164  | 139105m  | 1.054 | ppbv   |          |
| 53) Toluene                   | 9.80  | 91   | 401787m  | 1.070 | ppbv   |          |
| 54) 1,2-Dibromoethane         | 10.60 | 107  | 187458   | 0.993 | ppbv   | 91       |
| 56) 1,1,1,2-Tetrachloroethane | 12.12 | 131  | 152613   | 1.093 | ppbv # | 1        |
| 57) Chlorobenzene             | 12.14 | 112  | 314412m  | 1.128 | ppbv   |          |
| 58) Ethyl Benzene             | 12.70 | 91   | 510595   | 1.059 | ppbv   | 100      |
| 59) m/p-Xylene                | 12.98 | 91   | 926771m  | 2.233 | ppbv   |          |
| 60) o-Xylene                  | 13.68 | 91   | 420618   | 1.093 | ppbv   | 99       |
| 61) Styrene                   | 13.52 | 104  | 193035   | 0.968 | ppbv   | 98       |
| 62) Isopropylbenzene          | 14.66 | 105  | 608232   | 1.122 | ppbv   | 99       |
| 63) 1,1,2,2-Tetrachloroethane | 13.67 | 83   | 309083   | 1.062 | ppbv   | 98       |
| 64) n-propylbenzene           | 15.55 | 120  | 152429m  | 1.108 | ppbv   |          |
| 65) tert-Butylbenzene         | 16.73 | 119  | 563173   | 1.152 | ppbv   | 97       |
| 66) Benzyl Chloride           | 16.98 | 91   | 19598m   | 0.945 | ppbv   |          |
| 67) sec-Butylbenzene          | 17.28 | 105  | 747810   | 1.113 | ppbv   | 99       |
| 69) p-Isopropyltoluene        | 17.64 | 119  | 622112m  | 1.146 | ppbv   |          |
| 70) n-Butylbenzene            | 18.55 | 91   | 552359   | 1.083 | ppbv   | 97       |
| 71) 2-Chlorotoluene           | 15.44 | 91   | 426178   | 1.077 | ppbv   | 98       |
| 72) 4-Ethyltoluene            | 15.83 | 105  | 481773   | 1.070 | ppbv   | 99       |
| 73) 1,3,5-Trimethylbenzene    | 15.99 | 105  | 476828m  | 1.142 | ppbv   |          |
| 74) 1,2,4-Trimethylbenzene    | 16.75 | 105  | 456070   | 1.076 | ppbv   | 95       |
| 75) 1,3-Dichlorobenzene       | 16.99 | 146  | 291504m  | 1.131 | ppbv   |          |
| 76) 1,4-Dichlorobenzene       | 17.13 | 146  | 277572m  | 1.097 | ppbv   |          |
| 77) 1,2-Dichlorobenzene       | 17.81 | 146  | 277389m  | 1.117 | ppbv   |          |
| 78) Hexachloro-1,3-Butadiene  | 23.36 | 225  | 237422m  | 1.193 | ppbv   |          |
| 79) Naphthalene               | 22.19 | 128  | 186915m  | 0.809 | ppbv   |          |
| 80) Naphthalene, 2-methyl-    | 25.02 | 142  | 22544m   | 0.496 | ppbv   |          |
| 81) 1,2,4-Trichlorobenzene    | 21.91 | 180  | 144171m  | 0.910 | ppbv   |          |

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

