

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL082320\  
 Data File : VL035497.D  
 Acq On : 23 Aug 2020 12:04  
 Operator : SY/AP  
 Sample : VSTDIC015  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC015

Quant Time: Aug 23 12:37:32 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL082320AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Sun Aug 23 10:33:49 2020  
 QLast Update : Sun Aug 23 10:33:49 2020  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.67  | 49   | 957516   | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.19  | 114  | 4468418  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.10 | 117  | 4784122  | 10.00 | ppbv  | 0.00     |

System Monitoring Compounds

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| 68) 1-Bromo-4-Fluorobenzene | 14.44  | 95    | 3336683  | 9.96     | ppbv | 0.00   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 99.60% |

| Target Compounds               | R.T. | QIon | Response | Conc   | Units | Ovalue |
|--------------------------------|------|------|----------|--------|-------|--------|
| 2) Dichlorodifluoromethane     | 3.04 | 85   | 2077902  | 11.708 | ppbv  | 96     |
| 3) Chlorodifluoromethane       | 2.98 | 51   | 1493314  | 12.439 | ppbv  | 98     |
| 4) Chloromethane               | 3.13 | 50   | 797948   | 12.758 | ppbv  | 100    |
| 5) Vinyl Chloride              | 3.25 | 62   | 961097   | 12.858 | ppbv  | 99     |
| 6) Bromomethane                | 3.47 | 94   | 864575   | 13.225 | ppbv  | 99     |
| 7) Chloroethane                | 3.55 | 64   | 361918   | 13.143 | ppbv  | 99     |
| 8) Dichlorotetrafluoroethane   | 3.18 | 85   | 2654074  | 11.680 | ppbv  | 99     |
| 9) Propene                     | 3.00 | 41   | 581009   | 12.040 | ppbv  | 98     |
| 10) Heptane                    | 8.13 | 43   | 1605600  | 12.690 | ppbv  | 99     |
| 11) Trichlorofluoromethane     | 3.95 | 101  | 3405448  | 12.229 | ppbv  | 98     |
| 12) 1,1,2-Trichlorotrifluoroet | 4.48 | 101  | 2612902  | 12.592 | ppbv  | 98     |
| 13) Ethanol                    | 3.60 | 45   | 148480   | 8.398  | ppbv  | 100    |
| 14) Bromoethene                | 3.74 | 108  | 1210202  | 13.197 | ppbv  | 99     |
| 15) Acetone                    | 3.85 | 43   | 1291419  | 11.718 | ppbv  | 99     |
| 16) 1,3-Butadiene              | 3.32 | 39   | 591395   | 13.232 | ppbv  | 98     |
| 17) tert-Butyl alcohol         | 4.29 | 59   | 1852856  | 13.007 | ppbv  | 100    |
| 18) 1,1-Dichloroethene         | 4.29 | 96   | 1224194  | 13.361 | ppbv  | 98     |
| 19) Isopropyl Alcohol          | 3.97 | 45   | 949460   | 12.499 | ppbv  | 99     |
| 20) Methylene Chloride         | 4.34 | 84   | 968088   | 10.887 | ppbv  | 100    |
| 21) Allyl Chloride             | 4.41 | 41   | 787942   | 14.069 | ppbv  | 99     |
| 22) trans-1,2-Dichloroethene   | 4.89 | 96   | 1296689  | 13.261 | ppbv  | 99     |
| 23) Vinyl Acetate              | 5.08 | 43   | 2085911  | 13.240 | ppbv  | 99     |
| 24) 1,1-Dichloroethane         | 5.02 | 63   | 1991174  | 12.664 | ppbv  | 99     |
| 25) Ethyl Acetate              | 5.68 | 43   | 2554667  | 11.912 | ppbv  | 99     |
| 26) Hexane                     | 5.69 | 57   | 1471507  | 12.159 | ppbv  | 98     |
| 27) Carbon Disulfide           | 4.55 | 76   | 2554050  | 14.599 | ppbv  | 99     |
| 28) Methyl tert-Butyl Ether    | 5.03 | 73   | 2761697  | 12.492 | ppbv  | 99     |
| 29) Chloroform                 | 5.76 | 83   | 3112351  | 12.799 | ppbv  | 98     |
| 30) Cyclohexane                | 7.14 | 84   | 1773318  | 13.207 | ppbv  | 98     |
| 31) cis-1,2-Dichloroethene     | 5.55 | 61   | 1673083  | 13.144 | ppbv  | 99     |
| 32) 1,1,1-Trichloroethane      | 6.52 | 97   | 3217288  | 14.118 | ppbv  | 99     |
| 34) 2-Butanone                 | 5.25 | 43   | 1853312  | 12.414 | ppbv  | 99     |
| 35) Carbon Tetrachloride       | 7.03 | 117  | 3447365  | 14.506 | ppbv  | 98     |
| 36) Benzene                    | 6.90 | 78   | 3971181  | 12.109 | ppbv  | 98     |
| 37) 1,2-Dichloroethane         | 6.31 | 62   | 1942859  | 12.963 | ppbv  | 100    |
| 38) Trichloroethene            | 7.84 | 130  | 2200218  | 12.061 | ppbv  | 97     |
| 39) 1,2-Dichloropropane        | 7.62 | 63   | 1356653  | 12.551 | ppbv  | 99     |
| 40) 1,4-Dioxane                | 7.84 | 88   | 699620   | 11.882 | ppbv  | 94     |
| 41) Tetrahydrofuran            | 6.05 | 42   | 1069779  | 12.990 | ppbv  | 99     |
| 42) Bromodichloromethane       | 7.80 | 83   | 3359402  | 13.394 | ppbv  | 100    |
| 43) Methyl Methacrylate        | 8.02 | 69   | 1697093  | 13.232 | ppbv  | 100    |

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| Internal Standards            | R.T.  | QIon | Response  | Conc   | Units  | Dev(Min) |
|-------------------------------|-------|------|-----------|--------|--------|----------|
| 44) 2,2,4-Trimethylpentane    | 7.88  | 57   | 4924696   | 11.499 | ppbv   | 99       |
| 45) t-1,3-Dichloropropene     | 9.29  | 75   | 2027142   | 15.345 | ppbv   | 99       |
| 46) cis-1,3-Dichloropropene   | 8.72  | 75   | 2343161   | 14.238 | ppbv   | 100      |
| 47) 1,1,2-Trichloroethane     | 9.49  | 97   | 2035012   | 12.605 | ppbv   | 99       |
| 48) Dibromochloromethane      | 10.32 | 129  | 3684817   | 13.606 | ppbv   | 99       |
| 49) Bromoform                 | 13.06 | 173  | 3623249   | 13.887 | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 8.75  | 43   | 2696273   | 12.590 | ppbv   | 99       |
| 51) 2-Hexanone                | 10.15 | 43   | 2364228   | 13.097 | ppbv # | 99       |
| 52) Tetrachloroethene         | 11.24 | 164  | 2330678   | 11.651 | ppbv   | 98       |
| 53) Toluene                   | 9.82  | 91   | 5104060   | 12.083 | ppbv   | 98       |
| 54) 1,2-Dibromoethane         | 10.63 | 107  | 3293263   | 12.560 | ppbv   | 99       |
| 56) 1,1,1,2-Tetrachloroethane | 12.15 | 131  | 2850494   | 12.561 | ppbv   | 98       |
| 57) Chlorobenzene             | 12.17 | 112  | 4435389   | 11.107 | ppbv   | 99       |
| 58) Ethyl Benzene             | 12.73 | 91   | 6615854   | 11.456 | ppbv   | 96       |
| 59) m/p-Xylene                | 13.02 | 91   | 11127343m | 22.793 | ppbv   |          |
| 60) o-Xylene                  | 13.72 | 91   | 5485819   | 11.562 | ppbv   | 98       |
| 61) Styrene                   | 13.55 | 104  | 4677023   | 12.199 | ppbv   | 98       |
| 62) Isopropylbenzene          | 14.69 | 105  | 8278682   | 10.646 | ppbv   | 96       |
| 63) 1,1,2,2-Tetrachloroethane | 13.70 | 83   | 3865394   | 11.341 | ppbv   | 99       |
| 64) n-propylbenzene           | 15.59 | 120  | 2866950   | 11.961 | ppbv   | 87       |
| 65) tert-Butylbenzene         | 16.77 | 119  | 7997175   | 10.583 | ppbv   | 97       |
| 66) Benzyl Chloride           | 17.01 | 91   | 3186379   | 17.529 | ppbv   | 99       |
| 67) sec-Butylbenzene          | 17.32 | 105  | 10031008  | 10.086 | ppbv   | 96       |
| 69) p-Isopropyltoluene        | 17.68 | 119  | 9101814   | 10.314 | ppbv   | 95       |
| 70) n-Butylbenzene            | 18.58 | 91   | 8711404   | 10.451 | ppbv   | 97       |
| 71) 2-Chlorotoluene           | 15.48 | 91   | 6471230   | 11.469 | ppbv   | 97       |
| 72) 4-Ethyltoluene            | 15.86 | 105  | 7065112   | 11.346 | ppbv   | 97       |
| 73) 1,3,5-Trimethylbenzene    | 16.02 | 105  | 6612021   | 11.412 | ppbv   | 97       |
| 74) 1,2,4-Trimethylbenzene    | 16.79 | 105  | 6744682   | 10.714 | ppbv   | 99       |
| 75) 1,3-Dichlorobenzene       | 17.02 | 146  | 5153405   | 10.599 | ppbv   | 99       |
| 76) 1,4-Dichlorobenzene       | 17.17 | 146  | 5248318   | 10.953 | ppbv   | 98       |
| 77) 1,2-Dichlorobenzene       | 17.84 | 146  | 5144496   | 10.802 | ppbv   | 98       |
| 78) Hexachloro-1,3-Butadiene  | 23.41 | 225  | 3455780   | 9.177  | ppbv   | 99       |
| 79) Naphthalene               | 22.24 | 128  | 9125787   | 10.294 | ppbv   | 96       |
| 80) Naphthalene, 2-methyl-    | 24.99 | 142  | 4276646   | 11.673 | ppbv   | 99       |
| 81) 1,2,4-Trichlorobenzene    | 21.96 | 180  | 5389573   | 10.085 | ppbv   | 100      |

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

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