

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL083118\  
 Data File : VL032431.D  
 Acq On : 31 Aug 2018 00:30  
 Operator : SY/AP  
 Sample : VSTDICCC010  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICCC010

Manual Integrations  
 APPROVED

apatel  
 9/4/2018 8:25:21 AM

Quant Time: Aug 31 21:19:44 2018

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL083118AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 31

QLast Update : Fri Aug 31 04:25:10 2018

Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.81  | 49   | 2084711  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.35  | 114  | 4336235  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.30 | 117  | 4299662m | 10.00 | ppbv  | 0.00     |

#### System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 14.64  | 95    | 3203474  | 10.00    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 100.00% |

#### Target Compounds

|                                |      |     |         |       |      | Ovalue |
|--------------------------------|------|-----|---------|-------|------|--------|
| 2) Dichlorodifluoromethane     | 3.11 | 85  | 2636334 | 14.12 | ppbv | 100    |
| 3) Chlorodifluoromethane       | 3.04 | 51  | 1685948 | 9.34  | ppbv | 100    |
| 4) Chloromethane               | 3.20 | 50  | 1025606 | 9.28  | ppbv | 100    |
| 5) Vinyl Chloride              | 3.32 | 62  | 986757  | 10.09 | ppbv | 100    |
| 6) Bromomethane                | 3.55 | 94  | 546595  | 9.19  | ppbv | 100    |
| 7) Chloroethane                | 3.64 | 64  | 357043  | 9.29  | ppbv | 100    |
| 8) Dichlorotetrafluoroethane   | 3.25 | 85  | 2096679 | 9.14  | ppbv | 100    |
| 9) Propene                     | 3.07 | 41  | 767339  | 10.75 | ppbv | 100    |
| 10) Heptane                    | 8.30 | 43  | 2827836 | 10.97 | ppbv | 100    |
| 11) Trichlorofluoromethane     | 4.04 | 101 | 2153888 | 9.21  | ppbv | 100    |
| 12) 1,1,2-Trichlorotrifluoroet | 4.59 | 101 | 1425196 | 9.11  | ppbv | 100    |
| 13) Ethanol                    | 3.68 | 45  | 186302  | 8.07  | ppbv | 99     |
| 14) Bromoethene                | 3.83 | 108 | 669502  | 9.87  | ppbv | 100    |
| 15) Acetone                    | 3.94 | 43  | 1625736 | 8.18  | ppbv | 100    |
| 16) 1,3-Butadiene              | 3.40 | 39  | 779131  | 9.39  | ppbv | 100    |
| 17) tert-Butyl alcohol         | 4.40 | 59  | 264017m | 8.09  | ppbv |        |
| 18) 1,1-Dichloroethene         | 4.39 | 96  | 682271  | 9.51  | ppbv | 100    |
| 19) Isopropyl Alcohol          | 4.06 | 45  | 1137530 | 9.08  | ppbv | 100    |
| 20) Methylene Chloride         | 4.45 | 84  | 610298  | 8.27  | ppbv | 100    |
| 21) Allyl Chloride             | 4.52 | 41  | 1202885 | 9.59  | ppbv | 100    |
| 22) trans-1,2-Dichloroethene   | 5.01 | 96  | 763244  | 9.86  | ppbv | 100    |
| 23) Vinyl Acetate              | 5.20 | 43  | 3155179 | 10.30 | ppbv | 100    |
| 24) 1,1-Dichloroethane         | 5.14 | 63  | 2373833 | 9.66  | ppbv | 100    |
| 25) Ethyl Acetate              | 5.82 | 43  | 4145208 | 9.87  | ppbv | 100    |
| 26) Hexane                     | 5.83 | 57  | 1929878 | 10.26 | ppbv | 100    |
| 27) Carbon Disulfide           | 4.66 | 76  | 1794980 | 9.94  | ppbv | 100    |
| 28) Methyl tert-Butyl Ether    | 5.16 | 73  | 2494131 | 10.74 | ppbv | 100    |
| 29) Chloroform                 | 5.90 | 83  | 2739293 | 9.42  | ppbv | 100    |
| 30) Cyclohexane                | 7.30 | 84  | 1528127 | 11.00 | ppbv | 100    |
| 31) cis-1,2-Dichloroethene     | 5.69 | 61  | 1841440 | 10.72 | ppbv | 100    |
| 32) 1,1,1-Trichloroethane      | 6.67 | 97  | 2550807 | 10.17 | ppbv | 100    |
| 34) 2-Butanone                 | 5.37 | 43  | 2759082 | 10.00 | ppbv | 100    |
| 35) Carbon Tetrachloride       | 7.19 | 117 | 2567355 | 9.56  | ppbv | 100    |
| 36) Benzene                    | 7.06 | 78  | 3638969 | 10.14 | ppbv | 100    |
| 37) 1,2-Dichloroethane         | 6.46 | 62  | 2093531 | 9.41  | ppbv | 100    |
| 38) Trichloroethene            | 8.02 | 130 | 1278188 | 10.66 | ppbv | 100    |
| 39) 1,2-Dichloropropane        | 7.79 | 63  | 1483340 | 9.84  | ppbv | 100    |
| 40) 1,4-Dioxane                | 8.01 | 88  | 484390  | 10.77 | ppbv | 100    |
| 41) Tetrahydrofuran            | 6.20 | 42  | 1634368 | 11.06 | ppbv | 100    |
| 42) Bromodichloromethane       | 7.97 | 83  | 2906764 | 9.56  | ppbv | 100    |
| 43) Methyl Methacrylate        | 8.19 | 69  | 1692611 | 11.45 | ppbv | 100    |

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Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|-------|--------|----------|
| 44) 2,2,4-Trimethylpentane    | 8.04  | 57   | 6995101  | 10.44 | ppbv   | 100      |
| 45) t-1,3-Dichloropropene     | 9.47  | 75   | 1967304  | 11.20 | ppbv   | 100      |
| 46) cis-1,3-Dichloropropene   | 8.89  | 75   | 2438760  | 11.34 | ppbv   | 100      |
| 47) 1,1,2-Trichloroethane     | 9.67  | 97   | 1463856  | 9.07  | ppbv   | 100      |
| 48) Dibromochloromethane      | 10.51 | 129  | 2314540  | 10.17 | ppbv   | 100      |
| 49) Bromoform                 | 13.26 | 173  | 2024647  | 10.13 | ppbv   | 100      |
| 50) 4-Methyl-2-Pentanone      | 8.92  | 43   | 4393970  | 10.27 | ppbv   | 100      |
| 51) 2-Hexanone                | 10.33 | 43   | 3086499  | 10.92 | ppbv   | 100      |
| 52) Tetrachloroethene         | 11.43 | 164  | 1096034  | 10.64 | ppbv   | 100      |
| 53) Toluene                   | 10.01 | 91   | 3952260  | 10.51 | ppbv   | 100      |
| 54) 1,2-Dibromoethane         | 10.82 | 107  | 2363369  | 10.13 | ppbv   | 100      |
| 56) 1,1,1,2-Tetrachloroethane | 12.34 | 131  | 1727647  | 9.34  | ppbv # | 58       |
| 57) Chlorobenzene             | 12.36 | 112  | 3110855  | 9.44  | ppbv   | 100      |
| 58) Ethyl Benzene             | 12.92 | 91   | 5554253  | 11.33 | ppbv   | 100      |
| 59) m/p-Xylene                | 13.21 | 91   | 9134354m | 20.91 | ppbv   |          |
| 60) o-Xylene                  | 13.91 | 91   | 4477346  | 10.67 | ppbv   | 100      |
| 61) Styrene                   | 13.74 | 104  | 3361621  | 11.92 | ppbv   | 100      |
| 62) Isopropylbenzene          | 14.89 | 105  | 6257668  | 10.53 | ppbv   | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 13.90 | 83   | 3472951  | 9.47  | ppbv   | 100      |
| 64) n-propylbenzene           | 15.78 | 120  | 1664357  | 10.72 | ppbv   | 100      |
| 65) tert-Butylbenzene         | 16.96 | 119  | 5245074  | 10.28 | ppbv   | 100      |
| 66) Benzyl Chloride           | 17.21 | 91   | 3208377  | 10.14 | ppbv   | 100      |
| 67) sec-Butylbenzene          | 17.52 | 105  | 7883944  | 10.39 | ppbv   | 100      |
| 69) p-Isopropyltoluene        | 17.87 | 119  | 6303640  | 10.84 | ppbv   | 100      |
| 70) n-Butylbenzene            | 18.77 | 91   | 6994461  | 10.84 | ppbv   | 100      |
| 71) 2-Chlorotoluene           | 15.68 | 91   | 4982616  | 10.97 | ppbv   | 100      |
| 72) 4-Ethyltoluene            | 16.06 | 105  | 5243679  | 11.47 | ppbv   | 100      |
| 73) 1,3,5-Trimethylbenzene    | 16.22 | 105  | 4969081  | 11.38 | ppbv   | 100      |
| 74) 1,2,4-Trimethylbenzene    | 16.98 | 105  | 4969798  | 10.54 | ppbv   | 100      |
| 75) 1,3-Dichlorobenzene       | 17.22 | 146  | 2799574  | 9.31  | ppbv   | 100      |
| 76) 1,4-Dichlorobenzene       | 17.37 | 146  | 2792509  | 10.10 | ppbv   | 100      |
| 77) 1,2-Dichlorobenzene       | 18.05 | 146  | 2806811  | 9.72  | ppbv   | 100      |
| 78) Hexachloro-1,3-Butadiene  | 23.60 | 225  | 899693   | 7.22  | ppbv   | 100      |
| 79) Naphthalene               | 22.48 | 128  | 4715899  | 15.04 | ppbv   | 100      |
| 80) Naphthalene, 2-methyl-    | 25.15 | 142  | 1680660  | 20.48 | ppbv   | 100      |
| 81) 1,2,4-Trichlorobenzene    | 22.20 | 180  | 2231832  | 13.13 | ppbv   | 100      |

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

