

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL091719\  
 Data File : VL034176.D  
 Acq On : 17 Sep 2019 8:07  
 Operator : SY/AP  
 Sample : VSTDIC015  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC015

Manual Integrations  
 APPROVED

MMDadoda  
 9/20/2019 12:44:06 AM

Quant Time: Sep 17 08:35:46 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL091719AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Tue Sep 17 2019  
 QLast Update : Tue Sep 17 05:58:04 2019  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.70  | 49   | 1216331  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.23  | 114  | 2189478  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.17 | 117  | 2352179  | 10.00 | ppbv  | 0.00     |

System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 14.51  | 95    | 2003532  | 10.33    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 103.30% |

| Target Compounds               | R.T. | QIon | Response | Conc   | Units  | Ovalue |
|--------------------------------|------|------|----------|--------|--------|--------|
| 2) Dichlorodifluoromethane     | 3.03 | 85   | 1862460  | 9.653  | ppbv   | 96     |
| 3) Chlorodifluoromethane       | 2.97 | 51   | 1932959  | 14.053 | ppbv   | 100    |
| 4) Chloromethane               | 3.13 | 50   | 1188692  | 14.030 | ppbv   | 100    |
| 5) Vinyl Chloride              | 3.25 | 62   | 1039866  | 13.461 | ppbv   | 97     |
| 6) Bromomethane                | 3.47 | 94   | 508658   | 13.494 | ppbv   | 94     |
| 7) Chloroethane                | 3.55 | 64   | 384438   | 14.557 | ppbv   | 98     |
| 8) Dichlorotetrafluoroethane   | 3.18 | 85   | 2024233  | 12.574 | ppbv   | 99     |
| 9) Propene                     | 2.99 | 41   | 990928   | 13.187 | ppbv   | 100    |
| 10) Heptane                    | 8.18 | 43   | 2542169  | 12.974 | ppbv   | 99     |
| 11) Trichlorofluoromethane     | 3.95 | 101  | 2179980  | 13.308 | ppbv   | 97     |
| 12) 1,1,2-Trichlorotrifluoroet | 4.50 | 101  | 1448102  | 13.300 | ppbv   | 98     |
| 13) Ethanol                    | 3.60 | 45   | 190397   | 12.997 | ppbv   | 99     |
| 14) Bromoethene                | 3.74 | 108  | 633270   | 13.475 | ppbv   | 99     |
| 15) Acetone                    | 3.85 | 43   | 1933557  | 13.165 | ppbv   | 99     |
| 16) 1,3-Butadiene              | 3.32 | 39   | 1034315  | 13.969 | ppbv   | 99     |
| 17) tert-Butyl alcohol         | 4.30 | 59   | 1567925  | 14.811 | ppbv   | 100    |
| 18) 1,1-Dichloroethene         | 4.30 | 96   | 683320   | 13.814 | ppbv   | 90     |
| 19) Isopropyl Alcohol          | 3.98 | 45   | 1430864  | 14.556 | ppbv   | 100    |
| 20) Methylene Chloride         | 4.36 | 84   | 616286   | 12.818 | ppbv   | 96     |
| 21) Allyl Chloride             | 4.42 | 41   | 1356496  | 14.079 | ppbv   | 99     |
| 22) trans-1,2-Dichloroethene   | 4.91 | 96   | 698373   | 14.052 | ppbv   | 99     |
| 23) Vinyl Acetate              | 5.10 | 43   | 3350907  | 13.557 | ppbv   | 99     |
| 24) 1,1-Dichloroethane         | 5.03 | 63   | 2169628  | 13.172 | ppbv   | 99     |
| 25) Ethyl Acetate              | 5.71 | 43   | 3900558  | 12.161 | ppbv   | 98     |
| 26) Hexane                     | 5.72 | 57   | 1711049  | 12.008 | ppbv   | 97     |
| 27) Carbon Disulfide           | 4.56 | 76   | 1864197  | 14.575 | ppbv   | 99     |
| 28) Methyl tert-Butyl Ether    | 5.05 | 73   | 2611056  | 12.638 | ppbv   | 99     |
| 29) Chloroform                 | 5.79 | 83   | 2515755  | 13.083 | ppbv   | 100    |
| 30) Cyclohexane                | 7.18 | 84   | 1331839  | 13.071 | ppbv   | 98     |
| 31) cis-1,2-Dichloroethene     | 5.58 | 61   | 1885515  | 13.800 | ppbv   | 99     |
| 32) 1,1,1-Trichloroethane      | 6.56 | 97   | 2418471  | 13.296 | ppbv   | 99     |
| 34) 2-Butanone                 | 5.27 | 43   | 2878471  | 13.449 | ppbv   | 97     |
| 35) Carbon Tetrachloride       | 7.07 | 117  | 2404274  | 13.898 | ppbv   | 98     |
| 36) Benzene                    | 6.94 | 78   | 3115675  | 12.463 | ppbv   | 97     |
| 37) 1,2-Dichloroethane         | 6.35 | 62   | 2296350  | 14.496 | ppbv   | 100    |
| 38) Trichloroethene            | 7.90 | 130  | 1060787  | 11.319 | ppbv   | 99     |
| 39) 1,2-Dichloropropane        | 7.67 | 63   | 1441163  | 13.340 | ppbv   | 98     |
| 40) 1,4-Dioxane                | 7.88 | 88   | 451106   | 11.525 | ppbv # | 94     |
| 41) Tetrahydrofuran            | 6.08 | 42   | 1759927  | 13.807 | ppbv   | 100    |
| 42) Bromodichloromethane       | 7.85 | 83   | 2781114  | 13.717 | ppbv   | 100    |
| 43) Methyl Methacrylate        | 8.07 | 69   | 1438109  | 13.925 | ppbv   | 98     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL091719\  
 Data File : VL034176.D  
 Acq On : 17 Sep 2019 8:07  
 Operator : SY/AP  
 Sample : VSTDIC015  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDIC015

Manual Integrations  
 APPROVED

MMDadoda  
 9/20/2019 12:44:06 AM

Quant Time: Sep 17 08:35:46 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL091719AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Tue Sep 17 2019  
 QLast Update : Tue Sep 17 05:58:04 2019  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|--------|--------|----------|
| 44) 2,2,4-Trimethylpentane    | 7.92  | 57   | 5498084  | 11.796 | ppbv   | 97       |
| 45) t-1,3-Dichloropropene     | 9.35  | 75   | 1941013  | 15.903 | ppbv   | 100      |
| 46) cis-1,3-Dichloropropene   | 8.77  | 75   | 2123942  | 14.317 | ppbv   | 96       |
| 47) 1,1,2-Trichloroethane     | 9.55  | 97   | 1300405  | 13.292 | ppbv   | 98       |
| 48) Dibromochloromethane      | 10.38 | 129  | 2135898  | 14.434 | ppbv   | 99       |
| 49) Bromoform                 | 13.13 | 173  | 1837143  | 14.302 | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 8.80  | 43   | 4109205  | 12.611 | ppbv   | 98       |
| 51) 2-Hexanone                | 10.20 | 43   | 3655126  | 13.008 | ppbv # | 98       |
| 52) Tetrachloroethene         | 11.30 | 164  | 1003016  | 11.385 | ppbv   | 94       |
| 53) Toluene                   | 9.88  | 91   | 3476383  | 12.557 | ppbv   | 99       |
| 54) 1,2-Dibromoethane         | 10.69 | 107  | 1936688  | 13.238 | ppbv   | 99       |
| 56) 1,1,1,2-Tetrachloroethane | 12.21 | 131  | 1365380  | 13.385 | ppbv   | 99       |
| 57) Chlorobenzene             | 12.23 | 112  | 2476475  | 12.197 | ppbv   | 98       |
| 58) Ethyl Benzene             | 12.80 | 91   | 4667157  | 12.079 | ppbv   | 97       |
| 59) m/p-Xylene                | 13.08 | 91   | 7496191m | 23.777 | ppbv   |          |
| 60) o-Xylene                  | 13.78 | 91   | 3787157  | 12.044 | ppbv   | 99       |
| 61) Styrene                   | 13.62 | 104  | 2985052  | 12.763 | ppbv   | 99       |
| 62) Isopropylbenzene          | 14.76 | 105  | 4853285  | 11.860 | ppbv   | 98       |
| 63) 1,1,2,2-Tetrachloroethane | 13.77 | 83   | 2810161  | 10.947 | ppbv   | 100      |
| 64) n-propylbenzene           | 15.65 | 120  | 1321469  | 12.876 | ppbv   | 94       |
| 65) tert-Butylbenzene         | 16.84 | 119  | 4150430m | 11.726 | ppbv   |          |
| 66) Benzyl Chloride           | 17.09 | 91   | 2295154  | 17.930 | ppbv   | 99       |
| 67) sec-Butylbenzene          | 17.39 | 105  | 5878186  | 11.532 | ppbv   | 98       |
| 69) p-Isopropyltoluene        | 17.75 | 119  | 4849586  | 11.885 | ppbv   | 97       |
| 70) n-Butylbenzene            | 18.64 | 91   | 5494196  | 11.784 | ppbv   | 97       |
| 71) 2-Chlorotoluene           | 15.55 | 91   | 4093108  | 12.240 | ppbv   | 98       |
| 72) 4-Ethyltoluene            | 15.93 | 105  | 4431377  | 12.473 | ppbv   | 99       |
| 73) 1,3,5-Trimethylbenzene    | 16.09 | 105  | 4205258  | 12.181 | ppbv   | 96       |
| 74) 1,2,4-Trimethylbenzene    | 16.86 | 105  | 4165949  | 11.678 | ppbv   | 97       |
| 75) 1,3-Dichlorobenzene       | 17.09 | 146  | 2353958  | 12.451 | ppbv   | 100      |
| 76) 1,4-Dichlorobenzene       | 17.24 | 146  | 2420643  | 12.244 | ppbv   | 99       |
| 77) 1,2-Dichlorobenzene       | 17.91 | 146  | 2370730  | 12.266 | ppbv   | 99       |
| 78) Hexachloro-1,3-Butadiene  | 23.47 | 225  | 1535409  | 11.769 | ppbv   | 98       |
| 79) Naphthalene               | 22.32 | 128  | 3984307  | 12.485 | ppbv   | 99       |
| 80) Naphthalene, 2-methyl-    | 25.05 | 142  | 1216637  | 11.257 | ppbv   | 98       |
| 81) 1,2,4-Trichlorobenzene    | 22.05 | 180  | 2168570  | 12.434 | ppbv   | 100      |

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

