

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL092018\  
 Data File : VL032512.D  
 Acq On : 20 Sep 2018 18:22  
 Operator : SY/AP  
 Sample : VSTDCCC010  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleID :  
 VSTDCCC010EC

Manual Integrations  
 APPROVED

MMDadoda  
 9/24/2018 11:20:00 AM

Quant Time: Sep 21 02:48:59 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL083118AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Sep 21 02:48:59 2018  
 QLast Update : Fri Sep 21 02:33:47 2018  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.80  | 49   | 1530542  | 10.00 | ppbv  | -0.01    |
| 33) 1,4-Difluorobenzene | 7.33  | 114  | 3556275  | 10.00 | ppbv  | -0.02    |
| 55) Chlorobenzene-d5    | 12.28 | 117  | 3629289m | 10.00 | ppbv  | -0.02    |

System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 14.61  | 95    | 2752289  | 10.21    | ppbv | -0.02   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 102.10% |

| Target Compounds               | R.T. | QIon | Response | Conc   | Units  | Ovalue |
|--------------------------------|------|------|----------|--------|--------|--------|
| 2) Dichlorodifluoromethane     | 3.10 | 85   | 1221557  | 6.239  | ppbv   | 100    |
| 3) Chlorodifluoromethane       | 3.03 | 51   | 1179967  | 8.517  | ppbv   | 97     |
| 4) Chloromethane               | 3.19 | 50   | 703736   | 8.389  | ppbv   | 99     |
| 5) Vinyl Chloride              | 3.31 | 62   | 666090   | 8.044  | ppbv   | 98     |
| 6) Bromomethane                | 3.54 | 94   | 399187   | 9.184  | ppbv   | 99     |
| 7) Chloroethane                | 3.62 | 64   | 251755   | 8.784  | ppbv   | 100    |
| 8) Dichlorotetrafluoroethane   | 3.24 | 85   | 1401246  | 8.064  | ppbv   | 98     |
| 9) Propene                     | 3.06 | 41   | 640127   | 11.454 | ppbv   | 99     |
| 10) Heptane                    | 8.28 | 43   | 2137373  | 10.660 | ppbv   | 99     |
| 11) Trichlorofluoromethane     | 4.03 | 101  | 1418254  | 8.034  | ppbv   | 99     |
| 12) 1,1,2-Trichlorotrifluoroet | 4.58 | 101  | 1234132  | 10.317 | ppbv   | 99     |
| 13) Ethanol                    | 3.67 | 45   | 151371   | 8.689  | ppbv   | 98     |
| 14) Bromoethene                | 3.81 | 108  | 481636   | 9.503  | ppbv   | 99     |
| 15) Acetone                    | 3.93 | 43   | 1256389  | 9.116  | ppbv   | 99     |
| 16) 1,3-Butadiene              | 3.38 | 39   | 523826   | 8.077  | ppbv   | 97     |
| 17) tert-Butyl alcohol         | 4.38 | 59   | 207234   | 9.770  | ppbv # | 100    |
| 18) 1,1-Dichloroethene         | 4.38 | 96   | 614342   | 11.237 | ppbv   | 97     |
| 19) Isopropyl Alcohol          | 4.05 | 45   | 904890   | 10.008 | ppbv # | 97     |
| 20) Methylene Chloride         | 4.44 | 84   | 546917   | 10.407 | ppbv   | 99     |
| 21) Allyl Chloride             | 4.51 | 41   | 1067846  | 11.665 | ppbv   | 100    |
| 22) trans-1,2-Dichloroethene   | 4.99 | 96   | 575395   | 9.700  | ppbv   | 98     |
| 23) Vinyl Acetate              | 5.18 | 43   | 2661128  | 11.648 | ppbv   | 99     |
| 24) 1,1-Dichloroethane         | 5.12 | 63   | 1833400  | 9.739  | ppbv   | 99     |
| 25) Ethyl Acetate              | 5.80 | 43   | 3243729  | 9.966  | ppbv   | 100    |
| 26) Hexane                     | 5.81 | 57   | 1485782  | 10.195 | ppbv   | 98     |
| 27) Carbon Disulfide           | 4.65 | 76   | 1558439  | 11.584 | ppbv   | 100    |
| 28) Methyl tert-Butyl Ether    | 5.14 | 73   | 2076966  | 11.607 | ppbv   | 99     |
| 29) Chloroform                 | 5.88 | 83   | 2123809  | 9.558  | ppbv   | 98     |
| 30) Cyclohexane                | 7.28 | 84   | 1305470  | 12.233 | ppbv   | 100    |
| 31) cis-1,2-Dichloroethene     | 5.67 | 61   | 1453917  | 11.017 | ppbv   | 98     |
| 32) 1,1,1-Trichloroethane      | 6.66 | 97   | 2198292  | 10.613 | ppbv   | 97     |
| 34) 2-Butanone                 | 5.36 | 43   | 2162770  | 9.156  | ppbv   | 99     |
| 35) Carbon Tetrachloride       | 7.17 | 117  | 2159752  | 9.036  | ppbv   | 99     |
| 36) Benzene                    | 7.04 | 78   | 3021802  | 9.985  | ppbv   | 99     |
| 37) 1,2-Dichloroethane         | 6.45 | 62   | 1701178  | 9.173  | ppbv   | 99     |
| 38) Trichloroethene            | 8.00 | 130  | 1071401  | 9.319  | ppbv   | 98     |
| 39) 1,2-Dichloropropane        | 7.78 | 63   | 1304165  | 10.072 | ppbv   | 96     |
| 40) 1,4-Dioxane                | 7.99 | 88   | 430318   | 11.077 | ppbv # | 1      |
| 41) Tetrahydrofuran            | 6.18 | 42   | 1382531  | 10.751 | ppbv   | 99     |
| 42) Bromodichloromethane       | 7.96 | 83   | 2473151  | 9.668  | ppbv   | 99     |
| 43) Methyl Methacrylate        | 8.17 | 69   | 1322377  | 10.299 | ppbv   | 98     |

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 ClientSampleId :  
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 QLast Update : Fri Sep 21 02:33:47 2018  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|--------|--------|----------|
| 44) 2,2,4-Trimethylpentane    | 8.03  | 57   | 5568411  | 9.517  | ppbv   | 99       |
| 45) t-1,3-Dichloropropene     | 9.45  | 75   | 1803724  | 13.129 | ppbv   | 98       |
| 46) cis-1,3-Dichloropropene   | 8.88  | 75   | 2023786  | 11.528 | ppbv   | 99       |
| 47) 1,1,2-Trichloroethane     | 9.65  | 97   | 1354751  | 9.841  | ppbv   | 99       |
| 48) Dibromochloromethane      | 10.49 | 129  | 2189958  | 11.486 | ppbv   | 100      |
| 49) Bromoform                 | 13.25 | 173  | 1646145  | 9.933  | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 8.90  | 43   | 3442010  | 9.673  | ppbv   | 99       |
| 51) 2-Hexanone                | 10.31 | 43   | 3031295  | 13.225 | ppbv # | 99       |
| 52) Tetrachloroethene         | 11.41 | 164  | 959637   | 10.226 | ppbv   | 96       |
| 53) Toluene                   | 9.98  | 91   | 3860409  | 12.203 | ppbv   | 99       |
| 54) 1,2-Dibromoethane         | 10.80 | 107  | 2016588  | 10.910 | ppbv   | 99       |
| 56) 1,1,1,2-Tetrachloroethane | 12.32 | 131  | 1452459  | 8.877  | ppbv # | 60       |
| 57) Chlorobenzene             | 12.34 | 112  | 2595130  | 8.947  | ppbv   | 98       |
| 58) Ethyl Benzene             | 12.90 | 91   | 4827528  | 11.115 | ppbv   | 99       |
| 59) m/p-Xylene                | 13.19 | 91   | 7785760m | 20.107 | ppbv   |          |
| 60) o-Xylene                  | 13.89 | 91   | 3764832  | 9.898  | ppbv   | 100      |
| 61) Styrene                   | 13.72 | 104  | 2845173  | 11.555 | ppbv   | 99       |
| 62) Isopropylbenzene          | 14.87 | 105  | 5347442  | 10.001 | ppbv   | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 13.88 | 83   | 2795980  | 8.222  | ppbv   | 100      |
| 64) n-propylbenzene           | 15.76 | 120  | 1363653  | 9.756  | ppbv   | 97       |
| 65) tert-Butylbenzene         | 16.95 | 119  | 4404225  | 9.559  | ppbv   | 100      |
| 66) Benzyl Chloride           | 17.19 | 91   | 2678275  | 10.435 | ppbv   | 100      |
| 67) sec-Butylbenzene          | 17.50 | 105  | 6498771  | 9.379  | ppbv   | 100      |
| 69) p-Isopropyltoluene        | 17.86 | 119  | 5150288  | 9.591  | ppbv   | 100      |
| 70) n-Butylbenzene            | 18.75 | 91   | 5587805  | 9.179  | ppbv   | 99       |
| 71) 2-Chlorotoluene           | 15.66 | 91   | 4181525  | 10.237 | ppbv   | 99       |
| 72) 4-Ethyltoluene            | 16.04 | 105  | 4311167  | 10.382 | ppbv   | 100      |
| 73) 1,3,5-Trimethylbenzene    | 16.20 | 105  | 4095785  | 9.845  | ppbv   | 95       |
| 74) 1,2,4-Trimethylbenzene    | 16.97 | 105  | 4065751  | 8.939  | ppbv   | 99       |
| 75) 1,3-Dichlorobenzene       | 17.21 | 146  | 2243575  | 8.313  | ppbv   | 99       |
| 76) 1,4-Dichlorobenzene       | 17.35 | 146  | 2220005  | 8.866  | ppbv   | 99       |
| 77) 1,2-Dichlorobenzene       | 18.03 | 146  | 2209937  | 8.487  | ppbv   | 100      |
| 78) Hexachloro-1,3-Butadiene  | 23.58 | 225  | 1278073  | 13.137 | ppbv   | 100      |
| 79) Naphthalene               | 22.45 | 128  | 3439607  | 9.300  | ppbv   | 99       |
| 80) Naphthalene, 2-methyl-    | 25.14 | 142  | 1151697  | 11.703 | ppbv   | 99       |
| 81) 1,2,4-Trichlorobenzene    | 22.18 | 180  | 1629625m | 8.748  | ppbv   |          |

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

