

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL090519\  
 Data File : VL034129.D  
 Acq On : 5 Sep 2019 10:11  
 Operator : SY/AP  
 Sample : VL0905ABS01  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0905ABS01

Manual Integrations  
 APPROVED

MMDadoda  
 9/12/2019 5:15:05 AM

Quant Time: Sep 06 04:20:28 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL090519AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Sep 06  
 QLast Update : Thu Sep 05 10:21:45 2019  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.71  | 49   | 1075605  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.24  | 114  | 2029335  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.18 | 117  | 2223265m | 10.00 | ppbv  | 0.00     |

System Monitoring Compounds

|                             |        |       |          |          |      |        |
|-----------------------------|--------|-------|----------|----------|------|--------|
| 68) 1-Bromo-4-Fluorobenzene | 14.51  | 95    | 1757041  | 9.67     | ppbv | 0.00   |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 96.70% |

| Target Compounds               |      |     |          |            | Ovalue |
|--------------------------------|------|-----|----------|------------|--------|
| 2) Dichlorodifluoromethane     | 3.04 | 85  | 1682283  | 9.482 ppbv | 99     |
| 3) Chlorodifluoromethane       | 2.98 | 51  | 1146615m | 9.563 ppbv |        |
| 4) Chloromethane               | 3.13 | 50  | 713915   | 9.524 ppbv | 97     |
| 5) Vinyl Chloride              | 3.25 | 62  | 621133   | 9.097 ppbv | 99     |
| 6) Bromomethane                | 3.47 | 94  | 309869   | 9.196 ppbv | 93     |
| 7) Chloroethane                | 3.56 | 64  | 220871   | 9.495 ppbv | 97     |
| 8) Dichlorotetrafluoroethane   | 3.18 | 85  | 1278862  | 8.956 ppbv | 99     |
| 9) Propene                     | 3.00 | 41  | 614743   | 9.164 ppbv | 98     |
| 10) Heptane                    | 8.19 | 43  | 1606598  | 9.228 ppbv | 99     |
| 11) Trichlorofluoromethane     | 3.96 | 101 | 1320806  | 9.129 ppbv | 100    |
| 12) 1,1,2-Trichlorotrifluoroet | 4.50 | 101 | 881573   | 9.107 ppbv | 100    |
| 13) Ethanol                    | 3.61 | 45  | 98397    | 7.487 ppbv | 99     |
| 14) Bromoethene                | 3.74 | 108 | 388785   | 9.277 ppbv | 99     |
| 15) Acetone                    | 3.86 | 43  | 1123882  | 8.670 ppbv | 99     |
| 16) 1,3-Butadiene              | 3.32 | 39  | 624866   | 9.518 ppbv | 97     |
| 17) tert-Butyl alcohol         | 4.31 | 59  | 784625   | 8.338 ppbv | 100    |
| 18) 1,1-Dichloroethene         | 4.30 | 96  | 413393   | 9.348 ppbv | 96     |
| 19) Isopropyl Alcohol          | 3.98 | 45  | 696780   | 7.963 ppbv | 100    |
| 20) Methylene Chloride         | 4.36 | 84  | 370308   | 8.640 ppbv | 96     |
| 21) Allyl Chloride             | 4.43 | 41  | 821121   | 9.608 ppbv | 98     |
| 22) trans-1,2-Dichloroethene   | 4.91 | 96  | 408922   | 9.238 ppbv | 99     |
| 23) Vinyl Acetate              | 5.10 | 43  | 2084220  | 9.477 ppbv | 99     |
| 24) 1,1-Dichloroethane         | 5.04 | 63  | 1335748  | 9.151 ppbv | 98     |
| 25) Ethyl Acetate              | 5.72 | 43  | 2490315  | 8.752 ppbv | 100    |
| 26) Hexane                     | 5.72 | 57  | 1057930  | 8.362 ppbv | 100    |
| 27) Carbon Disulfide           | 4.57 | 76  | 1117752  | 9.790 ppbv | 100    |
| 28) Methyl tert-Butyl Ether    | 5.06 | 73  | 1688372  | 9.108 ppbv | 100    |
| 29) Chloroform                 | 5.80 | 83  | 1568557  | 9.192 ppbv | 98     |
| 30) Cyclohexane                | 7.19 | 84  | 855492   | 9.353 ppbv | 98     |
| 31) cis-1,2-Dichloroethene     | 5.59 | 61  | 1144907  | 9.450 ppbv | 98     |
| 32) 1,1,1-Trichloroethane      | 6.56 | 97  | 1464270  | 9.083 ppbv | 98     |
| 34) 2-Butanone                 | 5.27 | 43  | 1787635  | 9.163 ppbv | 99     |
| 35) Carbon Tetrachloride       | 7.07 | 117 | 1426683  | 9.017 ppbv | 98     |
| 36) Benzene                    | 6.95 | 78  | 2100380  | 9.055 ppbv | 97     |
| 37) 1,2-Dichloroethane         | 6.36 | 62  | 1332118  | 9.362 ppbv | 99     |
| 38) Trichloroethene            | 7.90 | 130 | 673402   | 7.780 ppbv | 94     |
| 39) 1,2-Dichloropropane        | 7.68 | 63  | 894448   | 9.011 ppbv | 93     |
| 40) 1,4-Dioxane                | 7.89 | 88  | 277939   | 7.619 ppbv | # 97   |
| 41) Tetrahydrofuran            | 6.09 | 42  | 1105097  | 9.448 ppbv | 98     |
| 42) Bromodichloromethane       | 7.86 | 83  | 1733835  | 9.349 ppbv | 99     |
| 43) Methyl Methacrylate        | 8.08 | 69  | 899966   | 9.418 ppbv | 96     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL090519\  
 Data File : VL034129.D  
 Acq On : 5 Sep 2019 10:11  
 Operator : SY/AP  
 Sample : VL0905ABS01  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0905ABS01

Manual Integrations  
 APPROVED

MMDadoda  
 9/12/2019 5:15:05 AM

Quant Time: Sep 06 04:20:28 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL090519AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Sep 06 04:20:28 2019  
 QLast Update : Thu Sep 05 10:21:45 2019  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|--------|--------|----------|
| 44) 2,2,4-Trimethylpentane    | 7.93  | 57   | 3698703  | 8.649  | ppbv   | 99       |
| 45) t-1,3-Dichloropropene     | 9.35  | 75   | 1183540  | 10.538 | ppbv   | 97       |
| 46) cis-1,3-Dichloropropene   | 8.78  | 75   | 1332329  | 9.751  | ppbv   | 99       |
| 47) 1,1,2-Trichloroethane     | 9.55  | 97   | 827657   | 9.152  | ppbv   | 96       |
| 48) Dibromochloromethane      | 10.39 | 129  | 1312733  | 9.728  | ppbv   | 99       |
| 49) Bromoform                 | 13.14 | 173  | 1130015  | 9.551  | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 8.81  | 43   | 2603209  | 8.744  | ppbv   | 99       |
| 51) 2-Hexanone                | 10.21 | 43   | 2273678  | 8.841  | ppbv   | 99       |
| 52) Tetrachloroethene         | 11.31 | 164  | 666797   | 8.152  | ppbv   | 97       |
| 53) Toluene                   | 9.88  | 91   | 2313780  | 9.019  | ppbv   | 100      |
| 54) 1,2-Dibromoethane         | 10.70 | 107  | 1227188  | 9.109  | ppbv   | 100      |
| 56) 1,1,1,2-Tetrachloroethane | 12.22 | 131  | 836653   | 8.774  | ppbv # | 61       |
| 57) Chlorobenzene             | 12.24 | 112  | 1612549  | 8.432  | ppbv   | 97       |
| 58) Ethyl Benzene             | 12.80 | 91   | 3125840  | 8.574  | ppbv   | 96       |
| 59) m/p-Xylene                | 13.09 | 91   | 5007531m | 16.838 | ppbv   |          |
| 60) o-Xylene                  | 13.79 | 91   | 2444148  | 8.251  | ppbv   | 100      |
| 61) Styrene                   | 13.62 | 104  | 1936836  | 8.742  | ppbv   | 99       |
| 62) Isopropylbenzene          | 14.76 | 105  | 3175374  | 8.239  | ppbv   | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 13.77 | 83   | 1775378  | 7.355  | ppbv   | 100      |
| 64) n-propylbenzene           | 15.66 | 120  | 836881   | 8.668  | ppbv   | 97       |
| 65) tert-Butylbenzene         | 16.84 | 119  | 2656444  | 7.986  | ppbv   | 99       |
| 66) Benzyl Chloride           | 17.09 | 91   | 1322982  | 10.788 | ppbv   | 99       |
| 67) sec-Butylbenzene          | 17.40 | 105  | 3840805  | 8.030  | ppbv   | 99       |
| 69) p-Isopropyltoluene        | 17.75 | 119  | 3102185  | 8.106  | ppbv   | 100      |
| 70) n-Butylbenzene            | 18.65 | 91   | 3504272  | 8.048  | ppbv   | 99       |
| 71) 2-Chlorotoluene           | 15.55 | 91   | 2651667  | 8.422  | ppbv   | 99       |
| 72) 4-Ethyltoluene            | 15.94 | 105  | 2827306  | 8.460  | ppbv   | 99       |
| 73) 1,3,5-Trimethylbenzene    | 16.10 | 105  | 2697745  | 8.306  | ppbv   | 100      |
| 74) 1,2,4-Trimethylbenzene    | 16.86 | 105  | 2664310  | 7.966  | ppbv # | 93       |
| 75) 1,3-Dichlorobenzene       | 17.10 | 146  | 1449195  | 8.177  | ppbv   | 99       |
| 76) 1,4-Dichlorobenzene       | 17.24 | 146  | 1509657  | 8.128  | ppbv   | 100      |
| 77) 1,2-Dichlorobenzene       | 17.92 | 146  | 1452527  | 8.006  | ppbv   | 98       |
| 78) Hexachloro-1,3-Butadiene  | 23.48 | 225  | 958593   | 7.744  | ppbv   | 99       |
| 79) Naphthalene               | 22.33 | 128  | 2567596  | 8.491  | ppbv   | 98       |
| 80) Naphthalene, 2-methyl-    | 25.06 | 142  | 1519178  | 14.474 | ppbv   | 100      |
| 81) 1,2,4-Trichlorobenzene    | 22.06 | 180  | 1382329  | 8.402  | ppbv   | 98       |

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

