

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV080719\  
 Data File : VV012129.D  
 Acq On : 07 Aug 2019 15:52  
 Operator : SY/MD  
 Sample : VSTDCCC050EC  
 Misc : 5.0mL/MSVOA V/WATER  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD05070

Quant Time: Aug 08 01:17:11 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SFAMVLM080619W.M  
 Quant Title : VOC Analysis  
 QLast Update : Thu Aug 08 01:11:59 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.66  | 114  | 286963   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.89  | 117  | 262985   | 50.00 | ug/L  | 0.00     |
| 58) 1,4-Dichlorobenzene-d4 | 11.29 | 152  | 139537   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |        |
|--------------------------------|---------|-------|----------|----------|------|--------|
| 4) Vinyl Chloride-d3           | 1.32    | 65    | 58258    | 37.14    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 74.28% |
| 7) Chloroethane-d5             | 1.58    | 69    | 39673    | 35.63    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 71.26% |
| 11) 1,1-Dichloroethene-d2      | 2.13    | 63    | 94849    | 34.88    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 69.76% |
| 21) 2-Butanone-d5              | 3.92    | 46    | 109156   | 95.51    | ug/L | 0.00   |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 95.51% |
| 24) Chloroform-d               | 4.40    | 84    | 177166   | 45.02    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 90.04% |
| 26) 1,2-Dichloroethane-d4      | 5.08    | 65    | 115692   | 45.76    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 91.52% |
| 32) Benzene-d6                 | 5.10    | 84    | 332486   | 43.93    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 87.86% |
| 36) 1,2-Dichloropropane-d6     | 6.12    | 67    | 98048    | 44.72    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 89.44% |
| 41) Toluene-d8                 | 7.36    | 98    | 325834   | 44.65    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 89.30% |
| 43) trans-1,3-Dichloropropene- | 7.66    | 79    | 57899    | 46.45    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 92.90% |
| 47) 2-Hexanone-d5              | 8.13    | 63    | 89552    | 98.36    | ug/L | 0.00   |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 98.36% |
| 56) 1,1,2,2-Tetrachloroethane- | 10.26   | 84    | 143670   | 46.50    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 93.00% |
| 66) 1,2-Dichlorobenzene-d4     | 11.67   | 152   | 149786   | 45.64    | ug/L | 0.00   |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 91.28% |

## Target Compounds

|                                |      |     |        |         | Ovalue   |
|--------------------------------|------|-----|--------|---------|----------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 103803 | 51.214  | ug/L 97  |
| 3) Chloromethane               | 1.25 | 50  | 66039  | 45.886  | ug/L 99  |
| 5) Vinyl chloride              | 1.32 | 62  | 64232  | 46.238  | ug/L 99  |
| 6) Bromomethane                | 1.53 | 94  | 36576  | 45.352  | ug/L 96  |
| 8) Chloroethane                | 1.60 | 64  | 29748  | 40.889  | ug/L 100 |
| 9) Trichlorofluoromethane      | 1.77 | 101 | 102616 | 45.432  | ug/L 98  |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.14 | 101 | 47580  | 42.973  | ug/L 98  |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 43439  | 41.664  | ug/L 93  |
| 13) Acetone                    | 2.18 | 43  | 72505  | 93.041  | ug/L 99  |
| 14) Carbon disulfide           | 2.32 | 76  | 145367 | 41.259  | ug/L 100 |
| 15) Methyl Acetate             | 2.45 | 43  | 59246  | 43.451  | ug/L 99  |
| 16) Methylene chloride         | 2.53 | 84  | 71753  | 45.359  | ug/L 96  |
| 17) trans-1,2-Dichloroethene   | 2.79 | 96  | 70904  | 48.162  | ug/L 98  |
| 18) Methyl tert-butyl Ether    | 2.80 | 73  | 247840 | 48.993  | ug/L 100 |
| 19) 1,1-Dichloroethane         | 3.23 | 63  | 128510 | 47.867  | ug/L 98  |
| 20) cis-1,2-Dichloroethene     | 3.96 | 96  | 83780  | 48.315  | ug/L 99  |
| 22) 2-Butanone                 | 4.01 | 43  | 103252 | 102.810 | ug/L 97  |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV080719\  
 Data File : VV012129.D  
 Acq On : 07 Aug 2019 15:52  
 Operator : SY/MD  
 Sample : VSTDCCC050EC  
 Misc : 5.0mL/MSVOA V/WATER  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD05070

Quant Time: Aug 08 01:17:11 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SFAMVLM080619W.M  
 Quant Title : VOC Analysis  
 QLast Update : Thu Aug 08 01:11:59 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|--------------------------------|-------|------|----------|---------|-------|----------|
| 23) Bromochloromethane         | 4.30  | 128  | 45949    | 48.189  | ug/L  | 96       |
| 25) Chloroform                 | 4.42  | 83   | 148241   | 48.713  | ug/L  | 98       |
| 27) 1,2-Dichloroethane         | 5.18  | 62   | 122215   | 51.671  | ug/L  | 99       |
| 29) Cyclohexane                | 4.73  | 56   | 105747   | 48.087  | ug/L  | 98       |
| 30) 1,1,1-Trichloroethane      | 4.66  | 97   | 138355   | 49.526  | ug/L  | 97       |
| 31) Carbon tetrachloride       | 4.87  | 117  | 131012   | 50.552  | ug/L  | 99       |
| 33) Benzene                    | 5.15  | 78   | 302872   | 50.030  | ug/L  | 100      |
| 34) Trichloroethene            | 5.96  | 95   | 84966    | 50.496  | ug/L  | 97       |
| 35) Methylcyclohexane          | 6.17  | 83   | 128736   | 51.403  | ug/L  | 99       |
| 37) 1,2-Dichloropropane        | 6.22  | 63   | 75458    | 51.103  | ug/L  | 100      |
| 38) Bromodichloromethane       | 6.55  | 83   | 118089   | 50.837  | ug/L  | 98       |
| 39) cis-1,3-Dichloropropene    | 7.07  | 75   | 132972   | 51.078  | ug/L  | 99       |
| 40) 4-Methyl-2-pentanone       | 7.27  | 43   | 193620   | 101.882 | ug/L  | 99       |
| 42) Toluene                    | 7.43  | 91   | 344414   | 51.201  | ug/L  | 100      |
| 44) trans-1,3-Dichloropropene  | 7.69  | 75   | 123712   | 50.342  | ug/L  | 99       |
| 45) 1,1,2-Trichloroethane      | 7.88  | 97   | 81208    | 51.020  | ug/L  | 99       |
| 46) Tetrachloroethene          | 8.02  | 164  | 81212    | 51.802  | ug/L  | 97       |
| 48) 2-Hexanone                 | 8.18  | 43   | 152832   | 106.669 | ug/L  | 99       |
| 49) Dibromochloromethane       | 8.29  | 129  | 106673   | 51.645  | ug/L  | 98       |
| 50) 1,2-Dibromoethane          | 8.40  | 107  | 90459    | 51.388  | ug/L  | 100      |
| 51) Chlorobenzene              | 8.92  | 112  | 231260   | 50.992  | ug/L  | 99       |
| 52) Ethylbenzene               | 9.05  | 91   | 388458   | 51.468  | ug/L  | 99       |
| 53) m,p-Xylene                 | 9.18  | 106  | 149594   | 51.378  | ug/L  | 98       |
| 54) o-Xylene                   | 9.59  | 106  | 152081   | 52.637  | ug/L  | 99       |
| 55) Styrene                    | 9.60  | 104  | 252593   | 51.898  | ug/L  | 98       |
| 57) 1,1,2,2-Tetrachloroethane  | 10.28 | 83   | 124482   | 50.856  | ug/L  | 96       |
| 59) Bromoform                  | 9.77  | 173  | 85606    | 52.302  | ug/L  | 100      |
| 60) Isopropylbenzene           | 9.97  | 105  | 401359   | 52.543  | ug/L  | 99       |
| 61) 1,2,3-Trichloropropane     | 10.31 | 75   | 99486    | 52.505  | ug/L  | 99       |
| 62) 1,3,5-Trimethylbenzene     | 10.58 | 105  | 348678   | 52.801  | ug/L  | 99       |
| 63) 1,2,4-Trimethylbenzene     | 10.95 | 105  | 343587   | 52.717  | ug/L  | 100      |
| 64) 1,3-Dichlorobenzene        | 11.22 | 146  | 199594   | 51.787  | ug/L  | 99       |
| 65) 1,4-Dichlorobenzene        | 11.31 | 146  | 197789   | 50.770  | ug/L  | 99       |
| 67) 1,2-Dichlorobenzene        | 11.69 | 146  | 202041   | 51.378  | ug/L  | 95       |
| 68) 1,2-Dibromo-3-chloropropan | 12.47 | 75   | 31223    | 50.000  | ug/L  | 97       |
| 69) 1,3,5-Trichlorobenzene     | 12.69 | 180  | 161401   | 51.659  | ug/L  | 99       |
| 70) 1,2,4-trichlorobenzene     | 13.31 | 180  | 134453   | 49.632  | ug/L  | 99       |
| 71) Naphthalene                | 13.55 | 128  | 341938   | 49.802  | ug/L  | 100      |
| 72) 1,2,3-Trichlorobenzene     | 13.79 | 180  | 139461   | 51.157  | ug/L  | 99       |

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

