

Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV052919\  
 Data File : VV011115.D  
 Acq On : 29 May 2019 20:00  
 Operator : SY/MD  
 Sample : VSTDCCC025  
 Misc : 5.00G/10ML/MSVOA V/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02578

Quant Time: May 30 03:57:18 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM052819S.M  
 Quant Title : VOC Analysis  
 QLast Update : Thu May 30 03:51:47 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.66  | 114  | 355237   | 25.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.89  | 117  | 344225   | 25.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.29 | 152  | 165311   | 25.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.31   | 65    | 105287   | 21.62    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 86.48%  |
| 7) Chloroethane-d5             | 1.56   | 69    | 81924    | 23.57    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 94.28%  |
| 10) 1,1-Dichloroethene-d2      | 2.12   | 63    | 223004   | 24.61    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 110 | Recovery | =    | 98.44%  |
| 20) 2-Butanone-d5              | 3.94   | 46    | 102244   | 60.91    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 121.82% |
| 24) Chloroform-d               | 4.40   | 84    | 217798   | 25.28    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 40 - 150 | Recovery | =    | 101.12% |
| 26) 1,2-Dichloroethane-d4      | 5.08   | 65    | 140170   | 25.45    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 130 | Recovery | =    | 101.80% |
| 29) Benzene-d6                 | 5.09   | 84    | 455683   | 22.61    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 20 - 135 | Recovery | =    | 90.44%  |
| 33) 1,2-Dichloropropane-d6     | 6.11   | 67    | 147442   | 22.99    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 120 | Recovery | =    | 91.96%  |
| 37) Toluene-d8                 | 7.36   | 98    | 420696   | 22.64    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 130 | Recovery | =    | 90.56%  |
| 38) trans-1,3-Dichloropropene- | 7.66   | 79    | 68693    | 22.99    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 135 | Recovery | =    | 91.96%  |
| 39) 2-Hexanone-d5              | 8.13   | 63    | 72914    | 52.19    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 104.38% |
| 48) 1,1,2,2-Tetrachloroethane- | 10.26  | 84    | 145738   | 26.43    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 120 | Recovery | =    | 105.72% |
| 61) 1,2-Dichlorobenzene-d4     | 11.67  | 152   | 156277   | 23.91    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 75 - 120 | Recovery | =    | 95.64%  |

## Target Compounds

| Target Compounds               | R.T. | QIon | Response | Conc   | Units  | Ovalue |
|--------------------------------|------|------|----------|--------|--------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85   | 134443   | 23.209 | ug/L   | 100    |
| 3) Chloromethane               | 1.25 | 50   | 133332   | 23.335 | ug/L   | 99     |
| 5) Vinyl chloride              | 1.32 | 62   | 131755   | 24.985 | ug/L   | 99     |
| 6) Bromomethane                | 1.51 | 94   | 71426    | 31.428 | ug/L   | 100    |
| 8) Chloroethane                | 1.58 | 64   | 77431    | 27.068 | ug/L   | 99     |
| 9) Trichlorofluoromethane      | 1.76 | 101  | 188392   | 26.672 | ug/L   | 98     |
| 11) 1,1,2-Trichloro-1,2,2-trif | 2.13 | 101  | 95739    | 25.259 | ug/L   | 98     |
| 12) 1,1-Dichloroethene         | 2.13 | 96   | 90793    | 25.457 | ug/L   | 93     |
| 13) Acetone                    | 2.19 | 43   | 108668   | 57.144 | ug/L   | 97     |
| 14) Carbon disulfide           | 2.31 | 76   | 297144   | 24.906 | ug/L   | 100    |
| 15) Methyl Acetate             | 2.45 | 43   | 78160    | 28.476 | ug/L # | 100    |
| 16) Methylene chloride         | 2.53 | 84   | 125771   | 24.217 | ug/L   | 97     |
| 17) Methyl tert-butyl Ether    | 2.80 | 73   | 348342   | 26.074 | ug/L   | 99     |
| 18) trans-1,2-Dichloroethene   | 2.78 | 96   | 115617   | 23.699 | ug/L   | 99     |
| 19) 1,1-Dichloroethane         | 3.22 | 63   | 225560   | 23.782 | ug/L   | 99     |
| 21) 2-Butanone                 | 4.02 | 43   | 130468   | 55.711 | ug/L   | 94     |
| 22) cis-1,2-Dichloroethene     | 3.96 | 96   | 134044   | 24.394 | ug/L   | 98     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV052919\  
 Data File : VV011115.D  
 Acq On : 29 May 2019 20:00  
 Operator : SY/MD  
 Sample : VSTDCCC025  
 Misc : 5.00G/10ML/MSVOA V/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02578

Quant Time: May 30 03:57:18 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM052819S.M  
 Quant Title : VOC Analysis  
 QLast Update : Thu May 30 03:51:47 2019  
 Response via : Initial Calibration

| Internal Standards              | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|---------------------------------|-------|------|----------|--------|-------|----------|
| 23) Bromochloromethane          | 4.29  | 128  | 59566    | 25.590 | ug/L  | 95       |
| 25) Chloroform                  | 4.42  | 83   | 233690   | 23.332 | ug/L  | 100      |
| 27) 1,2-Dichloroethane          | 5.18  | 62   | 174544   | 26.748 | ug/L  | 99       |
| 30) Cyclohexane                 | 4.72  | 56   | 207606   | 20.822 | ug/L  | 97       |
| 31) 1,1,1-Trichloroethane       | 4.65  | 97   | 186005   | 23.733 | ug/L  | 99       |
| 32) Carbon tetrachloride        | 4.87  | 117  | 152628   | 22.737 | ug/L  | 99       |
| 34) Benzene                     | 5.14  | 78   | 491828   | 23.628 | ug/L  | 100      |
| 35) Trichloroethene             | 5.96  | 95   | 127175   | 23.393 | ug/L  | 99       |
| 36) Methylcyclohexane           | 6.17  | 83   | 205432   | 21.900 | ug/L  | 97       |
| 40) 1,2-Dichloropropane         | 6.22  | 63   | 136243   | 24.560 | ug/L  | 100      |
| 41) Bromodichloromethane        | 6.55  | 83   | 174609   | 24.828 | ug/L  | 100      |
| 42) cis-1,3-Dichloropropene     | 7.07  | 75   | 216673   | 24.447 | ug/L  | 99       |
| 43) 4-Methyl-2-pentanone        | 7.27  | 43   | 259340   | 53.308 | ug/L  | 100      |
| 44) Toluene                     | 7.43  | 91   | 536189   | 23.692 | ug/L  | 99       |
| 45) trans-1,3-Dichloropropene   | 7.69  | 75   | 184576   | 24.405 | ug/L  | 99       |
| 46) 1,1,2-Trichloroethane       | 7.88  | 97   | 106954   | 26.014 | ug/L  | 98       |
| 47) Tetrachloroethene           | 8.02  | 164  | 91200    | 23.261 | ug/L  | 98       |
| 49) 2-Hexanone                  | 8.18  | 43   | 192308   | 53.600 | ug/L  | 97       |
| 50) Dibromochloromethane        | 8.29  | 129  | 121011   | 25.403 | ug/L  | 98       |
| 51) 1,2-Dibromoethane           | 8.40  | 107  | 104434   | 26.544 | ug/L  | 100      |
| 52) Chlorobenzene               | 8.92  | 112  | 346544   | 24.708 | ug/L  | 99       |
| 53) Ethylbenzene                | 9.05  | 91   | 610463   | 23.661 | ug/L  | 99       |
| 54) m,p-Xylene                  | 9.18  | 106  | 226280   | 23.545 | ug/L  | 99       |
| 55) o-xylene                    | 9.59  | 106  | 225517   | 24.149 | ug/L  | 97       |
| 56) Styrene                     | 9.60  | 104  | 394303   | 24.902 | ug/L  | 96       |
| 57) Isopropylbenzene            | 9.97  | 105  | 586596   | 23.536 | ug/L  | 100      |
| 58) 1,1,1,2,2-Tetrachloroethane | 10.29 | 83   | 149217   | 27.550 | ug/L  | 100      |
| 59) 1,2,3-Trichloropropane      | 10.32 | 75   | 117103   | 28.291 | ug/L  | 100      |
| 62) Bromoform                   | 9.77  | 173  | 69264    | 24.907 | ug/L  | 99       |
| 63) 1,3-Dichlorobenzene         | 11.23 | 146  | 263251   | 24.206 | ug/L  | 98       |
| 64) 1,4-Dichlorobenzene         | 11.32 | 146  | 264166   | 24.409 | ug/L  | 100      |
| 65) 1,2-Dichlorobenzene         | 11.69 | 146  | 252314   | 24.828 | ug/L  | 100      |
| 66) 1,2-Dibromo-3-chloropropan  | 12.48 | 75   | 26338    | 25.389 | ug/L  | 99       |
| 67) 1,3,5-Trichlorobenzene      | 12.69 | 180  | 192459   | 24.062 | ug/L  | 99       |
| 68) 1,2,4-trichlorobenzene      | 13.31 | 180  | 161101   | 25.317 | ug/L  | 100      |
| 69) Naphthalene                 | 13.55 | 128  | 375112   | 28.577 | ug/L  | 99       |
| 70) 1,2,3-Trichlorobenzene      | 13.79 | 180  | 152811   | 26.243 | ug/L  | 100      |

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

