

Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV052219\  
 Data File : VV011024.D  
 Acq On : 22 May 2019 17:59  
 Operator : SY/MD  
 Sample : VSTDCCC025EC  
 Misc : 5.00G/10ML/MSVOA V/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02570

Quant Time: May 23 08:05:45 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM052019S.M  
 Quant Title : VOC Analysis  
 QLast Update : Thu May 23 08:00:26 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.66  | 114  | 137316   | 25.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.89  | 117  | 138542   | 25.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.29 | 152  | 67558    | 25.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.31   | 65    | 35374    | 22.60    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 90.40%  |
| 7) Chloroethane-d5             | 1.57   | 69    | 24937    | 23.53    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 94.12%  |
| 10) 1,1-Dichloroethene-d2      | 2.12   | 63    | 70459    | 23.41    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 110 | Recovery | =    | 93.64%  |
| 20) 2-Butanone-d5              | 3.94   | 46    | 25755    | 47.68    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 95.36%  |
| 24) Chloroform-d               | 4.40   | 84    | 75540    | 21.24    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 40 - 150 | Recovery | =    | 84.96%  |
| 26) 1,2-Dichloroethane-d4      | 5.08   | 65    | 50117    | 23.91    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 130 | Recovery | =    | 95.64%  |
| 29) Benzene-d6                 | 5.09   | 84    | 188939   | 24.98    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 20 - 135 | Recovery | =    | 99.92%  |
| 33) 1,2-Dichloropropane-d6     | 6.12   | 67    | 58663    | 24.41    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 120 | Recovery | =    | 97.64%  |
| 37) Toluene-d8                 | 7.36   | 98    | 178331   | 25.36    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 130 | Recovery | =    | 101.44% |
| 38) trans-1,3-Dichloropropene- | 7.66   | 79    | 23045    | 23.35    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 135 | Recovery | =    | 93.40%  |
| 39) 2-Hexanone-d5              | 8.13   | 63    | 19837    | 44.26    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 88.52%  |
| 48) 1,1,2,2-Tetrachloroethane- | 10.26  | 84    | 55843    | 23.27    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 120 | Recovery | =    | 93.08%  |
| 61) 1,2-Dichlorobenzene-d4     | 11.67  | 152   | 67752    | 24.70    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 75 - 120 | Recovery | =    | 98.80%  |

## Target Compounds

| Target Compounds               | R.T. | QIon | Response | Conc   | Units | Ovalue |
|--------------------------------|------|------|----------|--------|-------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85   | 45445    | 22.417 | ug/L  | 98     |
| 3) Chloromethane               | 1.25 | 50   | 40536    | 22.075 | ug/L  | 100    |
| 5) Vinyl chloride              | 1.32 | 62   | 42100    | 22.827 | ug/L  | 99     |
| 6) Bromomethane                | 1.51 | 94   | 19117    | 29.728 | ug/L  | 99     |
| 8) Chloroethane                | 1.59 | 64   | 20384    | 22.088 | ug/L  | 95     |
| 9) Trichlorofluoromethane      | 1.76 | 101  | 68737    | 23.384 | ug/L  | 97     |
| 11) 1,1,2-Trichloro-1,2,2-trif | 2.13 | 101  | 39881    | 23.792 | ug/L  | 97     |
| 12) 1,1-Dichloroethene         | 2.13 | 96   | 34338    | 23.697 | ug/L  | 97     |
| 13) Acetone                    | 2.19 | 43   | 22370    | 42.944 | ug/L  | 97     |
| 14) Carbon disulfide           | 2.31 | 76   | 87171    | 21.482 | ug/L  | 99     |
| 15) Methyl Acetate             | 2.46 | 43   | 19973    | 19.956 | ug/L  | 98     |
| 16) Methylene chloride         | 2.53 | 84   | 51795    | 21.979 | ug/L  | 95     |
| 17) Methyl tert-butyl Ether    | 2.80 | 73   | 117974   | 23.009 | ug/L  | 99     |
| 18) trans-1,2-Dichloroethene   | 2.78 | 96   | 47917    | 23.970 | ug/L  | 97     |
| 19) 1,1-Dichloroethane         | 3.22 | 63   | 87368    | 24.003 | ug/L  | 96     |
| 21) 2-Butanone                 | 4.02 | 43   | 29068    | 40.777 | ug/L  | 97     |
| 22) cis-1,2-Dichloroethene     | 3.96 | 96   | 52188    | 23.447 | ug/L  | 97     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV052219\  
 Data File : VV011024.D  
 Acq On : 22 May 2019 17:59  
 Operator : SY/MD  
 Sample : VSTDCCC025EC  
 Misc : 5.00G/10ML/MSVOA V/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02570

Quant Time: May 23 08:05:45 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM052019S.M  
 Quant Title : VOC Analysis  
 QLast Update : Thu May 23 08:00:26 2019  
 Response via : Initial Calibration

| Internal Standards              | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|---------------------------------|-------|------|----------|--------|-------|----------|
| 23) Bromochloromethane          | 4.29  | 128  | 24921    | 23.626 | ug/L  | 97       |
| 25) Chloroform                  | 4.42  | 83   | 110560   | 26.844 | ug/L  | 99       |
| 27) 1,2-Dichloroethane          | 5.18  | 62   | 58584    | 23.139 | ug/L  | 99       |
| 30) Cyclohexane                 | 4.72  | 56   | 68539    | 23.808 | ug/L  | 100      |
| 31) 1,1,1-Trichloroethane       | 4.65  | 97   | 77263    | 24.792 | ug/L  | 99       |
| 32) Carbon tetrachloride        | 4.87  | 117  | 68992    | 24.276 | ug/L  | 99       |
| 34) Benzene                     | 5.14  | 78   | 194436   | 24.346 | ug/L  | 100      |
| 35) Trichloroethene             | 5.96  | 95   | 53072    | 24.051 | ug/L  | 98       |
| 36) Methylcyclohexane           | 6.17  | 83   | 82286    | 25.224 | ug/L  | 98       |
| 40) 1,2-Dichloropropane         | 6.22  | 63   | 50680    | 24.146 | ug/L  | 99       |
| 41) Bromodichloromethane        | 6.55  | 83   | 65862    | 23.477 | ug/L  | 99       |
| 42) cis-1,3-Dichloropropene     | 7.07  | 75   | 75795    | 24.261 | ug/L  | 100      |
| 43) 4-Methyl-2-pentanone        | 7.27  | 43   | 68431    | 45.482 | ug/L  | 97       |
| 44) Toluene                     | 7.43  | 91   | 223160   | 25.179 | ug/L  | 98       |
| 45) trans-1,3-Dichloropropene   | 7.69  | 75   | 60961    | 23.164 | ug/L  | 96       |
| 46) 1,1,2-Trichloroethane       | 7.88  | 97   | 43094    | 24.095 | ug/L  | 98       |
| 47) Tetrachloroethene           | 8.02  | 164  | 41279    | 23.965 | ug/L  | 96       |
| 49) 2-Hexanone                  | 8.18  | 43   | 44405    | 40.422 | ug/L  | 99       |
| 50) Dibromochloromethane        | 8.29  | 129  | 48872    | 23.216 | ug/L  | 96       |
| 51) 1,2-Dibromoethane           | 8.40  | 107  | 39664    | 22.933 | ug/L  | 99       |
| 52) Chlorobenzene               | 8.92  | 112  | 145394   | 23.934 | ug/L  | 99       |
| 53) Ethylbenzene                | 9.05  | 91   | 242664   | 25.128 | ug/L  | 99       |
| 54) m,p-Xylene                  | 9.18  | 106  | 95481    | 25.368 | ug/L  | 97       |
| 55) o-xylene                    | 9.59  | 106  | 92863    | 25.860 | ug/L  | 98       |
| 56) Styrene                     | 9.60  | 104  | 162437   | 26.247 | ug/L  | 100      |
| 57) Isopropylbenzene            | 9.97  | 105  | 244590   | 25.819 | ug/L  | 99       |
| 58) 1,1,1,2,2-Tetrachloroethane | 10.29 | 83   | 52827    | 22.432 | ug/L  | 99       |
| 59) 1,2,3-Trichloropropane      | 10.32 | 75   | 38556    | 22.288 | ug/L  | 99       |
| 62) Bromoform                   | 9.77  | 173  | 26101    | 21.764 | ug/L  | 100      |
| 63) 1,3-Dichlorobenzene         | 11.23 | 146  | 111488   | 24.195 | ug/L  | 100      |
| 64) 1,4-Dichlorobenzene         | 11.32 | 146  | 116830   | 24.619 | ug/L  | 99       |
| 65) 1,2-Dichlorobenzene         | 11.69 | 146  | 109510   | 24.510 | ug/L  | 97       |
| 66) 1,2-Dibromo-3-chloropropan  | 12.48 | 75   | 7509     | 21.156 | ug/L  | 96       |
| 67) 1,3,5-Trichlorobenzene      | 12.69 | 180  | 83764    | 24.781 | ug/L  | 99       |
| 68) 1,2,4-trichlorobenzene      | 13.31 | 180  | 65119    | 24.375 | ug/L  | 99       |
| 69) Naphthalene                 | 13.55 | 128  | 119243   | 22.265 | ug/L  | 100      |
| 70) 1,2,3-Trichlorobenzene      | 13.79 | 180  | 62360    | 23.909 | ug/L  | 100      |

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV052219\  
Data File : VV011024.D  
Acq On : 22 May 2019 17:59  
Operator : SY/MD  
Sample : VSTDCCC025EC  
Misc : 5.00G/10ML/MSVOA V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02570

Quant Time: May 23 08:05:45 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM052019S.M  
Quant Title : VOC Analysis  
QLast Update : Thu May 23 08:00:26 2019  
Response via : Initial Calibration

