

Data Path : Z:\voasrv\HPCHEM1\MSVOA V\Data\VV050619\  
 Data File : VV010673.D  
 Acq On : 06 May 2019 12:03  
 Operator : SY/MD  
 Sample : VSTDCCC025  
 Misc : 5.00G/10ML/MSVOA V/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02584

Quant Time: May 07 03:59:50 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM050219S.M  
 Quant Title : VOC Analysis  
 QLast Update : Mon May 06 01:43:06 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.66  | 114  | 200689   | 25.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.89  | 117  | 194906   | 25.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.30 | 152  | 100958   | 25.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.32   | 65    | 47232    | 18.59    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 74.36%  |
| 7) Chloroethane-d5             | 1.57   | 69    | 32662    | 18.36    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 73.44%  |
| 10) 1,1-Dichloroethene-d2      | 2.12   | 63    | 85985    | 19.30    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 110 | Recovery | =    | 77.20%  |
| 20) 2-Butanone-d5              | 3.93   | 46    | 42672    | 55.20    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 110.40% |
| 24) Chloroform-d               | 4.40   | 84    | 127533   | 24.60    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 40 - 150 | Recovery | =    | 98.40%  |
| 26) 1,2-Dichloroethane-d4      | 5.08   | 65    | 70886    | 23.86    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 130 | Recovery | =    | 95.44%  |
| 29) Benzene-d6                 | 5.10   | 84    | 256649   | 25.41    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 20 - 135 | Recovery | =    | 101.64% |
| 33) 1,2-Dichloropropane-d6     | 6.12   | 67    | 77942    | 25.19    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 120 | Recovery | =    | 100.76% |
| 37) Toluene-d8                 | 7.36   | 98    | 254970   | 26.27    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 130 | Recovery | =    | 105.08% |
| 38) trans-1,3-Dichloropropene- | 7.66   | 79    | 36057    | 28.19    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 135 | Recovery | =    | 112.76% |
| 39) 2-Hexanone-d5              | 8.13   | 63    | 33745    | 61.26    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 122.52% |
| 48) 1,1,2,2-Tetrachloroethane- | 10.26  | 84    | 75482    | 27.07    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 120 | Recovery | =    | 108.28% |
| 61) 1,2-Dichlorobenzene-d4     | 11.67  | 152   | 98938    | 25.47    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 75 - 120 | Recovery | =    | 101.88% |

## Target Compounds

| Target Compounds               | R.T. | QIon | Response | Conc   | Units | Ovalue |
|--------------------------------|------|------|----------|--------|-------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85   | 72371    | 24.392 | ug/L  | 100    |
| 3) Chloromethane               | 1.25 | 50   | 57248    | 20.982 | ug/L  | 99     |
| 5) Vinyl chloride              | 1.32 | 62   | 48890    | 19.871 | ug/L  | 99     |
| 6) Bromomethane                | 1.51 | 94   | 23662    | 18.782 | ug/L  | 99     |
| 8) Chloroethane                | 1.59 | 64   | 26389    | 20.326 | ug/L  | 97     |
| 9) Trichlorofluoromethane      | 1.76 | 101  | 91532    | 21.016 | ug/L  | 100    |
| 11) 1,1,2-Trichloro-1,2,2-trif | 2.13 | 101  | 46207    | 20.953 | ug/L  | 99     |
| 12) 1,1-Dichloroethene         | 2.14 | 96   | 39791    | 20.638 | ug/L  | 88     |
| 13) Acetone                    | 2.19 | 43   | 23724    | 35.798 | ug/L  | 97     |
| 14) Carbon disulfide           | 2.31 | 76   | 143489   | 22.477 | ug/L  | 100    |
| 15) Methyl Acetate             | 2.46 | 43   | 31215    | 24.095 | ug/L  | 97     |
| 16) Methylene chloride         | 2.53 | 84   | 63597    | 22.720 | ug/L  | 98     |
| 17) Methyl tert-butyl Ether    | 2.80 | 73   | 154397   | 25.998 | ug/L  | 97     |
| 18) trans-1,2-Dichloroethene   | 2.79 | 96   | 60624    | 24.759 | ug/L  | 95     |
| 19) 1,1-Dichloroethane         | 3.23 | 63   | 108966   | 24.401 | ug/L  | 98     |
| 21) 2-Butanone                 | 4.02 | 43   | 44051    | 50.975 | ug/L  | 94     |
| 22) cis-1,2-Dichloroethene     | 3.96 | 96   | 69615    | 26.046 | ug/L  | 93     |

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 Quant Title : VOC Analysis  
 QLast Update : Mon May 06 01:43:06 2019  
 Response via : Initial Calibration

| Internal Standards              | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|---------------------------------|-------|------|----------|--------|-------|----------|
| 23) Bromochloromethane          | 4.30  | 128  | 32328    | 25.583 | ug/L  | 89       |
| 25) Chloroform                  | 4.42  | 83   | 122007   | 24.649 | ug/L  | 98       |
| 27) 1,2-Dichloroethane          | 5.18  | 62   | 77859    | 24.285 | ug/L  | 95       |
| 30) Cyclohexane                 | 4.72  | 56   | 92132    | 26.876 | ug/L  | 97       |
| 31) 1,1,1-Trichloroethane       | 4.66  | 97   | 103643   | 27.221 | ug/L  | 97       |
| 32) Carbon tetrachloride        | 4.87  | 117  | 93355    | 27.391 | ug/L  | 98       |
| 34) Benzene                     | 5.14  | 78   | 241644   | 25.935 | ug/L  | 100      |
| 35) Trichloroethene             | 5.96  | 95   | 70145    | 26.394 | ug/L  | 99       |
| 36) Methylcyclohexane           | 6.17  | 83   | 100804   | 26.547 | ug/L  | 96       |
| 40) 1,2-Dichloropropane         | 6.22  | 63   | 62224    | 25.677 | ug/L  | 99       |
| 41) Bromodichloromethane        | 6.55  | 83   | 86682    | 27.014 | ug/L  | 99       |
| 42) cis-1,3-Dichloropropene     | 7.07  | 75   | 101013   | 28.497 | ug/L  | 100      |
| 43) 4-Methyl-2-pentanone        | 7.27  | 43   | 91150    | 53.420 | ug/L  | 94       |
| 44) Toluene                     | 7.43  | 91   | 279257   | 27.157 | ug/L  | 99       |
| 45) trans-1,3-Dichloropropene   | 7.69  | 75   | 82872    | 27.779 | ug/L  | 98       |
| 46) 1,1,2-Trichloroethane       | 7.88  | 97   | 56097    | 27.722 | ug/L  | 97       |
| 47) Tetrachloroethene           | 8.02  | 164  | 56352    | 27.202 | ug/L  | 97       |
| 49) 2-Hexanone                  | 8.18  | 43   | 65841    | 51.907 | ug/L  | 95       |
| 50) Dibromochloromethane        | 8.29  | 129  | 67614    | 28.175 | ug/L  | 99       |
| 51) 1,2-Dibromoethane           | 8.40  | 107  | 54000    | 27.666 | ug/L  | 97       |
| 52) Chlorobenzene               | 8.93  | 112  | 190761   | 26.581 | ug/L  | 99       |
| 53) Ethylbenzene                | 9.05  | 91   | 318333   | 27.372 | ug/L  | 100      |
| 54) m,p-Xylene                  | 9.18  | 106  | 120096   | 27.252 | ug/L  | 100      |
| 55) o-xylene                    | 9.59  | 106  | 119641   | 27.789 | ug/L  | 100      |
| 56) Styrene                     | 9.60  | 104  | 204368   | 27.969 | ug/L  | 100      |
| 57) Isopropylbenzene            | 9.97  | 105  | 325448   | 28.806 | ug/L  | 99       |
| 58) 1,1,1,2,2-Tetrachloroethane | 10.29 | 83   | 68800    | 27.255 | ug/L  | 99       |
| 59) 1,2,3-Trichloropropane      | 10.32 | 75   | 52278    | 27.528 | ug/L  | 99       |
| 62) Bromoform                   | 9.77  | 173  | 40211    | 28.399 | ug/L  | 99       |
| 63) 1,3-Dichlorobenzene         | 11.23 | 146  | 155178   | 26.935 | ug/L  | 100      |
| 64) 1,4-Dichlorobenzene         | 11.32 | 146  | 153988   | 25.596 | ug/L  | 98       |
| 65) 1,2-Dichlorobenzene         | 11.69 | 146  | 148213   | 26.058 | ug/L  | 99       |
| 66) 1,2-Dibromo-3-chloropropan  | 12.48 | 75   | 11354    | 27.143 | ug/L  | 87       |
| 67) 1,3,5-Trichlorobenzene      | 12.69 | 180  | 119270   | 26.964 | ug/L  | 99       |
| 68) 1,2,4-trichlorobenzene      | 13.31 | 180  | 94951    | 28.134 | ug/L  | 99       |
| 69) Naphthalene                 | 13.55 | 128  | 190345   | 29.497 | ug/L  | 100      |
| 70) 1,2,3-Trichlorobenzene      | 13.79 | 180  | 89864    | 28.229 | ug/L  | 96       |

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

