

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_V\DATA\VV121918\  
 Data File : VV009059.D  
 Acq On : 19 Dec 2018 20:00  
 Operator : SY/MD  
 Sample : VSTDCCC025  
 Misc : 5.00G/10ML/MSVOA\_V/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02568

Quant Time: Dec 20 02:04:27 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM120618S.M  
 Quant Title : VOC Analysis  
 QLast Update : Thu Dec 20 01:58:47 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.66  | 114  | 286924   | 25.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.90  | 117  | 251705   | 25.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.30 | 152  | 121212   | 25.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.32   | 65    | 55072    | 18.55    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 74.20%  |
| 7) Chloroethane-d5             | 1.58   | 69    | 59385    | 27.07    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 108.28% |
| 10) 1,1-Dichloroethene-d2      | 2.13   | 63    | 149539   | 20.14    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 110 | Recovery | =    | 80.56%  |
| 20) 2-Butanone-d5              | 3.94   | 46    | 41268    | 38.18    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 76.36%  |
| 24) Chloroform-d               | 4.40   | 84    | 154231   | 22.36    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 40 - 150 | Recovery | =    | 89.44%  |
| 26) 1,2-Dichloroethane-d4      | 5.08   | 65    | 85136    | 22.62    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 130 | Recovery | =    | 90.48%  |
| 29) Benzene-d6                 | 5.10   | 84    | 298693   | 21.25    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 20 - 135 | Recovery | =    | 85.00%  |
| 33) 1,2-Dichloropropane-d6     | 6.12   | 67    | 88808    | 22.57    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 120 | Recovery | =    | 90.28%  |
| 37) Toluene-d8                 | 7.36   | 98    | 274142   | 21.07    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 130 | Recovery | =    | 84.28%  |
| 38) trans-1,3-Dichloropropene- | 7.66   | 79    | 39446    | 22.81    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 135 | Recovery | =    | 91.24%  |
| 39) 2-Hexanone-d5              | 8.14   | 63    | 27907    | 38.71    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 77.42%  |
| 48) 1,1,2,2-Tetrachloroethane- | 10.26  | 84    | 70017    | 21.21    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 120 | Recovery | =    | 84.84%  |
| 61) 1,2-Dichlorobenzene-d4     | 11.67  | 152   | 95216    | 20.93    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 75 - 120 | Recovery | =    | 83.72%  |

## Target Compounds

|                                |      |     |        |             | Qvalue |
|--------------------------------|------|-----|--------|-------------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 89492  | 19.027 ug/L | 99     |
| 3) Chloromethane               | 1.25 | 50  | 67304  | 20.824 ug/L | 100    |
| 5) Vinyl chloride              | 1.32 | 62  | 75469  | 20.917 ug/L | 100    |
| 6) Bromomethane                | 1.53 | 94  | 52494  | 30.261 ug/L | 98     |
| 8) Chloroethane                | 1.60 | 64  | 62752  | 31.053 ug/L | 99     |
| 9) Trichlorofluoromethane      | 1.77 | 101 | 169306 | 27.396 ug/L | 100    |
| 11) 1,1,2-Trichloro-1,2,2-trif | 2.14 | 101 | 96889  | 22.859 ug/L | 97     |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 82565  | 22.323 ug/L | 99     |
| 13) Acetone                    | 2.19 | 43  | 62900  | 39.493 ug/L | 97     |
| 14) Carbon disulfide           | 2.32 | 76  | 250368 | 21.081 ug/L | 100    |
| 15) Methyl Acetate             | 2.46 | 43  | 36805  | 18.224 ug/L | 94     |
| 16) Methylene chloride         | 2.53 | 84  | 101575 | 21.023 ug/L | 97     |
| 17) Methyl tert-butyl Ether    | 2.80 | 73  | 207081 | 24.644 ug/L | 96     |
| 18) trans-1,2-Dichloroethene   | 2.79 | 96  | 94350  | 23.607 ug/L | 98     |
| 19) 1,1-Dichloroethane         | 3.23 | 63  | 157101 | 24.248 ug/L | 99     |
| 21) 2-Butanone                 | 4.02 | 43  | 61167  | 40.976 ug/L | 98     |
| 22) cis-1,2-Dichloroethene     | 3.96 | 96  | 100776 | 24.183 ug/L | 99     |

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 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 23) Bromochloromethane         | 4.30  | 128  | 48819    | 24.856 | ug/L  | 99       |
| 25) Chloroform                 | 4.43  | 83   | 176538   | 25.389 | ug/L  | 100      |
| 27) 1,2-Dichloroethane         | 5.18  | 62   | 115743   | 24.436 | ug/L  | 99       |
| 30) Cyclohexane                | 4.73  | 56   | 141091   | 22.261 | ug/L  | 98       |
| 31) 1,1,1-Trichloroethane      | 4.66  | 97   | 157741   | 24.307 | ug/L  | 99       |
| 32) Carbon tetrachloride       | 4.88  | 117  | 142448   | 24.043 | ug/L  | 99       |
| 34) Benzene                    | 5.15  | 78   | 358506   | 23.773 | ug/L  | 100      |
| 35) Trichloroethene            | 5.96  | 95   | 109268   | 24.034 | ug/L  | 99       |
| 36) Methylcyclohexane          | 6.18  | 83   | 170647   | 23.534 | ug/L  | 98       |
| 40) 1,2-Dichloropropane        | 6.22  | 63   | 89980    | 24.861 | ug/L  | 99       |
| 41) Bromodichloromethane       | 6.56  | 83   | 123754   | 25.942 | ug/L  | 98       |
| 42) cis-1,3-Dichloropropene    | 7.07  | 75   | 135544   | 25.580 | ug/L  | 97       |
| 43) 4-Methyl-2-pentanone       | 7.27  | 43   | 97260    | 39.758 | ug/L  | 99       |
| 44) Toluene                    | 7.43  | 91   | 386033   | 24.409 | ug/L  | 97       |
| 45) trans-1,3-Dichloropropene  | 7.69  | 75   | 118726   | 25.703 | ug/L  | 96       |
| 46) 1,1,2-Trichloroethane      | 7.88  | 97   | 73647    | 24.421 | ug/L  | 99       |
| 47) Tetrachloroethene          | 8.02  | 164  | 85281    | 23.065 | ug/L  | 98       |
| 49) 2-Hexanone                 | 8.19  | 43   | 78372    | 38.725 | ug/L  | 98       |
| 50) Dibromochloromethane       | 8.29  | 129  | 92906    | 26.876 | ug/L  | 100      |
| 51) 1,2-Dibromoethane          | 8.40  | 107  | 72592    | 23.971 | ug/L  | 97       |
| 52) Chlorobenzene              | 8.93  | 112  | 255474   | 24.808 | ug/L  | 99       |
| 53) Ethylbenzene               | 9.06  | 91   | 425008   | 24.772 | ug/L  | 98       |
| 54) m,p-Xylene                 | 9.18  | 106  | 163465   | 25.163 | ug/L  | 97       |
| 55) o-xylene                   | 9.59  | 106  | 154298   | 25.564 | ug/L  | 98       |
| 56) Styrene                    | 9.60  | 104  | 253655   | 26.051 | ug/L  | 97       |
| 57) Isopropylbenzene           | 9.98  | 105  | 412722   | 25.159 | ug/L  | 99       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.29 | 83   | 72916    | 22.366 | ug/L  | 97       |
| 59) 1,2,3-Trichloropropane     | 10.32 | 75   | 61378    | 21.758 | ug/L  | 99       |
| 62) Bromoform                  | 9.78  | 173  | 52062    | 23.789 | ug/L  | 100      |
| 63) 1,3-Dichlorobenzene        | 11.23 | 146  | 187823   | 24.047 | ug/L  | 97       |
| 64) 1,4-Dichlorobenzene        | 11.32 | 146  | 191003   | 23.764 | ug/L  | 97       |
| 65) 1,2-Dichlorobenzene        | 11.69 | 146  | 175006   | 24.305 | ug/L  | 99       |
| 66) 1,2-Dibromo-3-chloropropan | 12.48 | 75   | 12366    | 20.962 | ug/L  | 94       |
| 67) 1,3,5-Trichlorobenzene     | 12.69 | 180  | 134756   | 23.886 | ug/L  | 99       |
| 68) 1,2,4-trichlorobenzene     | 13.31 | 180  | 101574   | 25.696 | ug/L  | 100      |
| 69) Naphthalene                | 13.55 | 128  | 168624   | 24.767 | ug/L  | 99       |
| 70) 1,2,3-Trichlorobenzene     | 13.79 | 180  | 93503    | 25.605 | ug/L  | 100      |

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

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