

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV050919\  
 Data File : VV010782.D  
 Acq On : 09 May 2019 22:12  
 Operator : SY/MD  
 Sample : VSTDCCC025  
 Misc : 5.00G/10ML/MSVOA V/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02592

Quant Time: May 10 05:48:13 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM050719S.M  
 Quant Title : VOC Analysis  
 QLast Update : Fri May 10 05:43:08 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.66  | 114  | 89483    | 25.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.90  | 117  | 94459    | 25.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.29 | 152  | 45756    | 25.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.32   | 65    | 32539    | 23.41    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 93.64%  |
| 7) Chloroethane-d5             | 1.57   | 69    | 29560    | 25.84    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 103.36% |
| 10) 1,1-Dichloroethene-d2      | 2.13   | 63    | 74967    | 24.86    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 110 | Recovery | =    | 99.44%  |
| 20) 2-Butanone-d5              | 3.93   | 46    | 20369    | 48.83    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 97.66%  |
| 24) Chloroform-d               | 4.40   | 84    | 64174    | 26.30    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 40 - 150 | Recovery | =    | 105.20% |
| 26) 1,2-Dichloroethane-d4      | 5.08   | 65    | 39308    | 25.80    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 130 | Recovery | =    | 103.20% |
| 29) Benzene-d6                 | 5.10   | 84    | 124385   | 25.02    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 20 - 135 | Recovery | =    | 100.08% |
| 33) 1,2-Dichloropropane-d6     | 6.12   | 67    | 39866    | 25.16    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 120 | Recovery | =    | 100.64% |
| 37) Toluene-d8                 | 7.36   | 98    | 114673   | 24.08    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 130 | Recovery | =    | 96.32%  |
| 38) trans-1,3-Dichloropropene- | 7.66   | 79    | 17132    | 23.72    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 135 | Recovery | =    | 94.88%  |
| 39) 2-Hexanone-d5              | 8.13   | 63    | 14570    | 43.95    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 87.90%  |
| 48) 1,1,2,2-Tetrachloroethane- | 10.26  | 84    | 36640    | 24.61    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 120 | Recovery | =    | 98.44%  |
| 61) 1,2-Dichlorobenzene-d4     | 11.67  | 152   | 42640    | 24.06    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 75 - 120 | Recovery | =    | 96.24%  |

## Target Compounds

|                                |      |     |       |        | Ovalue   |
|--------------------------------|------|-----|-------|--------|----------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 29980 | 24.191 | ug/L 97  |
| 3) Chloromethane               | 1.25 | 50  | 36142 | 23.973 | ug/L 97  |
| 5) Vinyl chloride              | 1.32 | 62  | 43718 | 24.974 | ug/L 100 |
| 6) Bromomethane                | 1.52 | 94  | 27220 | 32.063 | ug/L 100 |
| 8) Chloroethane                | 1.59 | 64  | 28415 | 26.064 | ug/L 98  |
| 9) Trichlorofluoromethane      | 1.76 | 101 | 68357 | 25.940 | ug/L 99  |
| 11) 1,1,2-Trichloro-1,2,2-trif | 2.14 | 101 | 39847 | 26.486 | ug/L 99  |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 36928 | 26.214 | ug/L 97  |
| 13) Acetone                    | 2.19 | 43  | 23989 | 37.146 | ug/L 99  |
| 14) Carbon disulfide           | 2.31 | 76  | 87692 | 25.331 | ug/L 96  |
| 15) Methyl Acetate             | 2.46 | 43  | 17013 | 22.052 | ug/L 99  |
| 16) Methylene chloride         | 2.53 | 84  | 35659 | 25.773 | ug/L 98  |
| 17) Methyl tert-butyl Ether    | 2.80 | 73  | 90416 | 25.632 | ug/L 99  |
| 18) trans-1,2-Dichloroethene   | 2.79 | 96  | 32656 | 25.645 | ug/L 98  |
| 19) 1,1-Dichloroethane         | 3.23 | 63  | 66362 | 26.995 | ug/L 98  |
| 21) 2-Butanone                 | 4.02 | 43  | 25077 | 40.972 | ug/L 93  |
| 22) cis-1,2-Dichloroethene     | 3.96 | 96  | 38741 | 26.632 | ug/L 98  |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV050919\  
 Data File : VV010782.D  
 Acq On : 09 May 2019 22:12  
 Operator : SY/MD  
 Sample : VSTDCCC025  
 Misc : 5.00G/10ML/MSVOA V/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTD02592

Quant Time: May 10 05:48:13 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM050719S.M  
 Quant Title : VOC Analysis  
 QLast Update : Fri May 10 05:43:08 2019  
 Response via : Initial Calibration

| Internal Standards              | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|---------------------------------|-------|------|----------|--------|--------|----------|
| 23) Bromochloromethane          | 4.30  | 128  | 17341    | 26.520 | ug/L   | 96       |
| 25) Chloroform                  | 4.42  | 83   | 73796    | 27.249 | ug/L   | 97       |
| 27) 1,2-Dichloroethane          | 5.18  | 62   | 51607    | 26.070 | ug/L   | 96       |
| 30) Cyclohexane                 | 4.72  | 56   | 56081    | 23.672 | ug/L   | 97       |
| 31) 1,1,1-Trichloroethane       | 4.66  | 97   | 58997    | 25.050 | ug/L   | 98       |
| 32) Carbon tetrachloride        | 4.87  | 117  | 51006    | 24.862 | ug/L   | 99       |
| 34) Benzene                     | 5.14  | 78   | 144788   | 26.111 | ug/L   | 100      |
| 35) Trichloroethene             | 5.96  | 95   | 39562    | 25.471 | ug/L   | 98       |
| 36) Methylcyclohexane           | 6.18  | 83   | 61759    | 24.809 | ug/L   | 96       |
| 40) 1,2-Dichloropropane         | 6.22  | 63   | 37709    | 25.564 | ug/L   | 99       |
| 41) Bromodichloromethane        | 6.55  | 83   | 52884    | 26.091 | ug/L   | 99       |
| 42) cis-1,3-Dichloropropene     | 7.07  | 75   | 60945    | 26.121 | ug/L   | 100      |
| 43) 4-Methyl-2-pentanone        | 7.27  | 43   | 54290    | 43.723 | ug/L   | 99       |
| 44) Toluene                     | 7.43  | 91   | 161840   | 25.698 | ug/L   | 99       |
| 45) trans-1,3-Dichloropropene   | 7.69  | 75   | 49944    | 25.421 | ug/L   | 99       |
| 46) 1,1,2-Trichloroethane       | 7.88  | 97   | 30053    | 24.800 | ug/L   | 98       |
| 47) Tetrachloroethene           | 8.02  | 164  | 28742    | 25.551 | ug/L   | 97       |
| 49) 2-Hexanone                  | 8.18  | 43   | 38001    | 40.254 | ug/L   | 98       |
| 50) Dibromochloromethane        | 8.29  | 129  | 34551    | 24.794 | ug/L   | 99       |
| 51) 1,2-Dibromoethane           | 8.40  | 107  | 27786    | 23.740 | ug/L   | 95       |
| 52) Chlorobenzene               | 8.92  | 112  | 106347   | 25.847 | ug/L   | 97       |
| 53) Ethylbenzene                | 9.05  | 91   | 188984   | 25.880 | ug/L   | 99       |
| 54) m,p-Xylene                  | 9.18  | 106  | 71858    | 26.339 | ug/L   | 99       |
| 55) o-xylene                    | 9.59  | 106  | 70731    | 26.138 | ug/L   | 98       |
| 56) Styrene                     | 9.60  | 104  | 119965   | 26.211 | ug/L   | 97       |
| 57) Isopropylbenzene            | 9.97  | 105  | 186772   | 25.869 | ug/L   | 99       |
| 58) 1,1,1,2,2-Tetrachloroethane | 10.29 | 83   | 38543    | 24.277 | ug/L   | 98       |
| 59) 1,2,3-Trichloropropane      | 10.32 | 75   | 30382    | 24.519 | ug/L   | 99       |
| 62) Bromoform                   | 9.77  | 173  | 18204    | 23.364 | ug/L # | 97       |
| 63) 1,3-Dichlorobenzene         | 11.22 | 146  | 81944    | 25.728 | ug/L   | 99       |
| 64) 1,4-Dichlorobenzene         | 11.32 | 146  | 80446    | 24.726 | ug/L   | 98       |
| 65) 1,2-Dichlorobenzene         | 11.69 | 146  | 78462    | 25.364 | ug/L   | 98       |
| 66) 1,2-Dibromo-3-chloropropan  | 12.48 | 75   | 6270     | 21.843 | ug/L   | 89       |
| 67) 1,3,5-Trichlorobenzene      | 12.69 | 180  | 58183    | 25.360 | ug/L   | 99       |
| 68) 1,2,4-trichlorobenzene      | 13.31 | 180  | 45888    | 25.849 | ug/L   | 97       |
| 69) Naphthalene                 | 13.55 | 128  | 86928    | 22.877 | ug/L   | 99       |
| 70) 1,2,3-Trichlorobenzene      | 13.79 | 180  | 43516    | 26.133 | ug/L   | 99       |

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

