

Data File : VV009937.D  
Acq On : 27 Mar 2019 19:59  
Operator : SY/MD  
Sample : VSTSCC025  
Misc : 5.00G/10mL/MSVOA\_V/SOIL  
ALS Vial : 17 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :

Quant Time: Mar 28 07:17:34 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM032619S.M  
Quant Title : VOC Analysis  
QLast Update : Thu Mar 28 05:12:38 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.66  | 114  | 188349   | 25.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.89  | 117  | 188168   | 25.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.30 | 152  | 92361    | 25.00 | ug/L  | 0.00     |

#### System Monitoring Compounds

|                                |        |       |          |          |      |        |
|--------------------------------|--------|-------|----------|----------|------|--------|
| 4) Vinyl Chloride-d3           | 1.32   | 65    | 85191    | 22.29    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 89.16% |
| 7) Chloroethane-d5             | 1.57   | 69    | 91326    | 22.12    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 88.48% |
| 10) 1,1-Dichloroethene-d2      | 2.13   | 63    | 249473   | 23.86    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 45 - 110 | Recovery | =    | 95.44% |
| 20) 2-Butanone-d5              | 3.93   | 46    | 35219m   | 49.45    | ug/L | -0.01  |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 98.90% |
| 24) Chloroform-d               | 4.40   | 84    | 111117   | 23.16    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 40 - 150 | Recovery | =    | 92.64% |
| 26) 1,2-Dichloroethane-d4      | 5.08   | 65    | 71199    | 24.65    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 70 - 130 | Recovery | =    | 98.60% |
| 29) Benzene-d6                 | 5.10   | 84    | 241686   | 24.46    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 20 - 135 | Recovery | =    | 97.84% |
| 33) 1,2-Dichloropropane-d6     | 6.12   | 67    | 71939    | 24.88    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 70 - 120 | Recovery | =    | 99.52% |
| 37) Toluene-d8                 | 7.36   | 98    | 233494   | 24.96    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 30 - 130 | Recovery | =    | 99.84% |
| 38) trans-1,3-Dichloropropene- | 7.66   | 79    | 27936    | 23.62    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 30 - 135 | Recovery | =    | 94.48% |
| 39) 2-Hexanone-d5              | 8.13   | 63    | 26371    | 48.87    | ug/L | 0.00   |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 97.74% |
| 48) 1,1,2,2-Tetrachloroethane- | 10.26  | 84    | 68706    | 24.00    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 45 - 120 | Recovery | =    | 96.00% |
| 61) 1,2-Dichlorobenzene-d4     | 11.67  | 152   | 83085    | 23.63    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 75 - 120 | Recovery | =    | 94.52% |

#### Target Compounds

|                                |      |     |        |             | Qvalue |
|--------------------------------|------|-----|--------|-------------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 65588  | 22.492 ug/L | 97     |
| 3) Chloromethane               | 1.25 | 50  | 68890  | 20.442 ug/L | 100    |
| 5) Vinyl chloride              | 1.32 | 62  | 101559 | 23.178 ug/L | 98     |
| 6) Bromomethane                | 1.51 | 94  | 91596  | 20.958 ug/L | 99     |
| 8) Chloroethane                | 1.59 | 64  | 77059  | 20.414 ug/L | 99     |
| 9) Trichlorofluoromethane      | 1.76 | 101 | 227529 | 24.349 ug/L | 100    |
| 11) 1,1,2-Trichloro-1,2,2-trif | 2.14 | 101 | 133798 | 24.634 ug/L | 99     |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 111652 | 24.232 ug/L | 93     |
| 13) Acetone                    | 2.18 | 43  | 50171  | 46.526 ug/L | 99     |
| 14) Carbon disulfide           | 2.32 | 76  | 143547 | 23.028 ug/L | 96     |
| 15) Methyl Acetate             | 2.46 | 43  | 28667  | 22.695 ug/L | 93     |
| 16) Methylene chloride         | 2.53 | 84  | 70114  | 22.605 ug/L | 99     |
| 17) Methyl tert-butyl Ether    | 2.80 | 73  | 139930 | 23.275 ug/L | 98     |
| 18) trans-1,2-Dichloroethene   | 2.79 | 96  | 57167  | 23.164 ug/L | 96     |
| 19) 1,1-Dichloroethane         | 3.23 | 63  | 104960 | 23.256 ug/L | 99     |
| 21) 2-Butanone                 | 4.01 | 43  | 40574  | 42.248 ug/L | 94     |
| 22) cis-1,2-Dichloroethene     | 3.96 | 96  | 64423  | 23.642 ug/L | 91     |

Data File : VV009937.D  
Acq On : 27 Mar 2019 19:59  
Operator : SY/MD  
Sample : VSTSCC025  
Misc : 5.00G/10mL/MSVOA\_V/SOIL  
ALS Vial : 17 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :

Quant Time: Mar 28 07:17:34 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM032619S.M  
Quant Title : VOC Analysis  
QLast Update : Thu Mar 28 05:12:38 2019  
Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| -----                          |       |      |          |        |        |          |
| 23) Bromochloromethane         | 4.30  | 128  | 28569    | 22.706 | ug/L # | 84       |
| 25) Chloroform                 | 4.42  | 83   | 125669   | 25.183 | ug/L   | 100      |
| 27) 1,2-Dichloroethane         | 5.18  | 62   | 83818    | 23.707 | ug/L   | 100      |
| 30) Cyclohexane                | 4.72  | 56   | 89261    | 23.527 | ug/L   | 98       |
| 31) 1,1,1-Trichloroethane      | 4.66  | 97   | 94107    | 24.990 | ug/L   | 99       |
| 32) Carbon tetrachloride       | 4.87  | 117  | 81070    | 24.768 | ug/L   | 100      |
| 34) Benzene                    | 5.14  | 78   | 237349   | 22.970 | ug/L   | 100      |
| 35) Trichloroethene            | 5.96  | 95   | 63829    | 23.419 | ug/L   | 97       |
| 36) Methylcyclohexane          | 6.17  | 83   | 102565   | 23.984 | ug/L   | 97       |
| 40) 1,2-Dichloropropane        | 6.22  | 63   | 62169    | 24.078 | ug/L # | 94       |
| 41) Bromodichloromethane       | 6.55  | 83   | 77189    | 24.039 | ug/L   | 99       |
| 42) cis-1,3-Dichloropropene    | 7.07  | 75   | 88353    | 23.470 | ug/L   | 97       |
| 43) 4-Methyl-2-pentanone       | 7.27  | 43   | 86851    | 47.136 | ug/L   | 99       |
| 44) Toluene                    | 7.43  | 91   | 274072   | 24.060 | ug/L   | 100      |
| 45) trans-1,3-Dichloropropene  | 7.69  | 75   | 75835    | 24.609 | ug/L   | 94       |
| 46) 1,1,2-Trichloroethane      | 7.88  | 97   | 51294    | 24.020 | ug/L   | 98       |
| 47) Tetrachloroethene          | 8.02  | 164  | 52088    | 24.218 | ug/L   | 99       |
| 49) 2-Hexanone                 | 8.18  | 43   | 60068    | 48.236 | ug/L   | 97       |
| 50) Dibromochloromethane       | 8.29  | 129  | 53760    | 24.279 | ug/L   | 99       |
| 51) 1,2-Dibromoethane          | 8.40  | 107  | 49397    | 23.823 | ug/L   | 95       |
| 52) Chlorobenzene              | 8.92  | 112  | 175996   | 23.208 | ug/L   | 98       |
| 53) Ethylbenzene               | 9.05  | 91   | 304042   | 24.196 | ug/L   | 99       |
| 54) m,p-Xylene                 | 9.18  | 106  | 116768   | 23.660 | ug/L   | 96       |
| 55) o-xylene                   | 9.59  | 106  | 109994   | 22.961 | ug/L   | 96       |
| 56) Styrene                    | 9.60  | 104  | 193517   | 23.518 | ug/L   | 97       |
| 57) Isopropylbenzene           | 9.97  | 105  | 296344   | 23.846 | ug/L   | 99       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.29 | 83   | 65414    | 22.726 | ug/L # | 97       |
| 59) 1,2,3-Trichloropropane     | 10.32 | 75   | 47118    | 22.681 | ug/L   | 98       |
| 62) Bromoform                  | 9.78  | 173  | 26205    | 22.058 | ug/L   | 96       |
| 63) 1,3-Dichlorobenzene        | 11.23 | 146  | 131474   | 23.015 | ug/L   | 97       |
| 64) 1,4-Dichlorobenzene        | 11.32 | 146  | 136344   | 21.961 | ug/L   | 98       |
| 65) 1,2-Dichlorobenzene        | 11.69 | 146  | 130409   | 23.131 | ug/L   | 99       |
| 66) 1,2-Dibromo-3-chloropropan | 12.48 | 75   | 7518     | 21.335 | ug/L   | 96       |
| 67) 1,3,5-Trichlorobenzene     | 12.69 | 180  | 95800    | 23.614 | ug/L   | 96       |
| 68) 1,2,4-trichlorobenzene     | 13.31 | 180  | 72677    | 24.285 | ug/L   | 99       |
| 69) Naphthalene                | 13.55 | 128  | 113188   | 22.753 | ug/L   | 97       |
| 70) 1,2,3-Trichlorobenzene     | 13.79 | 180  | 67185    | 23.610 | ug/L   | 98       |
| -----                          |       |      |          |        |        |          |

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

Data File : VV009937.D

```
Acq On       : 27 Mar 2019   19:59
Operator    : SY/MD
Sample      : VSTSCC025
Misc       : 5.00G/10mL/MSVOA_V/SOIL
ALS Vial    : 17      Sample Multiplier: 1
```

Instrument :  
MSVOA\_V  
ClientSampleId :

Quant Time: Mar 28 07:17:34 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSV0A\_V\METHOD\SOM2VLM032619S.M  
Quant Title : VOC Analysis  
QLast Update : Thu Mar 28 05:12:38 2019  
Response via : Initial Calibration

