

Data File : VV013003.D  
Acq On : 27 Sep 2019 10:18  
Operator : SY/MD  
Sample : VSTDCCC025  
Misc : 5.00G/10ML/MSVOA\_V/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02575

Quant Time: Sep 27 22:50:08 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM092319S.M  
Quant Title : VOC Analysis  
QLast Update : Fri Sep 27 14:59:31 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.66  | 114  | 830858   | 25.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.89  | 117  | 801133   | 25.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.29 | 152  | 430362   | 25.00 | ug/L  | 0.00     |

#### System Monitoring Compounds

|                                |        |       |          |          |      |        |
|--------------------------------|--------|-------|----------|----------|------|--------|
| 4) Vinyl Chloride-d3           | 1.32   | 65    | 274393   | 21.28    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 85.12% |
| 7) Chloroethane-d5             | 1.58   | 69    | 240945   | 23.12    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 92.48% |
| 10) 1,1-Dichloroethene-d2      | 2.13   | 63    | 493809   | 23.03    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 45 - 110 | Recovery | =    | 92.12% |
| 20) 2-Butanone-d5              | 3.95   | 46    | 169548   | 38.09    | ug/L | 0.00   |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 76.18% |
| 24) Chloroform-d               | 4.40   | 84    | 514718   | 22.55    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 40 - 150 | Recovery | =    | 90.20% |
| 26) 1,2-Dichloroethane-d4      | 5.08   | 65    | 276470   | 20.84    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 70 - 130 | Recovery | =    | 83.36% |
| 29) Benzene-d6                 | 5.09   | 84    | 1036090  | 23.16    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 20 - 135 | Recovery | =    | 92.64% |
| 33) 1,2-Dichloropropane-d6     | 6.11   | 67    | 319609   | 22.80    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 70 - 120 | Recovery | =    | 91.20% |
| 37) Toluene-d8                 | 7.36   | 98    | 969816   | 23.88    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 30 - 130 | Recovery | =    | 95.52% |
| 38) trans-1,3-Dichloropropene- | 7.66   | 79    | 129062   | 21.74    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 30 - 135 | Recovery | =    | 86.96% |
| 39) 2-Hexanone-d5              | 8.13   | 63    | 116884   | 41.43    | ug/L | 0.00   |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 82.86% |
| 48) 1,1,2,2-Tetrachloroethane- | 10.26  | 84    | 270826   | 20.34    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 45 - 120 | Recovery | =    | 81.36% |
| 61) 1,2-Dichlorobenzene-d4     | 11.67  | 152   | 368058   | 22.01    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 75 - 120 | Recovery | =    | 88.04% |

#### Target Compounds

|                                |      |     |         |             | Qvalue |
|--------------------------------|------|-----|---------|-------------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 268939  | 29.392 ug/L | 99     |
| 3) Chloromethane               | 1.25 | 50  | 316889  | 26.519 ug/L | 100    |
| 5) Vinyl chloride              | 1.33 | 62  | 328091  | 27.810 ug/L | 100    |
| 6) Bromomethane                | 1.54 | 94  | 196302  | 26.655 ug/L | 99     |
| 8) Chloroethane                | 1.60 | 64  | 203995  | 28.139 ug/L | 98     |
| 9) Trichlorofluoromethane      | 1.77 | 101 | 433743  | 27.183 ug/L | 100    |
| 11) 1,1,2-Trichloro-1,2,2-trif | 2.14 | 101 | 268108  | 26.290 ug/L | 99     |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 249647  | 26.580 ug/L | 93     |
| 13) Acetone                    | 2.21 | 43  | 201465  | 42.584 ug/L | 100    |
| 14) Carbon disulfide           | 2.32 | 76  | 774256  | 25.807 ug/L | 99     |
| 15) Methyl Acetate             | 2.47 | 43  | 146590  | 19.977 ug/L | 98     |
| 16) Methylene chloride         | 2.53 | 84  | 313273  | 25.226 ug/L | 100    |
| 17) Methyl tert-butyl Ether    | 2.80 | 73  | 643013  | 23.333 ug/L | 99     |
| 18) trans-1,2-Dichloroethene   | 2.79 | 96  | 285098  | 25.645 ug/L | 98     |
| 19) 1,1-Dichloroethane         | 3.23 | 63  | 526603  | 25.957 ug/L | 99     |
| 21) 2-Butanone                 | 4.03 | 43  | 232318m | 42.195 ug/L |        |
| 22) cis-1,2-Dichloroethene     | 3.96 | 96  | 311155  | 25.573 ug/L | 99     |

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ClientSampleId :  
VSTD02575

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Quant Title : VOC Analysis  
QLast Update : Fri Sep 27 14:59:31 2019  
Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 23) Bromochloromethane         | 4.30  | 128  | 144084   | 23.975 | ug/L  | 99       |
| 25) Chloroform                 | 4.42  | 83   | 533400   | 25.076 | ug/L  | 100      |
| 27) 1,2-Dichloroethane         | 5.17  | 62   | 355997   | 23.679 | ug/L  | 99       |
| 30) Cyclohexane                | 4.72  | 56   | 493866   | 28.734 | ug/L  | 99       |
| 31) 1,1,1-Trichloroethane      | 4.66  | 97   | 435253   | 27.451 | ug/L  | 98       |
| 32) Carbon tetrachloride       | 4.87  | 117  | 395982   | 27.543 | ug/L  | 100      |
| 34) Benzene                    | 5.14  | 78   | 1200097  | 26.911 | ug/L  | 100      |
| 35) Trichloroethene            | 5.96  | 95   | 322553   | 25.965 | ug/L  | 99       |
| 36) Methylcyclohexane          | 6.17  | 83   | 535615   | 28.086 | ug/L  | 100      |
| 40) 1,2-Dichloropropane        | 6.22  | 63   | 309109   | 26.655 | ug/L  | 100      |
| 41) Bromodichloromethane       | 6.55  | 83   | 381398   | 25.677 | ug/L  | 100      |
| 42) cis-1,3-Dichloropropene    | 7.07  | 75   | 452719   | 26.568 | ug/L  | 96       |
| 43) 4-Methyl-2-pentanone       | 7.27  | 43   | 413160   | 43.364 | ug/L  | 100      |
| 44) Toluene                    | 7.43  | 91   | 1314676  | 27.952 | ug/L  | 99       |
| 45) trans-1,3-Dichloropropene  | 7.69  | 75   | 360793   | 25.157 | ug/L  | 100      |
| 46) 1,1,2-Trichloroethane      | 7.88  | 97   | 232938   | 23.660 | ug/L  | 98       |
| 47) Tetrachloroethene          | 8.02  | 164  | 268022   | 26.546 | ug/L  | 99       |
| 49) 2-Hexanone                 | 8.18  | 43   | 322787   | 44.944 | ug/L  | 95       |
| 50) Dibromochloromethane       | 8.29  | 129  | 275459   | 24.343 | ug/L  | 98       |
| 51) 1,2-Dibromoethane          | 8.39  | 107  | 226355   | 23.462 | ug/L  | 99       |
| 52) Chlorobenzene              | 8.92  | 112  | 840127   | 25.884 | ug/L  | 99       |
| 53) Ethylbenzene               | 9.05  | 91   | 1449704  | 27.995 | ug/L  | 100      |
| 54) m,p-Xylene                 | 9.18  | 106  | 555708   | 28.227 | ug/L  | 99       |
| 55) o-xylene                   | 9.58  | 106  | 530961   | 28.306 | ug/L  | 100      |
| 56) Styrene                    | 9.60  | 104  | 931737   | 28.230 | ug/L  | 99       |
| 57) Isopropylbenzene           | 9.97  | 105  | 1441763  | 29.246 | ug/L  | 100      |
| 58) 1,1,2,2-Tetrachloroethane  | 10.28 | 83   | 271733   | 22.313 | ug/L  | 99       |
| 59) 1,2,3-Trichloropropane     | 10.32 | 75   | 214890   | 21.379 | ug/L  | 99       |
| 62) Bromoform                  | 9.77  | 173  | 168872   | 23.124 | ug/L  | 98       |
| 63) 1,3-Dichlorobenzene        | 11.22 | 146  | 696802   | 26.304 | ug/L  | 98       |
| 64) 1,4-Dichlorobenzene        | 11.32 | 146  | 710922   | 25.570 | ug/L  | 99       |
| 65) 1,2-Dichlorobenzene        | 11.68 | 146  | 645974   | 25.565 | ug/L  | 99       |
| 66) 1,2-Dibromo-3-chloropropan | 12.47 | 75   | 43590    | 19.458 | ug/L  | 93       |
| 67) 1,3,5-Trichlorobenzene     | 12.69 | 180  | 553183   | 26.696 | ug/L  | 100      |
| 68) 1,2,4-trichlorobenzene     | 13.31 | 180  | 469243   | 25.896 | ug/L  | 99       |
| 69) Naphthalene                | 13.55 | 128  | 823270   | 22.589 | ug/L  | 100      |
| 70) 1,2,3-Trichlorobenzene     | 13.79 | 180  | 442851   | 25.419 | ug/L  | 98       |

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

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MSVOA\_V  
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VSTD02575

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