

Data File : VV009957.D  
Acq On : 28 Mar 2019 05:09  
Operator : SY/MD  
Sample : VSTDCCC025EC  
Misc : 5.00G/10mL/MSVOA\_V/SOIL  
ALS Vial : 40 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTD02568

Quant Time: Mar 28 07:23:47 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM032619S.M  
Quant Title : VOC Analysis  
QLast Update : Thu Mar 28 07:17:22 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.66  | 114  | 182675   | 25.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.89  | 117  | 184865   | 25.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.30 | 152  | 81486    | 25.00 | ug/L  | 0.00     |

#### System Monitoring Compounds

|                                |        |       |          |          |      |         |
|--------------------------------|--------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.31   | 65    | 71292    | 19.23    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 76.92%  |
| 7) Chloroethane-d5             | 1.56   | 69    | 83754    | 20.92    | ug/L | -0.01   |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 83.68%  |
| 10) 1,1-Dichloroethene-d2      | 2.12   | 63    | 203273   | 20.05    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 110 | Recovery | =    | 80.20%  |
| 20) 2-Butanone-d5              | 3.92   | 46    | 36266    | 52.50    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 105.00% |
| 24) Chloroform-d               | 4.39   | 84    | 110355   | 23.71    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 40 - 150 | Recovery | =    | 94.84%  |
| 26) 1,2-Dichloroethane-d4      | 5.07   | 65    | 73852    | 26.37    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 130 | Recovery | =    | 105.48% |
| 29) Benzene-d6                 | 5.09   | 84    | 240065   | 24.73    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 20 - 135 | Recovery | =    | 98.92%  |
| 33) 1,2-Dichloropropane-d6     | 6.11   | 67    | 75411    | 26.55    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 70 - 120 | Recovery | =    | 106.20% |
| 37) Toluene-d8                 | 7.36   | 98    | 220029   | 23.94    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 130 | Recovery | =    | 95.76%  |
| 38) trans-1,3-Dichloropropene- | 7.66   | 79    | 26730    | 23.00    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 30 - 135 | Recovery | =    | 92.00%  |
| 39) 2-Hexanone-d5              | 8.13   | 63    | 26375    | 49.75    | ug/L | 0.00    |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 99.50%  |
| 48) 1,1,2,2-Tetrachloroethane- | 10.26  | 84    | 68965    | 24.52    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 45 - 120 | Recovery | =    | 98.08%  |
| 61) 1,2-Dichlorobenzene-d4     | 11.67  | 152   | 73871    | 23.81    | ug/L | 0.00    |
| Spiked Amount                  | 25.000 | Range | 75 - 120 | Recovery | =    | 95.24%  |

#### Target Compounds

|                                |      |     |        |        | Qvalue   |
|--------------------------------|------|-----|--------|--------|----------|
| 2) Dichlorodifluoromethane     | 1.13 | 85  | 52986  | 18.735 | ug/L 100 |
| 3) Chloromethane               | 1.24 | 50  | 65358  | 19.997 | ug/L 99  |
| 5) Vinyl chloride              | 1.32 | 62  | 89842  | 21.140 | ug/L 95  |
| 6) Bromomethane                | 1.51 | 94  | 88439  | 20.864 | ug/L 99  |
| 8) Chloroethane                | 1.58 | 64  | 76518  | 20.901 | ug/L 99  |
| 9) Trichlorofluoromethane      | 1.75 | 101 | 203945 | 22.503 | ug/L 100 |
| 11) 1,1,2-Trichloro-1,2,2-trif | 2.12 | 101 | 94982  | 18.031 | ug/L 98  |
| 12) 1,1-Dichloroethene         | 2.13 | 96  | 85034  | 19.028 | ug/L 91  |
| 13) Acetone                    | 2.18 | 43  | 28855  | 27.590 | ug/L 89  |
| 14) Carbon disulfide           | 2.31 | 76  | 128823 | 21.307 | ug/L 100 |
| 15) Methyl Acetate             | 2.45 | 43  | 32638  | 26.642 | ug/L 97  |
| 16) Methylene chloride         | 2.53 | 84  | 77106  | 25.631 | ug/L 98  |
| 17) Methyl tert-butyl Ether    | 2.80 | 73  | 162700 | 27.903 | ug/L 97  |
| 18) trans-1,2-Dichloroethene   | 2.78 | 96  | 60151  | 25.130 | ug/L 92  |
| 19) 1,1-Dichloroethane         | 3.22 | 63  | 114210 | 26.092 | ug/L 97  |
| 21) 2-Butanone                 | 4.01 | 43  | 38277  | 41.094 | ug/L 86  |
| 22) cis-1,2-Dichloroethene     | 3.95 | 96  | 70861  | 26.812 | ug/L 92  |

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Quant Title : VOC Analysis  
QLast Update : Thu Mar 28 07:17:22 2019  
Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 23) Bromochloromethane         | 4.29  | 128  | 33934    | 27.807 | ug/L   | 98       |
| 25) Chloroform                 | 4.42  | 83   | 145738   | 30.112 | ug/L   | 99       |
| 27) 1,2-Dichloroethane         | 5.17  | 62   | 92744    | 27.046 | ug/L   | 98       |
| 30) Cyclohexane                | 4.72  | 56   | 78445    | 21.045 | ug/L   | 99       |
| 31) 1,1,1-Trichloroethane      | 4.65  | 97   | 94068    | 25.426 | ug/L   | 97       |
| 32) Carbon tetrachloride       | 4.87  | 117  | 76951    | 23.930 | ug/L   | 98       |
| 34) Benzene                    | 5.14  | 78   | 262881   | 25.896 | ug/L   | 100      |
| 35) Trichloroethene            | 5.95  | 95   | 65927    | 24.621 | ug/L   | 98       |
| 36) Methylcyclohexane          | 6.17  | 83   | 86090    | 20.492 | ug/L   | 95       |
| 40) 1,2-Dichloropropane        | 6.22  | 63   | 69898    | 27.555 | ug/L # | 93       |
| 41) Bromodichloromethane       | 6.55  | 83   | 90315    | 28.629 | ug/L   | 97       |
| 42) cis-1,3-Dichloropropene    | 7.07  | 75   | 93162    | 25.190 | ug/L   | 94       |
| 43) 4-Methyl-2-pentanone       | 7.27  | 43   | 94858    | 52.401 | ug/L   | 100      |
| 44) Toluene                    | 7.43  | 91   | 281286   | 25.134 | ug/L   | 98       |
| 45) trans-1,3-Dichloropropene  | 7.69  | 75   | 81566    | 26.942 | ug/L   | 100      |
| 46) 1,1,2-Trichloroethane      | 7.88  | 97   | 55589    | 26.496 | ug/L   | 96       |
| 47) Tetrachloroethene          | 8.02  | 164  | 48478    | 22.943 | ug/L   | 98       |
| 49) 2-Hexanone                 | 8.18  | 43   | 60760    | 49.663 | ug/L   | 99       |
| 50) Dibromochloromethane       | 8.29  | 129  | 58284    | 26.792 | ug/L   | 93       |
| 51) 1,2-Dibromoethane          | 8.40  | 107  | 53333    | 26.181 | ug/L # | 95       |
| 52) Chlorobenzene              | 8.92  | 112  | 182130   | 24.446 | ug/L   | 98       |
| 53) Ethylbenzene               | 9.05  | 91   | 301556   | 24.427 | ug/L   | 100      |
| 54) m,p-Xylene                 | 9.18  | 106  | 113753   | 23.461 | ug/L   | 92       |
| 55) o-xylene                   | 9.59  | 106  | 113585   | 24.134 | ug/L   | 89       |
| 56) Styrene                    | 9.60  | 104  | 197486   | 24.430 | ug/L   | 98       |
| 57) Isopropylbenzene           | 9.97  | 105  | 284531   | 23.304 | ug/L   | 100      |
| 58) 1,1,2,2-Tetrachloroethane  | 10.29 | 83   | 71100    | 25.142 | ug/L   | 99       |
| 59) 1,2,3-Trichloropropane     | 10.32 | 75   | 50691    | 24.837 | ug/L   | 99       |
| 62) Bromoform                  | 9.77  | 173  | 28138    | 26.846 | ug/L   | 96       |
| 63) 1,3-Dichlorobenzene        | 11.23 | 146  | 126556   | 25.110 | ug/L   | 97       |
| 64) 1,4-Dichlorobenzene        | 11.32 | 146  | 132970   | 24.276 | ug/L   | 99       |
| 65) 1,2-Dichlorobenzene        | 11.69 | 146  | 125446   | 25.220 | ug/L   | 98       |
| 66) 1,2-Dibromo-3-chloropropan | 12.48 | 75   | 7917     | 25.466 | ug/L   | 86       |
| 67) 1,3,5-Trichlorobenzene     | 12.69 | 180  | 84933    | 23.729 | ug/L   | 98       |
| 68) 1,2,4-trichlorobenzene     | 13.31 | 180  | 65448    | 24.788 | ug/L   | 99       |
| 69) Naphthalene                | 13.55 | 128  | 107816   | 24.566 | ug/L   | 98       |
| 70) 1,2,3-Trichlorobenzene     | 13.79 | 180  | 64647    | 25.750 | ug/L   | 97       |

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

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