

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV021219\  
 Data File : VV009287.D  
 Acq On : 12 Feb 2019 14:57  
 Operator : SY/MD  
 Sample : VSTDICV025  
 Misc : 5.00G/10ML/MSVOA V/SOIL  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VICV66

Quant Time: Feb 13 07:43:15 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SOM2VLM021219S.M  
 Quant Title : VOC Analysis  
 QLast Update : Wed Feb 13 07:40:48 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.66  | 114  | 214157   | 25.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.90  | 117  | 208438   | 25.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.30 | 152  | 99778    | 25.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |        |       |          |          |      |        |
|--------------------------------|--------|-------|----------|----------|------|--------|
| 4) Vinyl Chloride-d3           | 1.32   | 65    | 82062    | 22.42    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 89.68% |
| 7) Chloroethane-d5             | 1.58   | 69    | 48533    | 20.80    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 30 - 150 | Recovery | =    | 83.20% |
| 10) 1,1-Dichloroethene-d2      | 2.13   | 63    | 173316   | 23.03    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 45 - 110 | Recovery | =    | 92.12% |
| 20) 2-Butanone-d5              | 3.94   | 46    | 79968    | 48.75    | ug/L | 0.00   |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 97.50% |
| 24) Chloroform-d               | 4.40   | 84    | 152190   | 23.05    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 40 - 150 | Recovery | =    | 92.20% |
| 26) 1,2-Dichloroethane-d4      | 5.08   | 65    | 89421    | 22.95    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 70 - 130 | Recovery | =    | 91.80% |
| 29) Benzene-d6                 | 5.10   | 84    | 294165   | 22.73    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 20 - 135 | Recovery | =    | 90.92% |
| 33) 1,2-Dichloropropane-d6     | 6.12   | 67    | 88835    | 22.08    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 70 - 120 | Recovery | =    | 88.32% |
| 37) Toluene-d8                 | 7.36   | 98    | 272890   | 23.25    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 30 - 130 | Recovery | =    | 93.00% |
| 38) trans-1,3-Dichloropropene- | 7.66   | 79    | 41458    | 23.15    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 30 - 135 | Recovery | =    | 92.60% |
| 39) 2-Hexanone-d5              | 8.14   | 63    | 46305    | 47.43    | ug/L | 0.00   |
| Spiked Amount                  | 50.000 | Range | 20 - 135 | Recovery | =    | 94.86% |
| 48) 1,1,2,2-Tetrachloroethane- | 10.26  | 84    | 90217    | 22.71    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 45 - 120 | Recovery | =    | 90.84% |
| 61) 1,2-Dichlorobenzene-d4     | 11.67  | 152   | 93790    | 23.95    | ug/L | 0.00   |
| Spiked Amount                  | 25.000 | Range | 75 - 120 | Recovery | =    | 95.80% |

## Target Compounds

|                                |      |     |        |        | Ovalue   |
|--------------------------------|------|-----|--------|--------|----------|
| 2) Dichlorodifluoromethane     | 1.14 | 85  | 121013 | 30.440 | ug/L 100 |
| 3) Chloromethane               | 1.25 | 50  | 115499 | 26.957 | ug/L 97  |
| 5) Vinyl chloride              | 1.32 | 62  | 114917 | 26.887 | ug/L 100 |
| 6) Bromomethane                | 1.53 | 94  | 56377  | 27.634 | ug/L 98  |
| 8) Chloroethane                | 1.60 | 64  | 50711  | 22.175 | ug/L 100 |
| 9) Trichlorofluoromethane      | 1.77 | 101 | 160383 | 27.068 | ug/L 99  |
| 11) 1,1,2-Trichloro-1,2,2-trif | 2.14 | 101 | 83481  | 24.431 | ug/L 99  |
| 12) 1,1-Dichloroethene         | 2.14 | 96  | 75440  | 24.205 | ug/L 92  |
| 13) Acetone                    | 2.20 | 43  | 119832 | 51.472 | ug/L 99  |
| 14) Carbon disulfide           | 2.32 | 76  | 286680 | 24.027 | ug/L 99  |
| 15) Methyl Acetate             | 2.46 | 43  | 67795  | 24.019 | ug/L 96  |
| 16) Methylene chloride         | 2.53 | 84  | 95680  | 21.254 | ug/L 100 |
| 17) Methyl tert-butyl Ether    | 2.81 | 73  | 209404 | 24.889 | ug/L 98  |
| 18) trans-1,2-Dichloroethene   | 2.79 | 96  | 86300  | 24.337 | ug/L 98  |
| 19) 1,1-Dichloroethane         | 3.23 | 63  | 165284 | 24.485 | ug/L 99  |
| 21) 2-Butanone                 | 4.03 | 43  | 122864 | 52.025 | ug/L 100 |
| 22) cis-1,2-Dichloroethene     | 3.96 | 96  | 90783  | 24.925 | ug/L 98  |

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| Internal Standards              | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|---------------------------------|-------|------|----------|--------|-------|----------|
| 23) Bromochloromethane          | 4.30  | 128  | 40920    | 25.042 | ug/L  | 98       |
| 25) Chloroform                  | 4.43  | 83   | 161177   | 24.152 | ug/L  | 99       |
| 27) 1,2-Dichloroethane          | 5.18  | 62   | 120001   | 25.056 | ug/L  | 99       |
| 30) Cyclohexane                 | 4.72  | 56   | 165311   | 25.039 | ug/L  | 97       |
| 31) 1,1,1-Trichloroethane       | 4.66  | 97   | 146015   | 24.115 | ug/L  | 98       |
| 32) Carbon tetrachloride        | 4.87  | 117  | 131111   | 24.492 | ug/L  | 98       |
| 34) Benzene                     | 5.15  | 78   | 352265   | 24.667 | ug/L  | 100      |
| 35) Trichloroethene             | 5.96  | 95   | 94290    | 24.348 | ug/L  | 98       |
| 36) Methylcyclohexane           | 6.18  | 83   | 155779   | 24.068 | ug/L  | 99       |
| 40) 1,2-Dichloropropane         | 6.22  | 63   | 92402    | 24.566 | ug/L  | 99       |
| 41) Bromodichloromethane        | 6.55  | 83   | 112880   | 23.216 | ug/L  | 99       |
| 42) cis-1,3-Dichloropropene     | 7.07  | 75   | 136201   | 24.799 | ug/L  | 100      |
| 43) 4-Methyl-2-pentanone        | 7.28  | 43   | 182248   | 50.656 | ug/L  | 99       |
| 44) Toluene                     | 7.43  | 91   | 379885   | 25.353 | ug/L  | 98       |
| 45) trans-1,3-Dichloropropene   | 7.69  | 75   | 116777   | 23.860 | ug/L  | 98       |
| 46) 1,1,2-Trichloroethane       | 7.88  | 97   | 68118    | 23.795 | ug/L  | 99       |
| 47) Tetrachloroethene           | 8.02  | 164  | 72594    | 24.863 | ug/L  | 98       |
| 49) 2-Hexanone                  | 8.19  | 43   | 166340   | 53.916 | ug/L  | 99       |
| 50) Dibromochloromethane        | 8.29  | 129  | 79605    | 24.218 | ug/L  | 99       |
| 51) 1,2-Dibromoethane           | 8.40  | 107  | 69625    | 24.263 | ug/L  | 98       |
| 52) Chlorobenzene               | 8.93  | 112  | 228799   | 24.167 | ug/L  | 99       |
| 53) Ethylbenzene                | 9.06  | 91   | 418550   | 25.212 | ug/L  | 100      |
| 54) m,p-Xylene                  | 9.18  | 106  | 151286   | 24.748 | ug/L  | 100      |
| 55) o-xylene                    | 9.59  | 106  | 144482   | 24.979 | ug/L  | 98       |
| 56) Styrene                     | 9.60  | 104  | 249004   | 25.570 | ug/L  | 100      |
| 57) Isopropylbenzene            | 9.98  | 105  | 402859   | 25.380 | ug/L  | 99       |
| 58) 1,1,1,2,2-Tetrachloroethane | 10.29 | 83   | 98320    | 23.533 | ug/L  | 97       |
| 59) 1,2,3-Trichloropropane      | 10.32 | 75   | 80073    | 24.493 | ug/L  | 99       |
| 62) Bromoform                   | 9.78  | 173  | 47955    | 24.259 | ug/L  | 98       |
| 63) 1,3-Dichlorobenzene         | 11.23 | 146  | 175528   | 24.821 | ug/L  | 98       |
| 64) 1,4-Dichlorobenzene         | 11.32 | 146  | 175594   | 24.569 | ug/L  | 99       |
| 65) 1,2-Dichlorobenzene         | 11.69 | 146  | 167201   | 25.253 | ug/L  | 98       |
| 66) 1,2-Dibromo-3-chloropropan  | 12.48 | 75   | 21074    | 25.190 | ug/L  | 98       |
| 67) 1,3,5-Trichlorobenzene      | 12.69 | 180  | 133433   | 25.412 | ug/L  | 99       |
| 68) 1,2,4-trichlorobenzene      | 13.31 | 180  | 108769   | 26.587 | ug/L  | 99       |
| 69) Naphthalene                 | 13.55 | 128  | 249309   | 30.217 | ug/L  | 99       |
| 70) 1,2,3-Trichlorobenzene      | 13.79 | 180  | 103366   | 27.803 | ug/L  | 100      |

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

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