

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU073119\  
 Data File : VU033502.D  
 Acq On : 30 Jul 2019 19:12  
 Operator : JC/SP  
 Sample : MDL02  
 Misc : 5.0mL/MSVOA U/WATER  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 MDL02

Manual Integrations  
 APPROVED

MMDadoda  
 7/31/2019 10:33:59 AM

Quant Time: Jul 31 08:26:05 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SOMULM073119WMA.M  
 Quant Title : VOC Analysis  
 QLast Update : Wed Jul 31 08:02:52 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.86  | 114  | 321706   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.07  | 117  | 313794   | 50.00 | ug/L  | 0.00     |
| 60) 1,4-Dichlorobenzene-d4 | 11.47 | 152  | 154768   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |         |
|--------------------------------|---------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.39    | 65    | 111576   | 47.70    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 95.40%  |
| 7) Chloroethane-d5             | 1.67    | 69    | 96764    | 48.22    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 96.44%  |
| 11) 1,1-Dichloroethene-d2      | 2.26    | 63    | 153784   | 36.23    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 72.46%  |
| 21) 2-Butanone-d5              | 4.15    | 46    | 157607   | 101.73   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 101.73% |
| 24) Chloroform-d               | 4.62    | 84    | 188732   | 48.14    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 96.28%  |
| 26) 1,2-Dichloroethane-d4      | 5.29    | 65    | 122934   | 49.51    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 99.02%  |
| 32) Benzene-d6                 | 5.32    | 84    | 389426   | 50.06    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 100.12% |
| 36) 1,2-Dichloropropane-d6     | 6.31    | 67    | 124234   | 50.95    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 101.90% |
| 41) Toluene-d8                 | 7.55    | 98    | 357844   | 49.09    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 98.18%  |
| 43) trans-1,3-Dichloropropene- | 7.83    | 79    | 57686    | 47.69    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 95.38%  |
| 47) 2-Hexanone-d5              | 8.30    | 63    | 119146   | 102.91   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 102.91% |
| 57) 1,1,2,2-Tetrachloroethane- | 10.41   | 84    | 181248   | 48.20    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 96.40%  |
| 64) 1,2-Dichlorobenzene-d4     | 11.85   | 152   | 143115   | 50.50    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 101.00% |

## Target Compounds

|                                |      |     |       |              | Ovalue |
|--------------------------------|------|-----|-------|--------------|--------|
| 2) Dichlorodifluoromethane     | 1.20 | 85  | 7336  | 2.418 ug/L   | 98     |
| 3) Chloromethane               | 1.32 | 50  | 7758  | 2.539 ug/L   | 99     |
| 5) Vinyl chloride              | 1.40 | 62  | 8393  | 2.562 ug/L # | 68     |
| 6) Bromomethane                | 1.62 | 94  | 6000  | 2.076 ug/L   | 99     |
| 8) Chloroethane                | 1.69 | 64  | 5750  | 2.889 ug/L   | 90     |
| 9) Trichlorofluoromethane      | 1.87 | 101 | 10786 | 2.517 ug/L   | 100    |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.27 | 101 | 6616  | 3.045 ug/L   | 85     |
| 12) 1,1-Dichloroethene         | 2.27 | 96  | 6648  | 3.191 ug/L # | 1      |
| 13) Acetone                    | 2.31 | 43  | 8183  | 5.163 ug/L   | 93     |
| 14) Carbon disulfide           | 2.46 | 76  | 17534 | 2.683 ug/L   | 99     |
| 15) Methyl Acetate             | 2.60 | 43  | 6126  | 2.428 ug/L   | 92     |
| 16) Methylene chloride         | 2.68 | 84  | 6343  | 2.666 ug/L   | 99     |
| 17) trans-1,2-Dichloroethene   | 2.97 | 96  | 5508  | 2.524 ug/L   | 96     |
| 18) Methyl tert-butyl Ether    | 2.98 | 73  | 15394 | 2.313 ug/L   | 98     |
| 19) 1,1-Dichloroethane         | 3.42 | 63  | 10256 | 2.503 ug/L   | 95     |
| 20) cis-1,2-Dichloroethene     | 4.20 | 96  | 5989m | 2.445 ug/L   |        |
| 22) 2-Butanone                 | 4.25 | 43  | 8809m | 4.655 ug/L   |        |

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| Internal Standards             | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|-------|--------|----------|
| -----                          |       |      |          |       |        |          |
| 23) Bromochloromethane         | 4.53  | 128  | 2958     | 2.314 | ug/L   | 92       |
| 25) Chloroform                 | 4.65  | 83   | 15196    | 3.525 | ug/L   | 98       |
| 27) 1,2-Dichloroethane         | 5.38  | 62   | 8101     | 2.440 | ug/L   | 99       |
| 29) Cyclohexane                | 4.97  | 56   | 7830     | 2.288 | ug/L   | 97       |
| 30) 1,1,1-Trichloroethane      | 4.89  | 97   | 8958     | 2.481 | ug/L   | 99       |
| 31) Carbon tetrachloride       | 5.11  | 117  | 7384     | 2.348 | ug/L   | 95       |
| 33) Benzene                    | 5.37  | 78   | 24132    | 2.666 | ug/L   | 100      |
| 34) Trichloroethene            | 6.17  | 95   | 6101     | 2.555 | ug/L   | 94       |
| 35) Methylcyclohexane          | 6.40  | 83   | 8615     | 2.312 | ug/L   | 98       |
| 37) 1,2-Dichloropropane        | 6.42  | 63   | 5983     | 2.469 | ug/L # | 90       |
| 38) Bromodichloromethane       | 6.74  | 83   | 7706     | 2.460 | ug/L   | 96       |
| 39) cis-1,3-Dichloropropene    | 7.25  | 75   | 9077     | 2.400 | ug/L   | 94       |
| 40) 4-Methyl-2-pentanone       | 7.45  | 43   | 15229    | 4.552 | ug/L   | 99       |
| 42) Toluene                    | 7.62  | 91   | 25537    | 2.624 | ug/L   | 95       |
| 44) trans-1,3-Dichloropropene  | 7.86  | 75   | 8691     | 2.543 | ug/L   | 100      |
| 45) 1,1,2-Trichloroethane      | 8.05  | 97   | 5732     | 2.492 | ug/L   | 95       |
| 46) Tetrachloroethene          | 8.21  | 164  | 4725     | 2.424 | ug/L   | 94       |
| 48) 2-Hexanone                 | 8.35  | 43   | 14558    | 5.383 | ug/L   | 97       |
| 49) Dibromochloromethane       | 8.46  | 129  | 6250     | 2.388 | ug/L   | 90       |
| 50) 1,2-Dibromoethane          | 8.57  | 107  | 6558     | 2.574 | ug/L # | 87       |
| 51) Chlorobenzene              | 9.10  | 112  | 16297    | 2.557 | ug/L   | 96       |
| 52) Ethylbenzene               | 9.23  | 91   | 24951    | 2.380 | ug/L   | 97       |
| 53) m,p-Xylene                 | 9.36  | 106  | 8410     | 2.090 | ug/L   | 86       |
| 54) o-xylene                   | 9.76  | 106  | 8407     | 2.154 | ug/L   | 94       |
| 55) Styrene                    | 9.78  | 104  | 13959    | 2.106 | ug/L   | 90       |
| 56) Isopropylbenzene           | 10.15 | 105  | 21226    | 2.081 | ug/L   | 99       |
| 58) 1,1,2,2-Tetrachloroethane  | 10.44 | 83   | 11212    | 2.702 | ug/L   | 94       |
| 59) 1,2,3-Trichloropropane     | 10.48 | 75   | 7908     | 2.473 | ug/L   | 99       |
| 61) Bromoform                  | 9.94  | 173  | 4860     | 2.600 | ug/L # | 98       |
| 62) 1,3-Dichlorobenzene        | 11.40 | 146  | 12525    | 2.635 | ug/L   | 94       |
| 63) 1,4-Dichlorobenzene        | 11.49 | 146  | 13426    | 2.719 | ug/L   | 97       |
| 65) 1,2-Dichlorobenzene        | 11.86 | 146  | 12887    | 2.681 | ug/L   | 91       |
| 66) 1,2-Dibromo-3-chloropropan | 12.65 | 75   | 2121     | 2.389 | ug/L   | 90       |
| 67) 1,3,5-Trichlorobenzene     | 12.88 | 180  | 9802     | 2.556 | ug/L   | 94       |
| 68) 1,2,4-trichlorobenzene     | 13.50 | 180  | 6229     | 1.901 | ug/L   | 98       |
| 69) Naphthalene                | 13.74 | 128  | 14408    | 1.533 | ug/L   | 95       |
| 70) 1,2,3-Trichlorobenzene     | 13.98 | 180  | 7652     | 2.221 | ug/L   | 94       |
| -----                          |       |      |          |       |        |          |

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

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