

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU073019\  
 Data File : VU033487.D  
 Acq On : 30 Jul 2019 12:11  
 Operator : JC/SP  
 Sample : MDL03  
 Misc : 5.00u/5mL/100uL/5.0mL/MSVOA\_U/MEOH  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 MDL03

Manual Integrations  
 APPROVED

MMdadoda  
 8/1/2019 3:14:54 PM

Quant Time: Jul 31 09:05:07 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SFAMULM072919W.M  
 Quant Title : VOC Analysis  
 QLast Update : Wed Jul 31 08:44:45 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.86  | 114  | 296071   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.07  | 117  | 306293   | 50.00 | ug/L  | 0.00     |
| 58) 1,4-Dichlorobenzene-d4 | 11.47 | 152  | 142699   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |         |
|--------------------------------|---------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.39    | 65    | 116458   | 43.32    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 86.64%  |
| 7) Chloroethane-d5             | 1.67    | 69    | 102358   | 46.08    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 92.16%  |
| 11) 1,1-Dichloroethene-d2      | 2.25    | 63    | 162630   | 33.08    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 66.16%  |
| 21) 2-Butanone-d5              | 4.15    | 46    | 145615   | 94.52    | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 94.52%  |
| 24) Chloroform-d               | 4.62    | 84    | 179301   | 44.56    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 89.12%  |
| 26) 1,2-Dichloroethane-d4      | 5.29    | 65    | 123833   | 47.71    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 95.42%  |
| 32) Benzene-d6                 | 5.32    | 84    | 384675   | 46.79    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 93.58%  |
| 36) 1,2-Dichloropropane-d6     | 6.31    | 67    | 122087   | 47.87    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 95.74%  |
| 41) Toluene-d8                 | 7.55    | 98    | 350868   | 45.39    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 90.78%  |
| 43) trans-1,3-Dichloropropene- | 7.83    | 79    | 55744    | 44.73    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 89.46%  |
| 47) 2-Hexanone-d5              | 8.29    | 63    | 106844   | 100.85   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 100.85% |
| 56) 1,1,2,2-Tetrachloroethane- | 10.41   | 84    | 184252   | 47.07    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 94.14%  |
| 66) 1,2-Dichlorobenzene-d4     | 11.85   | 152   | 136859   | 49.91    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 99.82%  |

## Target Compounds

| Target Compounds               | R.T. | QIon | Response | Conc  | Units  | Ovalue |
|--------------------------------|------|------|----------|-------|--------|--------|
| 2) Dichlorodifluoromethane     | 1.20 | 85   | 6265     | 2.121 | ug/L   | 98     |
| 3) Chloromethane               | 1.32 | 50   | 6723     | 2.280 | ug/L   | 95     |
| 5) Vinyl chloride              | 1.40 | 62   | 7873     | 2.334 | ug/L # | 74     |
| 6) Bromomethane                | 1.62 | 94   | 4868     | 2.065 | ug/L   | 94     |
| 8) Chloroethane                | 1.69 | 64   | 4731     | 2.287 | ug/L   | 99     |
| 9) Trichlorofluoromethane      | 1.87 | 101  | 9782     | 2.211 | ug/L   | 93     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.27 | 101  | 6170     | 2.776 | ug/L # | 85     |
| 12) 1,1-Dichloroethene         | 2.27 | 96   | 5950     | 2.747 | ug/L # | 1      |
| 13) Acetone                    | 2.31 | 43   | 7430     | 4.867 | ug/L   | 94     |
| 14) Carbon disulfide           | 2.46 | 76   | 14336    | 2.221 | ug/L   | 95     |
| 15) Methyl Acetate             | 2.60 | 43   | 5381     | 2.198 | ug/L   | 99     |
| 16) Methylene chloride         | 2.68 | 84   | 5595     | 2.351 | ug/L   | 96     |
| 17) trans-1,2-Dichloroethene   | 2.96 | 96   | 5061     | 2.352 | ug/L   | 85     |
| 18) Methyl tert-butyl Ether    | 2.98 | 73   | 12956    | 2.041 | ug/L   | 96     |
| 19) 1,1-Dichloroethane         | 3.42 | 63   | 8639     | 2.133 | ug/L   | 96     |
| 20) cis-1,2-Dichloroethene     | 4.20 | 96   | 5210m    | 2.194 | ug/L   |        |
| 22) 2-Butanone                 | 4.25 | 43   | 7747m    | 4.271 | ug/L   |        |

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 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|-------|--------|----------|
| 23) Bromochloromethane         | 4.52  | 128  | 2694     | 2.136 | ug/L   | 94       |
| 25) Chloroform                 | 4.65  | 83   | 24587    | 5.724 | ug/L   | 97       |
| 27) 1,2-Dichloroethane         | 5.39  | 62   | 7362     | 2.207 | ug/L   | 99       |
| 29) Cyclohexane                | 4.97  | 56   | 6578     | 1.955 | ug/L   | 96       |
| 30) 1,1,1-Trichloroethane      | 4.89  | 97   | 8038     | 2.204 | ug/L   | 98       |
| 31) Carbon tetrachloride       | 5.11  | 117  | 6849     | 2.110 | ug/L   | 95       |
| 33) Benzene                    | 5.37  | 78   | 19126    | 2.089 | ug/L   | 100      |
| 34) Trichloroethene            | 6.17  | 95   | 5264     | 2.207 | ug/L   | 96       |
| 35) Methylcyclohexane          | 6.39  | 83   | 7866     | 2.169 | ug/L   | 94       |
| 37) 1,2-Dichloropropane        | 6.41  | 63   | 5446     | 2.212 | ug/L # | 96       |
| 38) Bromodichloromethane       | 6.74  | 83   | 6672     | 2.058 | ug/L   | 88       |
| 39) cis-1,3-Dichloropropene    | 7.26  | 75   | 7191     | 1.959 | ug/L   | 97       |
| 40) 4-Methyl-2-pentanone       | 7.45  | 43   | 12972    | 3.998 | ug/L   | 98       |
| 42) Toluene                    | 7.62  | 91   | 21995    | 2.233 | ug/L   | 100      |
| 44) trans-1,3-Dichloropropene  | 7.86  | 75   | 6967     | 2.091 | ug/L   | 95       |
| 45) 1,1,2-Trichloroethane      | 8.05  | 97   | 4986     | 2.123 | ug/L   | 95       |
| 46) Tetrachloroethene          | 8.21  | 164  | 4020     | 2.071 | ug/L   | 97       |
| 48) 2-Hexanone                 | 8.35  | 43   | 14851    | 5.618 | ug/L   | 95       |
| 49) Dibromochloromethane       | 8.46  | 129  | 5628     | 2.140 | ug/L   | 99       |
| 50) 1,2-Dibromoethane          | 8.57  | 107  | 5423     | 2.129 | ug/L # | 100      |
| 51) Chlorobenzene              | 9.10  | 112  | 13538    | 2.068 | ug/L   | 94       |
| 52) Ethylbenzene               | 9.23  | 91   | 20564    | 1.926 | ug/L   | 97       |
| 53) m,p-Xylene                 | 9.36  | 106  | 7270     | 1.810 | ug/L   | 86       |
| 54) o-xylene                   | 9.76  | 106  | 7294     | 1.852 | ug/L   | 97       |
| 55) Styrene                    | 9.78  | 104  | 12233    | 1.831 | ug/L   | 94       |
| 57) 1,1,2,2-Tetrachloroethane  | 10.44 | 83   | 9939     | 2.381 | ug/L # | 96       |
| 59) Bromoform                  | 9.94  | 173  | 3895     | 2.182 | ug/L   | 98       |
| 60) 1,2,3-Trichloropropane     | 10.48 | 75   | 7559     | 2.600 | ug/L   | 96       |
| 61) Isopropylbenzene           | 10.15 | 105  | 18033    | 1.973 | ug/L   | 98       |
| 62) 1,3,5-Trimethylbenzene     | 10.76 | 105  | 13226    | 1.786 | ug/L   | 100      |
| 63) 1,2,4-Trimethylbenzene     | 11.13 | 105  | 13166    | 1.793 | ug/L   | 100      |
| 64) 1,3-Dichlorobenzene        | 11.40 | 146  | 9845     | 2.113 | ug/L   | 98       |
| 65) 1,4-Dichlorobenzene        | 11.49 | 146  | 10793    | 2.242 | ug/L   | 91       |
| 67) 1,2-Dichlorobenzene        | 11.86 | 146  | 11310    | 2.423 | ug/L   | 94       |
| 68) 1,2-Dibromo-3-chloropropan | 12.65 | 75   | 1813     | 2.243 | ug/L   | 90       |
| 69) 1,3,5-Trichlorobenzene     | 12.88 | 180  | 6742     | 1.906 | ug/L   | 97       |
| 70) 1,2,4-trichlorobenzene     | 13.50 | 180  | 4461     | 1.511 | ug/L   | 92       |
| 71) Naphthalene                | 13.74 | 128  | 11142m   | 1.305 | ug/L   |          |
| 72) 1,2,3-Trichlorobenzene     | 13.98 | 180  | 5002     | 1.617 | ug/L # | 91       |

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

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