

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU073019\  
 Data File : VU033489.D  
 Acq On : 30 Jul 2019 12:58  
 Operator : JC/SP  
 Sample : MDL05  
 Misc : 5.00uL/5mL/100uL/5.0mL/MSVOA\_U/MEOH  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 MDL05

Manual Integrations  
 APPROVED

MMdadoda  
 8/1/2019 3:14:58 PM

Quant Time: Jul 31 09:08:02 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  | 280611   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.07  | 117  | 291755   | 50.00 | ug/L  | 0.00     |
| 58) 1,4-Dichlorobenzene-d4 | 11.47 | 152  | 137263   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |         |
|--------------------------------|---------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.39    | 65    | 113850   | 44.68    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 89.36%  |
| 7) Chloroethane-d5             | 1.67    | 69    | 101227   | 48.08    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 96.16%  |
| 11) 1,1-Dichloroethene-d2      | 2.26    | 63    | 155564   | 33.39    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 66.78%  |
| 21) 2-Butanone-d5              | 4.15    | 46    | 138175   | 94.64    | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 94.64%  |
| 24) Chloroform-d               | 4.62    | 84    | 177431   | 46.53    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 93.06%  |
| 26) 1,2-Dichloroethane-d4      | 5.29    | 65    | 121938   | 49.56    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 99.12%  |
| 32) Benzene-d6                 | 5.32    | 84    | 374134   | 47.77    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 95.54%  |
| 36) 1,2-Dichloropropane-d6     | 6.31    | 67    | 119413   | 49.15    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 98.30%  |
| 41) Toluene-d8                 | 7.55    | 98    | 342401   | 46.50    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 93.00%  |
| 43) trans-1,3-Dichloropropene- | 7.83    | 79    | 53389    | 44.97    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 89.94%  |
| 47) 2-Hexanone-d5              | 8.29    | 63    | 101504   | 100.58   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 100.58% |
| 56) 1,1,2,2-Tetrachloroethane- | 10.41   | 84    | 180162   | 48.32    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 96.64%  |
| 66) 1,2-Dichlorobenzene-d4     | 11.85   | 152   | 135433   | 51.35    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 102.70% |

## Target Compounds

|                                |      |     |       |              | Ovalue |
|--------------------------------|------|-----|-------|--------------|--------|
| 2) Dichlorodifluoromethane     | 1.20 | 85  | 7892  | 2.819 ug/L   | 97     |
| 3) Chloromethane               | 1.32 | 50  | 8175  | 2.925 ug/L   | 94     |
| 5) Vinyl chloride              | 1.40 | 62  | 8794  | 2.751 ug/L # | 67     |
| 6) Bromomethane                | 1.62 | 94  | 5287  | 2.366 ug/L   | 93     |
| 8) Chloroethane                | 1.69 | 64  | 5863  | 2.990 ug/L   | 95     |
| 9) Trichlorofluoromethane      | 1.87 | 101 | 12028 | 2.869 ug/L   | 97     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.27 | 101 | 7353  | 3.490 ug/L # | 83     |
| 12) 1,1-Dichloroethene         | 2.27 | 96  | 6994  | 3.407 ug/L # | 1      |
| 13) Acetone                    | 2.31 | 43  | 7687  | 5.312 ug/L   | 99     |
| 14) Carbon disulfide           | 2.46 | 76  | 16449 | 2.689 ug/L   | 97     |
| 15) Methyl Acetate             | 2.60 | 43  | 6473  | 2.789 ug/L   | 100    |
| 16) Methylene chloride         | 2.68 | 84  | 6499  | 2.881 ug/L   | 91     |
| 17) trans-1,2-Dichloroethene   | 2.96 | 96  | 5542  | 2.718 ug/L   | 94     |
| 18) Methyl tert-butyl Ether    | 2.98 | 73  | 15842 | 2.633 ug/L   | 98     |
| 19) 1,1-Dichloroethane         | 3.42 | 63  | 11079 | 2.886 ug/L   | 99     |
| 20) cis-1,2-Dichloroethene     | 4.21 | 96  | 6594  | 2.930 ug/L   | 93     |
| 22) 2-Butanone                 | 4.25 | 43  | 7120  | 4.141 ug/L   | 96     |

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 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|-------|--------|----------|
| 23) Bromochloromethane         | 4.53  | 128  | 3217m    | 2.691 | ug/L   |          |
| 25) Chloroform                 | 4.65  | 83   | 22946    | 5.637 | ug/L   | 98       |
| 27) 1,2-Dichloroethane         | 5.39  | 62   | 9852     | 3.116 | ug/L   | 99       |
| 29) Cyclohexane                | 4.97  | 56   | 7338     | 2.289 | ug/L   | 94       |
| 30) 1,1,1-Trichloroethane      | 4.89  | 97   | 9512     | 2.738 | ug/L   | 98       |
| 31) Carbon tetrachloride       | 5.11  | 117  | 8470     | 2.739 | ug/L   | 99       |
| 33) Benzene                    | 5.37  | 78   | 22933    | 2.630 | ug/L   | 100      |
| 34) Trichloroethene            | 6.17  | 95   | 6482     | 2.853 | ug/L   | 88       |
| 35) Methylcyclohexane          | 6.39  | 83   | 9118     | 2.639 | ug/L   | 94       |
| 37) 1,2-Dichloropropane        | 6.41  | 63   | 6530     | 2.784 | ug/L # | 90       |
| 38) Bromodichloromethane       | 6.74  | 83   | 8223     | 2.663 | ug/L   | 96       |
| 39) cis-1,3-Dichloropropene    | 7.25  | 75   | 9175     | 2.623 | ug/L   | 92       |
| 40) 4-Methyl-2-pentanone       | 7.44  | 43   | 15212    | 4.922 | ug/L   | 96       |
| 42) Toluene                    | 7.62  | 91   | 25441    | 2.711 | ug/L   | 98       |
| 44) trans-1,3-Dichloropropene  | 7.87  | 75   | 8285m    | 2.610 | ug/L   |          |
| 45) 1,1,2-Trichloroethane      | 8.05  | 97   | 6032     | 2.697 | ug/L   | 92       |
| 46) Tetrachloroethene          | 8.21  | 164  | 4724     | 2.555 | ug/L   | 93       |
| 48) 2-Hexanone                 | 8.35  | 43   | 14758    | 5.861 | ug/L # | 88       |
| 49) Dibromochloromethane       | 8.46  | 129  | 6581     | 2.628 | ug/L   | 96       |
| 50) 1,2-Dibromoethane          | 8.57  | 107  | 6548     | 2.698 | ug/L   | 96       |
| 51) Chlorobenzene              | 9.10  | 112  | 17418    | 2.793 | ug/L   | 96       |
| 52) Ethylbenzene               | 9.23  | 91   | 25192    | 2.476 | ug/L   | 96       |
| 53) m,p-Xylene                 | 9.36  | 106  | 9333     | 2.440 | ug/L   | 98       |
| 54) o-xylene                   | 9.76  | 106  | 8781     | 2.341 | ug/L   | 93       |
| 55) Styrene                    | 9.78  | 104  | 13838    | 2.174 | ug/L   | 98       |
| 57) 1,1,2,2-Tetrachloroethane  | 10.44 | 83   | 12067    | 3.034 | ug/L   | 98       |
| 59) Bromoform                  | 9.94  | 173  | 4659     | 2.713 | ug/L   | 97       |
| 60) 1,2,3-Trichloropropane     | 10.48 | 75   | 8903     | 3.184 | ug/L   | 96       |
| 61) Isopropylbenzene           | 10.15 | 105  | 22291    | 2.535 | ug/L   | 100      |
| 62) 1,3,5-Trimethylbenzene     | 10.76 | 105  | 16903    | 2.373 | ug/L   | 99       |
| 63) 1,2,4-Trimethylbenzene     | 11.13 | 105  | 16109    | 2.280 | ug/L   | 94       |
| 64) 1,3-Dichlorobenzene        | 11.40 | 146  | 12374    | 2.761 | ug/L   | 98       |
| 65) 1,4-Dichlorobenzene        | 11.49 | 146  | 13597    | 2.937 | ug/L   | 98       |
| 67) 1,2-Dichlorobenzene        | 11.86 | 146  | 13422    | 2.989 | ug/L # | 90       |
| 68) 1,2-Dibromo-3-chloropropan | 12.64 | 75   | 1938     | 2.493 | ug/L   | 94       |
| 69) 1,3,5-Trichlorobenzene     | 12.88 | 180  | 8175     | 2.403 | ug/L   | 94       |
| 70) 1,2,4-trichlorobenzene     | 13.50 | 180  | 5358     | 1.887 | ug/L   | 98       |
| 71) Naphthalene                | 13.74 | 128  | 14024m   | 1.708 | ug/L   |          |
| 72) 1,2,3-Trichlorobenzene     | 13.98 | 180  | 6101m    | 2.051 | ug/L   |          |

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

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