

Data Path : Z:\VOASRV\HPCHEM1\MSVOA U\DATA\VU020720\  
 Data File : VU036699.D  
 Acq On : 07 Feb 2020 13:36  
 Operator : JC/MD  
 Sample : MDL02  
 Misc : 5.00uL/5.0mL/100uL/5.0mL/MSVOA\_U/MEOH  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 MSVOA\_U  
 ClientSampleId :  
 MDL02

Quant Time: Feb 07 22:40:43 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_U\METHOD\SFAMULM020620W.M  
 Quant Title : VOC Analysis  
 QLast Update : Fri Feb 07 22:36:50 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 6.29  | 114  | 261231   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 9.45  | 117  | 240763   | 50.00 | ug/L  | 0.00     |
| 58) 1,4-Dichlorobenzene-d4 | 11.83 | 152  | 103933   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |         |
|--------------------------------|---------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.61    | 65    | 77470    | 44.47    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 88.94%  |
| 7) Chloroethane-d5             | 1.93    | 69    | 75253    | 46.58    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 93.16%  |
| 11) 1,1-Dichloroethene-d2      | 2.59    | 63    | 113229   | 34.43    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 68.86%  |
| 21) 2-Butanone-d5              | 4.68    | 46    | 117430   | 79.01    | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 79.01%  |
| 24) Chloroform-d               | 5.11    | 84    | 140189   | 44.46    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 88.92%  |
| 26) 1,2-Dichloroethane-d4      | 5.75    | 65    | 105644   | 48.99    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 97.98%  |
| 32) Benzene-d6                 | 5.77    | 84    | 315680   | 49.87    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 99.74%  |
| 36) 1,2-Dichloropropane-d6     | 6.73    | 67    | 105829   | 50.36    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 100.72% |
| 41) Toluene-d8                 | 7.93    | 98    | 285781   | 49.30    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 98.60%  |
| 43) trans-1,3-Dichloropropene- | 8.21    | 79    | 49204    | 48.91    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 97.82%  |
| 47) 2-Hexanone-d5              | 8.67    | 63    | 122943   | 102.52   | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 102.52% |
| 56) 1,1,2,2-Tetrachloroethane- | 10.78   | 84    | 154252   | 49.81    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 99.62%  |
| 66) 1,2-Dichlorobenzene-d4     | 12.21   | 152   | 94920    | 50.27    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 100.54% |

## Target Compounds

| Target Compounds               | R.T. | QIon | Response | Conc  | Units  | Ovalue |
|--------------------------------|------|------|----------|-------|--------|--------|
| 2) Dichlorodifluoromethane     | 1.39 | 85   | 4064     | 2.252 | ug/L   | 100    |
| 3) Chloromethane               | 1.54 | 50   | 5005     | 2.340 | ug/L   | 97     |
| 5) Vinyl chloride              | 1.62 | 62   | 5542     | 2.407 | ug/L # | 54     |
| 6) Bromomethane                | 1.87 | 94   | 3278     | 2.270 | ug/L   | 89     |
| 8) Chloroethane                | 1.95 | 64   | 3074     | 2.103 | ug/L   | 95     |
| 9) Trichlorofluoromethane      | 2.16 | 101  | 6138     | 2.243 | ug/L   | 99     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.61 | 101  | 4810     | 2.935 | ug/L # | 84     |
| 12) 1,1-Dichloroethene         | 2.60 | 96   | 4291     | 2.689 | ug/L # | 1      |
| 13) Acetone                    | 2.66 | 43   | 9542     | 6.043 | ug/L   | 99     |
| 14) Carbon disulfide           | 2.82 | 76   | 10495    | 2.201 | ug/L   | 99     |
| 15) Methyl Acetate             | 2.99 | 43   | 5170     | 2.265 | ug/L   | 100    |
| 16) Methylene chloride         | 3.08 | 84   | 4997     | 2.537 | ug/L   | 95     |
| 17) trans-1,2-Dichloroethene   | 3.39 | 96   | 4046     | 2.383 | ug/L   | 97     |
| 18) Methyl tert-butyl Ether    | 3.41 | 73   | 13283    | 2.254 | ug/L   | 99     |
| 19) 1,1-Dichloroethane         | 3.92 | 63   | 7766     | 2.296 | ug/L   | 97     |
| 20) cis-1,2-Dichloroethene     | 4.72 | 96   | 4584     | 2.370 | ug/L   | 95     |
| 22) 2-Butanone                 | 4.75 | 43   | 14148    | 7.550 | ug/L   | 84     |

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| Internal Standards             | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|-------|--------|----------|
| 23) Bromochloromethane         | 5.02  | 128  | 2012     | 2.219 | ug/L   | 90       |
| 25) Chloroform                 | 5.14  | 83   | 19307    | 5.868 | ug/L   | 98       |
| 27) 1,2-Dichloroethane         | 5.84  | 62   | 6487     | 2.345 | ug/L   | 96       |
| 29) Cyclohexane                | 5.43  | 56   | 6839     | 2.211 | ug/L   | 94       |
| 30) 1,1,1-Trichloroethane      | 5.36  | 97   | 5972     | 2.335 | ug/L   | 97       |
| 31) Carbon tetrachloride       | 5.57  | 117  | 4603     | 2.223 | ug/L   | 90       |
| 33) Benzene                    | 5.82  | 78   | 17168    | 2.358 | ug/L   | 100      |
| 34) Trichloroethene            | 6.58  | 95   | 4148     | 2.303 | ug/L   | 92       |
| 35) Methylcyclohexane          | 6.80  | 83   | 6988     | 2.203 | ug/L   | 94       |
| 37) 1,2-Dichloropropane        | 6.83  | 63   | 4609     | 2.347 | ug/L # | 91       |
| 38) Bromodichloromethane       | 7.14  | 83   | 5193     | 2.176 | ug/L   | 96       |
| 39) cis-1,3-Dichloropropene    | 7.64  | 75   | 6943     | 2.213 | ug/L   | 96       |
| 40) 4-Methyl-2-pentanone       | 7.83  | 43   | 14532    | 4.684 | ug/L   | 99       |
| 42) Toluene                    | 8.00  | 91   | 19550    | 2.484 | ug/L   | 97       |
| 44) trans-1,3-Dichloropropene  | 8.24  | 75   | 6480     | 2.364 | ug/L   | 98       |
| 45) 1,1,2-Trichloroethane      | 8.43  | 97   | 4194     | 2.341 | ug/L   | 97       |
| 46) Tetrachloroethene          | 8.58  | 164  | 3176     | 2.513 | ug/L   | 97       |
| 48) 2-Hexanone                 | 8.72  | 43   | 12731    | 5.030 | ug/L   | 97       |
| 49) Dibromochloromethane       | 8.84  | 129  | 3813     | 2.176 | ug/L   | 97       |
| 50) 1,2-Dibromoethane          | 8.95  | 107  | 4254     | 2.260 | ug/L # | 94       |
| 51) Chlorobenzene              | 9.47  | 112  | 10926    | 2.306 | ug/L   | 96       |
| 52) Ethylbenzene               | 9.60  | 91   | 19076    | 2.206 | ug/L   | 96       |
| 53) m,p-Xylene                 | 9.72  | 106  | 7257     | 2.275 | ug/L   | 98       |
| 54) o-xylene                   | 10.13 | 106  | 7199     | 2.278 | ug/L   | 89       |
| 55) Styrene                    | 10.14 | 104  | 11211    | 2.129 | ug/L   | 99       |
| 57) 1,1,2,2-Tetrachloroethane  | 10.81 | 83   | 8113     | 2.513 | ug/L # | 95       |
| 59) Bromoform                  | 10.32 | 173  | 2509     | 2.185 | ug/L # | 95       |
| 60) 1,2,3-Trichloropropane     | 10.85 | 75   | 6212     | 2.541 | ug/L   | 98       |
| 61) Isopropylbenzene           | 10.51 | 105  | 18225    | 2.355 | ug/L   | 99       |
| 62) 1,3,5-Trimethylbenzene     | 11.11 | 105  | 15458    | 2.330 | ug/L   | 99       |
| 63) 1,2,4-Trimethylbenzene     | 11.49 | 105  | 13830    | 2.087 | ug/L   | 95       |
| 64) 1,3-Dichlorobenzene        | 11.77 | 146  | 7709     | 2.369 | ug/L   | 96       |
| 65) 1,4-Dichlorobenzene        | 11.86 | 146  | 7443     | 2.272 | ug/L   | 91       |
| 67) 1,2-Dichlorobenzene        | 12.24 | 146  | 8072     | 2.450 | ug/L   | 96       |
| 68) 1,2-Dibromo-3-chloropropan | 13.01 | 75   | 1566     | 2.241 | ug/L   | 90       |
| 69) 1,3,5-Trichlorobenzene     | 13.24 | 180  | 4757     | 2.108 | ug/L   | 97       |
| 70) 1,2,4-trichlorobenzene     | 13.86 | 180  | 3001     | 1.595 | ug/L   | 95       |
| 71) Naphthalene                | 14.10 | 128  | 10076    | 1.519 | ug/L   | 98       |
| 72) 1,2,3-Trichlorobenzene     | 14.35 | 180  | 2964     | 1.581 | ug/L   | 92       |

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

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