

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV020620\  
 Data File : VV014520.D  
 Acq On : 06 Feb 2020 15:38  
 Operator : SY/MD  
 Sample : MDL02  
 Misc : 5.0mL/MSVOA V/WATER  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 MDL02

Manual Integrations  
 APPROVED

MMDadoda  
 2/7/2020 1:23:54 PM

Quant Time: Feb 07 01:53:37 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SFAMVLM020620W.M  
 Quant Title : VOC Analysis  
 QLast Update : Fri Feb 07 01:37:17 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) 1,4-Difluorobenzene     | 5.66  | 114  | 407391   | 50.00 | ug/L  | 0.00     |
| 28) Chlorobenzene-d5       | 8.89  | 117  | 376125   | 50.00 | ug/L  | 0.00     |
| 58) 1,4-Dichlorobenzene-d4 | 11.29 | 152  | 192971   | 50.00 | ug/L  | 0.00     |

## System Monitoring Compounds

|                                |         |       |          |          |      |         |
|--------------------------------|---------|-------|----------|----------|------|---------|
| 4) Vinyl Chloride-d3           | 1.32    | 65    | 104124   | 47.13    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 135 | Recovery | =    | 94.26%  |
| 7) Chloroethane-d5             | 1.58    | 69    | 74983    | 49.25    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 130 | Recovery | =    | 98.50%  |
| 11) 1,1-Dichloroethene-d2      | 2.13    | 63    | 124895   | 37.23    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 74.46%  |
| 21) 2-Butanone-d5              | 3.92    | 46    | 163039   | 95.60    | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 40 - 130 | Recovery | =    | 95.60%  |
| 24) Chloroform-d               | 4.40    | 84    | 238266   | 47.33    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 94.66%  |
| 26) 1,2-Dichloroethane-d4      | 5.08    | 65    | 150595   | 49.01    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 98.02%  |
| 32) Benzene-d6                 | 5.09    | 84    | 514094   | 49.36    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 125 | Recovery | =    | 98.72%  |
| 36) 1,2-Dichloropropane-d6     | 6.11    | 67    | 161922   | 50.70    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 70 - 120 | Recovery | =    | 101.40% |
| 41) Toluene-d8                 | 7.35    | 98    | 477530   | 49.79    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 99.58%  |
| 43) trans-1,3-Dichloropropene- | 7.66    | 79    | 84060    | 49.09    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 60 - 125 | Recovery | =    | 98.18%  |
| 47) 2-Hexanone-d5              | 8.13    | 63    | 124754   | 91.82    | ug/L | 0.00    |
| Spiked Amount                  | 100.000 | Range | 45 - 130 | Recovery | =    | 91.82%  |
| 56) 1,1,2,2-Tetrachloroethane- | 10.25   | 84    | 200913   | 48.44    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 65 - 120 | Recovery | =    | 96.88%  |
| 66) 1,2-Dichlorobenzene-d4     | 11.67   | 152   | 182118   | 49.21    | ug/L | 0.00    |
| Spiked Amount                  | 50.000  | Range | 80 - 120 | Recovery | =    | 98.42%  |

## Target Compounds

| Target Compounds               | R.T. | QIon | Response | Conc  | Units  | Ovalue |
|--------------------------------|------|------|----------|-------|--------|--------|
| 2) Dichlorodifluoromethane     | 1.14 | 85   | 8939     | 2.739 | ug/L   | 99     |
| 3) Chloromethane               | 1.26 | 50   | 9017     | 2.729 | ug/L   | 98     |
| 5) Vinyl chloride              | 1.33 | 62   | 6818     | 2.694 | ug/L # | 69     |
| 6) Bromomethane                | 1.54 | 94   | 2917     | 2.506 | ug/L   | 97     |
| 8) Chloroethane                | 1.60 | 64   | 3403     | 2.706 | ug/L   | 99     |
| 9) Trichlorofluoromethane      | 1.77 | 101  | 9193     | 2.696 | ug/L   | 96     |
| 10) 1,1,2-Trichloro-1,2,2-trif | 2.14 | 101  | 5191     | 3.171 | ug/L   | 92     |
| 12) 1,1-Dichloroethene         | 2.14 | 96   | 4947     | 3.159 | ug/L # | 1      |
| 13) Acetone                    | 2.18 | 43   | 8120     | 5.687 | ug/L   | 99     |
| 14) Carbon disulfide           | 2.32 | 76   | 20984    | 2.760 | ug/L   | 99     |
| 15) Methyl Acetate             | 2.46 | 43   | 7309     | 2.662 | ug/L   | 97     |
| 16) Methylene chloride         | 2.54 | 84   | 8350     | 2.808 | ug/L   | 93     |
| 17) trans-1,2-Dichloroethene   | 2.79 | 96   | 7866     | 2.851 | ug/L   | 96     |
| 18) Methyl tert-butyl Ether    | 2.80 | 73   | 22477    | 2.573 | ug/L   | 95     |
| 19) 1,1-Dichloroethane         | 3.23 | 63   | 13063    | 2.648 | ug/L   | 98     |
| 20) cis-1,2-Dichloroethene     | 3.96 | 96   | 7998     | 2.576 | ug/L   | 99     |
| 22) 2-Butanone                 | 4.02 | 43   | 10035m   | 4.752 | ug/L   |        |

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 Misc : 5.0mL/MSVOA V/WATER  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 MDL02

Manual Integrations  
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MMDadoda  
 2/7/2020 1:23:54 PM

Quant Time: Feb 07 01:53:37 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\SFAMVLM020620W.M  
 Quant Title : VOC Analysis  
 QLast Update : Fri Feb 07 01:37:17 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|-------|--------|----------|
| -----                          |       |      |          |       |        |          |
| 23) Bromochloromethane         | 4.30  | 128  | 3557     | 2.420 | ug/L # | 92       |
| 25) Chloroform                 | 4.43  | 83   | 17689    | 3.527 | ug/L   | 97       |
| 27) 1,2-Dichloroethane         | 5.18  | 62   | 10277    | 2.750 | ug/L   | 99       |
| 29) Cyclohexane                | 4.73  | 56   | 11929    | 2.579 | ug/L   | 96       |
| 30) 1,1,1-Trichloroethane      | 4.66  | 97   | 11100    | 2.586 | ug/L # | 66       |
| 31) Carbon tetrachloride       | 4.87  | 117  | 9870     | 2.606 | ug/L   | 98       |
| 33) Benzene                    | 5.15  | 78   | 29587    | 2.676 | ug/L   | 100      |
| 34) Trichloroethene            | 5.96  | 95   | 7811     | 2.665 | ug/L   | 96       |
| 35) Methylcyclohexane          | 6.17  | 83   | 12299    | 2.568 | ug/L   | 98       |
| 37) 1,2-Dichloropropane        | 6.22  | 63   | 7888     | 2.801 | ug/L   | 98       |
| 38) Bromodichloromethane       | 6.55  | 83   | 9874     | 2.612 | ug/L   | 96       |
| 39) cis-1,3-Dichloropropene    | 7.07  | 75   | 11585    | 2.466 | ug/L   | 97       |
| 40) 4-Methyl-2-pentanone       | 7.27  | 43   | 17117    | 4.703 | ug/L   | 97       |
| 42) Toluene                    | 7.43  | 91   | 32482    | 2.740 | ug/L   | 97       |
| 44) trans-1,3-Dichloropropene  | 7.69  | 75   | 10558m   | 2.506 | ug/L   |          |
| 45) 1,1,2-Trichloroethane      | 7.88  | 97   | 7293     | 2.699 | ug/L   | 93       |
| 46) Tetrachloroethene          | 8.02  | 164  | 5947     | 2.660 | ug/L   | 96       |
| 48) 2-Hexanone                 | 8.18  | 43   | 14254    | 5.087 | ug/L   | 94       |
| 49) Dibromochloromethane       | 8.28  | 129  | 7814     | 2.561 | ug/L   | 97       |
| 50) 1,2-Dibromoethane          | 8.39  | 107  | 7190     | 2.457 | ug/L # | 99       |
| 51) Chlorobenzene              | 8.92  | 112  | 20731    | 2.677 | ug/L   | 97       |
| 52) Ethylbenzene               | 9.05  | 91   | 34048    | 2.561 | ug/L   | 97       |
| 53) m,p-Xylene                 | 9.18  | 106  | 12538    | 2.448 | ug/L   | 95       |
| 54) o-Xylene                   | 9.58  | 106  | 12535    | 2.557 | ug/L   | 95       |
| 55) Styrene                    | 9.60  | 104  | 21415    | 2.556 | ug/L   | 94       |
| 57) 1,1,2,2-Tetrachloroethane  | 10.28 | 83   | 12286    | 2.901 | ug/L   | 97       |
| 59) Bromoform                  | 9.77  | 173  | 5326     | 2.475 | ug/L # | 91       |
| 60) Isopropylbenzene           | 9.97  | 105  | 32467    | 2.488 | ug/L   | 99       |
| 61) 1,2,3-Trichloropropane     | 10.32 | 75   | 8848     | 2.589 | ug/L   | 98       |
| 62) 1,3,5-Trimethylbenzene     | 10.58 | 105  | 27278    | 2.442 | ug/L   | 97       |
| 63) 1,2,4-Trimethylbenzene     | 10.95 | 105  | 26340    | 2.392 | ug/L   | 98       |
| 64) 1,3-Dichlorobenzene        | 11.22 | 146  | 15335    | 2.491 | ug/L   | 98       |
| 65) 1,4-Dichlorobenzene        | 11.31 | 146  | 16569    | 2.615 | ug/L   | 99       |
| 67) 1,2-Dichlorobenzene        | 11.68 | 146  | 16336    | 2.737 | ug/L   | 96       |
| 68) 1,2-Dibromo-3-chloropropan | 12.47 | 75   | 2478     | 2.589 | ug/L   | 98       |
| 69) 1,3,5-Trichlorobenzene     | 12.69 | 180  | 11054    | 2.549 | ug/L   | 96       |
| 70) 1,2,4-trichlorobenzene     | 13.31 | 180  | 9829     | 2.469 | ug/L   | 98       |
| 71) Naphthalene                | 13.55 | 128  | 33177    | 2.537 | ug/L   | 99       |
| 72) 1,2,3-Trichlorobenzene     | 13.79 | 180  | 9539     | 2.466 | ug/L   | 96       |
| -----                          |       |      |          |       |        |          |

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

