

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN021220\  
 Data File : VN060078.D  
 Acq On : 12 Feb 2020 17:07  
 Operator : JC/MD  
 Sample : VN0212MBSD01  
 Misc : 5.00µg/10mL/100µL/5.00mL/MSVOA\_N/MEOH  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0212MBSD01

Manual Integrations  
 APPROVED

MMDadoda  
 2/13/2020 10:37:40 AM

Quant Time: Feb 13 01:20:39 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N021220W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Feb 12 14:12:21 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.64  | 168  | 209579   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.57  | 114  | 334840   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.40 | 117  | 311294   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 150539   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.00   | 65  | 134353   | 52.68 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.36% |      |
| 35) Dibromofluoromethane  | 7.56   | 113 | 108883   | 52.90 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.80% |      |
| 50) Toluene-d8            | 10.08  | 98  | 422218   | 52.09 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 104.18% |      |
| 62) 4-Bromofluorobenzene  | 12.40  | 95  | 153533   | 51.55 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.10% |      |

## Target Compounds

|                               |      |     |        |         |        | Qvalue |
|-------------------------------|------|-----|--------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.83 | 85  | 44935  | 21.450  | ug/l   | 98     |
| 3) Chloromethane              | 2.04 | 50  | 52886  | 21.214  | ug/l   | 100    |
| 4) Vinyl Chloride             | 2.17 | 62  | 60565  | 21.314  | ug/l   | 98     |
| 5) Bromomethane               | 2.55 | 94  | 36107  | 20.723  | ug/l   | 98     |
| 6) Chloroethane               | 2.69 | 64  | 30043  | 20.903  | ug/l   | 97     |
| 7) Trichlorofluoromethane     | 3.01 | 101 | 77057  | 21.033  | ug/l   | 99     |
| 8) Diethyl Ether              | 3.39 | 74  | 26595  | 21.807  | ug/l   | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.74 | 101 | 43210  | 21.244  | ug/l   | 98     |
| 10) Methyl Iodide             | 3.93 | 142 | 51542  | 20.406  | ug/l   | 99     |
| 11) Tert butyl alcohol        | 4.73 | 59  | 42488  | 111.334 | ug/l # | 85     |
| 12) 1,1-Dichloroethene        | 3.72 | 96  | 43069  | 21.736  | ug/l   | 96     |
| 13) Acrolein                  | 3.58 | 56  | 31946  | 84.689  | ug/l   | 96     |
| 14) Allyl chloride            | 4.30 | 41  | 62084  | 21.288  | ug/l   | 96     |
| 15) Acrylonitrile             | 4.94 | 53  | 103049 | 110.569 | ug/l   | 99     |
| 16) Acetone                   | 3.78 | 43  | 108157 | 97.229  | ug/l   | 99     |
| 17) Carbon Disulfide          | 4.03 | 76  | 123717 | 20.714  | ug/l   | 99     |
| 18) Methyl Acetate            | 4.29 | 43  | 46575  | 22.289  | ug/l   | 100    |
| 19) Methyl tert-butyl Ether   | 5.00 | 73  | 142798 | 21.430  | ug/l   | 96     |
| 20) Methylene Chloride        | 4.52 | 84  | 47190  | 21.263  | ug/l   | 96     |
| 21) trans-1,2-Dichloroethene  | 5.01 | 96  | 45998  | 21.296  | ug/l   | 99     |
| 22) Diisopropyl ether         | 5.92 | 45  | 136168 | 21.304  | ug/l   | 97     |
| 23) Vinyl Acetate             | 5.86 | 43  | 574169 | 106.971 | ug/l   | 100    |
| 24) 1,1-Dichloroethane        | 5.82 | 63  | 81630  | 21.082  | ug/l   | 98     |
| 25) 2-Butanone                | 6.80 | 43  | 147541 | 105.459 | ug/l   | 98     |
| 26) 2,2-Dichloropropane       | 6.80 | 77  | 76505  | 20.802  | ug/l   | 99     |
| 27) cis-1,2-Dichloroethene    | 6.80 | 96  | 52480  | 20.761  | ug/l   | 99     |
| 28) Bromochloromethane        | 7.17 | 49  | 31099  | 20.430  | ug/l   | 100    |
| 29) Tetrahydrofuran           | 7.18 | 42  | 93509  | 108.950 | ug/l   | 99     |
| 30) Chloroform                | 7.35 | 83  | 86848  | 21.412  | ug/l   | 99     |
| 31) Cyclohexane               | 7.63 | 56  | 74888  | 20.763  | ug/l   | 97     |
| 32) 1,1,1-Trichloroethane     | 7.55 | 97  | 78595  | 21.205  | ug/l   | 100    |
| 36) 1,1-Dichloropropene       | 7.77 | 75  | 64667  | 20.851  | ug/l   | 99     |
| 37) Ethyl Acetate             | 6.90 | 43  | 59522  | 21.235  | ug/l   | 99     |
| 38) Carbon Tetrachloride      | 7.75 | 117 | 70457  | 20.918  | ug/l   | 97     |

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 Sample : VN0212MBSD01  
 Misc : 5.00µg/10mL/100µL/5.00mL/MSVOA\_N/MEOH  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleID :  
 VN0212MBSD01

Manual Integrations  
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 2/13/2020 10:37:40 AM

Quant Time: Feb 13 01:20:39 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N021220W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Feb 12 14:12:21 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.07  | 83   | 79834    | 20.737  | ug/l   | 99       |
| 40) Benzene                    | 8.02  | 78   | 190062   | 20.659  | ug/l   | 98       |
| 41) Methacrylonitrile          | 7.15  | 41   | 27790m   | 23.641  | ug/l   |          |
| 42) 1,2-Dichloroethane         | 8.10  | 62   | 68834    | 21.347  | ug/l   | 98       |
| 43) Isopropyl Acetate          | 8.14  | 43   | 100849   | 21.048  | ug/l   | 100      |
| 44) Trichloroethene            | 8.82  | 130  | 53032    | 20.818  | ug/l   | 100      |
| 45) 1,2-Dichloropropane        | 9.10  | 63   | 48757    | 21.406  | ug/l   | 98       |
| 46) Dibromomethane             | 9.19  | 93   | 33713    | 20.945  | ug/l   | 97       |
| 47) Bromodichloromethane       | 9.39  | 83   | 68641    | 20.976  | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.18  | 41   | 43904    | 20.423  | ug/l   | 99       |
| 49) 1,4-Dioxane                | 9.18  | 88   | 17519    | 476.956 | ug/l   | 96       |
| 51) 4-Methyl-2-Pentanone       | 9.97  | 43   | 299016   | 107.817 | ug/l   | 100      |
| 52) Toluene                    | 10.14 | 92   | 123729   | 20.972  | ug/l   | 98       |
| 53) t-1,3-Dichloropropene      | 10.37 | 75   | 77274    | 20.920  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 9.82  | 75   | 80968    | 20.817  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 10.55 | 97   | 47392    | 20.591  | ug/l   | 97       |
| 56) Ethyl methacrylate         | 10.42 | 69   | 68528    | 21.047  | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 10.70 | 76   | 78727    | 20.730  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.68  | 63   | 163952   | 108.089 | ug/l   | 100      |
| 59) 2-Hexanone                 | 10.74 | 43   | 226132   | 105.553 | ug/l   | 100      |
| 60) Dibromochloromethane       | 10.89 | 129  | 54229    | 20.532  | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 11.00 | 107  | 50170    | 20.794  | ug/l   | 98       |
| 64) Tetrachloroethene          | 10.62 | 164  | 47767    | 20.185  | ug/l   | 99       |
| 65) Chlorobenzene              | 11.43 | 112  | 131270   | 20.698  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.50 | 131  | 51194    | 21.338  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.50 | 91   | 239131   | 20.906  | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.62 | 106  | 179120   | 41.723  | ug/l   | 100      |
| 69) o-Xylene                   | 11.94 | 106  | 85814    | 20.760  | ug/l   | 99       |
| 70) Styrene                    | 11.96 | 104  | 137218   | 20.586  | ug/l   | 99       |
| 71) Bromoform                  | 12.12 | 173  | 40506    | 20.991  | ug/l # | 100      |
| 73) Isopropylbenzene           | 12.25 | 105  | 235803   | 20.976  | ug/l   | 99       |
| 74) N-amyl acetate             | 12.07 | 43   | 86711    | 21.391  | ug/l   | 100      |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 69948    | 21.618  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 62121m   | 21.569  | ug/l   |          |
| 77) Bromobenzene               | 12.52 | 156  | 63685    | 22.828  | ug/l   | 91       |
| 78) n-propylbenzene            | 12.59 | 91   | 264698   | 20.667  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 12.67 | 91   | 155110   | 20.604  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 198346   | 21.221  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.29 | 75   | 24726    | 21.020  | ug/l   | 99       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 159487   | 20.650  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 12.99 | 119  | 170563   | 20.629  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 195666   | 21.207  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.17 | 105  | 228070   | 20.828  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.28 | 119  | 207962   | 20.961  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 103211   | 20.900  | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 102070   | 20.673  | ug/l   | 97       |
| 89) n-Butylbenzene             | 13.61 | 91   | 183090   | 20.981  | ug/l   | 99       |
| 90) Hexachloroethane           | 13.87 | 117  | 37874    | 20.434  | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 100554   | 20.807  | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 14.26 | 75   | 14699    | 20.916  | ug/l   | 99       |

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Sample : VN0212MBSD01  
Misc : 5.00µ/10mL/100uL/5.00mL/MSVOA\_N/MEOH  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0212MBSD01

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Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N021220W.M  
Quant Title : SW846 8260  
QLast Update : Wed Feb 12 14:12:21 2020  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.90 | 180  | 63161    | 22.243 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 33496    | 20.149 | ug/l  | 98       |
| 95) Naphthalene            | 15.13 | 128  | 173749   | 22.651 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.31 | 180  | 61406    | 21.715 | ug/l  | 99       |

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

