

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN033019\  
 Data File : VN054801.D  
 Acq On : 30 Mar 2019 14:39  
 Operator : JC/SP  
 Sample : VN0330MBS01  
 Misc : 5.00µL/100µL/5.00mL/MSVOA\_N/MEOH  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0330MBS01

Manual Integrations  
 APPROVED

MMDadoda  
 4/1/2019 1:32:42 PM

Quant Time: Mar 30 23:12:40 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N032919W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Mar 30 00:48:18 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.67  | 168  | 411534   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.59  | 114  | 714118   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 614896   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 253298   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.03   | 65  | 309155   | 55.73 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 111.46% |      |
| 35) Dibromofluoromethane  | 7.59   | 113 | 235696   | 49.51 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.02%  |      |
| 50) Toluene-d8            | 10.09  | 98  | 877065   | 49.55 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.10%  |      |
| 62) 4-Bromofluorobenzene  | 12.40  | 95  | 284310   | 48.30 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.60%  |      |

## Target Compounds

|                               |      |     |         |         |        | Qvalue |
|-------------------------------|------|-----|---------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.85 | 85  | 83138   | 19.972  | ug/l   | 98     |
| 3) Chloromethane              | 2.06 | 50  | 117512  | 20.417  | ug/l   | 100    |
| 4) Vinyl Chloride             | 2.19 | 62  | 106347  | 20.575  | ug/l   | 100    |
| 5) Bromomethane               | 2.58 | 94  | 63418   | 22.151  | ug/l   | 94     |
| 6) Chloroethane               | 2.71 | 64  | 57151   | 19.802  | ug/l   | 93     |
| 7) Trichlorofluoromethane     | 3.02 | 101 | 132428  | 20.840  | ug/l   | 99     |
| 8) Diethyl Ether              | 3.41 | 74  | 44587   | 21.790  | ug/l   | 67     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.75 | 101 | 68627   | 20.515  | ug/l   | 95     |
| 10) Methyl Iodide             | 3.94 | 142 | 95898   | 20.941  | ug/l # | 88     |
| 11) Tert butyl alcohol        | 4.82 | 59  | 39785   | 137.646 | ug/l # | 70     |
| 12) 1,1-Dichloroethene        | 3.73 | 96  | 68337   | 21.125  | ug/l # | 70     |
| 13) Acrolein                  | 3.61 | 56  | 34903   | 135.075 | ug/l   | 98     |
| 14) Allyl chloride            | 4.32 | 41  | 163054  | 20.464  | ug/l # | 92     |
| 15) Acrylonitrile             | 5.00 | 53  | 197636  | 123.017 | ug/l   | 99     |
| 16) Acetone                   | 3.82 | 43  | 143560  | 108.519 | ug/l # | 80     |
| 17) Carbon Disulfide          | 4.04 | 76  | 197978  | 18.869  | ug/l   | 97     |
| 18) Methyl Acetate            | 4.34 | 43  | 90010   | 25.675  | ug/l # | 68     |
| 19) Methyl tert-butyl Ether   | 5.06 | 73  | 261060  | 23.071  | ug/l   | 96     |
| 20) Methylene Chloride        | 4.54 | 84  | 101290  | 21.706  | ug/l # | 86     |
| 21) trans-1,2-Dichloroethene  | 5.04 | 96  | 89932   | 21.165  | ug/l   | 86     |
| 22) Diisopropyl ether         | 5.96 | 45  | 349227  | 22.160  | ug/l # | 94     |
| 23) Vinyl Acetate             | 5.90 | 43  | 1275944 | 116.344 | ug/l # | 92     |
| 24) 1,1-Dichloroethane        | 5.85 | 63  | 183908  | 21.877  | ug/l   | 98     |
| 25) 2-Butanone                | 6.85 | 43  | 249876  | 127.781 | ug/l # | 88     |
| 26) 2,2-Dichloropropane       | 6.82 | 77  | 111087  | 18.853  | ug/l   | 100    |
| 27) cis-1,2-Dichloroethene    | 6.83 | 96  | 104681  | 21.809  | ug/l   | 89     |
| 28) Bromochloromethane        | 7.20 | 49  | 100867  | 23.995  | ug/l # | 68     |
| 29) Tetrahydrofuran           | 7.23 | 42  | 170211  | 125.322 | ug/l # | 84     |
| 30) Chloroform                | 7.37 | 83  | 178015  | 22.207  | ug/l   | 98     |
| 31) Cyclohexane               | 7.65 | 56  | 172661  | 21.361  | ug/l   | 87     |
| 32) 1,1,1-Trichloroethane     | 7.57 | 97  | 145689  | 21.931  | ug/l   | 95     |
| 36) 1,1-Dichloropropene       | 7.79 | 75  | 129469  | 19.457  | ug/l   | 97     |
| 37) Ethyl Acetate             | 6.94 | 43  | 113357  | 23.230  | ug/l   | 96     |
| 38) Carbon Tetrachloride      | 7.77 | 117 | 122650  | 18.977  | ug/l   | 100    |

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 Sample : VN0330MBS01  
 Misc : 5.00µL/10mL/100µL/5.00mL/MSVOA\_N/MEOH  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleID :  
 VN0330MBS01

Manual Integrations  
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MMDadoda  
 4/1/2019 1:32:42 PM

Quant Time: Mar 30 23:12:40 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N032919W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Mar 30 00:48:18 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.08  | 83   | 137177   | 18.751  | ug/l   | 88       |
| 40) Benzene                    | 8.04  | 78   | 395228   | 20.758  | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.18  | 41   | 67134    | 24.491  | ug/l # | 86       |
| 42) 1,2-Dichloroethane         | 8.13  | 62   | 143414   | 21.095  | ug/l   | 98       |
| 43) Isopropyl Acetate          | 8.17  | 43   | 183082   | 23.091  | ug/l # | 93       |
| 44) Trichloroethene            | 8.83  | 130  | 98855    | 20.001  | ug/l   | 91       |
| 45) 1,2-Dichloropropane        | 9.12  | 63   | 111740   | 20.582  | ug/l   | 95       |
| 46) Dibromomethane             | 9.21  | 93   | 66011    | 21.614  | ug/l   | 86       |
| 47) Bromodichloromethane       | 9.40  | 83   | 129122   | 20.343  | ug/l   | 95       |
| 48) Methyl methacrylate        | 9.20  | 41   | 94381    | 21.959  | ug/l   | 87       |
| 49) 1,4-Dioxane                | 9.21  | 88   | 21863    | 512.664 | ug/l # | 83       |
| 51) 4-Methyl-2-Pentanone       | 9.99  | 43   | 537964   | 120.680 | ug/l   | 92       |
| 52) Toluene                    | 10.16 | 92   | 229208   | 20.231  | ug/l   | 98       |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 117457   | 19.672  | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 9.84  | 75   | 145939   | 20.462  | ug/l # | 90       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 90267    | 21.427  | ug/l   | 97       |
| 56) Ethyl methacrylate         | 10.43 | 69   | 120588   | 21.821  | ug/l # | 85       |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 154161   | 21.285  | ug/l   | 98       |
| 58) 2-Chloroethyl Vinyl ether  | 9.70  | 63   | 235161   | 105.049 | ug/l   | 89       |
| 59) 2-Hexanone                 | 10.75 | 43   | 333919   | 117.013 | ug/l   | 90       |
| 60) Dibromochloromethane       | 10.90 | 129  | 87039    | 20.396  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.01 | 107  | 86430    | 21.468  | ug/l   | 100      |
| 64) Tetrachloroethene          | 10.63 | 164  | 98055    | 20.781  | ug/l   | 97       |
| 65) Chlorobenzene              | 11.44 | 112  | 243175   | 20.199  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 89421    | 19.844  | ug/l   | 98       |
| 67) Ethyl Benzene              | 11.51 | 91   | 444034   | 20.439  | ug/l   | 96       |
| 68) m/p-Xylenes                | 11.62 | 106  | 320004   | 39.803  | ug/l   | 95       |
| 69) o-Xylene                   | 11.95 | 106  | 159074   | 20.178  | ug/l   | 96       |
| 70) Styrene                    | 11.97 | 104  | 261502   | 20.746  | ug/l   | 98       |
| 71) Bromoform                  | 12.13 | 173  | 53342    | 20.206  | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.25 | 105  | 416420   | 20.113  | ug/l   | 98       |
| 74) N-amyl acetate             | 12.07 | 43   | 142738   | 22.130  | ug/l   | 92       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.51 | 83   | 113500   | 23.977  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 98406m   | 22.363  | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 102538   | 20.521  | ug/l   | 84       |
| 78) n-propylbenzene            | 12.59 | 91   | 453806   | 19.943  | ug/l   | 97       |
| 79) 2-Chlorotoluene            | 12.68 | 91   | 281293   | 19.981  | ug/l   | 94       |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 339880   | 20.007  | ug/l   | 97       |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 20650    | 18.254  | ug/l # | 75       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 276197   | 20.199  | ug/l   | 96       |
| 83) tert-Butylbenzene          | 12.99 | 119  | 295283   | 21.233  | ug/l   | 95       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 330654   | 20.430  | ug/l   | 97       |
| 85) sec-Butylbenzene           | 13.17 | 105  | 368643   | 19.976  | ug/l   | 97       |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 315698   | 19.396  | ug/l   | 98       |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 165564   | 19.791  | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 160014   | 19.502  | ug/l   | 97       |
| 89) n-Butylbenzene             | 13.62 | 91   | 248073   | 18.681  | ug/l   | 97       |
| 90) Hexachloroethane           | 13.88 | 117  | 50390    | 18.234  | ug/l   | 88       |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 168306   | 19.935  | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 16954    | 23.954  | ug/l   | 76       |

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Sample : VN0330MBS01  
Misc : 5.00g/10mL/100uL/5.00mL/MSVOA\_N/MEOH  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0330MBS01

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Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N032919W.M  
Quant Title : SW846 8260  
QLast Update : Sat Mar 30 00:48:18 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.91 | 180  | 73349    | 18.020 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 47980    | 18.582 | ug/l  | 98       |
| 95) Naphthalene            | 15.13 | 128  | 175890   | 19.267 | ug/l  | 98       |
| 96) 1,2,3-Trichlorobenzene | 15.31 | 180  | 77679    | 18.896 | ug/l  | 99       |

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

