

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN032419\  
 Data File : VN054649.D  
 Acq On : 24 Mar 2019 15:41  
 Operator : JC/SP  
 Sample : VN0324MBSD01  
 Misc : 5.00µg/10mL/100µL/5.00mL/MSVOA\_N/MEOH  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0324MBSD01

Manual Integrations  
 APPROVED

MMDadoda  
 3/25/2019 9:54:55 AM

Quant Time: Mar 25 07:21:38 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N032019W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Mar 22 02:09:07 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.67  | 168  | 436168   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.59  | 114  | 731953   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 634359   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 269851   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.03   | 65  | 300712   | 55.43 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 110.86% |      |
| 35) Dibromofluoromethane  | 7.59   | 113 | 233440   | 49.50 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.00%  |      |
| 50) Toluene-d8            | 10.09  | 98  | 878915   | 49.58 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.16%  |      |
| 62) 4-Bromofluorobenzene  | 12.40  | 95  | 294853   | 48.88 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.76%  |      |

## Target Compounds

|                               |      |     |         |         |        | Qvalue |
|-------------------------------|------|-----|---------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.85 | 85  | 94353   | 22.629  | ug/l   | 98     |
| 3) Chloromethane              | 2.06 | 50  | 124491  | 21.944  | ug/l   | 99     |
| 4) Vinyl Chloride             | 2.19 | 62  | 110974  | 19.483  | ug/l   | 99     |
| 5) Bromomethane               | 2.58 | 94  | 63821   | 17.328  | ug/l   | 96     |
| 6) Chloroethane               | 2.71 | 64  | 62416   | 18.270  | ug/l   | 96     |
| 7) Trichlorofluoromethane     | 3.03 | 101 | 140720  | 20.344  | ug/l   | 99     |
| 8) Diethyl Ether              | 3.41 | 74  | 48135   | 18.094  | ug/l   | 70     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.75 | 101 | 75386   | 18.544  | ug/l   | 94     |
| 10) Methyl Iodide             | 3.95 | 142 | 103969  | 17.386  | ug/l # | 90     |
| 11) Tert butyl alcohol        | 4.81 | 59  | 32951   | 100.321 | ug/l # | 70     |
| 12) 1,1-Dichloroethene        | 3.73 | 96  | 74538   | 17.718  | ug/l # | 80     |
| 13) Acrolein                  | 3.61 | 56  | 21076   | 46.497  | ug/l   | 91     |
| 14) Allyl chloride            | 4.32 | 41  | 169149  | 21.352  | ug/l # | 90     |
| 15) Acrylonitrile             | 5.00 | 53  | 183399  | 112.124 | ug/l   | 100    |
| 16) Acetone                   | 3.82 | 43  | 131555  | 80.654  | ug/l # | 82     |
| 17) Carbon Disulfide          | 4.04 | 76  | 185963  | 16.497  | ug/l   | 97     |
| 18) Methyl Acetate            | 4.33 | 43  | 83478   | 22.962  | ug/l # | 89     |
| 19) Methyl tert-butyl Ether   | 5.05 | 73  | 268155  | 21.841  | ug/l   | 94     |
| 20) Methylene Chloride        | 4.55 | 84  | 103835  | 21.596  | ug/l # | 84     |
| 21) trans-1,2-Dichloroethene  | 5.04 | 96  | 93005   | 21.650  | ug/l   | 86     |
| 22) Diisopropyl ether         | 5.96 | 45  | 367761  | 23.535  | ug/l # | 95     |
| 23) Vinyl Acetate             | 5.90 | 43  | 1244667 | 112.780 | ug/l # | 92     |
| 24) 1,1-Dichloroethane        | 5.85 | 63  | 192933  | 22.931  | ug/l   | 100    |
| 25) 2-Butanone                | 6.85 | 43  | 221968  | 106.234 | ug/l   | 90     |
| 26) 2,2-Dichloropropane       | 6.82 | 77  | 117419  | 19.578  | ug/l   | 97     |
| 27) cis-1,2-Dichloroethene    | 6.83 | 96  | 109559  | 21.382  | ug/l   | 88     |
| 28) Bromochloromethane        | 7.19 | 49  | 96657   | 23.339  | ug/l # | 73     |
| 29) Tetrahydrofuran           | 7.22 | 42  | 153474  | 113.189 | ug/l # | 84     |
| 30) Chloroform                | 7.37 | 83  | 182185  | 22.188  | ug/l   | 99     |
| 31) Cyclohexane               | 7.65 | 56  | 182136  | 21.535  | ug/l   | 90     |
| 32) 1,1,1-Trichloroethane     | 7.57 | 97  | 146720  | 21.659  | ug/l   | 95     |
| 36) 1,1-Dichloropropene       | 7.79 | 75  | 137322  | 20.065  | ug/l   | 94     |
| 37) Ethyl Acetate             | 6.94 | 43  | 101716  | 20.897  | ug/l   | 95     |
| 38) Carbon Tetrachloride      | 7.77 | 117 | 124376  | 18.701  | ug/l   | 98     |

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 Sample : VN0324MBSD01  
 Misc : 5.00µg/10mL/100µL/5.00mL/MSVOA\_N/MEOH  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleID :  
 VN0324MBSD01

Manual Integrations  
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 3/25/2019 9:54:55 AM

Quant Time: Mar 25 07:21:38 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N032019W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Mar 22 02:09:07 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.08  | 83   | 151633   | 19.369  | ug/l   | 91       |
| 40) Benzene                    | 8.04  | 78   | 404526   | 20.670  | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.17  | 41   | 65283    | 21.992  | ug/l # | 84       |
| 42) 1,2-Dichloroethane         | 8.13  | 62   | 147861   | 20.746  | ug/l   | 98       |
| 43) Isopropyl Acetate          | 8.17  | 43   | 169453   | 20.613  | ug/l # | 95       |
| 44) Trichloroethene            | 8.83  | 130  | 105005   | 19.299  | ug/l   | 91       |
| 45) 1,2-Dichloropropane        | 9.12  | 63   | 116517   | 22.172  | ug/l   | 99       |
| 46) Dibromomethane             | 9.21  | 93   | 64750    | 20.654  | ug/l   | 88       |
| 47) Bromodichloromethane       | 9.40  | 83   | 130610   | 20.074  | ug/l   | 94       |
| 48) Methyl methacrylate        | 9.20  | 41   | 90778    | 20.345  | ug/l # | 85       |
| 49) 1,4-Dioxane                | 9.20  | 88   | 18575    | 372.387 | ug/l # | 87       |
| 51) 4-Methyl-2-Pentanone       | 9.99  | 43   | 485331   | 106.528 | ug/l   | 94       |
| 52) Toluene                    | 10.16 | 92   | 241480   | 20.062  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 112944   | 17.953  | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 9.84  | 75   | 146743   | 19.670  | ug/l   | 93       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 88468    | 20.447  | ug/l   | 96       |
| 56) Ethyl methacrylate         | 10.43 | 69   | 114038   | 19.637  | ug/l # | 79       |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 158796   | 21.113  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.70  | 63   | 192737   | 80.598  | ug/l   | 90       |
| 59) 2-Hexanone                 | 10.75 | 43   | 299364   | 100.597 | ug/l   | 90       |
| 60) Dibromochloromethane       | 10.90 | 129  | 86210    | 18.725  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.00 | 107  | 83434    | 19.505  | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.63 | 164  | 104877   | 19.932  | ug/l   | 97       |
| 65) Chlorobenzene              | 11.43 | 112  | 260546   | 20.194  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 89598    | 19.348  | ug/l   | 97       |
| 67) Ethyl Benzene              | 11.51 | 91   | 466507   | 20.469  | ug/l   | 98       |
| 68) m/p-Xylenes                | 11.62 | 106  | 343370   | 39.776  | ug/l   | 96       |
| 69) o-Xylene                   | 11.95 | 106  | 170980   | 20.281  | ug/l   | 97       |
| 70) Styrene                    | 11.96 | 104  | 276257   | 20.179  | ug/l   | 96       |
| 71) Bromoform                  | 12.13 | 173  | 49846    | 17.140  | ug/l # | 97       |
| 73) Isopropylbenzene           | 12.25 | 105  | 451107   | 20.745  | ug/l   | 98       |
| 74) N-amyl acetate             | 12.07 | 43   | 136593   | 21.846  | ug/l   | 92       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 105917   | 21.338  | ug/l   | 97       |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 89941m   | 21.004  | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 109352   | 20.276  | ug/l   | 88       |
| 78) n-propylbenzene            | 12.59 | 91   | 487863   | 20.690  | ug/l   | 96       |
| 79) 2-Chlorotoluene            | 12.67 | 91   | 299213   | 20.349  | ug/l   | 95       |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 369539   | 20.735  | ug/l   | 96       |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 16892    | 15.908  | ug/l # | 63       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 287597   | 20.178  | ug/l   | 97       |
| 83) tert-Butylbenzene          | 12.99 | 119  | 321492   | 20.724  | ug/l   | 97       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 358184   | 20.483  | ug/l   | 97       |
| 85) sec-Butylbenzene           | 13.17 | 105  | 397275   | 20.543  | ug/l   | 97       |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 350734   | 20.272  | ug/l   | 98       |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 176287   | 19.725  | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 170719   | 19.633  | ug/l   | 98       |
| 89) n-Butylbenzene             | 13.61 | 91   | 270754   | 20.014  | ug/l   | 98       |
| 90) Hexachloroethane           | 13.87 | 117  | 47815    | 17.804  | ug/l   | 93       |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 181088   | 20.919  | ug/l   | 97       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 13922    | 19.121  | ug/l   | 87       |

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Sample : VN0324MBSD01  
Misc : 5.00µ/10mL/100uL/5.00mL/MSVOA\_N/MEOH  
ALS Vial : 13 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0324MBSD01

Manual Integrations  
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3/25/2019 9:54:55 AM

Quant Time: Mar 25 07:21:38 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N032019W.M  
Quant Title : SW846 8260  
QLast Update : Fri Mar 22 02:09:07 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.91 | 180  | 82001    | 19.002 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 53982    | 20.818 | ug/l  | 98       |
| 95) Naphthalene            | 15.13 | 128  | 185450   | 19.267 | ug/l  | 98       |
| 96) 1,2,3-Trichlorobenzene | 15.31 | 180  | 85819    | 19.981 | ug/l  | 97       |

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

