

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN072518\  
 Data File : VN050051.D  
 Acq On : 25 Jul 2018 18:55  
 Operator : MD\SY  
 Sample : VN0725WBS02  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 19 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0725WBS02

Manual Integrations  
 APPROVED

MMDadoda  
 7/26/2018 3:54:47 PM

Quant Time: Jul 26 07:08:43 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N072418W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jul 24 06:27:04 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.67  | 168  | 596353   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.59  | 114  | 893928   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 812620   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.35 | 152  | 406580   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 8.03   | 65  | 409340   | 49.20 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 98.40% |      |
| 35) Dibromofluoromethane  | 7.59   | 113 | 358641   | 49.14 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 98.28% |      |
| 50) Toluene-d8            | 10.09  | 98  | 1314706  | 49.00 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 98.00% |      |
| 62) 4-Bromofluorobenzene  | 12.40  | 95  | 422744   | 47.85 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 95.70% |      |

## Target Compounds

|                               |      |     |         |       |      | Qvalue |
|-------------------------------|------|-----|---------|-------|------|--------|
| 2) Dichlorodifluoromethane    | 1.85 | 85  | 166689  | 19.45 | ug/l | 100    |
| 3) Chloromethane              | 2.06 | 50  | 178764  | 19.19 | ug/l | 98     |
| 4) Vinyl Chloride             | 2.18 | 62  | 189658  | 19.34 | ug/l | 98     |
| 5) Bromomethane               | 2.56 | 94  | 118827  | 21.24 | ug/l | 97     |
| 6) Chloroethane               | 2.70 | 64  | 108775  | 18.47 | ug/l | 97     |
| 7) Trichlorofluoromethane     | 3.01 | 101 | 241545  | 19.01 | ug/l | 99     |
| 8) Diethyl Ether              | 3.41 | 74  | 82038   | 19.37 | ug/l | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.75 | 101 | 138986  | 18.19 | ug/l | 99     |
| 10) Methyl Iodide             | 3.95 | 142 | 172685  | 17.61 | ug/l | 99     |
| 11) Tert butyl alcohol        | 4.80 | 59  | 59417   | 97.05 | ug/l | 98     |
| 12) 1,1-Dichloroethene        | 3.73 | 96  | 129735  | 18.88 | ug/l | 98     |
| 13) Acrolein                  | 3.61 | 56  | 34023   | 69.17 | ug/l | 98     |
| 14) Allyl chloride            | 4.32 | 41  | 199924  | 18.76 | ug/l | 99     |
| 15) Acrylonitrile             | 5.00 | 53  | 256479  | 96.02 | ug/l | 100    |
| 16) Acetone                   | 3.82 | 43  | 194348  | 96.50 | ug/l | 99     |
| 17) Carbon Disulfide          | 4.05 | 76  | 384364  | 18.25 | ug/l | 100    |
| 18) Methyl Acetate            | 4.33 | 43  | 160635  | 20.10 | ug/l | 98     |
| 19) Methyl tert-butyl Ether   | 5.05 | 73  | 362979  | 19.82 | ug/l | 99     |
| 20) Methylene Chloride        | 4.55 | 84  | 151760  | 19.81 | ug/l | 99     |
| 21) trans-1,2-Dichloroethene  | 5.04 | 96  | 140341  | 19.27 | ug/l | 100    |
| 22) Diisopropyl ether         | 5.96 | 45  | 429387  | 20.32 | ug/l | 95     |
| 23) Vinyl Acetate             | 5.90 | 43  | 1436400 | 96.18 | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 5.85 | 63  | 265789  | 19.23 | ug/l | 99     |
| 25) 2-Butanone                | 6.84 | 43  | 301124  | 94.88 | ug/l | 100    |
| 26) 2,2-Dichloropropane       | 6.83 | 77  | 192123  | 18.28 | ug/l | 100    |
| 27) cis-1,2-Dichloroethene    | 6.83 | 96  | 153799  | 19.62 | ug/l | 99     |
| 28) Bromochloromethane        | 7.20 | 49  | 122600  | 19.45 | ug/l | 99     |
| 29) Tetrahydrofuran           | 7.22 | 42  | 199437  | 97.25 | ug/l | 100    |
| 30) Chloroform                | 7.38 | 83  | 272696  | 19.34 | ug/l | 98     |
| 31) Cyclohexane               | 7.66 | 56  | 211886  | 18.45 | ug/l | 93     |
| 32) 1,1,1-Trichloroethane     | 7.57 | 97  | 232347  | 19.26 | ug/l | 100    |
| 36) 1,1-Dichloropropene       | 7.80 | 75  | 196085  | 19.47 | ug/l | 99     |
| 37) Ethyl Acetate             | 6.94 | 43  | 134653  | 19.18 | ug/l | 98     |
| 38) Carbon Tetrachloride      | 7.78 | 117 | 202769  | 18.97 | ug/l | 100    |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN072518\  
 Data File : VN050051.D  
 Acq On : 25 Jul 2018 18:55  
 Operator : MD\SY  
 Sample : VN0725WBS02  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 19 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleID :  
 VN0725WBS02

Manual Integrations  
 APPROVED

MMDadoda  
 7/26/2018 3:54:47 PM

Quant Time: Jul 26 07:08:43 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N072418W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jul 24 06:27:04 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 39) Methylcyclohexane          | 9.08  | 83   | 185902   | 17.94  | ug/l   | 99       |
| 40) Benzene                    | 8.04  | 78   | 596379   | 19.46  | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.18  | 41   | 69113    | 20.61  | ug/l   | 86       |
| 42) 1,2-Dichloroethane         | 8.13  | 62   | 198387   | 19.40  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.17  | 43   | 250114   | 18.18  | ug/l   | 97       |
| 44) Trichloroethene            | 8.84  | 130  | 154324   | 18.74  | ug/l   | 97       |
| 45) 1,2-Dichloropropane        | 9.12  | 63   | 157726   | 19.43  | ug/l   | 100      |
| 46) Dibromomethane             | 9.21  | 93   | 97909    | 19.43  | ug/l   | 98       |
| 47) Bromodichloromethane       | 9.41  | 83   | 202743   | 19.06  | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.20  | 41   | 116499   | 19.26  | ug/l   | 100      |
| 49) 1,4-Dioxane                | 9.20  | 88   | 32423    | 393.97 | ug/l   | 99       |
| 51) 4-Methyl-2-Pentanone       | 9.99  | 43   | 681711   | 98.76  | ug/l   | 99       |
| 52) Toluene                    | 10.16 | 92   | 369017   | 20.40  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 192482   | 19.17  | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene    | 9.84  | 75   | 223036   | 19.44  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 142071   | 19.80  | ug/l   | 99       |
| 56) Ethyl methacrylate         | 10.43 | 69   | 164865   | 18.30  | ug/l   | 100      |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 231758   | 19.83  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.70  | 63   | 391664   | 91.83  | ug/l   | 100      |
| 59) 2-Hexanone                 | 10.76 | 43   | 443127   | 90.73  | ug/l   | 99       |
| 60) Dibromochloromethane       | 10.90 | 129  | 156912   | 19.75  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.01 | 107  | 137622   | 19.33  | ug/l   | 100      |
| 64) Tetrachloroethene          | 10.63 | 164  | 150582   | 19.27  | ug/l   | 97       |
| 65) Chlorobenzene              | 11.44 | 112  | 390774   | 19.04  | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 149060   | 18.90  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.52 | 91   | 641958   | 19.47  | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.62 | 106  | 502171   | 40.26  | ug/l   | 100      |
| 69) o-Xylene                   | 11.95 | 106  | 238597   | 20.07  | ug/l   | 97       |
| 70) Styrene                    | 11.97 | 104  | 375594   | 18.36  | ug/l   | 100      |
| 71) Bromoform                  | 12.13 | 173  | 109087   | 19.01  | ug/l # | 100      |
| 73) Isopropylbenzene           | 12.25 | 105  | 630444   | 19.99  | ug/l   | 100      |
| 74) N-amyl acetate             | 12.07 | 43   | 175908   | 18.25  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.51 | 83   | 178688   | 20.16  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 12.56 | 75   | 157370m  | 20.83  | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 166950   | 19.10  | ug/l   | 99       |
| 78) n-propylbenzene            | 12.59 | 91   | 711830   | 20.20  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.68 | 91   | 437978   | 20.05  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.74 | 105  | 520910   | 21.00  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 43674    | 18.33  | ug/l   | 94       |
| 82) 4-Chlorotoluene            | 12.78 | 91   | 438006   | 20.25  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 13.00 | 119  | 439063   | 20.28  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 535006   | 21.40  | ug/l   | 98       |
| 85) sec-Butylbenzene           | 13.17 | 105  | 590312   | 20.41  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 497363   | 20.41  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.29 | 146  | 286650   | 19.35  | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 13.37 | 146  | 277801   | 19.24  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.62 | 91   | 376720   | 18.80  | ug/l   | 99       |
| 90) Hexachloroethane           | 13.88 | 117  | 99903    | 18.46  | ug/l   | 97       |
| 91) 1,2-Dichlorobenzene        | 13.66 | 146  | 287960   | 19.44  | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 27420    | 19.01  | ug/l   | 99       |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN072518\  
Data File : VN050051.D  
Acq On : 25 Jul 2018 18:55  
Operator : MD\SY  
Sample : VN0725WBS02  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 19 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0725WBS02

Manual Integrations  
APPROVED

MMDadoda  
7/26/2018 3:54:47 PM

Quant Time: Jul 26 07:08:43 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N072418W.M  
Quant Title : SW846 8260  
QLast Update : Tue Jul 24 06:27:04 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.91 | 180  | 116837   | 17.04 | ug/l  | 97       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 86574    | 19.10 | ug/l  | 97       |
| 95) Naphthalene            | 15.14 | 128  | 242225   | 16.31 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.32 | 180  | 124766   | 17.80 | ug/l  | 97       |

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

