

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN073119\  
 Data File : VN057002.D  
 Acq On : 31 Jul 2019 10:25  
 Operator : JC/SP  
 Sample : VN0731WBS01  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0731WBS01

Manual Integrations  
 APPROVED

MMdadoda  
 8/2/2019 10:54:21 PM

Quant Time: Aug 01 01:37:19 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N072719W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Jul 27 01:33:29 2019  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc    | Units   | Dev(Min) |
|-------------------------------|-------|------|----------|---------|---------|----------|
| 1) Pentafluorobenzene         | 7.65  | 168  | 487995   | 50.00   | ug/l    | 0.00     |
| 34) 1,4-Difluorobenzene       | 8.58  | 114  | 708617   | 50.00   | ug/l    | 0.00     |
| 63) Chlorobenzene-d5          | 11.40 | 117  | 617290   | 50.00   | ug/l    | 0.00     |
| 72) 1,4-Dichlorobenzene-d4    | 13.34 | 152  | 234876   | 50.00   | ug/l    | 0.00     |
| System Monitoring Compounds   |       |      |          |         |         |          |
| 33) 1,2-Dichloroethane-d4     | 8.01  | 65   | 250374   | 50.12   | ug/l    | 0.00     |
| Spiked Amount 50.000          |       |      | Recovery | =       | 100.24% |          |
| 35) Dibromofluoromethane      | 7.58  | 113  | 233445   | 51.46   | ug/l    | 0.00     |
| Spiked Amount 50.000          |       |      | Recovery | =       | 102.92% |          |
| 50) Toluene-d8                | 10.08 | 98   | 884906   | 51.15   | ug/l    | 0.00     |
| Spiked Amount 50.000          |       |      | Recovery | =       | 102.30% |          |
| 62) 4-Bromofluorobenzene      | 12.40 | 95   | 271461   | 48.20   | ug/l    | 0.00     |
| Spiked Amount 50.000          |       |      | Recovery | =       | 96.40%  |          |
| Target Compounds              |       |      |          |         |         |          |
|                               |       |      |          |         | Qvalue  |          |
| 2) Dichlorodifluoromethane    | 1.85  | 85   | 105378   | 21.360  | ug/l    | 97       |
| 3) Chloromethane              | 2.05  | 50   | 112906   | 19.112  | ug/l    | 100      |
| 4) Vinyl Chloride             | 2.18  | 62   | 107689   | 19.441  | ug/l    | 99       |
| 5) Bromomethane               | 2.55  | 94   | 67552    | 19.617  | ug/l    | 99       |
| 6) Chloroethane               | 2.69  | 64   | 58247    | 19.075  | ug/l    | 99       |
| 7) Trichlorofluoromethane     | 3.00  | 101  | 150022   | 20.690  | ug/l    | 99       |
| 8) Diethyl Ether              | 3.40  | 74   | 53718    | 19.795  | ug/l    | 97       |
| 9) 1,1,2-Trichlorotrifluoroet | 3.75  | 101  | 88686    | 19.728  | ug/l    | 98       |
| 10) Methyl Iodide             | 3.94  | 142  | 114615   | 19.080  | ug/l    | 98       |
| 11) Tert butyl alcohol        | 4.78  | 59   | 68480    | 101.421 | ug/l    | 99       |
| 12) 1,1-Dichloroethene        | 3.73  | 96   | 85762    | 19.994  | ug/l    | 96       |
| 13) Acrolein                  | 3.60  | 56   | 20426    | 57.036  | ug/l    | 92       |
| 14) Allyl chloride            | 4.31  | 41   | 132995   | 19.061  | ug/l    | 98       |
| 15) Acrylonitrile             | 4.97  | 53   | 199371   | 100.688 | ug/l    | 98       |
| 16) Acetone                   | 3.81  | 43   | 173034   | 95.615  | ug/l    | 99       |
| 17) Carbon Disulfide          | 4.04  | 76   | 207655   | 18.218  | ug/l    | 99       |
| 18) Methyl Acetate            | 4.31  | 43   | 106643   | 18.472  | ug/l    | 100      |
| 19) Methyl tert-butyl Ether   | 5.02  | 73   | 256576   | 20.061  | ug/l    | 97       |
| 20) Methylene Chloride        | 4.54  | 84   | 100956   | 19.367  | ug/l    | 98       |
| 21) trans-1,2-Dichloroethene  | 5.03  | 96   | 91022    | 19.980  | ug/l    | 99       |
| 22) Diisopropyl ether         | 5.94  | 45   | 285882   | 19.886  | ug/l    | 98       |
| 23) Vinyl Acetate             | 5.88  | 43   | 955235   | 95.900  | ug/l    | 99       |
| 24) 1,1-Dichloroethane        | 5.83  | 63   | 168887   | 19.911  | ug/l    | 99       |
| 25) 2-Butanone                | 6.82  | 43   | 246769   | 96.163  | ug/l    | 98       |
| 26) 2,2-Dichloropropane       | 6.81  | 77   | 122580   | 19.006  | ug/l    | 100      |
| 27) cis-1,2-Dichloroethene    | 6.82  | 96   | 107009   | 19.860  | ug/l    | 98       |
| 28) Bromochloromethane        | 7.18  | 49   | 68351    | 17.144  | ug/l    | 97       |
| 29) Tetrahydrofuran           | 7.20  | 42   | 165823   | 99.042  | ug/l    | 99       |
| 30) Chloroform                | 7.36  | 83   | 172621   | 19.904  | ug/l    | 97       |
| 31) Cyclohexane               | 7.64  | 56   | 152933   | 18.632  | ug/l    | 94       |
| 32) 1,1,1-Trichloroethane     | 7.56  | 97   | 138880   | 20.070  | ug/l    | 98       |
| 36) 1,1-Dichloropropene       | 7.78  | 75   | 121839   | 19.540  | ug/l    | 100      |
| 37) Ethyl Acetate             | 6.92  | 43   | 96262    | 19.276  | ug/l #  | 93       |
| 38) Carbon Tetrachloride      | 7.76  | 117  | 119357   | 20.237  | ug/l    | 98       |

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 ALS Vial : 5 Sample Multiplier: 1

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 ClientSampleID :  
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Quant Time: Aug 01 01:37:19 2019  
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 Quant Title : SW846 8260  
 QLast Update : Sat Jul 27 01:33:29 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.07  | 83   | 151227   | 18.976  | ug/l   | 100      |
| 40) Benzene                    | 8.03  | 78   | 388567   | 20.233  | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.17  | 41   | 41619m   | 18.027  | ug/l   |          |
| 42) 1,2-Dichloroethane         | 8.11  | 62   | 122792   | 20.401  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.16  | 43   | 158626   | 19.218  | ug/l   | 93       |
| 44) Trichloroethene            | 8.82  | 130  | 107387   | 20.296  | ug/l   | 96       |
| 45) 1,2-Dichloropropane        | 9.11  | 63   | 102569   | 19.967  | ug/l   | 100      |
| 46) Dibromomethane             | 9.20  | 93   | 65300    | 21.079  | ug/l   | 98       |
| 47) Bromodichloromethane       | 9.39  | 83   | 122051   | 20.038  | ug/l   | 97       |
| 48) Methyl methacrylate        | 9.19  | 41   | 76593    | 19.220  | ug/l   | 97       |
| 49) 1,4-Dioxane                | 9.19  | 88   | 33348    | 406.069 | ug/l   | 99       |
| 51) 4-Methyl-2-Pentanone       | 9.98  | 43   | 490882   | 100.092 | ug/l   | 99       |
| 52) Toluene                    | 10.15 | 92   | 237266   | 20.563  | ug/l   | 98       |
| 53) t-1,3-Dichloropropene      | 10.37 | 75   | 121629   | 19.243  | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 9.83  | 75   | 142296   | 19.363  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.55 | 97   | 93217    | 20.145  | ug/l   | 99       |
| 56) Ethyl methacrylate         | 10.42 | 69   | 122512   | 18.675  | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 10.70 | 76   | 152758   | 19.908  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.69  | 63   | 201691   | 72.735  | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.74 | 43   | 339939   | 91.607  | ug/l   | 99       |
| 60) Dibromochloromethane       | 10.90 | 129  | 95637    | 20.173  | ug/l   | 97       |
| 61) 1,2-Dibromoethane          | 11.00 | 107  | 93038    | 20.603  | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.63 | 164  | 111228   | 20.910  | ug/l   | 97       |
| 65) Chlorobenzene              | 11.43 | 112  | 254536   | 20.231  | ug/l   | 96       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.50 | 131  | 93561    | 19.758  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.51 | 91   | 434879   | 20.000  | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.62 | 106  | 326211   | 40.650  | ug/l   | 99       |
| 69) o-Xylene                   | 11.94 | 106  | 161495   | 20.570  | ug/l   | 97       |
| 70) Styrene                    | 11.96 | 104  | 254530   | 19.524  | ug/l   | 100      |
| 71) Bromoform                  | 12.12 | 173  | 65695    | 19.871  | ug/l # | 100      |
| 73) Isopropylbenzene           | 12.24 | 105  | 428508   | 21.110  | ug/l   | 100      |
| 74) N-amyl acetate             | 12.07 | 43   | 116451   | 19.757  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 118783   | 21.706  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 94458m   | 19.803  | ug/l   |          |
| 77) Bromobenzene               | 12.52 | 156  | 108723   | 20.522  | ug/l   | 99       |
| 78) n-propylbenzene            | 12.59 | 91   | 444055   | 20.488  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.67 | 91   | 274542   | 20.571  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 358769   | 21.535  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 28544    | 19.227  | ug/l   | 92       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 255904   | 20.490  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 12.99 | 119  | 313148   | 21.233  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 346454   | 21.612  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.17 | 105  | 394683   | 20.747  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 353557   | 20.934  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 162384   | 20.150  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 152762   | 19.691  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.61 | 91   | 257951   | 19.817  | ug/l   | 100      |
| 90) Hexachloroethane           | 13.87 | 117  | 58030    | 19.954  | ug/l   | 97       |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 166138   | 20.947  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 15997    | 19.814  | ug/l   | 98       |

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| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.91 | 180  | 57087    | 15.907 | ug/l  | 100      |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 69104    | 23.160 | ug/l  | 99       |
| 95) Naphthalene            | 15.12 | 128  | 137041   | 16.335 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.29 | 180  | 67104    | 17.614 | ug/l  | 98       |

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

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