

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN111319\  
 Data File : VN059216.D  
 Acq On : 13 Nov 2019 17:49  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

MMDadoda  
 11/14/2019 10:00:26 AM

Quant Time: Nov 14 08:22:36 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N110619W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Nov 07 04:00:41 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.64  | 168  | 414943   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.57  | 114  | 649593   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.40 | 117  | 598417   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.35 | 152  | 290925   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.01   | 65  | 255981   | 50.19 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.38% |      |
| 35) Dibromofluoromethane  | 7.57   | 113 | 202737   | 52.27 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 104.54% |      |
| 50) Toluene-d8            | 10.08  | 98  | 779271   | 51.01 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.02% |      |
| 62) 4-Bromofluorobenzene  | 12.40  | 95  | 291224   | 52.87 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.74% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.83 | 85  | 182538  | 43.662  | ug/l | 99     |
| 3) Chloromethane              | 2.04 | 50  | 247600  | 43.568  | ug/l | 99     |
| 4) Vinyl Chloride             | 2.17 | 62  | 253422  | 45.995  | ug/l | 98     |
| 5) Bromomethane               | 2.53 | 94  | 134779  | 42.508  | ug/l | 98     |
| 6) Chloroethane               | 2.67 | 64  | 152502  | 46.790  | ug/l | 99     |
| 7) Trichlorofluoromethane     | 2.99 | 101 | 319131  | 48.424  | ug/l | 100    |
| 8) Diethyl Ether              | 3.39 | 74  | 133475  | 49.845  | ug/l | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.73 | 101 | 194797  | 49.023  | ug/l | 99     |
| 10) Methyl Iodide             | 3.92 | 142 | 242853  | 49.376  | ug/l | 100    |
| 11) Tert butyl alcohol        | 4.76 | 59  | 261289  | 268.792 | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 3.71 | 96  | 185213  | 47.849  | ug/l | 97     |
| 13) Acrolein                  | 3.58 | 56  | 158214  | 315.678 | ug/l | 98     |
| 14) Allyl chloride            | 4.29 | 41  | 379416  | 47.719  | ug/l | 99     |
| 15) Acrylonitrile             | 4.95 | 53  | 661296  | 273.354 | ug/l | 99     |
| 16) Acetone                   | 3.79 | 43  | 569891  | 214.853 | ug/l | 99     |
| 17) Carbon Disulfide          | 4.02 | 76  | 492560  | 40.993  | ug/l | 99     |
| 18) Methyl Acetate            | 4.29 | 43  | 349721  | 55.548  | ug/l | 99     |
| 19) Methyl tert-butyl Ether   | 5.02 | 73  | 694232  | 52.094  | ug/l | 100    |
| 20) Methylene Chloride        | 4.52 | 84  | 223056  | 48.270  | ug/l | 99     |
| 21) trans-1,2-Dichloroethene  | 5.01 | 96  | 199670  | 48.057  | ug/l | 97     |
| 22) Diisopropyl ether         | 5.92 | 45  | 776644  | 51.713  | ug/l | 99     |
| 23) Vinyl Acetate             | 5.87 | 43  | 3227115 | 277.255 | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 5.82 | 63  | 418421  | 49.882  | ug/l | 99     |
| 25) 2-Butanone                | 6.81 | 43  | 917651  | 262.501 | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 6.80 | 77  | 346396  | 47.227  | ug/l | 100    |
| 27) cis-1,2-Dichloroethene    | 6.81 | 96  | 238312  | 49.439  | ug/l | 100    |
| 28) Bromochloromethane        | 7.17 | 49  | 118672  | 47.024  | ug/l | 98     |
| 29) Tetrahydrofuran           | 7.19 | 42  | 620261  | 279.242 | ug/l | 100    |
| 30) Chloroform                | 7.35 | 83  | 405037  | 50.337  | ug/l | 96     |
| 31) Cyclohexane               | 7.63 | 56  | 357483  | 45.018  | ug/l | 99     |
| 32) 1,1,1-Trichloroethane     | 7.55 | 97  | 344530  | 50.927  | ug/l | 100    |
| 36) 1,1-Dichloropropene       | 7.77 | 75  | 299284  | 49.291  | ug/l | 99     |
| 37) Ethyl Acetate             | 6.91 | 43  | 367764  | 54.446  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 7.75 | 117 | 299240  | 49.515  | ug/l | 100    |

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 Quant Title : SW846 8260  
 QLast Update : Thu Nov 07 04:00:41 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 9.07  | 83   | 343146   | 48.695   | ug/l   | 100      |
| 40) Benzene                    | 8.02  | 78   | 915049   | 50.045   | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.15  | 41   | 118181m  | 40.235   | ug/l   |          |
| 42) 1,2-Dichloroethane         | 8.10  | 62   | 319418   | 50.936   | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.15  | 43   | 569607   | 52.895   | ug/l   | 99       |
| 44) Trichloroethene            | 8.82  | 130  | 221327   | 49.243   | ug/l   | 98       |
| 45) 1,2-Dichloropropane        | 9.10  | 63   | 254101   | 51.165   | ug/l   | 99       |
| 46) Dibromomethane             | 9.19  | 93   | 155152   | 50.134   | ug/l   | 98       |
| 47) Bromodichloromethane       | 9.39  | 83   | 320660   | 51.889   | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.18  | 41   | 260630   | 54.109   | ug/l   | 99       |
| 49) 1,4-Dioxane                | 9.19  | 88   | 94445    | 1103.308 | ug/l   | 98       |
| 51) 4-Methyl-2-Pentanone       | 9.97  | 43   | 1852377  | 304.008  | ug/l   | 100      |
| 52) Toluene                    | 10.14 | 92   | 562178   | 51.298   | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.37 | 75   | 361007   | 50.564   | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 9.83  | 75   | 396295   | 51.601   | ug/l   | 100      |
| 55) 1,1,2-Trichloroethane      | 10.55 | 97   | 228467   | 51.512   | ug/l   | 99       |
| 56) Ethyl methacrylate         | 10.42 | 69   | 371692   | 50.237   | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 10.70 | 76   | 395821   | 51.853   | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.68  | 63   | 694821   | 281.495  | ug/l   | 100      |
| 59) 2-Hexanone                 | 10.74 | 43   | 1384082  | 295.946  | ug/l   | 99       |
| 60) Dibromochloromethane       | 10.90 | 129  | 249528   | 53.212   | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 11.00 | 107  | 233945   | 52.105   | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.63 | 164  | 192254   | 47.247   | ug/l   | 99       |
| 65) Chlorobenzene              | 11.43 | 112  | 586972   | 50.317   | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 229298   | 52.399   | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.51 | 91   | 1076553  | 52.014   | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.62 | 106  | 805725   | 103.925  | ug/l   | 100      |
| 69) o-Xylene                   | 11.95 | 106  | 380775   | 50.821   | ug/l   | 99       |
| 70) Styrene                    | 11.96 | 104  | 643210   | 54.585   | ug/l   | 99       |
| 71) Bromoform                  | 12.13 | 173  | 186670   | 54.841   | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.25 | 105  | 1057508  | 49.972   | ug/l   | 100      |
| 74) N-amyl acetate             | 12.07 | 43   | 481137   | 53.656   | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 368565   | 51.142   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 294626m  | 44.483   | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 256516   | 48.246   | ug/l   | 100      |
| 78) n-propylbenzene            | 12.59 | 91   | 1241353  | 51.231   | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.67 | 91   | 729297   | 48.518   | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 900404   | 50.213   | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 128819   | 51.370   | ug/l   | 99       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 749059   | 49.685   | ug/l   | 99       |
| 83) tert-Butylbenzene          | 12.99 | 119  | 767992   | 49.595   | ug/l   | 100      |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 890980   | 51.357   | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.17 | 105  | 1032050  | 51.245   | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 932498   | 52.439   | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 456402   | 50.129   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 451566   | 49.572   | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.62 | 91   | 809527   | 52.013   | ug/l   | 99       |
| 90) Hexachloroethane           | 13.88 | 117  | 172433   | 48.290   | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 450744   | 50.328   | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 77503    | 53.902   | ug/l   | 99       |

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|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.91 | 180  | 257239   | 47.502 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 151673   | 49.115 | ug/l  | 99       |
| 95) Naphthalene            | 15.13 | 128  | 730488   | 48.549 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.30 | 180  | 262315   | 52.262 | ug/l  | 99       |

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

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