

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_N\DATA\VN112018\  
 Data File : VN052424.D  
 Acq On : 20 Nov 2018 22:38  
 Operator : MD\SY  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA\_N/WATER  
 ALS Vial : 27 Sample Multiplier: 28

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

MMDadoda  
 11/21/2018 5:12:55 PM

Quant Time: Nov 21 01:03:04 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N111418W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Nov 15 03:02:37 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.67  | 168  | 259790   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.59  | 114  | 436350   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 394291   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152  | 185539   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.03   | 65  | 205832   | 56.10 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 112.20% |      |
| 35) Dibromofluoromethane  | 7.59   | 113 | 149954   | 53.28 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 106.56% |      |
| 50) Toluene-d8            | 10.09  | 98  | 563858   | 50.93 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.86% |      |
| 62) 4-Bromofluorobenzene  | 12.40  | 95  | 197684   | 54.28 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 108.56% |      |

## Target Compounds

|                               |      |     |         |        |      | Qvalue |
|-------------------------------|------|-----|---------|--------|------|--------|
| 2) Dichlorodifluoromethane    | 1.85 | 85  | 132805  | 48.24  | ug/l | 99     |
| 3) Chloromethane              | 2.06 | 50  | 184975  | 48.35  | ug/l | 99     |
| 4) Vinyl Chloride             | 2.19 | 62  | 160179  | 48.44  | ug/l | 99     |
| 5) Bromomethane               | 2.57 | 94  | 77293   | 37.49  | ug/l | 96     |
| 6) Chloroethane               | 2.71 | 64  | 91767   | 49.08  | ug/l | 98     |
| 7) Trichlorofluoromethane     | 3.02 | 101 | 231917  | 50.68  | ug/l | 99     |
| 8) Diethyl Ether              | 3.41 | 74  | 84928   | 48.69  | ug/l | 97     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.76 | 101 | 134185  | 46.43  | ug/l | 99     |
| 10) Methyl Iodide             | 3.96 | 142 | 163707  | 42.19  | ug/l | 96     |
| 11) Tert butyl alcohol        | 4.78 | 59  | 47054   | 242.83 | ug/l | 96     |
| 12) 1,1-Dichloroethene        | 3.74 | 96  | 123378  | 46.13  | ug/l | 95     |
| 13) Acrolein                  | 3.61 | 56  | 94436   | 316.74 | ug/l | 99     |
| 14) Allyl chloride            | 4.33 | 41  | 259444  | 47.25  | ug/l | 92     |
| 15) Acrylonitrile             | 4.99 | 53  | 280001  | 253.06 | ug/l | 99     |
| 16) Acetone                   | 3.82 | 43  | 225016  | 222.73 | ug/l | 94     |
| 17) Carbon Disulfide          | 4.06 | 76  | 367276  | 47.89  | ug/l | 100    |
| 18) Methyl Acetate            | 4.33 | 43  | 149958  | 52.95  | ug/l | 99     |
| 19) Methyl tert-butyl Ether   | 5.05 | 73  | 396217  | 51.56  | ug/l | 100    |
| 20) Methylene Chloride        | 4.55 | 84  | 159950  | 52.07  | ug/l | 98     |
| 21) trans-1,2-Dichloroethene  | 5.05 | 96  | 134855  | 46.84  | ug/l | 93     |
| 22) Diisopropyl ether         | 5.95 | 45  | 591473  | 52.79  | ug/l | 99     |
| 23) Vinyl Acetate             | 5.90 | 43  | 1948553 | 256.37 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 5.85 | 63  | 304287  | 50.65  | ug/l | 99     |
| 25) 2-Butanone                | 6.83 | 43  | 355650  | 250.10 | ug/l | 97     |
| 26) 2,2-Dichloropropane       | 6.83 | 77  | 191249  | 43.29  | ug/l | 98     |
| 27) cis-1,2-Dichloroethene    | 6.83 | 96  | 159416  | 47.56  | ug/l | 93     |
| 28) Bromochloromethane        | 7.20 | 49  | 155303  | 50.27  | ug/l | 98     |
| 29) Tetrahydrofuran           | 7.21 | 42  | 242488  | 259.58 | ug/l | 98     |
| 30) Chloroform                | 7.37 | 83  | 298518  | 52.14  | ug/l | 96     |
| 31) Cyclohexane               | 7.66 | 56  | 267557  | 47.92  | ug/l | 99     |
| 32) 1,1,1-Trichloroethane     | 7.57 | 97  | 252944  | 51.86  | ug/l | 98     |
| 36) 1,1-Dichloropropene       | 7.80 | 75  | 223237  | 51.04  | ug/l | 99     |
| 37) Ethyl Acetate             | 6.93 | 43  | 162686  | 51.25  | ug/l | 97     |
| 38) Carbon Tetrachloride      | 7.78 | 117 | 217756  | 54.19  | ug/l | 98     |

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 Quant Title : SW846 8260  
 QLast Update : Thu Nov 15 03:02:37 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.08  | 83   | 238779   | 47.83   | ug/l   | 97       |
| 40) Benzene                    | 8.04  | 78   | 627048   | 50.19   | ug/l   | 96       |
| 41) Methacrylonitrile          | 7.18  | 41   | 93556    | 52.84   | ug/l # | 100      |
| 42) 1,2-Dichloroethane         | 8.13  | 62   | 248481   | 55.77   | ug/l   | 98       |
| 43) Isopropyl Acetate          | 8.17  | 43   | 311234   | 50.82   | ug/l   | 99       |
| 44) Trichloroethene            | 8.84  | 130  | 152419   | 49.52   | ug/l   | 98       |
| 45) 1,2-Dichloropropane        | 9.12  | 63   | 180507   | 50.91   | ug/l   | 98       |
| 46) Dibromomethane             | 9.21  | 93   | 106747   | 52.00   | ug/l   | 96       |
| 47) Bromodichloromethane       | 9.40  | 83   | 234559   | 55.68   | ug/l   | 98       |
| 48) Methyl methacrylate        | 9.20  | 41   | 155867   | 50.15   | ug/l   | 97       |
| 49) 1,4-Dioxane                | 9.20  | 88   | 25349    | 1062.51 | ug/l   | 93       |
| 51) 4-Methyl-2-Pentanone       | 9.99  | 43   | 846388   | 274.53  | ug/l   | 98       |
| 52) Toluene                    | 10.16 | 92   | 383287   | 51.28   | ug/l   | 98       |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 219596   | 51.69   | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 9.84  | 75   | 252933   | 52.23   | ug/l   | 94       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 138381   | 51.07   | ug/l   | 95       |
| 56) Ethyl methacrylate         | 10.43 | 69   | 182434   | 51.20   | ug/l   | 95       |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 251833   | 52.47   | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.70  | 63   | 541678   | 267.01  | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.75 | 43   | 570008   | 268.79  | ug/l   | 98       |
| 60) Dibromochloromethane       | 10.90 | 129  | 158807   | 54.17   | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.00 | 107  | 134494   | 49.83   | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.63 | 164  | 139619   | 49.81   | ug/l   | 99       |
| 65) Chlorobenzene              | 11.43 | 112  | 414715   | 49.76   | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 148912   | 52.40   | ug/l   | 100      |
| 67) Ethyl Benzene              | 11.51 | 91   | 751943   | 51.98   | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.62 | 106  | 552951   | 104.62  | ug/l   | 97       |
| 69) o-Xylene                   | 11.95 | 106  | 269777   | 53.25   | ug/l   | 98       |
| 70) Styrene                    | 11.96 | 104  | 440725   | 54.33   | ug/l   | 99       |
| 71) Bromoform                  | 12.13 | 173  | 96621    | 57.58   | ug/l # | 97       |
| 73) Isopropylbenzene           | 12.25 | 105  | 740210   | 49.62   | ug/l   | 98       |
| 74) N-amyl acetate             | 12.07 | 43   | 260990   | 49.12   | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 174482   | 48.39   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 150698m  | 47.87   | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 166185   | 47.88   | ug/l   | 96       |
| 78) n-propylbenzene            | 12.59 | 91   | 876496   | 50.24   | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 12.67 | 91   | 510659   | 50.11   | ug/l   | 97       |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 606117   | 51.09   | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 45685    | 47.07   | ug/l   | 93       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 520128   | 49.81   | ug/l   | 97       |
| 83) tert-Butylbenzene          | 12.99 | 119  | 516789   | 49.34   | ug/l   | 96       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 611408   | 51.34   | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.17 | 105  | 724280   | 50.77   | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 620792   | 51.37   | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 303965   | 49.31   | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 302842   | 49.42   | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.61 | 91   | 549005   | 52.89   | ug/l   | 100      |
| 90) Hexachloroethane           | 13.87 | 117  | 107587   | 50.26   | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 299997   | 50.23   | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 29609    | 55.68   | ug/l   | 89       |

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Quant Title : SW846 8260  
QLast Update : Thu Nov 15 03:02:37 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.91 | 180  | 134732   | 48.55 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 69964    | 51.18 | ug/l  | 99       |
| 95) Naphthalene            | 15.13 | 128  | 312232   | 47.67 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.31 | 180  | 123823   | 54.56 | ug/l  | 98       |

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

