

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN080818\  
 Data File : VN050451.D  
 Acq On : 8 Aug 2018 11:13  
 Operator : MD\SY  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 8/9/2018 1:32:12 PM

Quant Time: Aug 08 14:47:01 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N080618W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Aug 07 05:22:15 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.67  | 168  | 795411   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.59  | 114  | 1145267  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 1058587  | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.35 | 152  | 547823   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 8.03   | 65  | 487421   | 45.86 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 91.72% |      |
| 35) Dibromofluoromethane  | 7.59   | 113 | 446314   | 48.57 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.14% |      |
| 50) Toluene-d8            | 10.09  | 98  | 1669713  | 48.33 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.66% |      |
| 62) 4-Bromofluorobenzene  | 12.40  | 95  | 581754   | 49.40 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 98.80% |      |

## Target Compounds

|                               |      |     |         |        |      | Qvalue |
|-------------------------------|------|-----|---------|--------|------|--------|
| 2) Dichlorodifluoromethane    | 1.85 | 85  | 388796  | 44.03  | ug/l | 99     |
| 3) Chloromethane              | 2.06 | 50  | 463725  | 44.28  | ug/l | 99     |
| 4) Vinyl Chloride             | 2.18 | 62  | 506272  | 44.30  | ug/l | 98     |
| 5) Bromomethane               | 2.56 | 94  | 290051  | 52.34  | ug/l | 99     |
| 6) Chloroethane               | 2.70 | 64  | 313022  | 44.45  | ug/l | 99     |
| 7) Trichlorofluoromethane     | 3.01 | 101 | 671284  | 45.48  | ug/l | 100    |
| 8) Diethyl Ether              | 3.41 | 74  | 253707  | 46.87  | ug/l | 97     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.76 | 101 | 424433  | 46.53  | ug/l | 98     |
| 10) Methyl Iodide             | 3.95 | 142 | 207975  | 51.75  | ug/l | 97     |
| 11) Tert butyl alcohol        | 4.79 | 59  | 158833  | 186.05 | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 3.73 | 96  | 390958  | 45.46  | ug/l | 98     |
| 13) Acrolein                  | 3.61 | 56  | 167224  | 156.53 | ug/l | 100    |
| 14) Allyl chloride            | 4.32 | 41  | 626547  | 45.37  | ug/l | 98     |
| 15) Acrylonitrile             | 4.99 | 53  | 731039  | 204.43 | ug/l | 99     |
| 16) Acetone                   | 3.82 | 43  | 635379  | 200.40 | ug/l | 100    |
| 17) Carbon Disulfide          | 4.05 | 76  | 1141935 | 40.84  | ug/l | 99     |
| 18) Methyl Acetate            | 4.33 | 43  | 346685  | 42.07  | ug/l | 98     |
| 19) Methyl tert-butyl Ether   | 5.05 | 73  | 1168614 | 47.88  | ug/l | 98     |
| 20) Methylene Chloride        | 4.55 | 84  | 450860  | 46.40  | ug/l | 98     |
| 21) trans-1,2-Dichloroethene  | 5.04 | 96  | 431939  | 46.42  | ug/l | 98     |
| 22) Diisopropyl ether         | 5.95 | 45  | 1350471 | 47.87  | ug/l | 98     |
| 23) Vinyl Acetate             | 5.90 | 43  | 4696064 | 233.31 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 5.85 | 63  | 790187  | 45.65  | ug/l | 100    |
| 25) 2-Butanone                | 6.84 | 43  | 1066274 | 202.47 | ug/l | 98     |
| 26) 2,2-Dichloropropane       | 6.82 | 77  | 659710  | 46.23  | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 6.83 | 96  | 497029  | 48.19  | ug/l | 98     |
| 28) Bromochloromethane        | 7.19 | 49  | 369522  | 46.37  | ug/l | 95     |
| 29) Tetrahydrofuran           | 7.21 | 42  | 553675  | 196.43 | ug/l | 98     |
| 30) Chloroform                | 7.37 | 83  | 808065  | 46.70  | ug/l | 100    |
| 31) Cyclohexane               | 7.65 | 56  | 691857  | 45.35  | ug/l | 97     |
| 32) 1,1,1-Trichloroethane     | 7.57 | 97  | 689705  | 46.41  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 7.79 | 75  | 615017  | 48.87  | ug/l | 99     |
| 37) Ethyl Acetate             | 6.93 | 43  | 387097  | 42.72  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 7.77 | 117 | 606368  | 46.19  | ug/l | 98     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN080818\  
 Data File : VN050451.D  
 Acq On : 8 Aug 2018 11:13  
 Operator : MD\SY  
 Sample : VSTDCCC050  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 8/9/2018 1:32:12 PM

Quant Time: Aug 08 14:47:01 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N080618W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Aug 07 05:22:15 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| -----                          |       |      |          |        |        |          |
| 39) Methylcyclohexane          | 9.08  | 83   | 662967   | 48.27  | ug/l   | 97       |
| 40) Benzene                    | 8.04  | 78   | 1857374  | 48.01  | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.17  | 41   | 205783   | 42.71  | ug/l # | 85       |
| 42) 1,2-Dichloroethane         | 8.12  | 62   | 587320   | 47.82  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.17  | 43   | 689640   | 44.08  | ug/l   | 96       |
| 44) Trichloroethene            | 8.83  | 130  | 503984   | 48.48  | ug/l   | 100      |
| 45) 1,2-Dichloropropane        | 9.12  | 63   | 486038   | 47.79  | ug/l   | 98       |
| 46) Dibromomethane             | 9.21  | 93   | 296116   | 47.15  | ug/l   | 97       |
| 47) Bromodichloromethane       | 9.40  | 83   | 629846   | 48.42  | ug/l   | 99       |
| 48) Methyl methacrylate        | 9.20  | 41   | 354099   | 45.16  | ug/l   | 97       |
| 49) 1,4-Dioxane                | 9.20  | 88   | 95792    | 792.61 | ug/l   | 96       |
| 51) 4-Methyl-2-Pentanone       | 9.99  | 43   | 2401383  | 213.15 | ug/l   | 99       |
| 52) Toluene                    | 10.16 | 92   | 1165775  | 50.17  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 659634   | 50.50  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 9.84  | 75   | 751050   | 51.52  | ug/l   | 97       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 427590   | 47.13  | ug/l   | 100      |
| 56) Ethyl methacrylate         | 10.43 | 69   | 570550   | 44.63  | ug/l   | 96       |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 713366   | 47.91  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.70  | 63   | 1311250  | 220.03 | ug/l   | 98       |
| 59) 2-Hexanone                 | 10.75 | 43   | 1692929  | 215.32 | ug/l   | 97       |
| 60) Dibromochloromethane       | 10.90 | 129  | 487001   | 48.73  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.01 | 107  | 427717   | 47.83  | ug/l   | 97       |
| 64) Tetrachloroethene          | 10.63 | 164  | 498406   | 50.39  | ug/l   | 99       |
| 65) Chlorobenzene              | 11.43 | 112  | 1293264  | 48.73  | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 477370   | 49.42  | ug/l   | 100      |
| 67) Ethyl Benzene              | 11.51 | 91   | 2204492  | 51.39  | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.62 | 106  | 1694038  | 103.73 | ug/l   | 100      |
| 69) o-Xylene                   | 11.95 | 106  | 820471   | 52.15  | ug/l   | 99       |
| 70) Styrene                    | 11.96 | 104  | 1359802  | 53.15  | ug/l   | 99       |
| 71) Bromoform                  | 12.13 | 173  | 336810   | 47.71  | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.25 | 105  | 2148568  | 52.25  | ug/l   | 100      |
| 74) N-amyl acetate             | 12.07 | 43   | 621797   | 46.65  | ug/l   | 97       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.50 | 83   | 519598   | 43.79  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 12.55 | 75   | 442225m  | 44.60  | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 563249   | 51.13  | ug/l   | 97       |
| 78) n-propylbenzene            | 12.59 | 91   | 2420255  | 51.99  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 12.68 | 91   | 1456053  | 50.65  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 1755818  | 52.60  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 138204   | 48.97  | ug/l   | 97       |
| 82) 4-Chlorotoluene            | 12.77 | 91   | 1487855  | 51.90  | ug/l   | 98       |
| 83) tert-Butylbenzene          | 12.99 | 119  | 1480618  | 50.84  | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 1793157  | 53.03  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.17 | 105  | 1963008  | 50.57  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 1741219  | 52.35  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.28 | 146  | 978801   | 49.88  | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 962107   | 49.10  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.62 | 91   | 1434066  | 50.64  | ug/l   | 99       |
| 90) Hexachloroethane           | 13.88 | 117  | 268386   | 45.37  | ug/l   | 97       |
| 91) 1,2-Dichlorobenzene        | 13.65 | 146  | 954033   | 48.50  | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 80858    | 40.14  | ug/l   | 95       |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN080818\  
Data File : VN050451.D  
Acq On : 8 Aug 2018 11:13  
Operator : MD\SY  
Sample : VSTDCCC050  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

Manual Integrations  
APPROVED

MMDadoda  
8/9/2018 1:32:12 PM

Quant Time: Aug 08 14:47:01 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N080618W.M  
Quant Title : SW846 8260  
QLast Update : Tue Aug 07 05:22:15 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.91 | 180  | 533451   | 53.25 | ug/l  | 97       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 284710   | 52.09 | ug/l  | 100      |
| 95) Naphthalene            | 15.13 | 128  | 1235776  | 46.83 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.32 | 180  | 505472   | 49.90 | ug/l  | 99       |

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

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA N\DATA\VN080818\  
Data File : VN050451.D  
Acq On : 8 Aug 2018 11:13  
Operator : MD\SY  
Sample : VSTDCCC050  
Misc : 5.00mL/MSVOA N/WATER  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDCCC050

Manual Integrations  
APPROVED

MMDadoda  
8/9/2018 1:32:12 PM

Quant Time: Aug 08 14:47:01 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_N\METHODS\82N080618W.M  
Quant Title : SW846 8260  
QLast Update : Tue Aug 07 05:22:15 2018  
Response via : Initial Calibration

