

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN062118\  
 Data File : VN049477.D  
 Acq On : 21 Jun 2018 19:10  
 Operator : MD\SY  
 Sample : VN0621MBSD01  
 Misc : 5.00µg/10mL/100uL/5.00mL/MSVOA\_N/MEOH  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0621MBSD01

Manual Integrations  
 APPROVED

apatel  
 6/22/2018 1:58:07 PM

Quant Time: Jun 22 04:45:08 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N061618W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Jun 16 01:02:01 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.67  | 168  | 1379570  | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.59  | 114  | 2093513  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.41 | 117  | 1879102  | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.35 | 152  | 890828   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 8.03   | 65  | 863599   | 47.20 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 94.40% |      |
| 35) Dibromofluoromethane  | 7.59   | 113 | 779573   | 46.03 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 92.06% |      |
| 50) Toluene-d8            | 10.09  | 98  | 2841203  | 44.06 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 88.12% |      |
| 62) 4-Bromofluorobenzene  | 12.40  | 95  | 946067   | 44.37 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 88.74% |      |

## Target Compounds

|                               |      |     |         |        |      | Qvalue |
|-------------------------------|------|-----|---------|--------|------|--------|
| 2) Dichlorodifluoromethane    | 1.85 | 85  | 296884  | 18.70  | ug/l | 100    |
| 3) Chloromethane              | 2.06 | 50  | 374631  | 18.27  | ug/l | 99     |
| 4) Vinyl Chloride             | 2.18 | 62  | 410698  | 18.85  | ug/l | 99     |
| 5) Bromomethane               | 2.56 | 94  | 216027  | 18.86  | ug/l | 97     |
| 6) Chloroethane               | 2.70 | 64  | 259522  | 19.97  | ug/l | 98     |
| 7) Trichlorofluoromethane     | 3.02 | 101 | 544446  | 20.03  | ug/l | 99     |
| 8) Diethyl Ether              | 3.41 | 74  | 194206  | 20.46  | ug/l | 95     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.76 | 101 | 333234  | 19.33  | ug/l | 94     |
| 10) Methyl Iodide             | 3.95 | 142 | 364000  | 20.28  | ug/l | 91     |
| 11) Tert butyl alcohol        | 4.81 | 59  | 120982  | 112.65 | ug/l | 96     |
| 12) 1,1-Dichloroethene        | 3.73 | 96  | 306524  | 19.38  | ug/l | 90     |
| 13) Acrolein                  | 3.61 | 56  | 233529  | 207.36 | ug/l | 100    |
| 14) Allyl chloride            | 4.32 | 41  | 489601  | 19.60  | ug/l | 90     |
| 15) Acrylonitrile             | 5.00 | 53  | 560070  | 104.29 | ug/l | 99     |
| 16) Acetone                   | 3.82 | 43  | 471381  | 106.10 | ug/l | 91     |
| 17) Carbon Disulfide          | 4.05 | 76  | 862174  | 17.39  | ug/l | 100    |
| 18) Methyl Acetate            | 4.33 | 43  | 324778  | 23.98  | ug/l | 94     |
| 19) Methyl tert-butyl Ether   | 5.05 | 73  | 847415  | 21.01  | ug/l | 99     |
| 20) Methylene Chloride        | 4.55 | 84  | 361385  | 19.48  | ug/l | 92     |
| 21) trans-1,2-Dichloroethene  | 5.04 | 96  | 318746  | 19.03  | ug/l | 93     |
| 22) Diisopropyl ether         | 5.96 | 45  | 1028875 | 20.63  | ug/l | 98     |
| 23) Vinyl Acetate             | 5.90 | 43  | 3345157 | 102.88 | ug/l | 97     |
| 24) 1,1-Dichloroethane        | 5.85 | 63  | 633137  | 19.83  | ug/l | 99     |
| 25) 2-Butanone                | 6.84 | 43  | 641225  | 107.49 | ug/l | 94     |
| 26) 2,2-Dichloropropane       | 6.82 | 77  | 509528  | 19.76  | ug/l | 97     |
| 27) cis-1,2-Dichloroethene    | 6.83 | 96  | 371530  | 19.95  | ug/l | 92     |
| 28) Bromochloromethane        | 7.20 | 49  | 245969  | 17.38  | ug/l | 85     |
| 29) Tetrahydrofuran           | 7.22 | 42  | 417926  | 108.83 | ug/l | 94     |
| 30) Chloroform                | 7.37 | 83  | 640788  | 20.17  | ug/l | 100    |
| 31) Cyclohexane               | 7.66 | 56  | 532033  | 19.55  | ug/l | 92     |
| 32) 1,1,1-Trichloroethane     | 7.57 | 97  | 547387  | 20.19  | ug/l | 96     |
| 36) 1,1-Dichloropropene       | 7.79 | 75  | 476287  | 19.85  | ug/l | 98     |
| 37) Ethyl Acetate             | 6.94 | 43  | 302602  | 23.20  | ug/l | 97     |
| 38) Carbon Tetrachloride      | 7.77 | 117 | 483402  | 19.46  | ug/l | 98     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN062118\  
 Data File : VN049477.D  
 Acq On : 21 Jun 2018 19:10  
 Operator : MD\SY  
 Sample : VN0621MBSD01  
 Misc : 5.00µg/10mL/100uL/5.00mL/MSVOA\_N/MEOH  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleID :  
 VN0621MBSD01

Manual Integrations  
 APPROVED

apatel  
 6/22/2018 1:58:07 PM

Quant Time: Jun 22 04:45:08 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N061618W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Jun 16 01:02:01 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 39) Methylcyclohexane          | 9.08  | 83   | 469418   | 18.23  | ug/l   | 97       |
| 40) Benzene                    | 8.04  | 78   | 1433154  | 19.48  | ug/l   | 98       |
| 41) Methacrylonitrile          | 7.17  | 41   | 136395   | 19.34  | ug/l # | 100      |
| 42) 1,2-Dichloroethane         | 8.13  | 62   | 450905   | 19.84  | ug/l   | 97       |
| 43) Isopropyl Acetate          | 8.17  | 43   | 592045   | 23.76  | ug/l   | 98       |
| 44) Trichloroethene            | 8.84  | 130  | 384543   | 19.80  | ug/l   | 95       |
| 45) 1,2-Dichloropropane        | 9.12  | 63   | 379601   | 19.71  | ug/l   | 99       |
| 46) Dibromomethane             | 9.21  | 93   | 227900   | 20.41  | ug/l   | 91       |
| 47) Bromodichloromethane       | 9.41  | 83   | 477947   | 19.47  | ug/l   | 96       |
| 48) Methyl methacrylate        | 9.20  | 41   | 251337   | 21.42  | ug/l   | 87       |
| 49) 1,4-Dioxane                | 9.20  | 88   | 67493    | 416.67 | ug/l   | 96       |
| 51) 4-Methyl-2-Pentanone       | 9.99  | 43   | 1420547  | 108.75 | ug/l   | 94       |
| 52) Toluene                    | 10.16 | 92   | 864635   | 20.03  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.38 | 75   | 454705   | 19.37  | ug/l   | 97       |
| 54) cis-1,3-Dichloropropene    | 9.84  | 75   | 534778   | 19.29  | ug/l # | 89       |
| 55) 1,1,2-Trichloroethane      | 10.56 | 97   | 323671   | 20.11  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 10.43 | 69   | 387195   | 20.85  | ug/l # | 86       |
| 57) 1,3-Dichloropropane        | 10.71 | 76   | 538171   | 20.18  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.70  | 63   | 440816   | 76.93  | ug/l   | 95       |
| 59) 2-Hexanone                 | 10.75 | 43   | 917911   | 109.00 | ug/l   | 95       |
| 60) Dibromochloromethane       | 10.90 | 129  | 357180   | 19.88  | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 11.01 | 107  | 306543   | 20.49  | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.63 | 164  | 427848   | 22.22  | ug/l   | 97       |
| 65) Chlorobenzene              | 11.44 | 112  | 939600   | 19.41  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.51 | 131  | 359668   | 19.74  | ug/l   | 98       |
| 67) Ethyl Benzene              | 11.51 | 91   | 1580051  | 19.68  | ug/l   | 96       |
| 68) m/p-Xylenes                | 11.62 | 106  | 1212136  | 40.23  | ug/l   | 97       |
| 69) o-Xylene                   | 11.95 | 106  | 581403   | 20.03  | ug/l   | 98       |
| 70) Styrene                    | 11.97 | 104  | 937637   | 20.48  | ug/l   | 97       |
| 71) Bromoform                  | 12.13 | 173  | 239088   | 20.28  | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.25 | 105  | 1561110  | 19.96  | ug/l   | 98       |
| 74) N-amyl acetate             | 12.07 | 43   | 389811   | 20.35  | ug/l   | 93       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.51 | 83   | 361094   | 21.15  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 12.56 | 75   | 337293m  | 22.19  | ug/l   |          |
| 77) Bromobenzene               | 12.53 | 156  | 392944   | 19.02  | ug/l   | 91       |
| 78) n-propylbenzene            | 12.59 | 91   | 1725697  | 20.09  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 12.68 | 91   | 1065411  | 19.58  | ug/l   | 98       |
| 80) 1,3,5-Trimethylbenzene     | 12.73 | 105  | 1261735  | 20.52  | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75   | 96348    | 20.03  | ug/l   | 95       |
| 82) 4-Chlorotoluene            | 12.78 | 91   | 1043991  | 19.89  | ug/l   | 97       |
| 83) tert-Butylbenzene          | 12.99 | 119  | 1065068  | 19.55  | ug/l   | 97       |
| 84) 1,2,4-Trimethylbenzene     | 13.04 | 105  | 1250845  | 20.48  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.17 | 105  | 1421567  | 19.61  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.29 | 119  | 1175245  | 19.40  | ug/l   | 98       |
| 87) 1,3-Dichlorobenzene        | 13.29 | 146  | 648021   | 19.07  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.36 | 146  | 623607   | 18.51  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.62 | 91   | 847420   | 17.91  | ug/l   | 98       |
| 90) Hexachloroethane           | 13.88 | 117  | 238376   | 19.77  | ug/l   | 90       |
| 91) 1,2-Dichlorobenzene        | 13.66 | 146  | 637224   | 19.12  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75   | 53134    | 19.51  | ug/l   | 87       |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN062118\  
Data File : VN049477.D  
Acq On : 21 Jun 2018 19:10  
Operator : MD\SY  
Sample : VN0621MBSD01  
Misc : 5.00µ/10mL/100uL/5.00mL/MSVOA\_N/MEOH  
ALS Vial : 18 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VN0621MBSD01

Manual Integrations  
APPROVED

apatel  
6/22/2018 1:58:07 PM

Quant Time: Jun 22 04:45:08 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N061618W.M  
Quant Title : SW846 8260  
QLast Update : Sat Jun 16 01:02:01 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.91 | 180  | 198328   | 16.49 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.01 | 225  | 200218   | 18.84 | ug/l  | 97       |
| 95) Naphthalene            | 15.14 | 128  | 403716   | 17.71 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.32 | 180  | 217341   | 17.00 | ug/l  | 99       |

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

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN062118\  
 Data File : VN049477.D  
 Acq On : 21 Jun 2018 19:10  
 Operator : MD\SY  
 Sample : VN0621MBSD01  
 Misc : 5.00uL/10mL/100uL/5.00mL/MSVOA\_N/MEOH  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 Client Sample ID :  
 VN0621MBSD01

Manual Integrations  
 APPROVED

apatel  
 6/22/2018 1:58:07 PM

Quant Time: Jun 22 04:45:08 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N061618W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Jun 16 01:02:01 2018  
 Response via : Initial Calibration

