

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN062420\  
 Data File : VN062082.D  
 Acq On : 24 Jun 2020 23:26  
 Operator : JC/MD  
 Sample : VN0624WBS02  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 32 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0624WBS02

Manual Integrations  
 APPROVED

MMDadoda  
 6/25/2020 6:10:49 PM

Quant Time: Jun 25 05:39:45 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N062420W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jun 24 15:33:00 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.63  | 168  | 246979   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.55  | 114  | 449904   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.38 | 117  | 424086   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.32 | 152  | 191106   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 7.99   | 65  | 177525   | 51.22 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.44% |      |
| 35) Dibromofluoromethane  | 7.55   | 113 | 142927   | 49.52 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.04%  |      |
| 50) Toluene-d8            | 10.06  | 98  | 567266   | 49.17 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 98.34%  |      |
| 62) 4-Bromofluorobenzene  | 12.38  | 95  | 188506   | 48.36 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.72%  |      |

## Target Compounds

|                               |      |     |        |        |      | Qvalue |
|-------------------------------|------|-----|--------|--------|------|--------|
| 2) Dichlorodifluoromethane    | 1.83 | 85  | 51247  | 18.357 | ug/l | 98     |
| 3) Chloromethane              | 2.03 | 50  | 66748  | 19.493 | ug/l | 99     |
| 4) Vinyl Chloride             | 2.16 | 62  | 81902  | 18.630 | ug/l | 98     |
| 5) Bromomethane               | 2.53 | 94  | 46753  | 16.455 | ug/l | 96     |
| 6) Chloroethane               | 2.67 | 64  | 56193  | 18.711 | ug/l | 98     |
| 7) Trichlorofluoromethane     | 2.98 | 101 | 98351  | 18.155 | ug/l | 97     |
| 8) Diethyl Ether              | 3.37 | 74  | 35402  | 18.715 | ug/l | 95     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.72 | 101 | 50520  | 17.809 | ug/l | 97     |
| 10) Methyl Iodide             | 3.91 | 142 | 45855  | 14.353 | ug/l | 99     |
| 11) Tert butyl alcohol        | 4.74 | 59  | 46433  | 93.308 | ug/l | 98     |
| 12) 1,1-Dichloroethene        | 3.70 | 96  | 52753  | 18.602 | ug/l | 99     |
| 13) Acrolein                  | 3.57 | 56  | 38565  | 79.154 | ug/l | 100    |
| 14) Allyl chloride            | 4.27 | 41  | 70110  | 18.158 | ug/l | 99     |
| 15) Acrylonitrile             | 4.93 | 53  | 125062 | 92.224 | ug/l | 98     |
| 16) Acetone                   | 3.77 | 43  | 98093  | 87.534 | ug/l | 97     |
| 17) Carbon Disulfide          | 4.01 | 76  | 156154 | 19.255 | ug/l | 100    |
| 18) Methyl Acetate            | 4.28 | 43  | 49812  | 18.079 | ug/l | 98     |
| 19) Methyl tert-butyl Ether   | 4.99 | 73  | 170354 | 18.799 | ug/l | 99     |
| 20) Methylene Chloride        | 4.50 | 84  | 62488  | 19.508 | ug/l | 97     |
| 21) trans-1,2-Dichloroethene  | 4.99 | 96  | 57520  | 17.804 | ug/l | 98     |
| 22) Diisopropyl ether         | 5.90 | 45  | 160453 | 18.251 | ug/l | 96     |
| 23) Vinyl Acetate             | 5.84 | 43  | 657594 | 91.618 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 5.79 | 63  | 103414 | 18.268 | ug/l | 99     |
| 25) 2-Butanone                | 6.79 | 43  | 152057 | 89.756 | ug/l | 98     |
| 26) 2,2-Dichloropropane       | 6.77 | 77  | 73041  | 15.483 | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 6.78 | 96  | 65940  | 18.139 | ug/l | 97     |
| 28) Bromochloromethane        | 7.15 | 49  | 43418  | 17.677 | ug/l | 98     |
| 29) Tetrahydrofuran           | 7.17 | 42  | 104120 | 93.825 | ug/l | 99     |
| 30) Chloroform                | 7.33 | 83  | 107943 | 18.741 | ug/l | 97     |
| 31) Cyclohexane               | 7.62 | 56  | 87663  | 18.307 | ug/l | 96     |
| 32) 1,1,1-Trichloroethane     | 7.53 | 97  | 89998  | 18.528 | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 7.75 | 75  | 78681  | 17.399 | ug/l | 99     |
| 37) Ethyl Acetate             | 6.88 | 43  | 68700  | 18.346 | ug/l | 98     |
| 38) Carbon Tetrachloride      | 7.73 | 117 | 75517  | 17.713 | ug/l | 100    |

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Quant Time: Jun 25 05:39:45 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_N\METHODS\82N062420W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jun 24 15:33:00 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.05  | 83   | 86455    | 17.448  | ug/l   | 97       |
| 40) Benzene                    | 8.00  | 78   | 242760   | 17.612  | ug/l   | 97       |
| 41) Methacrylonitrile          | 7.13  | 41   | 29465    | 16.973  | ug/l   | 97       |
| 42) 1,2-Dichloroethane         | 8.09  | 62   | 83150    | 17.855  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.13  | 43   | 106592   | 17.462  | ug/l   | 97       |
| 44) Trichloroethene            | 8.80  | 130  | 60589    | 17.426  | ug/l   | 99       |
| 45) 1,2-Dichloropropane        | 9.08  | 63   | 61496    | 18.085  | ug/l   | 98       |
| 46) Dibromomethane             | 9.18  | 93   | 40702    | 17.654  | ug/l   | 98       |
| 47) Bromodichloromethane       | 9.37  | 83   | 83307    | 17.896  | ug/l   | 95       |
| 48) Methyl methacrylate        | 9.17  | 41   | 48372    | 17.673  | ug/l   | 98       |
| 49) 1,4-Dioxane                | 9.17  | 88   | 21707    | 357.629 | ug/l   | 95       |
| 51) 4-Methyl-2-Pentanone       | 9.95  | 43   | 320365   | 89.826  | ug/l   | 99       |
| 52) Toluene                    | 10.12 | 92   | 152556   | 18.140  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.35 | 75   | 86803    | 16.949  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 9.81  | 75   | 95626    | 17.538  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 10.53 | 97   | 60607    | 18.333  | ug/l   | 99       |
| 56) Ethyl methacrylate         | 10.40 | 69   | 77654    | 17.601  | ug/l   | 97       |
| 57) 1,3-Dichloropropane        | 10.68 | 76   | 102576   | 18.027  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.66  | 63   | 142024   | 86.842  | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.72 | 43   | 229364   | 89.060  | ug/l   | 99       |
| 60) Dibromochloromethane       | 10.87 | 129  | 62101    | 17.743  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 10.98 | 107  | 60544    | 17.823  | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.60 | 164  | 50106    | 17.296  | ug/l   | 98       |
| 65) Chlorobenzene              | 11.41 | 112  | 162198   | 17.416  | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.48 | 131  | 56607    | 17.578  | ug/l   | 98       |
| 67) Ethyl Benzene              | 11.48 | 91   | 279865   | 17.793  | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.60 | 106  | 218986   | 35.997  | ug/l   | 99       |
| 69) o-Xylene                   | 11.92 | 106  | 101954   | 17.762  | ug/l   | 98       |
| 70) Styrene                    | 11.94 | 104  | 169075   | 17.662  | ug/l   | 99       |
| 71) Bromoform                  | 12.10 | 173  | 39891    | 17.422  | ug/l # | 97       |
| 73) Isopropylbenzene           | 12.22 | 105  | 272508   | 18.421  | ug/l   | 99       |
| 74) N-amyl acetate             | 12.05 | 43   | 86436    | 18.155  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.48 | 83   | 87407    | 17.756  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.53 | 75   | 72834m   | 16.190  | ug/l   |          |
| 77) Bromobenzene               | 12.50 | 156  | 65984    | 17.966  | ug/l   | 98       |
| 78) n-propylbenzene            | 12.57 | 91   | 305276   | 18.041  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.65 | 91   | 183258   | 17.914  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.71 | 105  | 219995   | 18.345  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.27 | 75   | 24702    | 16.035  | ug/l   | 99       |
| 82) 4-Chlorotoluene            | 12.75 | 91   | 187417   | 17.717  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 12.97 | 119  | 186108   | 18.134  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.01 | 105  | 219334   | 18.313  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.15 | 105  | 242622   | 17.891  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 13.26 | 119  | 216435   | 18.217  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.26 | 146  | 113307   | 17.569  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.34 | 146  | 115160   | 17.323  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.59 | 91   | 170113   | 17.222  | ug/l   | 100      |
| 90) Hexachloroethane           | 13.85 | 117  | 40409    | 17.335  | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene        | 13.63 | 146  | 111076   | 17.761  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.25 | 75   | 13394    | 16.984  | ug/l   | 94       |

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| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.89 | 180  | 46732    | 17.105 | ug/l  | 100      |
| 94) Hexachlorobutadiene    | 14.99 | 225  | 21195    | 17.862 | ug/l  | 99       |
| 95) Naphthalene            | 15.11 | 128  | 133762   | 17.506 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.28 | 180  | 48318    | 17.297 | ug/l  | 98       |

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

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