

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN071723\  
 Data File : VN078540.D  
 Acq On : 17 Jul 2023 14:00  
 Operator : JC\MD  
 Sample : VN0717MBS01  
 Misc : 5.00g/10mL/100uL/5.00mL/MSVOA\_N/MEOH  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VN0717MBS01

Manual Integrations  
 APPROVED

Reviewed By : John Carlone 07/18/2023  
 Supervised By : Mahesh Dadoda 07/18/2023

Quant Time: Jul 18 04:22:30 2023  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N071023W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Jul 10 16:13:53 2023  
 Response via : Initial Calibration

| Compound                     | R.T.           | QIon | Response            | Conc    | Units  | Dev(Min) |
|------------------------------|----------------|------|---------------------|---------|--------|----------|
| -----                        |                |      |                     |         |        |          |
| Internal Standards           |                |      |                     |         |        |          |
| 1) Pentafluorobenzene        | 8.235          | 168  | 449990              | 50.000  | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene      | 9.106          | 114  | 772522              | 50.000  | ug/l   | 0.00     |
| 63) Chlorobenzene-d5         | 11.871         | 117  | 675481              | 50.000  | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4   | 13.800         | 152  | 266789              | 50.000  | ug/l   | 0.00     |
| System Monitoring Compounds  |                |      |                     |         |        |          |
| 33) 1,2-Dichloroethane-d4    | 8.588          | 65   | 320393              | 53.110  | ug/l   | 0.00     |
| Spiked Amount 50.000         | Range 74 - 125 |      | Recovery = 106.220% |         |        |          |
| 35) Dibromofluoromethane     | 8.177          | 113  | 272745              | 52.010  | ug/l   | 0.00     |
| Spiked Amount 50.000         | Range 75 - 124 |      | Recovery = 104.020% |         |        |          |
| 50) Toluene-d8               | 10.571         | 98   | 1013507             | 51.160  | ug/l   | 0.00     |
| Spiked Amount 50.000         | Range 86 - 113 |      | Recovery = 102.320% |         |        |          |
| 62) 4-Bromofluorobenzene     | 12.853         | 95   | 306709              | 50.263  | ug/l   | 0.00     |
| Spiked Amount 50.000         | Range 83 - 123 |      | Recovery = 100.520% |         |        |          |
| Target Compounds             |                |      |                     |         |        |          |
|                              |                |      |                     |         | Qvalue |          |
| 2) Dichlorodifluoromethane   | 2.136          | 85   | 96210               | 17.438  | ug/l   | 96       |
| 3) Chloromethane             | 2.371          | 50   | 128439              | 21.419  | ug/l   | 99       |
| 4) Vinyl Chloride            | 2.518          | 62   | 159556              | 20.569  | ug/l   | 100      |
| 5) Bromomethane              | 2.959          | 94   | 104512              | 18.132  | ug/l   | 99       |
| 6) Chloroethane              | 3.124          | 64   | 104729              | 21.212  | ug/l   | 97       |
| 7) Trichlorofluoromethane    | 3.500          | 101  | 177881              | 19.183  | ug/l   | 100      |
| 8) Diethyl Ether             | 3.971          | 74   | 58550               | 18.951  | ug/l   | 77       |
| 9) 1,1,2-Trichlorotrifluo... | 4.383          | 101  | 96177               | 19.593  | ug/l   | 97       |
| 10) Methyl Iodide            | 4.600          | 142  | 126136              | 18.700  | ug/l   | 99       |
| 11) Tert butyl alcohol       | 5.542          | 59   | 90933               | 97.752  | ug/l # | 86       |
| 12) 1,1-Dichloroethene       | 4.347          | 96   | 90058               | 18.967  | ug/l   | 90       |
| 13) Acrolein                 | 4.195          | 56   | 94148               | 102.868 | ug/l   | 98       |
| 14) Allyl chloride           | 5.036          | 41   | 118045              | 18.194  | ug/l   | 92       |
| 15) Acrylonitrile            | 5.730          | 53   | 241875              | 102.909 | ug/l   | 98       |
| 16) Acetone                  | 4.447          | 43   | 184010              | 97.922  | ug/l   | 92       |
| 17) Carbon Disulfide         | 4.718          | 76   | 230109              | 16.759  | ug/l   | 99       |
| 18) Methyl Acetate           | 5.042          | 43   | 164782              | 20.715  | ug/l   | 90       |
| 19) Methyl tert-butyl Ether  | 5.812          | 73   | 306402              | 19.585  | ug/l   | 96       |
| 20) Methylene Chloride       | 5.283          | 84   | 112888              | 20.215  | ug/l   | 92       |
| 21) trans-1,2-Dichloroethene | 5.794          | 96   | 98600               | 18.428  | ug/l   | 93       |
| 22) Diisopropyl ether        | 6.683          | 45   | 294898              | 20.299  | ug/l   | 94       |
| 23) Vinyl Acetate            | 6.618          | 43   | 922182              | 99.847  | ug/l # | 89       |
| 24) 1,1-Dichloroethane       | 6.577          | 63   | 194194              | 19.837  | ug/l   | 96       |
| 25) 2-Butanone               | 7.500          | 43   | 308353              | 104.242 | ug/l # | 86       |
| 26) 2,2-Dichloropropane      | 7.500          | 77   | 156957              | 19.603  | ug/l   | 98       |
| 27) cis-1,2-Dichloroethene   | 7.500          | 96   | 121717              | 19.664  | ug/l   | 97       |
| 28) Bromochloromethane       | 7.824          | 49   | 98228               | 21.304  | ug/l   | 88       |
| 29) Tetrahydrofuran          | 7.853          | 42   | 198207              | 102.117 | ug/l # | 83       |
| 30) Chloroform               | 7.977          | 83   | 209939              | 20.599  | ug/l   | 93       |
| 31) Cyclohexane              | 8.265          | 56   | 150117              | 18.413  | ug/l   | 89       |
| 32) 1,1,1-Trichloroethane    | 8.177          | 97   | 184296              | 20.169  | ug/l   | 98       |
| 36) 1,1-Dichloropropene      | 8.383          | 75   | 146717              | 19.376  | ug/l   | 96       |
| 37) Ethyl Acetate            | 7.571          | 43   | 119810              | 18.981  | ug/l   | 95       |
| 38) Carbon Tetrachloride     | 8.371          | 117  | 164185              | 19.951  | ug/l   | 94       |
| 39) Methylcyclohexane        | 9.612          | 83   | 132518              | 19.173  | ug/l   | 95       |
| 40) Benzene                  | 8.618          | 78   | 447102              | 19.931  | ug/l   | 99       |

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 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
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Manual Integrations  
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Reviewed By : John Carlone 07/18/2023  
 Supervised By : Mahesh Dadoda 07/18/2023

Quant Time: Jul 18 04:22:30 2023  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N071023W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Jul 10 16:13:53 2023  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 41) Methacrylonitrile         | 7.794  | 41   | 64727    | 20.115  | ug/l   | 93       |
| 42) 1,2-Dichloroethane        | 8.677  | 62   | 155585   | 20.391  | ug/l   | 99       |
| 43) Isopropyl Acetate         | 8.700  | 43   | 213139   | 20.509  | ug/l   | 94       |
| 44) Trichloroethene           | 9.359  | 130  | 113112   | 18.708  | ug/l   | 94       |
| 45) 1,2-Dichloropropane       | 9.629  | 63   | 116950   | 20.584  | ug/l   | 97       |
| 46) Dibromomethane            | 9.718  | 93   | 81985    | 20.502  | ug/l   | 94       |
| 47) Bromodichloromethane      | 9.894  | 83   | 162106   | 20.223  | ug/l   | 96       |
| 48) Methyl methacrylate       | 9.688  | 41   | 94982    | 19.728  | ug/l   | 90       |
| 49) 1,4-Dioxane               | 9.706  | 88   | 40449    | 385.238 | ug/l   | 89       |
| 51) 4-Methyl-2-Pentanone      | 10.453 | 43   | 643050   | 104.030 | ug/l   | 93       |
| 52) Toluene                   | 10.635 | 92   | 282275   | 20.303  | ug/l   | 96       |
| 53) t-1,3-Dichloropropene     | 10.841 | 75   | 162461   | 19.783  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene   | 10.318 | 75   | 180135   | 20.578  | ug/l   | 95       |
| 55) 1,1,2-Trichloroethane     | 11.024 | 97   | 111070   | 20.276  | ug/l   | 97       |
| 56) Ethyl methacrylate        | 10.882 | 69   | 157014   | 20.505  | ug/l   | 92       |
| 57) 1,3-Dichloropropane       | 11.171 | 76   | 189378   | 20.333  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether | 10.165 | 63   | 257848   | 94.488  | ug/l   | 92       |
| 59) 2-Hexanone                | 11.200 | 43   | 460064   | 104.722 | ug/l   | 90       |
| 60) Dibromochloromethane      | 11.365 | 129  | 126952   | 20.993  | ug/l   | 99       |
| 61) 1,2-Dibromoethane         | 11.476 | 107  | 110822   | 19.639  | ug/l   | 99       |
| 64) Tetrachloroethene         | 11.112 | 164  | 98013    | 19.300  | ug/l   | 96       |
| 65) Chlorobenzene             | 11.900 | 112  | 302567   | 20.039  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane | 11.965 | 131  | 117499   | 20.229  | ug/l   | 98       |
| 67) Ethyl Benzene             | 11.971 | 91   | 503479   | 19.728  | ug/l   | 97       |
| 68) m/p-Xylenes               | 12.076 | 106  | 380562   | 40.330  | ug/l   | 96       |
| 69) o-Xylene                  | 12.406 | 106  | 182187   | 19.115  | ug/l   | 95       |
| 70) Styrene                   | 12.418 | 104  | 293778   | 19.702  | ug/l   | 98       |
| 71) Bromoform                 | 12.582 | 173  | 80340    | 20.423  | ug/l # | 99       |
| 73) Isopropylbenzene          | 12.700 | 105  | 463015   | 18.470  | ug/l   | 98       |
| 74) N-amyl acetate            | 12.500 | 43   | 162464   | 18.806  | ug/l   | 92       |
| 75) 1,1,2,2-Tetrachloroethane | 12.947 | 83   | 160319   | 21.107  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane    | 13.000 | 75   | 128062m  | 19.859  | ug/l   |          |
| 77) Bromobenzene              | 12.988 | 156  | 113180   | 19.828  | ug/l   | 96       |
| 78) n-propylbenzene           | 13.041 | 91   | 506535   | 18.894  | ug/l   | 100      |
| 79) 2-Chlorotoluene           | 13.129 | 91   | 327840   | 18.669  | ug/l   | 96       |
| 80) 1,3,5-Trimethylbenzene    | 13.176 | 105  | 382277   | 19.300  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-b... | 12.741 | 75   | 45375    | 18.490  | ug/l   | 90       |
| 82) 4-Chlorotoluene           | 13.229 | 91   | 308820   | 18.852  | ug/l   | 98       |
| 83) tert-Butylbenzene         | 13.447 | 119  | 321596   | 19.124  | ug/l   | 94       |
| 84) 1,2,4-Trimethylbenzene    | 13.488 | 105  | 367319   | 19.092  | ug/l   | 98       |
| 85) sec-Butylbenzene          | 13.623 | 105  | 412391   | 19.401  | ug/l   | 100      |
| 86) p-Isopropyltoluene        | 13.735 | 119  | 326419   | 19.125  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene       | 13.741 | 146  | 178014   | 18.497  | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene       | 13.817 | 146  | 174742   | 18.027  | ug/l   | 98       |
| 89) n-Butylbenzene            | 14.059 | 91   | 236484   | 19.365  | ug/l   | 97       |
| 90) Hexachloroethane          | 14.341 | 117  | 67585    | 21.072  | ug/l   | 84       |
| 91) 1,2-Dichlorobenzene       | 14.112 | 146  | 174092   | 18.178  | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.729 | 75   | 24533    | 19.262  | ug/l   | 99       |
| 93) 1,2,4-Trichlorobenzene    | 15.400 | 180  | 44134    | 14.439  | ug/l   | 96       |
| 94) Hexachlorobutadiene       | 15.506 | 225  | 32083    | 17.608  | ug/l   | 94       |
| 95) Naphthalene               | 15.647 | 128  | 134393   | 12.861  | ug/l   | 98       |
| 96) 1,2,3-Trichlorobenzene    | 15.841 | 180  | 53363    | 15.183  | ug/l   | 99       |

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 MSVOA\_N  
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**APPROVED**

Reviewed By : John Carlone 07/18/2023  
 Supervised By : Mahesh Dadoda 07/18/2023

Quant Time: Jul 18 04:22:30 2023  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N071023W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Jul 10 16:13:53 2023  
 Response via : Initial Calibration

| Compound | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|----------|------|------|----------|------|-------|----------|
|----------|------|------|----------|------|-------|----------|

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

