

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_N\Data\VN092922\  
 Data File : VN074652.D  
 Acq On : 29 Sep 2022 13:57  
 Operator : JC\MD  
 Sample : VSTDICC005  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC005

Quant Time: Sep 30 07:07:47 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N092922W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Sep 30 07:05:22 2022  
 Response via : Initial Calibration

### Manual Integrations APPROVED

Reviewed By : John Carlone 09/30/2022  
 Supervised By : Mahesh Dadoda 10/05/2022

| Compound                     | R.T.           | QIon | Response   | Conc     | Units  | Dev(Min) |
|------------------------------|----------------|------|------------|----------|--------|----------|
| -----                        |                |      |            |          |        |          |
| Internal Standards           |                |      |            |          |        |          |
| 1) Pentafluorobenzene        | 7.927          | 168  | 377728     | 50.000   | ug/l   | 0.00     |
| 34) 1,4-Difluorobenzene      | 8.821          | 114  | 687497     | 50.000   | ug/l   | 0.00     |
| 63) Chlorobenzene-d5         | 11.615         | 117  | 697449     | 50.000   | ug/l   | 0.00     |
| 72) 1,4-Dichlorobenzene-d4   | 13.545         | 152  | 378200     | 50.000   | ug/l   | 0.00     |
| System Monitoring Compounds  |                |      |            |          |        |          |
| 33) 1,2-Dichloroethane-d4    | 8.286          | 65   | 50029      | 5.285    | ug/l   | 0.00     |
| Spiked Amount 50.000         | Range 74 - 125 |      | Recovery = | 10.560%# |        |          |
| 35) Dibromofluoromethane     | 7.857          | 113  | 37961      | 5.217    | ug/l   | -0.01    |
| Spiked Amount 50.000         | Range 75 - 124 |      | Recovery = | 10.440%# |        |          |
| 50) Toluene-d8               | 10.304         | 98   | 151915     | 4.963    | ug/l   | 0.00     |
| Spiked Amount 50.000         | Range 86 - 113 |      | Recovery = | 9.920%#  |        |          |
| 62) 4-Bromofluorobenzene     | 12.604         | 95   | 47328      | 4.876    | ug/l   | 0.00     |
| Spiked Amount 50.000         | Range 83 - 123 |      | Recovery = | 9.760%#  |        |          |
| Target Compounds             |                |      |            |          |        |          |
|                              |                |      |            |          | Qvalue |          |
| 2) Dichlorodifluoromethane   | 1.998          | 85   | 39449      | 4.989    | ug/l   | 85       |
| 3) Chloromethane             | 2.216          | 50   | 58899      | 5.091    | ug/l   | 96       |
| 4) Vinyl Chloride            | 2.357          | 62   | 87024      | 5.181    | ug/l # | 82       |
| 5) Bromomethane              | 2.716          | 94   | 68005      | 5.860    | ug/l   | 99       |
| 6) Chloroethane              | 2.887          | 64   | 70433      | 5.456    | ug/l   | 95       |
| 7) Trichlorofluoromethane    | 3.234          | 101  | 62890      | 5.384    | ug/l   | 99       |
| 8) Diethyl Ether             | 3.675          | 74   | 30947      | 5.584    | ug/l   | 83       |
| 9) 1,1,2-Trichlorotrifluo... | 4.045          | 101  | 37136      | 5.335    | ug/l # | 88       |
| 10) Methyl Iodide            | 4.251          | 142  | 42615      | 5.153    | ug/l # | 84       |
| 11) Tert butyl alcohol       | 5.175          | 59   | 79205      | 31.329   | ug/l # | 87       |
| 12) 1,1-Dichloroethene       | 4.016          | 96   | 38386      | 5.441    | ug/l   | 90       |
| 13) Acrolein                 | 3.881          | 56   | 35502      | 32.496   | ug/l   | 88       |
| 14) Allyl chloride           | 4.651          | 41   | 76740      | 5.036    | ug/l   | 95       |
| 15) Acrylonitrile            | 5.351          | 53   | 153539     | 25.737   | ug/l   | 97       |
| 16) Acetone                  | 4.122          | 43   | 140974     | 27.591   | ug/l   | 94       |
| 17) Carbon Disulfide         | 4.351          | 76   | 112553     | 5.467    | ug/l   | 95       |
| 18) Methyl Acetate           | 4.663          | 43   | 88408      | 5.055    | ug/l   | 93       |
| 19) Methyl tert-butyl Ether  | 5.410          | 73   | 142551     | 5.294    | ug/l   | 98       |
| 20) Methylene Chloride       | 4.904          | 84   | 53349      | 5.501    | ug/l # | 92       |
| 21) trans-1,2-Dichloroethene | 5.404          | 96   | 41094      | 5.332    | ug/l   | 96       |
| 22) Diisopropyl ether        | 6.298          | 45   | 167821     | 5.414    | ug/l # | 94       |
| 23) Vinyl Acetate            | 6.239          | 43   | 718321     | 26.364   | ug/l   | 94       |
| 24) 1,1-Dichloroethane       | 6.186          | 63   | 85549      | 5.408    | ug/l   | 93       |
| 25) 2-Butanone               | 7.157          | 43   | 239670     | 27.505   | ug/l   | 95       |
| 26) 2,2-Dichloropropane      | 7.145          | 77   | 71967      | 5.350    | ug/l   | 100      |
| 27) cis-1,2-Dichloroethene   | 7.151          | 96   | 51923      | 5.508    | ug/l   | 98       |
| 28) Bromochloromethane       | 7.480          | 49   | 36239      | 5.045    | ug/l # | 69       |
| 29) Tetrahydrofuran          | 7.516          | 42   | 148126     | 25.764   | ug/l # | 85       |
| 30) Chloroform               | 7.645          | 83   | 76639      | 5.257    | ug/l   | 87       |
| 31) Cyclohexane              | 7.933          | 56   | 92247      | 5.998    | ug/l   | 95       |
| 32) 1,1,1-Trichloroethane    | 7.845          | 97   | 63318      | 4.949    | ug/l # | 90       |
| 36) 1,1-Dichloropropene      | 8.057          | 75   | 61378      | 5.267    | ug/l   | 95       |
| 37) Ethyl Acetate            | 7.245          | 43   | 86674      | 5.016    | ug/l # | 94       |
| 38) Carbon Tetrachloride     | 8.045          | 117  | 56645      | 5.306    | ug/l   | 87       |
| 39) Methylcyclohexane        | 9.316          | 83   | 77471      | 5.325    | ug/l   | 91       |
| 40) Benzene                  | 8.304          | 78   | 189688     | 5.281    | ug/l   | 99       |

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 Acq On : 29 Sep 2022 13:57  
 Operator : JC\MD  
 Sample : VSTDICC005  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDICC005

Manual Integrations  
 APPROVED

Reviewed By : John Carlone 09/30/2022  
 Supervised By : Mahesh Dadoda 10/05/2022

Quant Time: Sep 30 07:07:47 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N092922W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Sep 30 07:05:22 2022  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|--------|--------|----------|
| 41) Methacrylonitrile         | 7.463  | 41   | 40791    | 5.403  | ug/l # | 80       |
| 42) 1,2-Dichloroethane        | 8.380  | 62   | 61910    | 5.131  | ug/l   | 94       |
| 43) Isopropyl Acetate         | 8.416  | 43   | 137320   | 4.980  | ug/l # | 95       |
| 44) Trichloroethene           | 9.074  | 130  | 40925    | 5.469  | ug/l   | 91       |
| 45) 1,2-Dichloropropane       | 9.351  | 63   | 51507    | 5.267  | ug/l   | 99       |
| 46) Dibromomethane            | 9.433  | 93   | 32151    | 5.216  | ug/l # | 82       |
| 47) Bromodichloromethane      | 9.627  | 83   | 63534    | 5.274  | ug/l   | 96       |
| 48) Methyl methacrylate       | 9.427  | 41   | 55769    | 4.908  | ug/l # | 89       |
| 49) 1,4-Dioxane               | 9.433  | 88   | 21553    | 99.448 | ug/l   | 92       |
| 51) 4-Methyl-2-Pentanone      | 10.198 | 43   | 451149   | 25.859 | ug/l   | 89       |
| 52) Toluene                   | 10.374 | 92   | 108856   | 5.019  | ug/l   | 94       |
| 53) t-1,3-Dichloropropene     | 10.592 | 75   | 70755    | 5.182  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene   | 10.051 | 75   | 78165    | 5.196  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane     | 10.774 | 97   | 42936    | 4.912  | ug/l   | 94       |
| 56) Ethyl methacrylate        | 10.633 | 69   | 79181    | 5.252  | ug/l # | 90       |
| 57) 1,3-Dichloropropane       | 10.915 | 76   | 81218    | 5.250  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether | 9.910  | 63   | 147634   | 23.983 | ug/l   | 90       |
| 59) 2-Hexanone                | 10.963 | 43   | 336841   | 25.547 | ug/l   | 89       |
| 60) Dibromochloromethane      | 11.110 | 129  | 41619    | 4.949  | ug/l   | 98       |
| 61) 1,2-Dibromoethane         | 11.215 | 107  | 45602    | 5.324  | ug/l   | 98       |
| 64) Tetrachloroethene         | 10.845 | 164  | 32324    | 5.482  | ug/l   | 90       |
| 65) Chlorobenzene             | 11.639 | 112  | 110754   | 5.307  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane | 11.715 | 131  | 43075    | 5.786  | ug/l   | 93       |
| 67) Ethyl Benzene             | 11.721 | 91   | 212945   | 5.454  | ug/l   | 98       |
| 68) m/p-Xylenes               | 11.827 | 106  | 152899   | 10.341 | ug/l   | 96       |
| 69) o-Xylene                  | 12.151 | 106  | 79887    | 5.375  | ug/l   | 99       |
| 70) Styrene                   | 12.168 | 104  | 121857   | 5.141  | ug/l   | 99       |
| 71) Bromoform                 | 12.333 | 173  | 29465    | 4.936  | ug/l # | 95       |
| 73) Isopropylbenzene          | 12.451 | 105  | 194883   | 5.501  | ug/l   | 98       |
| 74) N-amyl acetate            | 12.268 | 43   | 119481   | 5.505  | ug/l # | 89       |
| 75) 1,1,2,2-Tetrachloroethane | 12.704 | 83   | 73538    | 5.455  | ug/l   | 97       |
| 76) 1,2,3-Trichloropropane    | 12.757 | 75   | 70851m   | 7.211  | ug/l   |          |
| 77) Bromobenzene              | 12.727 | 156  | 39193    | 5.164  | ug/l   | 73       |
| 78) n-propylbenzene           | 12.798 | 91   | 221133   | 5.411  | ug/l   | 96       |
| 79) 2-Chlorotoluene           | 12.880 | 91   | 134007   | 5.457  | ug/l   | 95       |
| 80) 1,3,5-Trimethylbenzene    | 12.933 | 105  | 150754   | 5.332  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-b... | 12.498 | 75   | 24032    | 5.310  | ug/l   | 98       |
| 82) 4-Chlorotoluene           | 12.974 | 91   | 121106   | 5.299  | ug/l   | 99       |
| 83) tert-Butylbenzene         | 13.198 | 119  | 135845   | 5.380  | ug/l   | 95       |
| 84) 1,2,4-Trimethylbenzene    | 13.245 | 105  | 153926   | 5.452  | ug/l   | 98       |
| 85) sec-Butylbenzene          | 13.374 | 105  | 189106   | 5.330  | ug/l   | 95       |
| 86) p-Isopropyltoluene        | 13.492 | 119  | 144379   | 5.136  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene       | 13.486 | 146  | 72528    | 5.267  | ug/l   | 97       |
| 88) 1,4-Dichlorobenzene       | 13.568 | 146  | 79590    | 5.655  | ug/l   | 97       |
| 89) n-Butylbenzene            | 13.815 | 91   | 129418   | 5.219  | ug/l   | 94       |
| 90) Hexachloroethane          | 14.086 | 117  | 34461    | 5.697  | ug/l   | 61       |
| 91) 1,2-Dichlorobenzene       | 13.862 | 146  | 76111    | 5.296  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropr... | 14.480 | 75   | 14162    | 5.214  | ug/l   | 91       |
| 93) 1,2,4-Trichlorobenzene    | 15.127 | 180  | 34523    | 5.377  | ug/l   | 97       |
| 94) Hexachlorobutadiene       | 15.233 | 225  | 17380    | 5.531  | ug/l   | 98       |
| 95) Naphthalene               | 15.362 | 128  | 132913   | 5.291  | ug/l   | 99       |
| 96) 1,2,3-Trichlorobenzene    | 15.550 | 180  | 33812    | 5.290  | ug/l   | 95       |

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Sample : VSTDICC005  
Misc : 5.0mL/MSVOA\_N/WATER  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
MSVOA\_N  
ClientSampleId :  
VSTDICC005

Manual Integrations  
APPROVED

Reviewed By :John Carlone 09/30/2022  
Supervised By :Mahesh Dadoda 10/05/2022

Quant Time: Sep 30 07:07:47 2022  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_N\methods\82N092922W.M  
Quant Title : SW846 8260  
QLast Update : Fri Sep 30 07:05:22 2022  
Response via : Initial Calibration

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

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

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 Data File : VN074652.D  
 Acq On : 29 Sep 2022 13:57  
 Operator : JC\MD  
 Sample : VSTDIC005  
 Misc : 5.0mL/MSVOA\_N/WATER  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_N  
 ClientSampleId :  
 VSTDIC005

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