

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_X\Data\VX030924\  
 Data File : VX040620.D  
 Acq On : 08 Mar 2024 10:12  
 Operator : JC/MD  
 Sample : VSTDCCC020  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VSTDCCC020

Manual Integrations  
 APPROVED

Reviewed By :Mahesh  
 Dadoda

03/11/2024  
 Supervised By :Semsettin  
 Yesilyurt

Quant Time: Mar 08 23:49:51 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_X\Method\624X030524W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Tue Mar 05 13:21:29 2024  
 Response via : Initial Calibration

| Compound                | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|--------|------|----------|--------|-------|----------|
| -----                   |        |      |          |        |       |          |
| Internal Standards      |        |      |          |        |       |          |
| 1) Bromochloromethane   | 4.897  | 128  | 16799    | 30.000 | ug/l  | 0.00     |
| 28) 1,4-Difluorobenzene | 6.757  | 114  | 92184    | 30.000 | ug/l  | 0.00     |
| 57) Chlorobenzene-d5    | 10.055 | 117  | 87549    | 30.000 | ug/l  | 0.00     |

|                             |        |       |          |          |      |          |
|-----------------------------|--------|-------|----------|----------|------|----------|
| System Monitoring Compounds |        |       |          |          |      |          |
| 27) 1,2-Dichloroethane-d4   | 5.952  | 65    | 48495    | 28.904   | ug/l | 0.00     |
| Spiked Amount               | 30.000 | Range | 91 - 110 | Recovery | =    | 96.333%  |
| 60) 4-Bromofluorobenzene    | 11.079 | 95    | 39574    | 26.352   | ug/l | 0.00     |
| Spiked Amount               | 30.000 | Range | 63 - 112 | Recovery | =    | 87.833%  |
| 63) Toluene-d8              | 8.647  | 98    | 117404   | 30.345   | ug/l | 0.00     |
| Spiked Amount               | 30.000 | Range | 91 - 112 | Recovery | =    | 101.133% |

| Target Compounds             |       |     |        |        | Qvalue |     |
|------------------------------|-------|-----|--------|--------|--------|-----|
| 2) Dichlorodifluoromethane   | 1.166 | 85  | 22581  | 19.819 | ug/l   | 95  |
| 3) Chloromethane             | 1.294 | 50  | 22884  | 19.602 | ug/l   | 96  |
| 4) Vinyl Chloride            | 1.374 | 62  | 24819  | 19.671 | ug/l   | 96  |
| 5) Bromomethane              | 1.605 | 94  | 21034  | 27.297 | ug/l   | 100 |
| 6) Chloroethane              | 1.691 | 64  | 15783  | 21.293 | ug/l   | 99  |
| 7) Trichlorofluoromethane    | 1.886 | 101 | 38054  | 19.810 | ug/l   | 93  |
| 8) Diethyl Ether             | 2.136 | 74  | 11527  | 17.674 | ug/l   | 99  |
| 9) 1,1,2-Trichlorotrifluo... | 2.331 | 101 | 21611  | 20.539 | ug/l   | 95  |
| 10) 1,1-Dichloroethene       | 2.319 | 96  | 20302  | 20.266 | ug/l   | 96  |
| 11) Methyl Iodide            | 2.453 | 142 | 16676  | 13.763 | ug/l   | 94  |
| 12) Methyl Acetate           | 2.697 | 43  | 31486  | 19.081 | ug/l   | 96  |
| 13) Acrolein                 | 2.233 | 56  | 24830  | 79.815 | ug/l   | 98  |
| 14) Acrylonitrile            | 3.056 | 53  | 61893  | 95.251 | ug/l   | 98  |
| 15) Acetone                  | 2.373 | 58  | 18122  | 97.568 | ug/l   | 70  |
| 16) Carbon Disulfide         | 2.508 | 76  | 51352  | 18.652 | ug/l   | 97  |
| 17) Allyl chloride           | 2.660 | 41  | 36535  | 19.763 | ug/l   | 87  |
| 18) Methylene Chloride       | 2.788 | 84  | 22407  | 19.591 | ug/l   | 96  |
| 19) trans-1,2-Dichloroethene | 3.087 | 96  | 21129  | 19.319 | ug/l   | 98  |
| 20) Diisopropyl ether        | 3.757 | 45  | 73330  | 19.834 | ug/l   | 98  |
| 21) 1,1-Dichloroethane       | 3.605 | 63  | 42278  | 19.872 | ug/l   | 97  |
| 22) cis-1,2-Dichloroethene   | 4.483 | 96  | 24524  | 19.309 | ug/l   | 93  |
| 23) tert-Butyl Alcohol       | 2.953 | 59  | 27100m | 88.271 | ug/l   |     |
| 24) Methyl tert-Butyl Ether  | 3.111 | 73  | 71833  | 19.430 | ug/l   | 94  |
| 25) Chloroform               | 5.092 | 83  | 46838  | 20.114 | ug/l   | 88  |
| 26) Cyclohexane              | 5.464 | 56  | 33466  | 19.491 | ug/l # | 99  |
| 29) 1,1-Dichloropropene      | 5.684 | 75  | 32641  | 20.456 | ug/l   | 83  |
| 30) 2-Butanone               | 4.550 | 43  | 96671  | 99.283 | ug/l   | 98  |
| 31) 2,2-Dichloropropane      | 4.471 | 77  | 35538  | 20.635 | ug/l   | 96  |
| 32) 1,1,1-Trichloroethane    | 5.379 | 97  | 40826  | 20.305 | ug/l   | 98  |
| 33) Carbon Tetrachloride     | 5.672 | 117 | 33690  | 19.916 | ug/l   | 98  |
| 34) Benzene                  | 6.031 | 78  | 87240  | 20.253 | ug/l   | 97  |
| 35) Methacrylonitrile        | 4.916 | 41  | 19780  | 19.788 | ug/l   | 95  |
| 36) 1,2-Dichloroethane       | 6.086 | 62  | 40478  | 20.324 | ug/l   | 97  |
| 37) Trichloroethene          | 7.123 | 130 | 23651  | 20.432 | ug/l   | 96  |
| 38) Methylcyclohexane        | 7.379 | 83  | 36252  | 21.099 | ug/l   | 98  |
| 39) 1,2-Dichloropropane      | 7.427 | 63  | 22990  | 20.962 | ug/l   | 100 |
| 40) Dibromomethane           | 7.580 | 93  | 18389  | 21.343 | ug/l   | 97  |
| 41) Bromodichloromethane     | 7.818 | 83  | 36257  | 21.153 | ug/l # | 96  |
| 42) Vinyl Acetate            | 3.721 | 43  | 332464 | 99.171 | ug/l   | 99  |

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_X\Data\VX030924\  
 Data File : VX040620.D  
 Acq On : 08 Mar 2024 10:12  
 Operator : JC/MD  
 Sample : VSTDCCC020  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VSTDCCC020

Manual Integrations  
 APPROVED

Reviewed By :Mahesh  
 Dadoda

03/11/2024  
 Supervised By :Semsettin  
 Yesilyurt

Quant Time: Mar 08 23:49:51 2024  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_X\Method\624X030524W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Tue Mar 05 13:21:29 2024  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc    | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|---------|--------|----------|
| 43) Ethyl Acetate             | 4.702  | 43   | 35097    | 19.139  | ug/l   | 98       |
| 44) Isopropyl Acetate         | 6.336  | 43   | 56335    | 19.246  | ug/l   | 97       |
| 45) 1,4-Dioxane               | 7.653  | 88   | 11343    | 376.982 | ug/l   | 96       |
| 46) Methyl methacrylate       | 7.690  | 41   | 29192    | 20.079  | ug/l   | 95       |
| 47) n-amyl Acetate            | 10.841 | 43   | 42778    | 16.957  | ug/l   | 97       |
| 48) t-1,3-Dichloropropene     | 8.976  | 75   | 34707    | 19.157  | ug/l   | 97       |
| 49) cis-1,3-Dichloropropene   | 8.360  | 75   | 38185    | 20.690  | ug/l   | 93       |
| 50) 1,1,2-Trichloroethane     | 9.147  | 97   | 24353    | 21.279  | ug/l   | 97       |
| 51) Ethyl methacrylate        | 9.110  | 69   | 36578    | 20.301  | ug/l   | 97       |
| 52) 1,3-Dichloropropane       | 9.305  | 76   | 40382    | 20.678  | ug/l   | 99       |
| 53) Dibromochloromethane      | 9.518  | 129  | 26591    | 20.382  | ug/l   | 98       |
| 54) 1,2-Dibromoethane         | 9.604  | 107  | 25592    | 20.209  | ug/l   | 98       |
| 55) 2-Chloroethyl vinyl ether | 8.238  | 63   | 82473    | 89.883  | ug/l   | 99       |
| 56) Bromoform                 | 10.799 | 173  | 17156    | 18.539  | ug/l # | 99       |
| 58) 4-Methyl-2-Pentanone      | 8.567  | 43   | 195255   | 100.157 | ug/l   | 98       |
| 59) 2-Hexanone                | 9.427  | 43   | 156246   | 99.224  | ug/l   | 94       |
| 61) Tetrachloroethene         | 9.269  | 164  | 21930    | 21.104  | ug/l   | 97       |
| 62) Toluene                   | 8.714  | 91   | 98556    | 20.439  | ug/l   | 99       |
| 64) Chlorobenzene             | 10.079 | 112  | 61097    | 20.731  | ug/l   | 99       |
| 65) 1,1,1,2-Tetrachloroethane | 10.159 | 131  | 23200    | 20.639  | ug/l   | 98       |
| 66) Ethyl Benzene             | 10.189 | 91   | 114325   | 20.564  | ug/l   | 100      |
| 67) m/p-Xylenes               | 10.299 | 106  | 81530    | 39.712  | ug/l   | 94       |
| 68) o-Xylene                  | 10.640 | 106  | 37574    | 19.012  | ug/l   | 99       |
| 69) Styrene                   | 10.652 | 104  | 62433    | 18.802  | ug/l   | 98       |
| 70) Isopropylbenzene          | 10.963 | 105  | 104359   | 19.542  | ug/l   | 99       |
| 71) 1,1,2,2-Tetrachloroethane | 11.207 | 83   | 34350    | 18.348  | ug/l   | 99       |
| 72) 1,2,3-Trichloropropane    | 11.238 | 75   | 29853m   | 17.722  | ug/l   |          |
| 73) Bromobenzene              | 11.195 | 156  | 23996    | 18.981  | ug/l   | 93       |
| 74) n-propylbenzene           | 11.305 | 91   | 120918   | 18.333  | ug/l   | 99       |
| 75) 2-Chlorotoluene           | 11.366 | 91   | 70899    | 18.114  | ug/l   | 98       |
| 76) 1,3,5-Trimethylbenzene    | 11.451 | 105  | 88364    | 18.795  | ug/l   | 96       |
| 77) t-1,4-Dichloro-2-butene   | 11.012 | 75   | 8663     | 16.548  | ug/l   | 74       |
| 78) 4-Chlorotoluene           | 11.451 | 91   | 86699    | 18.568  | ug/l   | 99       |
| 79) tert-butylbenzene         | 11.713 | 119  | 79282    | 18.067  | ug/l   | 96       |
| 80) 1,2,4-Trimethylbenzene    | 11.750 | 105  | 83604    | 18.048  | ug/l   | 100      |
| 81) sec-Butylbenzene          | 11.890 | 105  | 106096   | 18.312  | ug/l   | 99       |
| 82) p-Isopropyltoluene        | 12.006 | 119  | 86837    | 18.311  | ug/l   | 98       |
| 83) 1,3-Dichlorobenzene       | 11.969 | 146  | 45533    | 18.510  | ug/l   | 97       |
| 84) 1,4-Dichlorobenzene       | 12.042 | 146  | 46028    | 18.297  | ug/l   | 98       |
| 85) n-Butylbenzene            | 12.329 | 91   | 93614    | 20.287  | ug/l   | 97       |
| 86) Hexachloroethane          | 12.536 | 117  | 16148    | 19.515  | ug/l   | 90       |
| 87) 1,2-Dichlorobenzene       | 12.335 | 146  | 48897    | 20.455  | ug/l   | 99       |
| 88) 1,2-Dibromo-3-Chloropr... | 12.939 | 75   | 9751     | 19.479  | ug/l   | 98       |
| 89) 1,2,4-Trichlorobenzene    | 13.585 | 180  | 33009    | 20.508  | ug/l   | 98       |
| 90) Hexachlorobutadiene       | 13.725 | 225  | 13717    | 21.076  | ug/l   | 99       |
| 91) Naphthalene               | 13.774 | 128  | 101788   | 19.388  | ug/l   | 99       |
| 92) 1,2,3-Trichlorobenzene    | 13.963 | 180  | 32369    | 20.396  | ug/l   | 98       |

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_X\Data\VX030924\  
Data File : VX040620.D  
Acq On : 08 Mar 2024 10:12  
Operator : JC/MD  
Sample : VSTDCCC020  
Misc : 5.0mL/MSVOA\_X/WATER  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
VSTDCCC020

Quant Time: Mar 08 23:49:51 2024  
Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_X\Method\624X030524W.M  
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
QLast Update : Tue Mar 05 13:21:29 2024  
Response via : Initial Calibration

Manual Integrations  
APPROVED

Reviewed By :Mahesh  
Dadoda

03/11/2024  
Supervised By :Semsettin  
Yesilyurt

03/11/2024

