

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_X\Data\VX052921\  
 Data File : VX022254.D  
 Acq On : 28 May 2021 15:21  
 Operator : JC/MD  
 Sample : VSTDCCC020  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VSTDCCC020

Manual Integrations  
 APPROVED

MMDadoda  
 6/2/2021 2:27:48 PM

Quant Time: May 29 03:50:38 2021  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_X\Method\624X051321W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Thu May 13 06:11:35 2021  
 Response via : Initial Calibration

| Compound                     | R.T.   | QIon     | Response | Conc   | Units   | Dev(Min) |
|------------------------------|--------|----------|----------|--------|---------|----------|
| -----                        |        |          |          |        |         |          |
| Internal Standards           |        |          |          |        |         |          |
| 1) Bromochloromethane        | 4.904  | 128      | 17318    | 30.00  | ug/l    | 0.00     |
| 28) 1,4-Difluorobenzene      | 6.769  | 114      | 101542   | 30.00  | ug/l    | 0.00     |
| 57) Chlorobenzene-d5         | 10.055 | 117      | 91239    | 30.00  | ug/l    | 0.00     |
|                              |        |          |          |        |         |          |
| System Monitoring Compounds  |        |          |          |        |         |          |
| 27) 1,2-Dichloroethane-d4    | 5.964  | 65       | 41930    | 31.43  | ug/l    | 0.00     |
| Spiked Amount 30.000         | Range  | 91 - 110 | Recovery | =      | 104.77% |          |
| 60) 4-Bromofluorobenzene     | 11.085 | 95       | 45858    | 30.29  | ug/l    | 0.00     |
| Spiked Amount 30.000         | Range  | 63 - 112 | Recovery | =      | 100.97% |          |
| 63) Toluene-d8               | 8.653  | 98       | 124287   | 29.81  | ug/l    | 0.00     |
| Spiked Amount 30.000         | Range  | 91 - 112 | Recovery | =      | 99.37%  |          |
|                              |        |          |          |        |         |          |
| Target Compounds             |        |          |          |        |         | Qvalue   |
| 2) Dichlorodifluoromethane   | 1.166  | 85       | 20600    | 20.15  | ug/l    | 96       |
| 3) Chloromethane             | 1.295  | 50       | 22661    | 18.45  | ug/l    | 97       |
| 4) Vinyl Chloride            | 1.374  | 62       | 23852    | 18.70  | ug/l    | 96       |
| 5) Bromomethane              | 1.605  | 94       | 13778    | 19.20  | ug/l    | 100      |
| 6) Chloroethane              | 1.685  | 64       | 14922    | 18.17  | ug/l    | 96       |
| 7) Trichlorofluoromethane    | 1.886  | 101      | 34267    | 19.23  | ug/l    | 99       |
| 8) Diethyl Ether             | 2.142  | 74       | 14309    | 18.72  | ug/l    | 93       |
| 9) 1,1,2-Trichlorotrifluo... | 2.331  | 101      | 19932    | 19.50  | ug/l    | 99       |
| 10) 1,1-Dichloroethene       | 2.319  | 96       | 20017    | 19.45  | ug/l    | 92       |
| 11) Methyl Iodide            | 2.453  | 142      | 21996    | 21.49  | ug/l    | 98       |
| 12) Methyl Acetate           | 2.709  | 43       | 32114    | 22.56  | ug/l    | 98       |
| 13) Acrolein                 | 2.239  | 56       | 29089    | 131.78 | ug/l    | 99       |
| 14) Acrylonitrile            | 3.075  | 53       | 63744    | 109.76 | ug/l    | 97       |
| 15) Acetone                  | 2.386  | 58       | 20235    | 116.71 | ug/l    | 87       |
| 16) Carbon Disulfide         | 2.514  | 76       | 49033    | 17.41  | ug/l    | 99       |
| 17) Allyl chloride           | 2.666  | 41       | 36617    | 20.18  | ug/l    | 90       |
| 18) Methylene Chloride       | 2.794  | 84       | 23720    | 19.38  | ug/l    | 96       |
| 19) trans-1,2-Dichloroethene | 3.093  | 96       | 22139    | 19.79  | ug/l    | 92       |
| 20) Diisopropyl ether        | 3.770  | 45       | 70930    | 20.74  | ug/l    | 95       |
| 21) 1,1-Dichloroethane       | 3.617  | 63       | 41060    | 20.05  | ug/l    | 98       |
| 22) cis-1,2-Dichloroethene   | 4.495  | 96       | 26225    | 19.95  | ug/l    | 97       |
| 23) tert-Butyl Alcohol       | 2.977  | 59       | 32069    | 113.59 | ug/l #  | 100      |
| 24) Methyl tert-Butyl Ether  | 3.123  | 73       | 68838    | 20.54  | ug/l    | 100      |
| 25) Chloroform               | 5.105  | 83       | 42324    | 20.39  | ug/l    | 96       |
| 26) Cyclohexane              | 5.477  | 56       | 33924    | 20.07  | ug/l #  | 99       |
| 29) 1,1-Dichloropropene      | 5.702  | 75       | 31211    | 19.64  | ug/l    | 100      |
| 30) 2-Butanone               | 4.568  | 43       | 100449   | 111.66 | ug/l #  | 97       |
| 31) 2,2-Dichloropropane      | 4.483  | 77       | 35638    | 19.08  | ug/l    | 99       |
| 32) 1,1,1-Trichloroethane    | 5.385  | 97       | 35655    | 19.02  | ug/l #  | 76       |
| 33) Carbon Tetrachloride     | 5.684  | 117      | 28753    | 18.07  | ug/l    | 88       |
| 34) Benzene                  | 6.044  | 78       | 96012    | 19.80  | ug/l    | 98       |
| 35) Methacrylonitrile        | 4.934  | 41       | 19790    | 20.55  | ug/l    | 92       |
| 36) 1,2-Dichloroethane       | 6.092  | 62       | 33658    | 20.33  | ug/l #  | 89       |
| 37) Trichloroethene          | 7.135  | 130      | 23009    | 18.88  | ug/l    | 94       |
| 38) Methylcyclohexane        | 7.385  | 83       | 34888    | 19.34  | ug/l    | 98       |
| 39) 1,2-Dichloropropane      | 7.434  | 63       | 25126    | 20.75  | ug/l    | 97       |
| 40) Dibromomethane           | 7.586  | 93       | 16275    | 19.32  | ug/l    | 97       |
| 41) Bromodichloromethane     | 7.824  | 83       | 30998    | 18.43  | ug/l    | 93       |
| 42) Vinyl Acetate            | 3.733  | 43       | 341581   | 101.68 | ug/l    | 98       |

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 ALS Vial : 7 Sample Multiplier: 1

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Quant Time: May 29 03:50:38 2021  
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 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Thu May 13 06:11:35 2021  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|--------|--------|----------|
| 43) Ethyl Acetate             | 4.733  | 43   | 39223    | 21.46  | ug/l   | 98       |
| 44) Isopropyl Acetate         | 6.348  | 43   | 62488    | 20.73  | ug/l   | 99       |
| 45) 1,4-Dioxane               | 7.665  | 88   | 12066    | 448.24 | ug/l # | 100      |
| 46) Methyl methacrylate       | 7.696  | 41   | 29007    | 20.75  | ug/l   | 98       |
| 47) n-amyl Acetate            | 10.848 | 43   | 52757    | 21.04  | ug/l   | 100      |
| 48) t-1,3-Dichloropropene     | 8.982  | 75   | 35701    | 18.91  | ug/l   | 95       |
| 49) cis-1,3-Dichloropropene   | 8.372  | 75   | 38419    | 18.96  | ug/l   | 99       |
| 50) 1,1,2-Trichloroethane     | 9.153  | 97   | 23710    | 19.77  | ug/l   | 97       |
| 51) Ethyl methacrylate        | 9.122  | 69   | 38870    | 20.10  | ug/l   | 98       |
| 52) 1,3-Dichloropropane       | 9.311  | 76   | 42480    | 20.32  | ug/l   | 99       |
| 53) Dibromochloromethane      | 9.525  | 129  | 20907    | 17.35  | ug/l   | 98       |
| 54) 1,2-Dibromoethane         | 9.610  | 107  | 24032    | 19.52  | ug/l   | 98       |
| 55) 2-Chloroethyl vinyl ether | 8.244  | 63   | 99211    | 97.20  | ug/l   | 99       |
| 56) Bromoform                 | 10.805 | 173  | 12628    | 16.52  | ug/l   | 97       |
| 58) 4-Methyl-2-Pentanone      | 8.580  | 43   | 195526   | 106.27 | ug/l   | 98       |
| 59) 2-Hexanone                | 9.433  | 43   | 147763   | 108.44 | ug/l   | 99       |
| 61) Tetrachloroethene         | 9.281  | 164  | 20249    | 19.56  | ug/l   | 92       |
| 62) Toluene                   | 8.720  | 91   | 101045   | 19.34  | ug/l   | 100      |
| 64) Chlorobenzene             | 10.086 | 112  | 60436    | 19.35  | ug/l   | 98       |
| 65) 1,1,1,2-Tetrachloroethane | 10.165 | 131  | 20376    | 17.87  | ug/l   | 98       |
| 66) Ethyl Benzene             | 10.195 | 91   | 112702   | 19.61  | ug/l   | 100      |
| 67) m/p-Xylenes               | 10.305 | 106  | 84558    | 38.82  | ug/l   | 98       |
| 68) o-Xylene                  | 10.646 | 106  | 41828    | 19.72  | ug/l   | 97       |
| 69) Styrene                   | 10.659 | 104  | 68220    | 19.22  | ug/l   | 99       |
| 70) Isopropylbenzene          | 10.963 | 105  | 110429   | 19.82  | ug/l   | 97       |
| 71) 1,1,2,2-Tetrachloroethane | 11.213 | 83   | 37616    | 20.48  | ug/l   | 98       |
| 72) 1,2,3-Trichloropropane    | 11.244 | 75   | 33728m   | 20.71  | ug/l   |          |
| 73) Bromobenzene              | 11.201 | 156  | 22899    | 19.40  | ug/l   | 95       |
| 74) n-propylbenzene           | 11.305 | 91   | 127163   | 19.58  | ug/l   | 99       |
| 75) 2-Chlorotoluene           | 11.366 | 91   | 75865    | 19.72  | ug/l   | 100      |
| 76) 1,3,5-Trimethylbenzene    | 11.451 | 105  | 91088    | 19.58  | ug/l   | 100      |
| 77) t-1,4-Dichloro-2-butene   | 11.018 | 75   | 11245    | 17.04  | ug/l   | 76       |
| 78) 4-Chlorotoluene           | 11.457 | 91   | 86952    | 19.64  | ug/l   | 99       |
| 79) tert-butylbenzene         | 11.719 | 119  | 85003    | 19.10  | ug/l   | 99       |
| 80) 1,2,4-Trimethylbenzene    | 11.756 | 105  | 90026    | 19.36  | ug/l   | 98       |
| 81) sec-Butylbenzene          | 11.896 | 105  | 110458   | 19.75  | ug/l   | 98       |
| 82) p-Isopropyltoluene        | 12.012 | 119  | 91014    | 19.41  | ug/l   | 100      |
| 83) 1,3-Dichlorobenzene       | 11.976 | 146  | 42893    | 19.17  | ug/l   | 98       |
| 84) 1,4-Dichlorobenzene       | 12.043 | 146  | 42618    | 18.99  | ug/l   | 98       |
| 85) n-Butylbenzene            | 12.335 | 91   | 85455    | 19.89  | ug/l   | 97       |
| 86) Hexachloroethane          | 12.542 | 117  | 12643    | 16.23  | ug/l   | 94       |
| 87) 1,2-Dichlorobenzene       | 12.335 | 146  | 42769    | 19.73  | ug/l   | 97       |
| 88) 1,2-Dibromo-3-Chloropr... | 12.945 | 75   | 7298     | 17.84  | ug/l   | 95       |
| 89) 1,2,4-Trichlorobenzene    | 13.591 | 180  | 24553    | 18.49  | ug/l   | 95       |
| 90) Hexachlorobutadiene       | 13.731 | 225  | 9657     | 18.80  | ug/l   | 96       |
| 91) Naphthalene               | 13.780 | 128  | 107528   | 20.64  | ug/l   | 97       |
| 92) 1,2,3-Trichlorobenzene    | 13.963 | 180  | 25143    | 19.07  | ug/l   | 98       |

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

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Sample : VSTDCCC020  
Misc : 5.0mL/MSVOA\_X/WATER  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
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ClientSampleID :  
VSTDCCC020

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Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_X\Method\624X051321W.M  
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