

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX031220\  
 Data File : VX015234.D  
 Acq On : 12 Mar 2020 14:35  
 Operator : JC/SP  
 Sample : VSTDICV020  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 ICVVX031220

Quant Time: Mar 13 04:03:03 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA X\METHOD\624X031220W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Thu Mar 12 14:12:53 2020  
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 150%

|      | Compound                    | Amount  | Calc.   | %Dev | Area% | Dev(min) |
|------|-----------------------------|---------|---------|------|-------|----------|
| 1 I  | Bromochloromethane          | 30.000  | 30.000  | 0.0  | 99    | -0.01    |
| 2 M  | Dichlorodifluoromethane     | 20.000  | 20.435  | -2.2 | 104   | 0.00     |
| 3 M  | Chloromethane               | 20.000  | 20.719  | -3.6 | 101   | 0.00     |
| 4 M  | Vinyl Chloride              | 20.000  | 20.756  | -3.8 | 102   | 0.00     |
| 5 M  | Bromomethane                | 20.000  | 21.284  | -6.4 | 106   | 0.00     |
| 6 M  | Chloroethane                | 20.000  | 20.489  | -2.4 | 100   | 0.00     |
| 7 M  | Trichlorofluoromethane      | 20.000  | 20.818  | -4.1 | 101   | 0.00     |
| 8 T  | Diethyl Ether               | 20.000  | 20.426  | -2.1 | 100   | 0.00     |
| 9    | 1,1,2-Trichlorotrifluoroeth | 20.000  | 19.838  | 0.8  | 99    | 0.00     |
| 10 M | 1,1-Dichloroethene          | 20.000  | 20.269  | -1.3 | 101   | 0.00     |
| 11   | Methyl Iodide               | 20.000  | 16.753  | 16.2 | 101   | 0.00     |
| 12   | Methyl Acetate              | 20.000  | 19.521  | 2.4  | 101   | 0.00     |
| 13 M | Acrolein                    | 100.000 | 96.614  | 3.4  | 100   | 0.00     |
| 14 M | Acrylonitrile               | 100.000 | 95.583  | 4.4  | 101   | 0.00     |
| 15 M | Acetone                     | 100.000 | 88.937  | 11.1 | 79    | 0.00     |
| 16 M | Carbon Disulfide            | 20.000  | 19.605  | 2.0  | 106   | 0.00     |
| 17   | Allyl chloride              | 20.000  | 18.887  | 5.6  | 100   | 0.00     |
| 18 M | Methylene Chloride          | 20.000  | 19.115  | 4.4  | 100   | 0.00     |
| 19 M | trans-1,2-Dichloroethene    | 20.000  | 19.935  | 0.3  | 107   | 0.00     |
| 20 T | Diisopropyl ether           | 20.000  | 19.619  | 1.9  | 102   | 0.00     |
| 21 M | 1,1-Dichloroethane          | 20.000  | 19.307  | 3.5  | 102   | 0.00     |
| 22 M | cis-1,2-Dichloroethene      | 20.000  | 19.620  | 1.9  | 101   | 0.00     |
| 23 M | tert-Butyl Alcohol          | 100.000 | 98.322  | 1.7  | 107   | 0.00     |
| 24 M | Methyl tert-Butyl Ether     | 20.000  | 19.656  | 1.7  | 104   | 0.00     |
| 25 M | Chloroform                  | 20.000  | 19.576  | 2.1  | 98    | 0.00     |
| 26   | Cyclohexane                 | 20.000  | 19.318  | 3.4  | 99    | 0.00     |
| 27 s | 1,2-Dichloroethane-d4       | 30.000  | 29.469  | 1.8  | 93    | -0.01    |
| 28 I | 1,4-Difluorobenzene         | 30.000  | 30.000  | 0.0  | 95    | 0.00     |
| 29   | 1,1-Dichloropropene         | 20.000  | 19.765  | 1.2  | 97    | 0.00     |
| 30 M | 2-Butanone                  | 100.000 | 95.725  | 4.3  | 93    | 0.00     |
| 31   | 2,2-Dichloropropane         | 20.000  | 19.929  | 0.4  | 102   | -0.01    |
| 32 M | 1,1,1-Trichloroethane       | 20.000  | 19.909  | 0.5  | 97    | -0.01    |
| 33 M | Carbon Tetrachloride        | 20.000  | 19.996  | 0.0  | 99    | -0.01    |
| 34 M | Benzene                     | 20.000  | 19.725  | 1.4  | 95    | 0.00     |
| 35   | Methacrylonitrile           | 20.000  | 19.488  | 2.6  | 100   | -0.01    |
| 36 M | 1,2-Dichloroethane          | 20.000  | 19.285  | 3.6  | 92    | -0.19    |
| 37 M | Trichloroethene             | 20.000  | 19.526  | 2.4  | 98    | 0.00     |
| 38   | Methylcyclohexane           | 20.000  | 19.943  | 0.3  | 104   | 0.00     |
| 39 M | 1,2-Dichloropropane         | 20.000  | 20.133  | -0.7 | 102   | 0.00     |
| 40   | Dibromomethane              | 20.000  | 20.131  | -0.7 | 101   | 0.00     |
| 41 M | Bromodichloromethane        | 20.000  | 20.063  | -0.3 | 105   | 0.00     |
| 42 M | Vinyl Acetate               | 100.000 | 98.058  | 1.9  | 101   | -0.01    |
| 43   | Ethyl Acetate               | 20.000  | 20.421  | -2.1 | 104   | 0.00     |
| 44   | Isopropyl Acetate           | 20.000  | 19.379  | 3.1  | 95    | 0.00     |
| 45 T | 1,4-Dioxane                 | 400.000 | 434.913 | -8.7 | 113   | 0.00     |

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 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Thu Mar 12 14:12:53 2020  
 Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min  
 Max. RRF Dev : 30% Max. Rel. Area : 150%

|      | Compound                    | Amount  | Calc.   | %Dev  | Area% | Dev(min) |
|------|-----------------------------|---------|---------|-------|-------|----------|
| 46   | Methyl methacrylate         | 20.000  | 19.638  | 1.8   | 100   | 0.00     |
| 47   | n-amyl Acetate              | 20.000  | 18.553  | 7.2   | 93    | 0.00     |
| 48 M | t-1,3-Dichloropropene       | 20.000  | 21.803  | -9.0  | 115   | 0.00     |
| 49 T | cis-1,3-Dichloropropene     | 20.000  | 19.874  | 0.6   | 100   | 0.00     |
| 50 M | 1,1,2-Trichloroethane       | 20.000  | 22.073  | -10.4 | 111   | 0.00     |
| 51   | Ethyl methacrylate          | 20.000  | 21.291  | -6.5  | 109   | 0.00     |
| 52   | 1,3-Dichloropropane         | 20.000  | 22.296  | -11.5 | 112   | 0.00     |
| 53 M | Dibromochloromethane        | 20.000  | 21.794  | -9.0  | 113   | 0.00     |
| 54 M | 1,2-Dibromoethane           | 20.000  | 22.171  | -10.9 | 111   | 0.00     |
| 55 M | 2-Chloroethyl vinyl ether   | 100.000 | 99.232  | 0.8   | 101   | 0.00     |
| 56 M | Bromoform                   | 20.000  | 19.299  | 3.5   | 97    | 0.00     |
| 57 I | Chlorobenzene-d5            | 30.000  | 30.000  | 0.0   | 92    | 0.00     |
| 58 M | 4-Methyl-2-Pentanone        | 100.000 | 108.249 | -8.2  | 106   | 0.00     |
| 59 M | 2-Hexanone                  | 100.000 | 109.233 | -9.2  | 107   | 0.00     |
| 60 S | 4-Bromofluorobenzene        | 30.000  | 29.484  | 1.7   | 91    | 0.00     |
| 61 M | Tetrachloroethene           | 20.000  | 21.553  | -7.8  | 104   | 0.00     |
| 62 M | Toluene                     | 20.000  | 22.295  | -11.5 | 110   | 0.00     |
| 63 S | Toluene-d8                  | 30.000  | 32.897  | -9.7  | 104   | 0.00     |
| 64 M | Chlorobenzene               | 20.000  | 19.912  | 0.4   | 94    | 0.00     |
| 65   | 1,1,1,2-Tetrachloroethane   | 20.000  | 20.014  | -0.1  | 94    | 0.00     |
| 66 M | Ethyl Benzene               | 20.000  | 20.080  | -0.4  | 95    | 0.00     |
| 67 M | m/p-Xylenes                 | 40.000  | 39.620  | 1.0   | 94    | 0.00     |
| 68 M | o-Xylene                    | 20.000  | 19.994  | 0.0   | 96    | 0.00     |
| 69 M | Styrene                     | 20.000  | 19.777  | 1.1   | 94    | 0.00     |
| 70   | Isopropylbenzene            | 20.000  | 20.236  | -1.2  | 95    | 0.00     |
| 71 M | 1,1,2,2-Tetrachloroethane   | 20.000  | 19.490  | 2.6   | 93    | 0.00     |
| 72   | 1,2,3-Trichloropropane      | 20.000  | 23.695  | -18.5 | 111   | 0.00     |
| 73   | Bromobenzene                | 20.000  | 19.988  | 0.1   | 96    | 0.00     |
| 74   | n-propylbenzene             | 20.000  | 19.778  | 1.1   | 96    | 0.00     |
| 75   | 2-Chlorotoluene             | 20.000  | 19.940  | 0.3   | 96    | 0.00     |
| 76   | 1,3,5-Trimethylbenzene      | 20.000  | 19.900  | 0.5   | 96    | 0.00     |
| 77   | t-1,4-Dichloro-2-butene     | 20.000  | 18.313  | 8.4   | 94    | 0.00     |
| 78   | 4-Chlorotoluene             | 20.000  | 19.823  | 0.9   | 95    | 0.00     |
| 79   | tert-butylbenzene           | 20.000  | 20.612  | -3.1  | 105   | 0.00     |
| 80   | 1,2,4-Trimethylbenzene      | 20.000  | 20.229  | -1.1  | 102   | 0.00     |
| 81   | sec-Butylbenzene            | 20.000  | 19.854  | 0.7   | 101   | 0.00     |
| 82   | p-Isopropyltoluene          | 20.000  | 20.086  | -0.4  | 101   | 0.00     |
| 83 M | 1,3-Dichlorobenzene         | 20.000  | 19.728  | 1.4   | 99    | 0.00     |
| 84 M | 1,4-Dichlorobenzene         | 20.000  | 19.642  | 1.8   | 100   | 0.00     |
| 85   | n-Butylbenzene              | 20.000  | 19.893  | 0.5   | 101   | 0.00     |
| 86 T | Hexachloroethane            | 20.000  | 19.659  | 1.7   | 104   | 0.00     |
| 87 M | 1,2-Dichlorobenzene         | 20.000  | 20.036  | -0.2  | 101   | 0.00     |
| 88   | 1,2-Dibromo-3-Chloropropane | 20.000  | 20.608  | -3.0  | 107   | 0.00     |
| 89   | 1,2,4-Trichlorobenzene      | 20.000  | 19.865  | 0.7   | 103   | 0.00     |
| 90   | Hexachlorobutadiene         | 20.000  | 20.906  | -4.5  | 104   | 0.00     |

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Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min  
Max. RRF Dev : 30% Max. Rel. Area : 150%

|      | Compound               | Amount | Calc.  | %Dev | Area% | Dev(min) |
|------|------------------------|--------|--------|------|-------|----------|
| 91 M | Naphthalene            | 20.000 | 19.610 | 2.0  | 101   | 0.00     |
| 92   | 1,2,3-Trichlorobenzene | 20.000 | 19.943 | 0.3  | 103   | 0.00     |

(#) = Out of Range

SPCC's out = 0 CCC's out = 0