

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX031220\  
 Data File : VX015242.D  
 Acq On : 12 Mar 2020 18:45  
 Operator : JC/SP  
 Sample : VSTDCCC020  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 24 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 LabSampleId :  
 VSTDCCC020

Quant Time: Mar 13 04:36:23 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  | 97    | 0.00     |
| 2 M  | Dichlorodifluoromethane     | 20.000  | 19.059  | 4.7  | 95    | 0.00     |
| 3 M  | Chloromethane               | 20.000  | 19.638  | 1.8  | 95    | 0.00     |
| 4 M  | Vinyl Chloride              | 20.000  | 19.789  | 1.1  | 96    | 0.00     |
| 5 M  | Bromomethane                | 20.000  | 20.366  | -1.8 | 100   | 0.00     |
| 6 M  | Chloroethane                | 20.000  | 20.407  | -2.0 | 98    | 0.00     |
| 7 M  | Trichlorofluoromethane      | 20.000  | 19.691  | 1.5  | 94    | 0.00     |
| 8 T  | Diethyl Ether               | 20.000  | 20.045  | -0.2 | 97    | 0.00     |
| 9    | 1,1,2-Trichlorotrifluoroeth | 20.000  | 17.549  | 12.3 | 86    | 0.00     |
| 10 M | 1,1-Dichloroethene          | 20.000  | 18.240  | 8.8  | 89    | 0.00     |
| 11   | Methyl Iodide               | 20.000  | 16.496  | 17.5 | 98    | 0.00     |
| 12   | Methyl Acetate              | 20.000  | 19.428  | 2.9  | 99    | 0.00     |
| 13 M | Acrolein                    | 100.000 | 83.848  | 16.2 | 86    | 0.00     |
| 14 M | Acrylonitrile               | 100.000 | 96.119  | 3.9  | 100   | 0.00     |
| 15 M | Acetone                     | 100.000 | 82.531  | 17.5 | 72    | 0.00     |
| 16 M | Carbon Disulfide            | 20.000  | 18.112  | 9.4  | 97    | 0.00     |
| 17   | Allyl chloride              | 20.000  | 18.205  | 9.0  | 95    | 0.00     |
| 18 M | Methylene Chloride          | 20.000  | 18.760  | 6.2  | 97    | 0.00     |
| 19 M | trans-1,2-Dichloroethene    | 20.000  | 18.687  | 6.6  | 99    | 0.00     |
| 20 T | Diisopropyl ether           | 20.000  | 18.854  | 5.7  | 97    | 0.00     |
| 21 M | 1,1-Dichloroethane          | 20.000  | 18.619  | 6.9  | 97    | 0.00     |
| 22 M | cis-1,2-Dichloroethene      | 20.000  | 18.591  | 7.0  | 95    | 0.00     |
| 23 M | tert-Butyl Alcohol          | 100.000 | 97.649  | 2.4  | 105   | 0.00     |
| 24 M | Methyl tert-Butyl Ether     | 20.000  | 18.808  | 6.0  | 98    | 0.00     |
| 25 M | Chloroform                  | 20.000  | 19.036  | 4.8  | 94    | 0.00     |
| 26   | Cyclohexane                 | 20.000  | 18.427  | 7.9  | 93    | 0.00     |
| 27 s | 1,2-Dichloroethane-d4       | 30.000  | 29.620  | 1.3  | 92    | 0.00     |
| 28 I | 1,4-Difluorobenzene         | 30.000  | 30.000  | 0.0  | 92    | 0.00     |
| 29   | 1,1-Dichloropropene         | 20.000  | 19.462  | 2.7  | 94    | 0.00     |
| 30 M | 2-Butanone                  | 100.000 | 96.307  | 3.7  | 91    | 0.00     |
| 31   | 2,2-Dichloropropane         | 20.000  | 18.124  | 9.4  | 90    | 0.00     |
| 32 M | 1,1,1-Trichloroethane       | 20.000  | 19.294  | 3.5  | 92    | 0.00     |
| 33 M | Carbon Tetrachloride        | 20.000  | 19.016  | 4.9  | 92    | 0.00     |
| 34 M | Benzene                     | 20.000  | 19.321  | 3.4  | 91    | 0.00     |
| 35   | Methacrylonitrile           | 20.000  | 19.375  | 3.1  | 97    | 0.00     |
| 36 M | 1,2-Dichloroethane          | 20.000  | 19.471  | 2.6  | 91    | -0.18    |
| 37 M | Trichloroethene             | 20.000  | 19.591  | 2.0  | 96    | 0.00     |
| 38   | Methylcyclohexane           | 20.000  | 18.671  | 6.6  | 95    | 0.00     |
| 39 M | 1,2-Dichloropropane         | 20.000  | 19.111  | 4.4  | 94    | 0.00     |
| 40   | Dibromomethane              | 20.000  | 19.633  | 1.8  | 96    | 0.00     |
| 41 M | Bromodichloromethane        | 20.000  | 19.375  | 3.1  | 99    | 0.00     |
| 42 M | Vinyl Acetate               | 100.000 | 95.552  | 4.4  | 96    | 0.00     |
| 43   | Ethyl Acetate               | 20.000  | 20.029  | -0.1 | 100   | 0.00     |
| 44   | Isopropyl Acetate           | 20.000  | 19.193  | 4.0  | 91    | 0.00     |
| 45 T | 1,4-Dioxane                 | 400.000 | 417.803 | -4.5 | 106   | 0.00     |

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 Misc : 5.0mL/MSVOA X/WATER  
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Instrument :  
 MSVOA\_X  
 LabSampleId :  
 VSTDCCC020

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 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) |
|------|-----------------------------|---------|---------|-------|-------|----------|
| 46   | Methyl methacrylate         | 20.000  | 19.695  | 1.5   | 98    | 0.00     |
| 47   | n-amyl Acetate              | 20.000  | 17.938  | 10.3  | 88    | 0.00     |
| 48 M | t-1,3-Dichloropropene       | 20.000  | 20.743  | -3.7  | 106   | 0.00     |
| 49 T | cis-1,3-Dichloropropene     | 20.000  | 19.462  | 2.7   | 96    | 0.00     |
| 50 M | 1,1,2-Trichloroethane       | 20.000  | 22.127  | -10.6 | 109   | 0.00     |
| 51   | Ethyl methacrylate          | 20.000  | 20.452  | -2.3  | 102   | 0.00     |
| 52   | 1,3-Dichloropropane         | 20.000  | 21.940  | -9.7  | 107   | 0.00     |
| 53 M | Dibromochloromethane        | 20.000  | 20.898  | -4.5  | 105   | 0.00     |
| 54 M | 1,2-Dibromoethane           | 20.000  | 21.421  | -7.1  | 104   | 0.00     |
| 55 M | 2-Chloroethyl vinyl ether   | 100.000 | 103.183 | -3.2  | 102   | 0.00     |
| 56 M | Bromoform                   | 20.000  | 19.348  | 3.3   | 95    | 0.00     |
| 57 I | Chlorobenzene-d5            | 30.000  | 30.000  | 0.0   | 92    | 0.00     |
| 58 M | 4-Methyl-2-Pentanone        | 100.000 | 108.551 | -8.6  | 107   | 0.00     |
| 59 M | 2-Hexanone                  | 100.000 | 107.058 | -7.1  | 105   | 0.00     |
| 60 S | 4-Bromofluorobenzene        | 30.000  | 29.529  | 1.6   | 91    | 0.00     |
| 61 M | Tetrachloroethene           | 20.000  | 21.717  | -8.6  | 105   | 0.00     |
| 62 M | Toluene                     | 20.000  | 21.119  | -5.6  | 105   | 0.00     |
| 63 S | Toluene-d8                  | 30.000  | 32.640  | -8.8  | 104   | 0.00     |
| 64 M | Chlorobenzene               | 20.000  | 19.427  | 2.9   | 92    | 0.00     |
| 65   | 1,1,1,2-Tetrachloroethane   | 20.000  | 19.739  | 1.3   | 93    | 0.00     |
| 66 M | Ethyl Benzene               | 20.000  | 18.992  | 5.0   | 91    | 0.00     |
| 67 M | m/p-Xylenes                 | 40.000  | 38.306  | 4.2   | 92    | 0.00     |
| 68 M | o-Xylene                    | 20.000  | 19.401  | 3.0   | 94    | 0.00     |
| 69 M | Styrene                     | 20.000  | 19.103  | 4.5   | 91    | 0.00     |
| 70   | Isopropylbenzene            | 20.000  | 19.245  | 3.8   | 91    | 0.00     |
| 71 M | 1,1,2,2-Tetrachloroethane   | 20.000  | 18.981  | 5.1   | 91    | 0.00     |
| 72   | 1,2,3-Trichloropropane      | 20.000  | 18.866  | 5.7   | 88    | 0.00     |
| 73   | Bromobenzene                | 20.000  | 18.971  | 5.1   | 92    | 0.00     |
| 74   | n-propylbenzene             | 20.000  | 18.804  | 6.0   | 92    | 0.00     |
| 75   | 2-Chlorotoluene             | 20.000  | 18.848  | 5.8   | 91    | 0.00     |
| 76   | 1,3,5-Trimethylbenzene      | 20.000  | 18.658  | 6.7   | 90    | 0.00     |
| 77   | t-1,4-Dichloro-2-butene     | 20.000  | 17.411  | 12.9  | 90    | 0.00     |
| 78   | 4-Chlorotoluene             | 20.000  | 18.753  | 6.2   | 90    | 0.00     |
| 79   | tert-butylbenzene           | 20.000  | 19.203  | 4.0   | 99    | 0.00     |
| 80   | 1,2,4-Trimethylbenzene      | 20.000  | 19.293  | 3.5   | 98    | 0.00     |
| 81   | sec-Butylbenzene            | 20.000  | 18.788  | 6.1   | 96    | 0.00     |
| 82   | p-Isopropyltoluene          | 20.000  | 18.786  | 6.1   | 95    | 0.00     |
| 83 M | 1,3-Dichlorobenzene         | 20.000  | 18.943  | 5.3   | 96    | 0.00     |
| 84 M | 1,4-Dichlorobenzene         | 20.000  | 19.347  | 3.3   | 99    | 0.00     |
| 85   | n-Butylbenzene              | 20.000  | 18.806  | 6.0   | 96    | 0.00     |
| 86 T | Hexachloroethane            | 20.000  | 18.475  | 7.6   | 98    | 0.00     |
| 87 M | 1,2-Dichlorobenzene         | 20.000  | 19.411  | 2.9   | 98    | 0.00     |
| 88   | 1,2-Dibromo-3-Chloropropane | 20.000  | 19.162  | 4.2   | 100   | 0.00     |
| 89   | 1,2,4-Trichlorobenzene      | 20.000  | 19.345  | 3.3   | 100   | 0.00     |
| 90   | Hexachlorobutadiene         | 20.000  | 18.347  | 8.3   | 92    | 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) |
|------|------------------------|--------|--------|------|-------|----------|
| 91 M | Naphthalene            | 20.000 | 19.622 | 1.9  | 101   | 0.00     |
| 92   | 1,2,3-Trichlorobenzene | 20.000 | 19.505 | 2.5  | 101   | 0.00     |

(#) = Out of Range

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