

Data Path : Z:\voasrv\HPCHEM1\MSVOA X\Data\WX080718\  
 Data File : VX003895.D  
 Acq On : 07 Aug 2018 22:19  
 Operator : JC/MD  
 Sample : VSTDCCC020  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 27 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 LabSampleId :  
 VSTDCCC020

Quant Time: Aug 08 04:22:33 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA X\METHOD\624X072718W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Fri Jul 27 16:17:43 2018  
 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                    | AvqRF | CCRF   | %Dev   | Area% | Dev(min) |
|------|-----------------------------|-------|--------|--------|-------|----------|
| 1 I  | Bromochloromethane          | 1.000 | 1.000  | 0.0    | 296#  | 0.00     |
| 2 M  | Dichlorodifluoromethane     | 1.585 | 2.165  | -36.6# | 448#  | 0.00     |
| 3 M  | Chloromethane               | 2.133 | 2.189  | -2.6   | 336#  | 0.00     |
| 4 M  | Vinyl Chloride              | 2.243 | 2.221  | 1.0    | 324#  | 0.00     |
| 5 M  | Bromomethane                | 1.341 | 1.318  | 1.7    | 342#  | 0.00     |
| 6 M  | Chloroethane                | 1.468 | 1.482  | -1.0   | 328#  | 0.00     |
| 7 M  | Trichlorofluoromethane      | 3.017 | 2.866  | 5.0    | 315#  | 0.00     |
| 8 T  | Diethyl Ether               | 1.293 | 1.249  | 3.4    | 320#  | 0.00     |
| 9    | 1,1,2-Trichlorotrifluoroeth | 1.829 | 1.752  | 4.2    | 313#  | 0.00     |
| 10 M | 1,1-Dichloroethene          | 1.720 | 1.634  | 5.0    | 313#  | 0.00     |
| 11   | Methyl Iodide               | 2.384 | 2.057  | 13.7   | 287#  | 0.00     |
| 12   | Methyl Acetate              | 3.182 | 3.446  | -8.3   | 343#  | 0.00     |
| 13 M | Acrolein                    | 0.248 | 0.314  | -26.6  | 367#  | 0.00     |
| 14 M | Acrylonitrile               | 1.254 | 1.132  | 9.7    | 291#  | 0.00     |
| 15 M | Acetone                     | 0.340 | 0.317  | 6.8    | 300#  | 0.00     |
| 16 M | Carbon Disulfide            | 4.776 | 4.368  | 8.5    | 306#  | 0.00     |
| 17   | Allyl chloride              | 3.560 | 3.138  | 11.9   | 290#  | 0.00     |
| 18 M | Methylene Chloride          | 2.037 | 1.997  | 2.0    | 317#  | 0.00     |
| 19 M | trans-1,2-Dichloroethene    | 1.859 | 1.769  | 4.8    | 309#  | 0.00     |
| 20 T | Diisopropyl ether           | 6.537 | 5.631  | 13.9   | 275#  | 0.00     |
| 21 M | 1,1-Dichloroethane          | 3.701 | 3.446  | 6.9    | 303#  | 0.00     |
| 22 M | cis-1,2-Dichloroethene      | 1.877 | 1.965  | -4.7   | 319#  | 0.00     |
| 23 M | tert-Butyl Alcohol          | 0.527 | 0.505  | 4.2    | 306#  | 0.00     |
| 24 M | Methyl tert-Butyl Ether     | 6.169 | 5.767  | 6.5    | 308#  | 0.00     |
| 25 M | Chloroform                  | 3.205 | 3.267  | -1.9   | 308#  | 0.00     |
| 26   | Cyclohexane                 | 2.780 | 2.757  | 0.8    | 309#  | 0.00     |
| 27 s | 1,2-Dichloroethane-d4       | 2.202 | 2.086  | 5.3    | 294#  | 0.00     |
| 28 I | 1,4-Difluorobenzene         | 1.000 | 1.000  | 0.0    | 310#  | 0.00     |
| 29   | 1,1-Dichloropropene         | 0.443 | 0.446  | -0.7   | 317#  | 0.00     |
| 30 M | 2-Butanone                  | 0.283 | 0.266  | 6.0    | 283#  | 0.00     |
| 31   | 2,2-Dichloropropane         | 0.429 | 0.349  | 18.6   | 252#  | 0.00     |
| 32 M | 1,1,1-Trichloroethane       | 0.507 | 0.499  | 1.6    | 310#  | 0.00     |
| 33 M | Carbon Tetrachloride        | 0.440 | 0.429  | 2.5    | 302#  | 0.00     |
| 34 M | Benzene                     | 1.361 | 1.386  | -1.8   | 313#  | 0.00     |
| 35   | Methacrylonitrile           | 0.294 | 0.275  | 6.5    | 292#  | 0.00     |
| 36 M | 1,2-Dichloroethane          | 0.489 | 0.478  | 2.2    | 306#  | 0.00     |
| 37 M | Trichloroethene             | 0.355 | 0.362  | -2.0   | 319#  | 0.00     |
| 38   | Methylcyclohexane           | 0.503 | 0.495  | 1.6    | 315#  | 0.00     |
| 39 M | 1,2-Dichloropropane         | 0.360 | 0.346  | 3.9    | 301#  | 0.00     |
| 40   | Dibromomethane              | 0.233 | 0.227  | 2.6    | 303#  | 0.00     |
| 41 M | Bromodichloromethane        | 0.445 | 0.426  | 4.3    | 308#  | 0.00     |
| 42 M | Vinyl Acetate               | 1.087 | 0.824  | 24.2   | 255#  | 0.00     |
| 43   | Ethyl Acetate               | 0.528 | 0.482  | 8.7    | 280#  | 0.00     |
| 44   | Isopropyl Acetate           | 0.811 | 0.739  | 8.9    | 289#  | 0.00     |
| 45 T | 1,4-Dioxane                 | 0.009 | 0.009# | 0.0    | 310#  | 0.00     |

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 LabSampleId :  
 VSTDCCC020

Quant Time: Aug 08 04:22:33 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA X\METHOD\624X072718W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Fri Jul 27 16:17:43 2018  
 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                    | AvqRF | CCRF  | %Dev | Area% | Dev(min) |
|------|-----------------------------|-------|-------|------|-------|----------|
| 46   | Methyl methacrylate         | 0.418 | 0.396 | 5.3  | 301#  | 0.00     |
| 47   | n-amyl Acetate              | 0.765 | 0.626 | 18.2 | 281#  | 0.00     |
| 48 M | t-1,3-Dichloropropene       | 0.540 | 0.499 | 7.6  | 298#  | 0.00     |
| 49 T | cis-1,3-Dichloropropene     | 0.506 | 0.448 | 11.5 | 304#  | 0.00     |
| 50 M | 1,1,2-Trichloroethane       | 0.370 | 0.355 | 4.1  | 314#  | 0.00     |
| 51   | Ethyl methacrylate          | 0.556 | 0.492 | 11.5 | 304#  | 0.00     |
| 52   | 1,3-Dichloropropane         | 0.615 | 0.603 | 2.0  | 325#  | 0.00     |
| 53 M | Dibromochloromethane        | 0.363 | 0.337 | 7.2  | 317#  | 0.00     |
| 54 M | 1,2-Dibromoethane           | 0.386 | 0.368 | 4.7  | 319#  | 0.00     |
| 55 M | 2-Chloroethyl vinyl ether   | 0.287 | 0.256 | 10.8 | 289#  | 0.00     |
| 56 M | Bromoform                   | 0.282 | 0.253 | 10.3 | 316#  | 0.00     |
| 57 I | Chlorobenzene-d5            | 1.000 | 1.000 | 0.0  | 314#  | 0.00     |
| 58 M | 4-Methyl-2-Pentanone        | 0.566 | 0.553 | 2.3  | 289#  | 0.00     |
| 59 M | 2-Hexanone                  | 0.451 | 0.424 | 6.0  | 290#  | 0.00     |
| 60 S | 4-Bromofluorobenzene        | 0.483 | 0.470 | 2.7  | 308#  | 0.00     |
| 61 M | Tetrachloroethene           | 0.349 | 0.377 | -8.0 | 347#  | 0.00     |
| 62 M | Toluene                     | 1.557 | 1.606 | -3.1 | 314#  | 0.00     |
| 63 S | Toluene-d8                  | 1.351 | 1.335 | 1.2  | 298#  | 0.00     |
| 64 M | Chlorobenzene               | 1.006 | 1.043 | -3.7 | 322#  | 0.00     |
| 65   | 1,1,1,2-Tetrachloroethane   | 0.356 | 0.368 | -3.4 | 323#  | 0.00     |
| 66 M | Ethyl Benzene               | 1.713 | 1.713 | 0.0  | 316#  | 0.00     |
| 67 M | m/p-Xylenes                 | 0.660 | 0.688 | -4.2 | 325#  | 0.00     |
| 68 M | o-Xylene                    | 0.631 | 0.654 | -3.6 | 326#  | 0.00     |
| 69 M | Styrene                     | 1.069 | 1.067 | 0.2  | 313#  | 0.00     |
| 70   | Isopropylbenzene            | 1.738 | 1.744 | -0.3 | 320#  | 0.00     |
| 71 M | 1,1,2,2-Tetrachloroethane   | 0.621 | 0.595 | 4.2  | 303#  | 0.00     |
| 72   | 1,2,3-Trichloropropane      | 0.516 | 0.521 | -1.0 | 318#  | 0.00     |
| 73   | Bromobenzene                | 0.468 | 0.463 | 1.1  | 323#  | 0.00     |
| 74   | n-propylbenzene             | 2.048 | 1.995 | 2.6  | 311#  | 0.00     |
| 75   | 2-Chlorotoluene             | 1.207 | 1.203 | 0.3  | 314#  | 0.00     |
| 76   | 1,3,5-Trimethylbenzene      | 1.475 | 1.438 | 2.5  | 312#  | 0.00     |
| 77   | t-1,4-Dichloro-2-butene     | 0.176 | 0.145 | 17.6 | 277#  | 0.00     |
| 78   | 4-Chlorotoluene             | 1.412 | 1.367 | 3.2  | 308#  | 0.00     |
| 79   | tert-butylbenzene           | 1.518 | 1.407 | 7.3  | 296#  | 0.00     |
| 80   | 1,2,4-Trimethylbenzene      | 1.510 | 1.484 | 1.7  | 312#  | 0.00     |
| 81   | sec-Butylbenzene            | 1.718 | 1.680 | 2.2  | 315#  | 0.00     |
| 82   | p-Isopropyltoluene          | 1.518 | 1.407 | 7.3  | 296#  | 0.00     |
| 83 M | 1,3-Dichlorobenzene         | 0.856 | 0.789 | 7.8  | 294#  | 0.00     |
| 84 M | 1,4-Dichlorobenzene         | 0.861 | 0.806 | 6.4  | 297#  | 0.00     |
| 85   | n-Butylbenzene              | 1.347 | 1.094 | 18.8 | 269#  | 0.00     |
| 86 T | Hexachloroethane            | 0.245 | 0.198 | 19.2 | 266#  | 0.00     |
| 87 M | 1,2-Dichlorobenzene         | 0.859 | 0.759 | 11.6 | 281#  | 0.00     |
| 88   | 1,2-Dibromo-3-Chloropropane | 0.131 | 0.103 | 21.4 | 262#  | 0.00     |
| 89   | 1,2,4-Trichlorobenzene      | 0.603 | 0.582 | 3.5  | 317#  | 0.00     |
| 90   | Hexachlorobutadiene         | 0.273 | 0.267 | 2.2  | 311#  | 0.00     |

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Max. RRF Dev : 30% Max. Rel. Area : 150%

|      | Compound               | AvgRF | CCRF  | %Dev | Area% | Dev(min) |
|------|------------------------|-------|-------|------|-------|----------|
| 91 M | Naphthalene            | 1.843 | 1.829 | 0.8  | 317#  | 0.00     |
| 92   | 1,2,3-Trichlorobenzene | 0.614 | 0.621 | -1.1 | 320#  | 0.00     |

(#) = Out of Range

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