

Data Path : Z:\voasrv\HPCHEM1\MSVOA L\Data\VL120418\  
 Data File : VL032903.D  
 Acq On : 5 Dec 2018 9:07  
 Operator : SY/AP  
 Sample : VSTDCCC010  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleID :  
 VSTDCCC010EC

Quant Time: Dec 05 09:42:56 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL111418AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Wed Nov 14 07:00:23 2018  
 QLast Update : Wed Nov 14 07:00:23 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   | 85    | 0.00     |
| 2 T  | Dichlorodifluoromethane     | 1.437 | 1.254 | 12.7  | 83    | 0.00     |
| 3    | Chlorodifluoromethane       | 0.793 | 0.734 | 7.4   | 87    | 0.00     |
| 4    | Chloromethane               | 0.440 | 0.425 | 3.4   | 93    | 0.00     |
| 5 T  | Vinyl Chloride              | 0.466 | 0.440 | 5.6   | 93    | 0.00     |
| 6 T  | Bromomethane                | 0.285 | 0.279 | 2.1   | 90    | 0.00     |
| 7    | Chloroethane                | 0.168 | 0.162 | 3.6   | 91    | 0.00     |
| 8 T  | Dichlorotetrafluoroethane   | 1.133 | 1.001 | 11.7  | 86    | 0.00     |
| 9 T  | Propene                     | 0.317 | 0.351 | -10.7 | 102   | 0.00     |
| 10 T | Heptane                     | 1.211 | 1.366 | -12.8 | 96    | 0.00     |
| 11 T | Trichlorofluoromethane      | 1.355 | 1.160 | 14.4  | 87    | 0.00     |
| 12 T | 1,1,2-Trichlorotrifluoroeth | 1.106 | 0.877 | 20.7  | 79    | 0.00     |
| 13   | Ethanol                     | 0.104 | 0.091 | 12.5  | 105   | 0.00     |
| 14 T | Bromoethene                 | 0.367 | 0.356 | 3.0   | 91    | 0.00     |
| 15 T | Acetone                     | 0.913 | 0.782 | 14.3  | 94    | 0.00     |
| 16 T | 1,3-Butadiene               | 0.354 | 0.388 | -9.6  | 90    | 0.00     |
| 17   | tert-Butyl alcohol          | 0.286 | 0.227 | 20.6  | 68    | 0.00     |
| 18 T | 1,1-Dichloroethene          | 0.544 | 0.382 | 29.8  | 64    | 0.00     |
| 19 T | Isopropyl Alcohol           | 0.608 | 0.625 | -2.8  | 103   | 0.00     |
| 20 T | Methylene Chloride          | 0.473 | 0.328 | 30.7# | 65    | 0.00     |
| 21 T | Allyl Chloride              | 0.767 | 0.618 | 19.4  | 76    | 0.00     |
| 22 T | trans-1,2-Dichloroethene    | 0.531 | 0.517 | 2.6   | 86    | 0.00     |
| 23 T | Vinyl Acetate               | 1.665 | 1.736 | -4.3  | 84    | 0.00     |
| 24 T | 1,1-Dichloroethane          | 1.323 | 1.229 | 7.1   | 79    | 0.00     |
| 25 T | Ethyl Acetate               | 2.128 | 2.329 | -9.4  | 101   | 0.00     |
| 26 T | Hexane                      | 0.947 | 1.055 | -11.4 | 99    | 0.00     |
| 27 T | Carbon Disulfide            | 1.201 | 1.328 | -10.6 | 100   | 0.00     |
| 28 T | Methyl tert-Butyl Ether     | 1.511 | 1.573 | -4.1  | 83    | 0.00     |
| 29 T | Chloroform                  | 1.689 | 1.647 | 2.5   | 92    | 0.00     |
| 30 T | Cyclohexane                 | 0.829 | 0.922 | -11.2 | 96    | 0.00     |
| 31 T | cis-1,2-Dichloroethene      | 0.953 | 0.954 | -0.1  | 86    | 0.00     |
| 32 T | 1,1,1-Trichloroethane       | 1.851 | 1.667 | 9.9   | 87    | 0.00     |
| 33 I | 1,4-Difluorobenzene         | 1.000 | 1.000 | 0.0   | 86    | 0.00     |
| 34 T | 2-Butanone                  | 0.519 | 0.525 | -1.2  | 88    | 0.00     |
| 35 T | Carbon Tetrachloride        | 0.804 | 0.703 | 12.6  | 85    | 0.00     |
| 36 T | Benzene                     | 0.796 | 0.869 | -9.2  | 97    | 0.00     |
| 37 T | 1,2-Dichloroethane          | 0.536 | 0.479 | 10.6  | 81    | 0.00     |
| 38 T | Trichloroethene             | 0.322 | 0.351 | -9.0  | 96    | 0.00     |
| 39 T | 1,2-Dichloropropane         | 0.303 | 0.330 | -8.9  | 97    | 0.00     |
| 40 T | 1,4-Dioxane                 | 0.108 | 0.124 | -14.8 | 104   | 0.00     |
| 41 T | Tetrahydrofuran             | 0.298 | 0.351 | -17.8 | 99    | 0.00     |
| 42 T | Bromodichloromethane        | 0.727 | 0.699 | 3.9   | 86    | 0.00     |
| 43   | Methyl Methacrylate         | 0.297 | 0.343 | -15.5 | 93    | 0.00     |
| 44 T | 2,2,4-Trimethylpentane      | 1.331 | 1.442 | -8.3  | 95    | 0.00     |
| 45 T | t-1,3-Dichloropropene       | 0.399 | 0.476 | -19.3 | 87    | 0.00     |

Data Path : Z:\voasrv\HPCHEM1\MSVOA L\Data\VL120418\  
 Data File : VL032903.D  
 Acq On : 5 Dec 2018 9:07  
 Operator : SY/AP  
 Sample : VSTDCCC010  
 Misc : 400ml/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDCCC010EC

Quant Time: Dec 05 09:42:56 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL111418AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Wed Nov 14 07:00:23 2018  
 QLast Update : Wed Nov 14 07:00:23 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 T | cis-1,3-Dichloropropene   | 0.482 | 0.530 | -10.0  | 85    | 0.00     |
| 47 T | 1,1,2-Trichloroethane     | 0.359 | 0.349 | 2.8    | 86    | 0.00     |
| 48 T | Dibromochloromethane      | 0.610 | 0.625 | -2.5   | 82    | 0.00     |
| 49 T | Bromoform                 | 0.504 | 0.538 | -6.7   | 92    | 0.00     |
| 50 T | 4-Methyl-2-Pentanone      | 0.810 | 0.825 | -1.9   | 85    | 0.00     |
| 51 T | 2-Hexanone                | 0.522 | 0.683 | -30.8# | 99    | 0.00     |
| 52 T | Tetrachloroethene         | 0.277 | 0.333 | -20.2  | 104   | 0.00     |
| 53 T | Toluene                   | 0.831 | 1.004 | -20.8  | 95    | 0.00     |
| 54 T | 1,2-Dibromoethane         | 0.507 | 0.539 | -6.3   | 91    | 0.00     |
| 55 I | Chlorobenzene-d5          | 1.000 | 1.000 | 0.0    | 99    | 0.00     |
| 56   | 1,1,1,2-Tetrachloroethane | 0.466 | 0.420 | 9.9    | 95    | 0.00     |
| 57 T | Chlorobenzene             | 0.765 | 0.727 | 5.0    | 100   | 0.00     |
| 58 T | Ethyl Benzene             | 1.203 | 1.278 | -6.2   | 99    | 0.00     |
| 59 T | m/p-Xylene                | 1.071 | 1.051 | 1.9    | 98    | 0.00     |
| 60 T | o-Xylene                  | 1.077 | 0.996 | 7.5    | 93    | 0.00     |
| 61 T | Styrene                   | 0.701 | 0.794 | -13.3  | 99    | 0.00     |
| 62   | Isopropylbenzene          | 1.456 | 1.450 | 0.4    | 98    | 0.00     |
| 63 T | 1,1,2,2-Tetrachloroethane | 0.840 | 0.661 | 21.3   | 90    | 0.00     |
| 64   | n-propylbenzene           | 0.383 | 0.357 | 6.8    | 91    | 0.00     |
| 65   | tert-Butylbenzene         | 1.305 | 1.238 | 5.1    | 92    | 0.00     |
| 66 T | Benzyl Chloride           | 0.722 | 0.683 | 5.4    | 82    | 0.00     |
| 67   | sec-Butylbenzene          | 1.881 | 1.658 | 11.9   | 88    | 0.00     |
| 68 S | 1-Bromo-4-Fluorobenzene   | 0.748 | 0.688 | 8.0    | 83    | 0.00     |
| 69   | p-Isopropyltoluene        | 1.496 | 1.389 | 7.2    | 90    | 0.00     |
| 70   | n-Butylbenzene            | 1.519 | 1.410 | 7.2    | 90    | 0.00     |
| 71   | 2-Chlorotoluene           | 1.086 | 1.036 | 4.6    | 89    | 0.00     |
| 72 T | 4-Ethyltoluene            | 1.181 | 1.098 | 7.0    | 87    | 0.00     |
| 73 T | 1,3,5-Trimethylbenzene    | 1.154 | 1.036 | 10.2   | 87    | 0.00     |
| 74 T | 1,2,4-Trimethylbenzene    | 1.235 | 1.100 | 10.9   | 91    | 0.00     |
| 75 T | 1,3-Dichlorobenzene       | 0.709 | 0.618 | 12.8   | 89    | 0.00     |
| 76 T | 1,4-Dichlorobenzene       | 0.662 | 0.614 | 7.3    | 90    | 0.00     |
| 77 T | 1,2-Dichlorobenzene       | 0.656 | 0.611 | 6.9    | 94    | 0.00     |
| 78 T | Hexachloro-1,3-Butadiene  | 0.354 | 0.487 | -37.6# | 132   | 0.00     |
| 79 T | Naphthalene               | 0.812 | 1.292 | -59.1# | 136   | 0.00     |
| 80 T | Naphthalene,2-methyl-     | 0.203 | 0.325 | -60.1# | 101   | 0.00     |
| 81 T | 1,2,4-Trichlorobenzene    | 0.408 | 0.594 | -45.6# | 129   | 0.00     |

(#) = Out of Range

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