

Method Path : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\

Method File : VL040424AIR.M

Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022

Last Update : Fri Apr 05 04:49:46 2024

Response Via : Initial Calibration

## Calibration Files

0.03=VL041125.D 0.1 =VL041124.D 0.5 =VL041123.D 1 =VL041122.D 2 =VL041121.D 10 =VL041120.D 15 =VL041126.D

| Compound                  | 0.03           | 0.1   | 0.5   | 1     | 2     | 10    | 15    | Avg   | %RSD  |
|---------------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|
| -----                     |                |       |       |       |       |       |       |       |       |
| 1) I Bromochloromethane   | -----ISTD----- |       |       |       |       |       |       |       |       |
| 2) T Dichlorodifluo...    |                |       | 2.003 | 1.890 | 1.745 | 1.547 | 1.369 | 1.711 | 14.96 |
| 3) Chlorodifluoro...      |                |       | 1.681 | 1.664 | 1.642 | 1.366 | 1.348 | 1.540 | 10.92 |
| 4) Chloromethane          |                |       | 0.632 | 0.606 | 0.631 | 0.519 | 0.527 | 0.583 | 9.60  |
| 5) T Vinyl Chloride       | 0.492          | 0.530 | 0.599 | 0.613 | 0.626 | 0.535 | 0.546 | 0.563 | 8.88  |
| 6) T Bromomethane         |                |       | 0.213 | 0.222 | 0.224 | 0.197 | 0.203 | 0.212 | 5.55  |
| 7) Chloroethane           |                |       | 0.206 | 0.225 | 0.218 | 0.194 | 0.191 | 0.207 | 7.18  |
| 8) T Dichlorotetra...     |                |       | 1.568 | 1.537 | 1.525 | 1.344 | 1.322 | 1.459 | 7.97  |
| 9) T Propene              |                |       | 0.495 | 0.520 | 0.534 | 0.441 | 0.460 | 0.490 | 8.00  |
| 10) T Heptane             |                |       | 1.047 | 1.182 | 1.259 | 1.152 | 1.177 | 1.163 | 6.55  |
| 11) T Trichlorofluor...   |                |       | 1.664 | 1.645 | 1.642 | 1.406 | 1.399 | 1.551 | 8.76  |
| 12) T 1,1,2-Trichlor...   |                |       | 1.165 | 1.191 | 1.209 | 1.026 | 1.022 | 1.123 | 8.13  |
| 13) Ethanol               |                |       | 0.112 | 0.147 | 0.131 | 0.098 | 0.095 | 0.117 | 19.23 |
| 14) T Bromoethene         |                |       | 0.464 | 0.440 | 0.456 | 0.419 | 0.432 | 0.442 | 4.07  |
| 15) T Acetone             |                |       | 1.140 | 1.187 | 1.201 | 0.943 | 0.944 | 1.083 | 11.93 |
| 16) T 1,3-Butadiene       |                |       | 0.518 | 0.547 | 0.566 | 0.517 | 0.510 | 0.532 | 4.53  |
| 17) tert-Butyl alc...     |                |       | 0.945 | 1.119 | 1.055 | 0.942 | 0.842 | 0.981 | 11.04 |
| 18) T 1,1-Dichloroet...   |                |       | 0.483 | 0.503 | 0.511 | 0.447 | 0.453 | 0.479 | 5.97  |
| 19) T Isopropyl Alcohol   |                |       | 0.631 | 0.777 | 0.700 | 0.625 | 0.556 | 0.658 | 12.74 |
| 20) T Methylene Chlo...   |                |       | 0.525 | 0.488 | 0.453 | 0.383 | 0.384 | 0.447 | 14.11 |
| 21) T Allyl Chloride      |                |       | 0.674 | 0.665 | 0.700 | 0.626 | 0.634 | 0.660 | 4.53  |
| 22) T trans-1,2-Dich...   |                |       | 0.545 | 0.504 | 0.518 | 0.465 | 0.481 | 0.503 | 6.23  |
| 23) T Vinyl Acetate       |                |       | 1.042 | 1.116 | 1.185 | 1.080 | 1.109 | 1.106 | 4.77  |
| 24) T 1,1-Dichloroet...   |                |       | 1.046 | 1.017 | 1.089 | 0.931 | 0.950 | 1.006 | 6.56  |
| 25) T Ethyl Acetate       |                |       | 2.009 | 2.081 | 2.252 | 1.911 | 1.915 | 2.033 | 6.94  |
| 26) T Hexane              |                |       | 0.879 | 0.991 | 1.022 | 0.829 | 0.841 | 0.912 | 9.72  |
| 27) T Carbon Disulfide    |                |       | 1.028 | 1.088 | 1.210 | 1.115 | 1.148 | 1.118 | 6.05  |
| 28) T Methyl tert-Bu...   |                |       | 0.670 | 0.698 | 0.779 | 0.656 | 0.639 | 0.689 | 8.02  |
| 29) T Chloroform          |                |       | 1.601 | 1.642 | 1.617 | 1.412 | 1.418 | 1.538 | 7.35  |
| 30) T Cyclohexane         |                |       | 0.768 | 0.705 | 0.819 | 0.709 | 0.715 | 0.743 | 6.65  |
| 31) T cis-1,2-Dichlo...   |                |       | 0.818 | 0.872 | 0.949 | 0.830 | 0.849 | 0.864 | 6.02  |
| 32) T 1,1,1-Trichlor...   | 1.314          | 1.197 | 1.486 | 1.527 | 1.613 | 1.405 | 1.413 | 1.422 | 9.71  |
| -----                     |                |       |       |       |       |       |       |       |       |
| 33) I 1,4-Difluorobenzene | -----ISTD----- |       |       |       |       |       |       |       |       |
| 34) T 2-Butanone          |                |       | 0.414 | 0.437 | 0.453 | 0.400 | 0.412 | 0.423 | 5.07  |
| 35) T Carbon Tetrach...   | 0.472          | 0.494 | 0.581 | 0.612 | 0.641 | 0.588 | 0.598 | 0.569 | 10.97 |
| 36) T Benzene             |                |       | 0.715 | 0.753 | 0.791 | 0.706 | 0.707 | 0.734 | 5.07  |
| 37) T 1,2-Dichloroet...   |                |       | 0.446 | 0.445 | 0.460 | 0.423 | 0.431 | 0.441 | 3.28  |
| 38) T Trichloroethene     | 0.260          | 0.220 | 0.258 | 0.282 | 0.285 | 0.274 | 0.278 | 0.265 | 8.48  |
| 39) T 1,2-Dichloropr...   |                |       | 0.292 | 0.295 | 0.305 | 0.278 | 0.277 | 0.290 | 4.11  |

|                                                                                 |   |                   |       |       |       |       |       |       |       |       |       |
|---------------------------------------------------------------------------------|---|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Method Path : Z:\voasrv\HPCHEM1\MSVOA_L\methods\<br>Method File : VL040424AIR.M |   |                   |       |       |       |       |       |       |       |       |       |
| 40)                                                                             | T | 1,4-Dioxane       |       |       | 0.085 | 0.115 | 0.120 | 0.097 | 0.088 | 0.101 | 15.52 |
| 41)                                                                             | T | Tetrahydrofuran   |       |       | 0.247 | 0.288 | 0.301 | 0.284 | 0.289 | 0.282 | 7.26  |
| 42)                                                                             | T | Bromodichlorom... |       |       | 0.584 | 0.626 | 0.682 | 0.626 | 0.631 | 0.630 | 5.55  |
| 43)                                                                             |   | Methyl Methacr... |       |       | 0.228 | 0.261 | 0.308 | 0.296 | 0.305 | 0.280 | 12.29 |
| 44)                                                                             | T | 2,2,4-Trimethy... |       |       | 1.116 | 1.268 | 1.357 | 1.183 | 1.156 | 1.216 | 7.94  |
| 45)                                                                             | T | t-1,3-Dichloro... |       |       | 0.125 | 0.144 | 0.166 | 0.186 | 0.203 | 0.165 | 18.95 |
| 46)                                                                             | T | cis-1,3-Dichlo... |       |       | 0.181 | 0.199 | 0.212 | 0.230 | 0.243 | 0.213 | 11.49 |
| 47)                                                                             | T | 1,1,2-Trichlor... |       |       | 0.314 | 0.311 | 0.330 | 0.301 | 0.308 | 0.313 | 3.45  |
| 48)                                                                             | T | Dibromochlorom... |       |       | 0.425 | 0.475 | 0.523 | 0.522 | 0.539 | 0.497 | 9.43  |
| 49)                                                                             | T | Bromoform         |       |       | 0.326 | 0.368 | 0.421 | 0.419 | 0.434 | 0.394 | 11.56 |
| 50)                                                                             | T | 4-Methyl-2-Pen... |       |       | 0.659 | 0.734 | 0.807 | 0.759 | 0.764 | 0.745 | 7.31  |
| 51)                                                                             | T | 2-Hexanone        |       |       | 0.409 | 0.494 | 0.562 | 0.552 | 0.565 | 0.516 | 12.93 |
| 52)                                                                             | T | Tetrachloroethene | 0.228 | 0.194 | 0.226 | 0.245 | 0.256 | 0.242 | 0.249 | 0.234 | 8.84  |
| 53)                                                                             | T | Toluene           |       |       | 0.627 | 0.753 | 0.853 | 0.811 | 0.822 | 0.773 | 11.58 |
| 54)                                                                             | T | 1,2-Dibromoethane |       | 0.298 | 0.381 | 0.384 | 0.432 | 0.418 | 0.429 | 0.390 | 12.86 |
| -----ISTD-----                                                                  |   |                   |       |       |       |       |       |       |       |       |       |
| 55)                                                                             | I | Chlorobenzene-d5  |       |       |       |       |       |       |       |       |       |
| 56)                                                                             |   | 1,1,1,2-Tetrac... |       |       | 0.415 | 0.435 | 0.433 | 0.387 | 0.383 | 0.411 | 5.99  |
| 57)                                                                             | T | Chlorobenzene     |       |       | 0.731 | 0.714 | 0.714 | 0.638 | 0.626 | 0.685 | 7.10  |
| 58)                                                                             | T | Ethyl Benzene     |       |       | 0.944 | 1.126 | 1.197 | 1.121 | 1.086 | 1.095 | 8.53  |
| 59)                                                                             | T | m/p-Xylene        |       |       | 0.909 | 1.033 | 1.083 | 0.973 | 0.946 | 0.989 | 7.02  |
| 60)                                                                             | T | o-Xylene          |       |       | 0.849 | 0.965 | 1.042 | 0.930 | 0.898 | 0.937 | 7.78  |
| 61)                                                                             | T | Styrene           |       |       | 0.306 | 0.390 | 0.444 | 0.465 | 0.471 | 0.415 | 16.61 |
| 62)                                                                             |   | Isopropylbenzene  |       |       | 1.363 | 1.464 | 1.515 | 1.340 | 1.291 | 1.395 | 6.61  |
| 63)                                                                             | T | 1,1,2,2-Tetrac... | 0.718 | 0.612 | 0.828 | 0.807 | 0.799 | 0.699 | 0.688 | 0.736 | 10.64 |
| 64)                                                                             |   | n-propylbenzene   |       |       | 0.316 | 0.360 | 0.377 | 0.351 | 0.345 | 0.350 | 6.49  |
| 65)                                                                             |   | tert-Butylbenzene |       |       | 1.097 | 1.267 | 1.355 | 1.200 | 1.168 | 1.218 | 8.07  |
| 66)                                                                             | T | Benzyl Chloride   |       |       | 0.065 | 0.074 | 0.077 | 0.087 | 0.098 | 0.080 | 15.52 |
| 67)                                                                             |   | sec-Butylbenzene  |       |       | 1.623 | 1.865 | 1.970 | 1.697 | 1.641 | 1.759 | 8.62  |
| 68)                                                                             | S | 1-Bromo-4-Fluo... | 0.812 | 0.800 | 0.824 | 0.817 | 0.782 | 0.799 | 0.795 | 0.804 | 1.78  |
| 69)                                                                             |   | p-Isopropyltol... |       |       | 1.177 | 1.393 | 1.553 | 1.381 | 1.356 | 1.372 | 9.74  |
| 70)                                                                             |   | n-Butylbenzene    |       |       | 1.272 | 1.512 | 1.698 | 1.507 | 1.463 | 1.490 | 10.20 |
| 71)                                                                             |   | 2-Chlorotoluene   |       |       | 1.008 | 1.097 | 1.167 | 1.051 | 1.027 | 1.070 | 5.93  |
| 72)                                                                             | T | 4-Ethyltoluene    |       |       | 0.938 | 1.063 | 1.124 | 1.058 | 1.049 | 1.046 | 6.43  |
| 73)                                                                             | T | 1,3,5-Trimethy... |       |       | 0.843 | 0.929 | 1.008 | 0.925 | 0.910 | 0.923 | 6.38  |
| 74)                                                                             | T | 1,2,4-Trimethy... |       |       | 0.940 | 1.119 | 1.173 | 1.045 | 1.004 | 1.056 | 8.73  |
| 75)                                                                             | T | 1,3-Dichlorobe... |       |       | 0.593 | 0.619 | 0.668 | 0.602 | 0.601 | 0.617 | 4.90  |
| 76)                                                                             | T | 1,4-Dichlorobe... |       |       | 0.597 | 0.595 | 0.631 | 0.583 | 0.594 | 0.600 | 3.02  |
| 77)                                                                             | T | 1,2-Dichlorobe... |       |       | 0.568 | 0.587 | 0.666 | 0.582 | 0.590 | 0.599 | 6.45  |
| 78)                                                                             | T | Hexachloro-1,3... |       |       | 0.419 | 0.410 | 0.437 | 0.360 | 0.364 | 0.398 | 8.66  |
| 79)                                                                             | T | Naphthalene       |       | 0.328 | 0.490 | 0.648 | 0.830 | 0.867 | 0.902 | 0.678 | 34.12 |
| 80)                                                                             | T | Naphthalene,2-... |       |       | 0.078 | 0.097 | 0.136 | 0.162 | 0.187 | 0.132 | 34.10 |
| 81)                                                                             | T | 1,2,4-Trichlor... |       |       | 0.287 | 0.351 | 0.415 | 0.416 | 0.430 | 0.380 | 15.82 |

(#) = Out of Range