

Method Path : Z:\VOASRV\HPCHEM1\MSVOA\_L\METHODS\

Method File : VL092320AIR.M

Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA\_LWed Sep 23 07:38:05 2020

Last Update : Wed Sep 23 07:38:05 2020

Response Via : Initial Calibration

## Calibration Files

0.03=VL035709.D 0.1 =VL035708.D 0.5 =VL035707.D 1 =VL035706.D 2 =VL035705.D 10 =VL035704.D 15 =VL035710.D

| Compound                  | 0.03  | 0.1   | 0.5   | 1     | 2     | 10    | 15    | Avg   | %RSD  |
|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| -----ISTD-----            |       |       |       |       |       |       |       |       |       |
| 1) I Bromochloromethane   |       |       |       |       |       |       |       |       |       |
| 2) T Dichlorodifluo...    |       |       | 2.079 | 1.904 | 1.552 | 1.473 | 1.196 | 1.641 | 21.43 |
| 3) Chlorodifluoro...      |       |       | 1.164 | 1.175 | 1.095 | 0.990 | 0.956 | 1.076 | 9.26  |
| 4) Chloromethane          |       |       | 0.603 | 0.638 | 0.583 | 0.541 | 0.524 | 0.578 | 7.95  |
| 5) T Vinyl Chloride       | 0.698 | 0.723 | 0.683 | 0.708 | 0.703 | 0.645 | 0.626 | 0.684 | 5.19  |
| 6) T Bromomethane         |       |       | 0.612 | 0.607 | 0.581 | 0.552 | 0.537 | 0.578 | 5.71  |
| 7) Chloroethane           |       |       | 0.265 | 0.258 | 0.259 | 0.239 | 0.233 | 0.251 | 5.46  |
| 8) T Dichlorotetra...     |       |       | 2.237 | 2.258 | 2.046 | 1.826 | 1.585 | 1.990 | 14.37 |
| 9) T Propene              |       |       | 0.386 | 0.409 | 0.395 | 0.381 | 0.382 | 0.391 | 2.92  |
| 10) T Heptane             |       |       | 0.919 | 1.117 | 1.139 | 1.159 | 1.110 | 1.089 | 8.88  |
| 11) T Trichlorofluor...   |       |       | 2.524 | 2.587 | 2.407 | 2.195 | 1.992 | 2.341 | 10.49 |
| 12) T 1,1,2-Trichlor...   |       |       | 1.865 | 1.889 | 1.772 | 1.667 | 1.534 | 1.745 | 8.43  |
| 13) Ethanol               |       |       | 0.119 | 0.103 | 0.087 | 0.090 | 0.082 | 0.096 | 15.46 |
| 14) T Bromoethene         |       |       | 0.725 | 0.767 | 0.752 | 0.728 | 0.703 | 0.735 | 3.40  |
| 15) T Acetone             |       |       | 1.258 | 1.200 | 1.154 | 0.902 | 0.867 | 1.076 | 16.68 |
| 16) T 1,3-Butadiene       |       |       | 0.367 | 0.387 | 0.418 | 0.400 | 0.397 | 0.394 | 4.77  |
| 17) tert-Butyl alc...     |       |       | 1.259 | 1.322 | 1.077 | 1.182 | 1.021 | 1.172 | 10.63 |
| 18) T 1,1-Dichloroet...   |       |       | 0.751 | 0.803 | 0.771 | 0.767 | 0.729 | 0.764 | 3.55  |
| 19) T Isopropyl Alcohol   |       |       | 0.675 | 0.649 | 0.505 | 0.581 | 0.516 | 0.585 | 13.10 |
| 20) T Methylene Chlo...   |       |       | 0.947 | 0.913 | 0.837 | 0.641 | 0.614 | 0.790 | 19.52 |
| 21) T Allyl Chloride      |       |       | 0.502 | 0.529 | 0.522 | 0.535 | 0.520 | 0.522 | 2.43  |
| 22) T trans-1,2-Dich...   |       |       | 0.824 | 0.838 | 0.799 | 0.809 | 0.766 | 0.807 | 3.40  |
| 23) T Vinyl Acetate       |       |       | 1.159 | 1.343 | 1.360 | 1.378 | 1.349 | 1.318 | 6.80  |
| 24) T 1,1-Dichloroet...   |       |       | 1.514 | 1.524 | 1.482 | 1.361 | 1.296 | 1.436 | 7.05  |
| 25) T Ethyl Acetate       |       |       | 1.952 | 2.072 | 2.012 | 1.871 | 1.773 | 1.936 | 6.07  |
| 26) T Hexane              |       |       | 1.010 | 1.119 | 1.127 | 1.046 | 1.004 | 1.061 | 5.54  |
| 27) T Carbon Disulfide    |       |       | 1.420 | 1.551 | 1.620 | 1.704 | 1.611 | 1.581 | 6.65  |
| 28) T Methyl tert-Bu...   |       |       | 1.500 | 1.739 | 1.757 | 1.726 | 1.687 | 1.682 | 6.23  |
| 29) T Chloroform          |       |       | 2.227 | 2.307 | 2.206 | 2.071 | 1.962 | 2.155 | 6.34  |
| 30) T Cyclohexane         |       |       | 0.904 | 1.010 | 1.067 | 1.136 | 1.117 | 1.047 | 8.97  |
| 31) T cis-1,2-Dichlo...   |       |       | 0.895 | 1.021 | 1.049 | 1.079 | 1.076 | 1.024 | 7.41  |
| 32) T 1,1,1-Trichlor...   | 1.621 | 1.864 | 1.868 | 2.017 | 2.004 | 1.994 | 1.928 | 1.899 | 7.28  |
| -----ISTD-----            |       |       |       |       |       |       |       |       |       |
| 33) I 1,4-Difluorobenzene |       |       |       |       |       |       |       |       |       |
| 34) T 2-Butanone          |       |       | 0.302 | 0.344 | 0.353 | 0.332 | 0.323 | 0.331 | 5.91  |
| 35) T Carbon Tetrach...   | 0.475 | 0.519 | 0.505 | 0.545 | 0.551 | 0.541 | 0.514 | 0.521 | 5.17  |
| 36) T Benzene             |       |       | 0.583 | 0.670 | 0.696 | 0.671 | 0.637 | 0.652 | 6.68  |
| 37) T 1,2-Dichloroet...   |       |       | 0.340 | 0.361 | 0.347 | 0.330 | 0.320 | 0.340 | 4.68  |
| 38) T Trichloroethene     | 0.312 | 0.308 | 0.303 | 0.345 | 0.348 | 0.341 | 0.318 | 0.325 | 5.91  |
| 39) T 1,2-Dichloropr...   |       |       | 0.234 | 0.247 | 0.241 | 0.233 | 0.226 | 0.236 | 3.39  |

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|     |   |                   |       |       |       |       |       |       |       |
|-----|---|-------------------|-------|-------|-------|-------|-------|-------|-------|
| 40) | T | 1,4-Dioxane       | 0.107 | 0.117 | 0.102 | 0.113 | 0.101 | 0.108 | 6.31  |
| 41) | T | Tetrahydrofuran   | 0.129 | 0.158 | 0.176 | 0.185 | 0.185 | 0.167 | 14.18 |
| 42) | T | Bromodichlorom... | 0.514 | 0.558 | 0.561 | 0.565 | 0.537 | 0.547 | 3.95  |
| 43) |   | Methyl Methacr... | 0.203 | 0.246 | 0.275 | 0.289 | 0.282 | 0.259 | 13.65 |
| 44) | T | 2,2,4-Trimethy... | 0.853 | 1.033 | 1.032 | 0.921 | 0.836 | 0.935 | 10.09 |
| 45) | T | t-1,3-Dichloro... | 0.182 | 0.218 | 0.261 | 0.322 | 0.325 | 0.262 | 24.16 |
| 46) | T | cis-1,3-Dichlo... | 0.241 | 0.285 | 0.325 | 0.384 | 0.378 | 0.323 | 18.92 |
| 47) | T | 1,1,2-Trichlor... | 0.339 | 0.355 | 0.348 | 0.331 | 0.318 | 0.338 | 4.27  |
| 48) | T | Dibromochlorom... | 0.441 | 0.505 | 0.532 | 0.562 | 0.535 | 0.515 | 8.96  |
| 49) | T | Bromoform         | 0.343 | 0.413 | 0.447 | 0.500 | 0.482 | 0.437 | 14.31 |
| 50) | T | 4-Methyl-2-Pen... | 0.411 | 0.502 | 0.526 | 0.500 | 0.477 | 0.483 | 9.04  |
| 51) | T | 2-Hexanone        | 0.291 | 0.384 | 0.433 | 0.427 | 0.412 | 0.389 | 14.88 |
| 52) | T | Tetrachloroethene | 0.325 | 0.316 | 0.291 | 0.316 | 0.324 | 0.317 | 3.83  |
| 53) | T | Toluene           | 0.601 | 0.760 | 0.844 | 0.850 | 0.788 | 0.768 | 13.15 |
| 54) | T | 1,2-Dibromoethane | 0.464 | 0.518 | 0.529 | 0.522 | 0.499 | 0.507 | 5.14  |

|     |   |                   |                |       |       |       |       |       |       |
|-----|---|-------------------|----------------|-------|-------|-------|-------|-------|-------|
| 55) | I | Chlorobenzene-d5  | -----ISTD----- |       |       |       |       |       |       |
| 56) |   | 1,1,1,2-Tetrac... | 0.414          | 0.445 | 0.428 | 0.425 | 0.385 | 0.419 | 5.38  |
| 57) | T | Chlorobenzene     | 0.810          | 0.846 | 0.784 | 0.712 | 0.624 | 0.755 | 11.70 |
| 58) | T | Ethyl Benzene     | 0.820          | 1.043 | 1.113 | 1.090 | 0.953 | 1.004 | 11.92 |
| 59) | T | m/p-Xylene        | 0.795          | 0.952 | 0.966 | 0.899 | 0.771 | 0.877 | 10.20 |
| 60) | T | o-Xylene          | 0.777          | 0.953 | 0.971 | 0.925 | 0.807 | 0.887 | 9.98  |
| 61) | T | Styrene           | 0.426          | 0.594 | 0.667 | 0.722 | 0.656 | 0.613 | 18.61 |
| 62) |   | Isopropylbenzene  | 1.306          | 1.515 | 1.520 | 1.375 | 1.161 | 1.375 | 10.99 |
| 63) | T | 1,1,2,2-Tetrac... | 0.796          | 0.706 | 0.760 | 0.797 | 0.753 | 0.681 | 9.89  |
| 64) |   | n-propylbenzene   | 0.344          | 0.421 | 0.429 | 0.427 | 0.391 | 0.403 | 8.99  |
| 65) |   | tert-Butylbenzene | 1.076          | 1.385 | 1.424 | 1.279 | 1.088 | 1.250 | 13.01 |
| 66) | T | Benzyl Chloride   | 0.252          | 0.310 | 0.358 | 0.496 | 0.477 | 0.379 | 27.87 |
| 67) |   | sec-Butylbenzene  | 1.578          | 1.947 | 2.003 | 1.707 | 1.398 | 1.727 | 14.64 |
| 68) | S | 1-Bromo-4-Fluo... | 0.750          | 0.763 | 0.768 | 0.757 | 0.735 | 0.748 | 2.06  |
| 69) |   | p-Isopropyltol... | 1.172          | 1.540 | 1.636 | 1.453 | 1.223 | 1.405 | 14.31 |
| 70) |   | n-Butylbenzene    | 1.267          | 1.590 | 1.678 | 1.471 | 1.226 | 1.447 | 13.63 |
| 71) |   | 2-Chlorotoluene   | 0.852          | 1.054 | 1.109 | 1.066 | 0.935 | 1.003 | 10.57 |
| 72) | T | 4-Ethyltoluene    | 0.839          | 1.110 | 1.173 | 1.139 | 0.991 | 1.050 | 13.02 |
| 73) | T | 1,3,5-Trimethy... | 0.823          | 1.053 | 1.104 | 1.055 | 0.927 | 0.993 | 11.59 |
| 74) | T | 1,2,4-Trimethy... | 1.032          | 1.249 | 1.258 | 1.111 | 0.945 | 1.119 | 12.19 |
| 75) | T | 1,3-Dichlorobe... | 0.769          | 0.851 | 0.814 | 0.736 | 0.650 | 0.764 | 10.10 |
| 76) | T | 1,4-Dichlorobe... | 0.696          | 0.775 | 0.774 | 0.747 | 0.660 | 0.730 | 6.92  |
| 77) | T | 1,2-Dichlorobe... | 0.700          | 0.776 | 0.766 | 0.721 | 0.645 | 0.722 | 7.38  |
| 78) | T | Hexachloro-1,3... | 0.375          | 0.417 | 0.426 | 0.404 | 0.370 | 0.398 | 6.27  |
| 79) | T | Naphthalene       | 0.791          | 1.076 | 1.254 | 1.157 | 1.057 | 1.067 | 16.18 |
| 80) | T | Naphthalene,2-... | 0.106          | 0.142 | 0.229 | 0.377 | 0.405 | 0.252 | 53.61 |
| 81) | T | 1,2,4-Trichlor... | 0.461          | 0.561 | 0.615 | 0.582 | 0.546 | 0.553 | 10.39 |

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 (#) = Out of Range