

Data Path : Z:\voasrv\HPCHEM1\MSVOA\_L\Data\VL101022\  
 Data File : VL039709.D  
 Acq On : 10 Oct 2022 23:30  
 Operator : SY/AP  
 Sample : N4955-15 MDL 0.40  
 Misc : 400mL/MSVOA\_L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 MDL-AIR-03-QT4-2022DL

Quant Time: Oct 11 07:23:53 2022  
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA\_L\methods\VL091922AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
 QLast Update : Mon Sep 19 14:26:28 2022  
 Response via : Initial Calibration

| Compound                | R.T.   | QIon | Response | Conc   | Units | Dev(Min) |
|-------------------------|--------|------|----------|--------|-------|----------|
| -----                   |        |      |          |        |       |          |
| Internal Standards      |        |      |          |        |       |          |
| 1) Bromochloromethane   | 5.192  | 49   | 1023421  | 10.000 | ppbv  | -0.02    |
| 33) 1,4-Difluorobenzene | 6.645  | 114  | 2697529  | 10.000 | ppbv  | -0.02    |
| 55) Chlorobenzene-d5    | 11.452 | 117  | 2393569  | 10.000 | ppbv  | -0.02    |

|                             |        |       |          |          |      |          |
|-----------------------------|--------|-------|----------|----------|------|----------|
| System Monitoring Compounds |        |       |          |          |      |          |
| 68) 1-Bromo-4-Fluorobenzene | 13.757 | 95    | 1812326  | 10.143   | ppbv | -0.02    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 101.400% |

| Target Compounds              |       |     |        |       |        | Qvalue |
|-------------------------------|-------|-----|--------|-------|--------|--------|
| 2) Dichlorodifluoromethane    | 2.745 | 85  | 82340  | 0.694 | ppbv   | 90     |
| 3) Chlorodifluoromethane      | 2.690 | 51  | 54219  | 0.446 | ppbv   | 99     |
| 4) Chloromethane              | 2.829 | 50  | 35539  | 0.485 | ppbv   | 91     |
| 5) Vinyl Chloride             | 2.935 | 62  | 26440  | 0.433 | ppbv   | 98     |
| 6) Bromomethane               | 3.137 | 94  | 10452m | 0.464 | ppbv   |        |
| 7) Chloroethane               | 3.211 | 64  | 11858m | 0.531 | ppbv   |        |
| 8) Dichlorotetrafluoroethane  | 2.870 | 85  | 67369m | 0.473 | ppbv   |        |
| 9) Propene                    | 2.713 | 41  | 29587m | 0.533 | ppbv   |        |
| 10) Heptane                   | 7.568 | 43  | 52636m | 0.407 | ppbv   |        |
| 11) Trichlorofluoromethane    | 3.575 | 101 | 56562  | 0.385 | ppbv   | 97     |
| 12) 1,1,2-Trichlorotrifluo... | 4.073 | 101 | 48646  | 0.438 | ppbv   | 95     |
| 13) Ethanol                   | 3.269 | 45  | 4048m  | 0.958 | ppbv   |        |
| 14) Bromoethene               | 3.375 | 108 | 17185  | 0.388 | ppbv # | 88     |
| 15) Acetone                   | 3.494 | 43  | 56935m | 0.500 | ppbv   |        |
| 16) 1,3-Butadiene             | 2.999 | 39  | 24398  | 0.422 | ppbv   | 100    |
| 17) tert-Butyl alcohol        | 3.909 | 59  | 46389m | 0.454 | ppbv   |        |
| 18) 1,1-Dichloroethene        | 3.890 | 96  | 20852m | 0.427 | ppbv   |        |
| 19) Isopropyl Alcohol         | 3.600 | 45  | 27894m | 0.481 | ppbv   |        |
| 20) Methylene Chloride        | 3.944 | 84  | 26295  | 0.499 | ppbv   | 93     |
| 21) Allyl Chloride            | 4.005 | 41  | 29356  | 0.379 | ppbv   | 87     |
| 22) trans-1,2-Dichloroethene  | 4.452 | 96  | 21098  | 0.437 | ppbv   | 94     |
| 23) Vinyl Acetate             | 4.639 | 43  | 18671  | 0.363 | ppbv # | 88     |
| 24) 1,1-Dichloroethane        | 4.571 | 63  | 45601  | 0.445 | ppbv # | 96     |
| 25) Ethyl Acetate             | 5.218 | 43  | 98177  | 0.395 | ppbv # | 94     |
| 26) Hexane                    | 5.211 | 57  | 45886  | 0.435 | ppbv   | 93     |
| 27) Carbon Disulfide          | 4.128 | 76  | 36822m | 0.332 | ppbv   |        |
| 28) Methyl tert-Butyl Ether   | 4.603 | 73  | 35034  | 0.396 | ppbv   | 91     |
| 29) Chloroform                | 5.272 | 83  | 62450  | 0.411 | ppbv   | 95     |
| 30) Cyclohexane               | 6.597 | 84  | 31243m | 0.383 | ppbv   |        |
| 31) cis-1,2-Dichloroethene    | 5.079 | 61  | 41761m | 0.438 | ppbv   |        |
| 32) 1,1,1-Trichloroethane     | 6.002 | 97  | 57593m | 0.418 | ppbv   |        |
| 34) 2-Butanone                | 4.803 | 43  | 46905  | 0.354 | ppbv   | 99     |
| 35) Carbon Tetrachloride      | 6.491 | 117 | 52670  | 0.368 | ppbv   | 87     |
| 36) Benzene                   | 6.362 | 78  | 82103  | 0.398 | ppbv # | 89     |
| 37) 1,2-Dichloroethane        | 5.806 | 62  | 46955m | 0.418 | ppbv   |        |
| 38) Trichloroethene           | 7.282 | 130 | 43694  | 0.392 | ppbv   | 95     |
| 39) 1,2-Dichloropropane       | 7.063 | 63  | 29687  | 0.373 | ppbv   | 96     |
| 40) 1,4-Dioxane               | 7.320 | 88  | 13595m | 0.418 | ppbv   |        |
| 41) Tetrahydrofuran           | 5.584 | 42  | 31591m | 0.389 | ppbv   |        |
| 42) Bromodichloromethane      | 7.243 | 83  | 58899m | 0.377 | ppbv   |        |
| 43) Methyl Methacrylate       | 7.478 | 69  | 25977m | 0.346 | ppbv   |        |
| 44) 2,2,4-Trimethylpentane    | 7.324 | 57  | 139244 | 0.392 | ppbv   | 94     |
| 45) t-1,3-Dichloropropene     | 8.700 | 75  | 17358m | 0.273 | ppbv   |        |

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 MSVOA\_L  
 ClientSampleId :  
 MDL-AIR-03-QT4-2022DL

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 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Aug 26 06:05:16 2022  
 QLast Update : Mon Sep 19 14:26:28 2022  
 Response via : Initial Calibration

| Compound                      | R.T.   | QIon | Response | Conc  | Units  | Dev(Min) |
|-------------------------------|--------|------|----------|-------|--------|----------|
| 46) cis-1,3-Dichloropropene   | 8.137  | 75   | 25698    | 0.284 | ppbv # | 82       |
| 47) 1,1,2-Trichloroethane     | 8.893  | 97   | 35867m   | 0.412 | ppbv   |          |
| 48) Dibromochloromethane      | 9.693  | 129  | 39440    | 0.301 | ppbv   | 97       |
| 49) Bromoform                 | 12.391 | 173  | 31756m   | 0.293 | ppbv   |          |
| 50) 4-Methyl-2-Pentanone      | 8.198  | 43   | 66720    | 0.320 | ppbv   | 99       |
| 51) 2-Hexanone                | 9.565  | 43   | 50302m   | 0.326 | ppbv   |          |
| 52) Tetrachloroethene         | 10.600 | 164  | 32673m   | 0.415 | ppbv   |          |
| 53) Toluene                   | 9.204  | 91   | 75740    | 0.330 | ppbv   | 99       |
| 54) 1,2-Dibromoethane         | 9.995  | 107  | 34964m   | 0.375 | ppbv   |          |
| 56) 1,1,1,2-Tetrachloroethane | 11.491 | 131  | 38864m   | 0.402 | ppbv   |          |
| 57) Chlorobenzene             | 11.510 | 112  | 80992    | 0.460 | ppbv # | 92       |
| 58) Ethyl Benzene             | 12.076 | 91   | 92298m   | 0.334 | ppbv   |          |
| 59) m/p-Xylene                | 12.359 | 91   | 169067m  | 0.688 | ppbv   |          |
| 60) o-Xylene                  | 13.047 | 91   | 82997m   | 0.354 | ppbv   |          |
| 61) Styrene                   | 12.892 | 104  | 35066m   | 0.278 | ppbv   |          |
| 62) Isopropylbenzene          | 14.018 | 105  | 142835   | 0.405 | ppbv   | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 13.028 | 83   | 43320m   | 0.463 | ppbv   |          |
| 64) n-propylbenzene           | 14.899 | 120  | 31328m   | 0.347 | ppbv   |          |
| 65) tert-Butylbenzene         | 16.079 | 119  | 115762   | 0.371 | ppbv   | 93       |
| 66) Benzyl Chloride           | 16.304 | 91   | 8833m    | 0.356 | ppbv   |          |
| 67) sec-Butylbenzene          | 16.619 | 105  | 162469   | 0.371 | ppbv   | 99       |
| 69) p-Isopropyltoluene        | 16.982 | 119  | 128673m  | 0.358 | ppbv   |          |
| 70) n-Butylbenzene            | 17.876 | 91   | 126255m  | 0.358 | ppbv   |          |
| 71) 2-Chlorotoluene           | 14.786 | 91   | 88563    | 0.348 | ppbv   | 97       |
| 72) 4-Ethyltoluene            | 15.185 | 105  | 95056m   | 0.355 | ppbv   |          |
| 73) 1,3,5-Trimethylbenzene    | 15.339 | 105  | 83708    | 0.342 | ppbv # | 85       |
| 74) 1,2,4-Trimethylbenzene    | 16.098 | 105  | 106900m  | 0.389 | ppbv   |          |
| 75) 1,3-Dichlorobenzene       | 16.307 | 146  | 65326m   | 0.399 | ppbv   |          |
| 76) 1,4-Dichlorobenzene       | 16.455 | 146  | 71909m   | 0.439 | ppbv   |          |
| 77) 1,2-Dichlorobenzene       | 17.124 | 146  | 71660m   | 0.448 | ppbv   |          |
| 78) Hexachloro-1,3-Butadiene  | 22.609 | 225  | 57127    | 0.468 | ppbv   | 97       |
| 79) Naphthalene               | 21.371 | 128  | 52772    | 0.291 | ppbv # | 91       |
| 80) Naphthalene,2-methyl-     | 24.371 | 142  | 10178    | 0.149 | ppbv   | 91       |
| 81) 1,2,4-Trichlorobenzene    | 21.127 | 180  | 44440m   | 0.373 | ppbv   |          |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

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