

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL040521\  
 Data File : VL036679.D  
 Acq On : 5 Apr 2021 18:09  
 Operator : SY/AP  
 Sample : VL0405ABS01  
 Misc : 400mL/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0405ABS01

Manual Integrations  
 APPROVED

MMDadoda  
 4/6/2021 5:13:55 PM

Quant Time: Apr 06 02:38:26 2021  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Mar 25 2021  
 QLast Update : Thu Mar 25 09:42:40 2021  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 5.67  | 49   | 1400458  | 10.00 | ppbv  | 0.00     |
| 33) 1,4-Difluorobenzene | 7.19  | 114  | 3600015  | 10.00 | ppbv  | 0.00     |
| 55) Chlorobenzene-d5    | 12.10 | 117  | 3355132m | 10.00 | ppbv  | 0.00     |

## System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 14.43  | 95    | 2763388  | 10.33    | ppbv | 0.00    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 103.30% |

## Target Compounds

|                                |      |     |         |       | Ovalue   |
|--------------------------------|------|-----|---------|-------|----------|
| 2) Dichlorodifluoromethane     | 3.05 | 85  | 1915525 | 8.386 | ppbv 97  |
| 3) Chlorodifluoromethane       | 2.99 | 51  | 2262492 | 8.647 | ppbv 100 |
| 4) Chloromethane               | 3.14 | 50  | 728362  | 7.881 | ppbv 98  |
| 5) Vinyl Chloride              | 3.26 | 62  | 713605  | 7.509 | ppbv 98  |
| 6) Bromomethane                | 3.48 | 94  | 377762  | 7.220 | ppbv 99  |
| 7) Chloroethane                | 3.56 | 64  | 247699  | 7.585 | ppbv 92  |
| 8) Dichlorotetrafluoroethane   | 3.19 | 85  | 1753189 | 8.042 | ppbv 95  |
| 9) Propene                     | 3.01 | 41  | 684613  | 8.207 | ppbv 98  |
| 10) Heptane                    | 8.13 | 43  | 1785465 | 8.402 | ppbv 99  |
| 11) Trichlorofluoromethane     | 3.96 | 101 | 1791736 | 7.697 | ppbv 98  |
| 12) 1,1,2-Trichlorotrifluoroet | 4.49 | 101 | 1196729 | 8.041 | ppbv 99  |
| 13) Ethanol                    | 3.62 | 45  | 64106   | 6.454 | ppbv 87  |
| 14) Bromoethene                | 3.74 | 108 | 487612  | 7.881 | ppbv 99  |
| 15) Acetone                    | 3.86 | 43  | 958251  | 6.952 | ppbv 100 |
| 16) 1,3-Butadiene              | 3.33 | 39  | 837876  | 8.731 | ppbv 90  |
| 17) tert-Butyl alcohol         | 4.30 | 59  | 924421  | 7.704 | ppbv 97  |
| 18) 1,1-Dichloroethene         | 4.29 | 96  | 513858  | 7.762 | ppbv 95  |
| 19) Isopropyl Alcohol          | 3.98 | 45  | 534493  | 7.049 | ppbv 100 |
| 20) Methylene Chloride         | 4.35 | 84  | 454790  | 7.047 | ppbv 99  |
| 21) Allyl Chloride             | 4.42 | 41  | 764585  | 6.958 | ppbv 97  |
| 22) trans-1,2-Dichloroethene   | 4.89 | 96  | 502652  | 8.190 | ppbv 93  |
| 23) Vinyl Acetate              | 5.08 | 43  | 1892029 | 8.025 | ppbv 99  |
| 24) 1,1-Dichloroethane         | 5.02 | 63  | 1420860 | 8.268 | ppbv 98  |
| 25) Ethyl Acetate              | 5.69 | 43  | 2668537 | 8.143 | ppbv 99  |
| 26) Hexane                     | 5.70 | 57  | 1268817 | 8.343 | ppbv 98  |
| 27) Carbon Disulfide           | 4.56 | 76  | 1224671 | 8.175 | ppbv 98  |
| 28) Methyl tert-Butyl Ether    | 5.04 | 73  | 1425221 | 7.947 | ppbv 99  |
| 29) Chloroform                 | 5.76 | 83  | 2015352 | 8.287 | ppbv 100 |
| 30) Cyclohexane                | 7.14 | 84  | 1076945 | 8.732 | ppbv 99  |
| 31) cis-1,2-Dichloroethene     | 5.56 | 61  | 1238231 | 8.418 | ppbv 97  |
| 32) 1,1,1-Trichloroethane      | 6.52 | 97  | 2046738 | 8.351 | ppbv 99  |
| 34) 2-Butanone                 | 5.25 | 43  | 1244548 | 7.082 | ppbv 99  |
| 35) Carbon Tetrachloride       | 7.03 | 117 | 2140933 | 7.743 | ppbv 99  |
| 36) Benzene                    | 6.90 | 78  | 2655395 | 7.998 | ppbv 98  |
| 37) 1,2-Dichloroethane         | 6.31 | 62  | 1514317 | 7.749 | ppbv 99  |
| 38) Trichloroethene            | 7.85 | 130 | 978091  | 7.570 | ppbv 95  |
| 39) 1,2-Dichloropropane        | 7.63 | 63  | 1049685 | 7.794 | ppbv 99  |
| 40) 1,4-Dioxane                | 7.84 | 88  | 221297  | 7.060 | ppbv 76  |
| 41) Tetrahydrofuran            | 6.06 | 42  | 528105  | 6.518 | ppbv 92  |
| 42) Bromodichloromethane       | 7.80 | 83  | 2128389 | 8.007 | ppbv 98  |
| 43) Methyl Methacrylate        | 8.02 | 69  | 1006622 | 9.029 | ppbv 96  |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL040521\  
 Data File : VL036679.D  
 Acq On : 5 Apr 2021 18:09  
 Operator : SY/AP  
 Sample : VL0405ABS01  
 Misc : 400mL/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VL0405ABS01

Manual Integrations  
 APPROVED

MMDadoda  
 4/6/2021 5:13:55 PM

Quant Time: Apr 06 02:38:26 2021  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Thu Mar 2  
 QLast Update : Thu Mar 25 09:42:40 2021  
 Response via : Initial Calibration

| Internal Standards            | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|--------|--------|----------|
| 44) 2,2,4-Trimethylpentane    | 7.88  | 57   | 4537007  | 7.764  | ppbv   | 99       |
| 45) t-1,3-Dichloropropene     | 9.29  | 75   | 621167   | 4.879  | ppbv   | 99       |
| 46) cis-1,3-Dichloropropene   | 8.72  | 75   | 789270   | 4.850  | ppbv   | 95       |
| 47) 1,1,2-Trichloroethane     | 9.49  | 97   | 1090259  | 7.992  | ppbv   | 98       |
| 48) Dibromochloromethane      | 10.32 | 129  | 1789500  | 8.605  | ppbv   | 99       |
| 49) Bromoform                 | 13.06 | 173  | 1473272  | 8.793  | ppbv   | 99       |
| 50) 4-Methyl-2-Pentanone      | 8.75  | 43   | 1968567  | 7.742  | ppbv   | 99       |
| 51) 2-Hexanone                | 10.15 | 43   | 1023219  | 7.974  | ppbv # | 98       |
| 52) Tetrachloroethene         | 11.24 | 164  | 928133   | 7.591  | ppbv   | 96       |
| 53) Toluene                   | 9.82  | 91   | 2986459  | 8.446  | ppbv   | 99       |
| 54) 1,2-Dibromoethane         | 10.62 | 107  | 1537397  | 7.980  | ppbv   | 100      |
| 56) 1,1,1,2-Tetrachloroethane | 12.14 | 131  | 1284759  | 8.466  | ppbv # | 54       |
| 57) Chlorobenzene             | 12.16 | 112  | 2265304  | 7.935  | ppbv   | 97       |
| 58) Ethyl Benzene             | 12.73 | 91   | 4108673  | 8.417  | ppbv   | 99       |
| 59) m/p-Xylene                | 13.01 | 91   | 7011998m | 16.470 | ppbv   |          |
| 60) o-Xylene                  | 13.71 | 91   | 3301445  | 8.020  | ppbv   | 100      |
| 61) Styrene                   | 13.54 | 104  | 1774348  | 8.567  | ppbv   | 99       |
| 62) Isopropylbenzene          | 14.68 | 105  | 4656376  | 8.399  | ppbv   | 100      |
| 63) 1,1,2,2-Tetrachloroethane | 13.69 | 83   | 2367422  | 7.539  | ppbv   | 99       |
| 64) n-propylbenzene           | 15.58 | 120  | 1222292  | 9.018  | ppbv   | 98       |
| 65) tert-Butylbenzene         | 16.76 | 119  | 4046649  | 8.418  | ppbv   | 99       |
| 66) Benzyl Chloride           | 17.01 | 91   | 311230   | 5.857  | ppbv   | 99       |
| 67) sec-Butylbenzene          | 17.31 | 105  | 5688564  | 8.383  | ppbv   | 100      |
| 69) p-Isopropyltoluene        | 17.67 | 119  | 4776251  | 9.014  | ppbv   | 98       |
| 70) n-Butylbenzene            | 18.57 | 91   | 4815282  | 8.765  | ppbv   | 99       |
| 71) 2-Chlorotoluene           | 15.47 | 91   | 3544334  | 8.532  | ppbv   | 99       |
| 72) 4-Ethyltoluene            | 15.85 | 105  | 3924601  | 8.700  | ppbv   | 100      |
| 73) 1,3,5-Trimethylbenzene    | 16.01 | 105  | 3554140  | 8.442  | ppbv   | 99       |
| 74) 1,2,4-Trimethylbenzene    | 16.78 | 105  | 3705061  | 8.223  | ppbv   | 97       |
| 75) 1,3-Dichlorobenzene       | 17.01 | 146  | 2145945  | 8.462  | ppbv   | 99       |
| 76) 1,4-Dichlorobenzene       | 17.15 | 146  | 2068969  | 8.217  | ppbv   | 99       |
| 77) 1,2-Dichlorobenzene       | 17.83 | 146  | 2082387  | 8.736  | ppbv   | 98       |
| 78) Hexachloro-1,3-Butadiene  | 23.39 | 225  | 1642713  | 7.695  | ppbv   | 99       |
| 79) Naphthalene               | 22.22 | 128  | 2358475  | 8.971  | ppbv   | 99       |
| 80) Naphthalene, 2-methyl-    | 25.00 | 142  | 255619   | 4.931  | ppbv   | 99       |
| 81) 1,2,4-Trichlorobenzene    | 21.95 | 180  | 1423926  | 8.772  | ppbv   | 98       |

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

