

Data Path : W:\HPCHEM1\MSVOA L\DATA\VL100915\  
 Data File : VL026172.D  
 Acq On : 9 Oct 2015 10:59  
 Operator : SY/MD  
 Sample : VSTDICCC010  
 Misc : 400mL/MSVOA L  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_L  
 ClientSampleId :  
 VSTDICCC010

Manual Integrations  
 APPROVED

MMdadoda  
 10/12/2015 1:25:30 PM

Quant Time: Oct 09 14:19:56 2015  
 Quant Method : W:\HPCHEM1\MSVOA L\METHODS\VL100915AIR.M  
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA\_L Fri Sep 0  
 QLast Update : Fri Sep 04 15:41:31 2015  
 Response via : Initial Calibration

| Internal Standards      | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|-------------------------|-------|------|----------|-------|-------|----------|
| 1) Bromochloromethane   | 6.66  | 49   | 874321   | 10.00 | ppbv  | 0.01     |
| 33) 1,4-Difluorobenzene | 8.34  | 114  | 2513217  | 10.00 | ppbv  | 0.01     |
| 55) Chlorobenzene-d5    | 13.76 | 117  | 3033038m | 10.00 | ppbv  | 0.02     |

System Monitoring Compounds

|                             |        |       |          |          |      |         |
|-----------------------------|--------|-------|----------|----------|------|---------|
| 68) 1-Bromo-4-Fluorobenzene | 16.30  | 95    | 2313097  | 10.33    | ppbv | 0.02    |
| Spiked Amount               | 10.000 | Range | 65 - 135 | Recovery | =    | 103.30% |

| Target Compounds               |      |     |         |       |        | Ovalue |
|--------------------------------|------|-----|---------|-------|--------|--------|
| 2) Dichlorodifluoromethane     | 3.64 | 85  | 1254704 | 10.00 | ppbv   | 99     |
| 3) Chlorodifluoromethane       | 3.57 | 51  | 916480  | 9.14  | ppbv   | 96     |
| 4) Chloromethane               | 3.75 | 50  | 541319  | 9.12  | ppbv   | 98     |
| 5) Vinyl Chloride              | 3.89 | 62  | 556851  | 8.78  | ppbv   | 99     |
| 6) Bromomethane                | 4.14 | 94  | 395631  | 9.92  | ppbv   | 100    |
| 7) Chloroethane                | 4.24 | 64  | 238809  | 9.68  | ppbv   | 98     |
| 8) Dichlorotetrafluoroethane   | 3.81 | 85  | 1316278 | 9.67  | ppbv   | 99     |
| 9) Propene                     | 3.59 | 41  | 454789  | 8.92  | ppbv   | 99     |
| 10) Heptane                    | 9.37 | 43  | 1587669 | 8.98  | ppbv   | 98     |
| 11) Trichlorofluoromethane     | 4.70 | 101 | 1505970 | 10.46 | ppbv   | 100    |
| 12) 1,1,2-Trichlorotrifluoroet | 5.31 | 101 | 1016278 | 10.23 | ppbv   | 99     |
| 13) Ethanol                    | 4.34 | 45  | 41191   | 6.67  | ppbv   | 94     |
| 14) Bromoethene                | 4.45 | 108 | 428444  | 10.11 | ppbv   | 99     |
| 15) Acetone                    | 4.60 | 43  | 923735  | 8.51  | ppbv   | 100    |
| 16) 1,3-Butadiene              | 3.97 | 39  | 495704  | 9.20  | ppbv   | 99     |
| 17) tert-Butyl alcohol         | 5.12 | 59  | 799172  | 11.33 | ppbv   | 99     |
| 18) 1,1-Dichloroethene         | 5.09 | 96  | 468436  | 10.09 | ppbv   | 99     |
| 19) Isopropyl Alcohol          | 4.75 | 45  | 404454  | 8.90  | ppbv # | 99     |
| 20) Methylene Chloride         | 5.15 | 84  | 438775  | 9.50  | ppbv   | 98     |
| 21) Allyl Chloride             | 5.23 | 41  | 728790  | 9.72  | ppbv   | 97     |
| 22) trans-1,2-Dichloroethene   | 5.77 | 96  | 606322  | 9.72  | ppbv   | 99     |
| 23) Vinyl Acetate              | 5.99 | 43  | 1996189 | 9.70  | ppbv   | 99     |
| 24) 1,1-Dichloroethane         | 5.92 | 63  | 1302035 | 9.38  | ppbv   | 99     |
| 25) Ethyl Acetate              | 6.67 | 43  | 2100870 | 9.11  | ppbv   | 100    |
| 26) Hexane                     | 6.67 | 57  | 1027953 | 9.30  | ppbv   | 98     |
| 27) Carbon Disulfide           | 5.39 | 76  | 1295757 | 10.95 | ppbv   | 99     |
| 28) Methyl tert-Butyl Ether    | 5.96 | 73  | 1724124 | 10.25 | ppbv   | 97     |
| 29) Chloroform                 | 6.76 | 83  | 1525342 | 9.94  | ppbv   | 99     |
| 30) Cyclohexane                | 8.29 | 84  | 1022495 | 9.68  | ppbv   | 95     |
| 31) cis-1,2-Dichloroethene     | 6.53 | 61  | 985950  | 9.75  | ppbv   | 98     |
| 32) 1,1,1-Trichloroethane      | 7.60 | 97  | 1532201 | 9.98  | ppbv   | 99     |
| 34) 2-Butanone                 | 6.20 | 43  | 1346669 | 8.35  | ppbv   | 98     |
| 35) Carbon Tetrachloride       | 8.17 | 117 | 1593170 | 9.45  | ppbv   | 99     |
| 36) Benzene                    | 8.03 | 78  | 2306398 | 8.68  | ppbv   | 99     |
| 37) 1,2-Dichloroethane         | 7.38 | 62  | 1239833 | 9.34  | ppbv   | 99     |
| 38) Trichloroethene            | 9.07 | 130 | 924816  | 7.96  | ppbv   | 99     |
| 39) 1,2-Dichloropropane        | 8.84 | 63  | 851645  | 8.54  | ppbv   | 98     |
| 40) 1,4-Dioxane                | 9.13 | 88  | 114607  | 7.85  | ppbv   | 76     |
| 41) Tetrahydrofuran            | 7.12 | 42  | 814157  | 8.61  | ppbv   | 96     |
| 42) Bromodichloromethane       | 9.04 | 83  | 1683937 | 9.63  | ppbv   | 100    |
| 43) Methyl Methacrylate        | 9.27 | 69  | 881000  | 9.34  | ppbv   | 96     |

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| Internal Standards            | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|-------------------------------|-------|------|----------|-------|--------|----------|
| 44) 2,2,4-Trimethylpentane    | 9.10  | 57   | 3669230  | 8.15  | ppbv   | 99       |
| 45) t-1,3-Dichloropropene     | 10.66 | 75   | 1325696  | 10.73 | ppbv   | 99       |
| 46) cis-1,3-Dichloropropene   | 10.03 | 75   | 1545373  | 10.09 | ppbv   | 98       |
| 47) 1,1,2-Trichloroethane     | 10.89 | 97   | 1023306  | 9.05  | ppbv   | 99       |
| 48) Dibromochloromethane      | 11.81 | 129  | 1596902  | 10.42 | ppbv   | 100      |
| 49) Bromoform                 | 14.83 | 173  | 1269661  | 11.17 | ppbv   | 100      |
| 50) 4-Methyl-2-Pentanone      | 10.10 | 43   | 1901105  | 8.80  | ppbv   | 99       |
| 51) 2-Hexanone                | 11.62 | 43   | 1812448  | 9.16  | ppbv # | 99       |
| 52) Tetrachloroethene         | 12.80 | 164  | 988158   | 8.18  | ppbv   | 99       |
| 53) Toluene                   | 11.25 | 91   | 3048282  | 9.08  | ppbv   | 100      |
| 54) 1,2-Dibromoethane         | 12.15 | 107  | 1564695  | 9.28  | ppbv   | 99       |
| 56) 1,1,1,2-Tetrachloroethane | 13.80 | 131  | 1141836  | 9.08  | ppbv   | 99       |
| 57) Chlorobenzene             | 13.83 | 112  | 2475607  | 8.26  | ppbv   | 100      |
| 58) Ethyl Benzene             | 14.43 | 91   | 4284157  | 8.51  | ppbv   | 99       |
| 59) m/p-Xylene                | 14.73 | 91   | 6601395m | 16.68 | ppbv   |          |
| 60) o-Xylene                  | 15.51 | 91   | 3354349  | 8.16  | ppbv   | 99       |
| 61) Styrene                   | 15.32 | 104  | 1642434  | 9.31  | ppbv   | 99       |
| 62) Isopropylbenzene          | 16.56 | 105  | 4643491  | 8.60  | ppbv   | 99       |
| 63) 1,1,2,2-Tetrachloroethane | 15.50 | 83   | 2219915  | 7.05  | ppbv   | 100      |
| 64) n-propylbenzene           | 17.54 | 120  | 1282040  | 8.89  | ppbv   | 100      |
| 65) tert-Butylbenzene         | 18.83 | 119  | 4021538  | 8.50  | ppbv   | 100      |
| 66) Benzyl Chloride           | 19.11 | 91   | 1556345  | 12.09 | ppbv   | 99       |
| 67) sec-Butylbenzene          | 19.43 | 105  | 5787887  | 8.66  | ppbv   | 99       |
| 69) p-Isopropyltoluene        | 19.80 | 119  | 4762638  | 8.81  | ppbv   | 99       |
| 70) n-Butylbenzene            | 20.77 | 91   | 4619050  | 8.55  | ppbv   | 100      |
| 71) 2-Chlorotoluene           | 17.44 | 91   | 3510690  | 8.55  | ppbv   | 98       |
| 72) 4-Ethyltoluene            | 17.83 | 105  | 3994940  | 8.90  | ppbv   | 100      |
| 73) 1,3,5-Trimethylbenzene    | 18.00 | 105  | 3684944  | 8.84  | ppbv   | 99       |
| 74) 1,2,4-Trimethylbenzene    | 18.85 | 105  | 3626328  | 8.30  | ppbv   | 98       |
| 75) 1,3-Dichlorobenzene       | 19.14 | 146  | 2352396  | 8.67  | ppbv   | 99       |
| 76) 1,4-Dichlorobenzene       | 19.28 | 146  | 2449606  | 8.77  | ppbv   | 100      |
| 77) 1,2-Dichlorobenzene       | 20.04 | 146  | 2359721  | 8.71  | ppbv   | 99       |
| 78) Hexachloro-1,3-Butadiene  | 24.68 | 225  | 918296   | 8.46  | ppbv   | 99       |
| 79) Naphthalene               | 23.94 | 128  | 2686121  | 7.91  | ppbv   | 99       |
| 80) Naphthalene, 2-methyl-    | 26.05 | 142  | 569316   | 7.15  | ppbv   | 100      |
| 81) 1,2,4-Trichlorobenzene    | 23.74 | 180  | 1270339  | 7.78  | ppbv   | 100      |

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

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