

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD122419\  
 Data File : VD064586.D  
 Acq On : 24 Dec 2019 12:42  
 Operator : VA/SY  
 Sample : VSTDICC150  
 Misc : 5.00G/5.00ml/MSVOA D/SOIL  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 VSTDICC150

Manual Integrations  
 APPROVED

apatel  
 12/26/2019 11:14:03 AM

Quant Time: Dec 24 13:20:31 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D122419S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Dec 24 12:11:16 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.98  | 168  | 460178   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.87  | 114  | 668151   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.65 | 117  | 598709   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.58 | 152  | 309952   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |        |         |      |
|---------------------------|--------|-----|----------|--------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.34   | 65  | 600039   | 146.16 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =      | 292.32% |      |
| 35) Dibromofluoromethane  | 7.92   | 113 | 580457   | 139.38 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =      | 278.76% |      |
| 50) Toluene-d8            | 10.34  | 98  | 2339702  | 149.67 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =      | 299.34% |      |
| 62) 4-Bromofluorobenzene  | 12.64  | 95  | 730795   | 146.93 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =      | 293.86% |      |

## Target Compounds

|                               |      |     |         |          |      | Qvalue |
|-------------------------------|------|-----|---------|----------|------|--------|
| 2) Dichlorodifluoromethane    | 1.99 | 85  | 462064  | 122.310  | ug/l | 95     |
| 3) Chloromethane              | 2.21 | 50  | 641122  | 120.184  | ug/l | 100    |
| 4) Vinyl Chloride             | 2.35 | 62  | 808221  | 126.219  | ug/l | 97     |
| 5) Bromomethane               | 2.74 | 94  | 617266  | 133.201  | ug/l | 96     |
| 6) Chloroethane               | 2.91 | 64  | 546195  | 127.892  | ug/l | 98     |
| 7) Trichlorofluoromethane     | 3.27 | 101 | 1341463 | 123.733  | ug/l | 99     |
| 8) Diethyl Ether              | 3.70 | 74  | 266495  | 123.986  | ug/l | 98     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.09 | 101 | 557092  | 124.108  | ug/l | 100    |
| 10) Methyl Iodide             | 4.29 | 142 | 737806  | 168.404  | ug/l | 99     |
| 11) Tert butyl alcohol        | 5.26 | 59  | 166251  | 1007.051 | ug/l | 96     |
| 12) 1,1-Dichloroethene        | 4.06 | 96  | 538201  | 126.645  | ug/l | 99     |
| 13) Acrolein                  | 3.92 | 56  | 222295  | 670.094  | ug/l | 98     |
| 14) Allyl chloride            | 4.71 | 41  | 876567  | 134.111  | ug/l | 99     |
| 15) Acrylonitrile             | 5.43 | 53  | 587359  | 668.638  | ug/l | 100    |
| 16) Acetone                   | 4.17 | 43  | 486990  | 543.336  | ug/l | 95     |
| 17) Carbon Disulfide          | 4.40 | 76  | 1741876 | 126.764  | ug/l | 100    |
| 18) Methyl Acetate            | 4.73 | 43  | 309365  | 129.019  | ug/l | 100    |
| 19) Methyl tert-butyl Ether   | 5.48 | 73  | 1279699 | 138.866  | ug/l | 97     |
| 20) Methylene Chloride        | 4.96 | 84  | 579257  | 109.418  | ug/l | 97     |
| 21) trans-1,2-Dichloroethene  | 5.47 | 96  | 637793  | 133.232  | ug/l | 97     |
| 22) Diisopropyl ether         | 6.37 | 45  | 1770387 | 136.421  | ug/l | 97     |
| 23) Vinyl Acetate             | 6.31 | 43  | 5322474 | 744.126  | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 6.26 | 63  | 1046554 | 133.509  | ug/l | 98     |
| 25) 2-Butanone                | 7.22 | 43  | 762434  | 662.609  | ug/l | 98     |
| 26) 2,2-Dichloropropane       | 7.21 | 77  | 957905  | 130.543  | ug/l | 100    |
| 27) cis-1,2-Dichloroethene    | 7.21 | 96  | 696350  | 135.620  | ug/l | 99     |
| 28) Bromochloromethane        | 7.55 | 49  | 414014  | 137.578  | ug/l | 96     |
| 29) Tetrahydrofuran           | 7.57 | 42  | 479790  | 672.805  | ug/l | 100    |
| 30) Chloroform                | 7.71 | 83  | 1090590 | 132.165  | ug/l | 97     |
| 31) Cyclohexane               | 7.99 | 56  | 953800  | 117.567  | ug/l | 96     |
| 32) 1,1,1-Trichloroethane     | 7.91 | 97  | 1026114 | 132.654  | ug/l | 98     |
| 36) 1,1-Dichloropropene       | 8.11 | 75  | 878873  | 132.246  | ug/l | 99     |
| 37) Ethyl Acetate             | 7.30 | 43  | 349467  | 134.817  | ug/l | 100    |
| 38) Carbon Tetrachloride      | 8.10 | 117 | 975745  | 140.136  | ug/l | 98     |

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 Sample : VSTDICC150  
 Misc : 5.00G/5.00ml/MSVOA D/SOIL  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 VSTDICC150

Manual Integrations  
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apatel  
 12/26/2019 11:14:03 AM

Quant Time: Dec 24 13:20:31 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D122419S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Dec 24 12:11:16 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 9.36  | 83   | 1088816  | 137.239  | ug/l   | 98       |
| 40) Benzene                    | 8.35  | 78   | 2493476  | 139.614  | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.53  | 41   | 198118   | 130.150  | ug/l   | 92       |
| 42) 1,2-Dichloroethane         | 8.43  | 62   | 701278   | 134.982  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.46  | 43   | 696556   | 135.656  | ug/l   | 100      |
| 44) Trichloroethene            | 9.11  | 130  | 705395   | 132.483  | ug/l   | 98       |
| 45) 1,2-Dichloropropane        | 9.39  | 63   | 579199   | 134.271  | ug/l   | 99       |
| 46) Dibromomethane             | 9.48  | 93   | 324248   | 135.471  | ug/l   | 98       |
| 47) Bromodichloromethane       | 9.66  | 83   | 843817   | 131.318  | ug/l   | 98       |
| 48) Methyl methacrylate        | 9.46  | 41   | 321641   | 131.600  | ug/l   | 91       |
| 49) 1,4-Dioxane                | 9.47  | 88   | 71785    | 2573.816 | ug/l   | 99       |
| 51) 4-Methyl-2-Pentanone       | 10.23 | 43   | 1767983  | 702.697  | ug/l   | 99       |
| 52) Toluene                    | 10.40 | 92   | 1675879  | 144.222  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.62 | 75   | 837455   | 143.520  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 10.09 | 75   | 987362   | 142.679  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 10.80 | 97   | 429793   | 131.797  | ug/l   | 97       |
| 56) Ethyl methacrylate         | 10.66 | 69   | 576720   | 145.771  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 10.95 | 76   | 743895   | 133.288  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.94  | 63   | 1012458  | 654.246  | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.98 | 43   | 1189775  | 699.814  | ug/l   | 100      |
| 60) Dibromochloromethane       | 11.14 | 129  | 610732   | 137.347  | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 11.25 | 107  | 432870   | 136.259  | ug/l   | 100      |
| 64) Tetrachloroethene          | 10.88 | 164  | 619524   | 129.866  | ug/l   | 98       |
| 65) Chlorobenzene              | 11.67 | 112  | 1751931  | 137.332  | ug/l   | 97       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.74 | 131  | 673799   | 142.110  | ug/l   | 100      |
| 67) Ethyl Benzene              | 11.75 | 91   | 3221292  | 140.482  | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.86 | 106  | 2499479  | 282.968  | ug/l   | 99       |
| 69) o-Xylene                   | 12.18 | 106  | 1137764  | 143.289  | ug/l   | 99       |
| 70) Styrene                    | 12.20 | 104  | 2058554  | 149.336  | ug/l   | 99       |
| 71) Bromoform                  | 12.36 | 173  | 376023   | 138.087  | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.48 | 105  | 3112509  | 137.082  | ug/l   | 100      |
| 74) N-amyl acetate             | 12.29 | 43   | 671248   | 139.539  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.74 | 83   | 455934   | 124.858  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 12.79 | 75   | 348010m  | 80.364   | ug/l   |          |
| 77) Bromobenzene               | 12.77 | 156  | 741911   | 131.843  | ug/l   | 99       |
| 78) n-propylbenzene            | 12.83 | 91   | 3598919  | 135.579  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.91 | 91   | 1946483  | 132.565  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.97 | 105  | 2578481  | 138.626  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.53 | 75   | 163575   | 136.236  | ug/l   | 99       |
| 82) 4-Chlorotoluene            | 13.01 | 91   | 2127263  | 137.192  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 13.23 | 119  | 2243146  | 139.236  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.27 | 105  | 2596898  | 140.934  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.41 | 105  | 3051883  | 138.111  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.52 | 119  | 2952396  | 140.586  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.52 | 146  | 1462447  | 137.897  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.60 | 146  | 1401027  | 132.953  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.85 | 91   | 2647832  | 139.298  | ug/l   | 99       |
| 90) Hexachloroethane           | 14.12 | 117  | 527360   | 127.246  | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene        | 13.90 | 146  | 1218125  | 133.165  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.51 | 75   | 72605    | 121.703  | ug/l   | 97       |

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Sample : VSTDICC150  
Misc : 5.00G/5.00ml/MSVOA D/SOIL  
ALS Vial : 8 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
ClientSampleId :  
VSTDICC150

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apatel  
12/26/2019 11:14:03 AM

Quant Time: Dec 24 13:20:31 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_D\METHOD\82D122419S.M  
Quant Title : SW846 8260  
QLast Update : Tue Dec 24 12:11:16 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|----------------------------|-------|------|----------|---------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.17 | 180  | 892459   | 132.253 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.28 | 225  | 552000   | 129.599 | ug/l  | 99       |
| 95) Naphthalene            | 15.41 | 128  | 1454518  | 139.205 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.61 | 180  | 752020   | 130.527 | ug/l  | 100      |

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

