

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD012819\  
 Data File : VD060796.D  
 Acq On : 28 Jan 2019 17:35  
 Operator : JC/SY  
 Sample : VSTDICC100  
 Misc : 5.00u/5ml/MSVOA D/SOIL  
 ALS Vial : 31 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 VSTDICC100

Manual Integrations  
 APPROVED

MMDadoda  
 1/29/2019 4:55:51 PM

Quant Time: Jan 29 13:46:39 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D012819S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jan 29 12:47:39 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 6.80  | 168  | 637137   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 7.98  | 114  | 865179   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 12.16 | 117  | 684219   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 14.32 | 152  | 340033   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 7.21   | 65  | 910017   | 93.16 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 186.32% |      |
| 35) Dibromofluoromethane  | 6.68   | 113 | 794195   | 95.72 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 191.44% |      |
| 50) Toluene-d8            | 10.19  | 98  | 1747103  | 90.17 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 180.34% |      |
| 62) 4-Bromofluorobenzene  | 13.35  | 95  | 908384   | 93.28 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 186.56% |      |

## Target Compounds

|                               |      |     |         |         |        | Qvalue |
|-------------------------------|------|-----|---------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.59 | 85  | 805457  | 103.976 | ug/l   | 99     |
| 3) Chloromethane              | 1.76 | 50  | 448831  | 96.773  | ug/l   | 94     |
| 4) Vinyl Chloride             | 1.84 | 62  | 500964  | 101.759 | ug/l   | 94     |
| 5) Bromomethane               | 2.13 | 94  | 135308m | 81.850  | ug/l   |        |
| 6) Chloroethane               | 2.24 | 64  | 146685  | 82.783  | ug/l # | 86     |
| 7) Trichlorofluoromethane     | 2.48 | 101 | 890138  | 91.852  | ug/l   | 99     |
| 8) Diethyl Ether              | 2.80 | 74  | 137645  | 96.390  | ug/l   | 92     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.06 | 101 | 454352  | 92.512  | ug/l   | 95     |
| 10) Methyl Iodide             | 3.21 | 142 | 536483  | 104.335 | ug/l   | 96     |
| 11) Tert butyl alcohol        | 3.93 | 59  | 222837  | 477.377 | ug/l # | 92     |
| 12) 1,1-Dichloroethene        | 3.04 | 96  | 313224  | 93.328  | ug/l   | 95     |
| 13) Acrolein                  | 2.96 | 56  | 74411   | 392.647 | ug/l   | 95     |
| 14) Allyl chloride            | 3.50 | 41  | 739421  | 94.672  | ug/l   | 98     |
| 15) Acrylonitrile             | 4.04 | 53  | 468906  | 448.322 | ug/l   | 98     |
| 16) Acetone                   | 3.13 | 43  | 643764  | 458.062 | ug/l   | 100    |
| 17) Carbon Disulfide          | 3.28 | 76  | 1104872 | 92.937  | ug/l   | 99     |
| 18) Methyl Acetate            | 3.52 | 43  | 267005  | 95.469  | ug/l   | 96     |
| 19) Methyl tert-butyl Ether   | 4.08 | 73  | 1454316 | 94.915  | ug/l   | 98     |
| 20) Methylene Chloride        | 3.68 | 84  | 576342  | 80.143  | ug/l   | 98     |
| 21) trans-1,2-Dichloroethene  | 4.05 | 96  | 528376  | 89.307  | ug/l   | 98     |
| 22) Diisopropyl ether         | 4.90 | 45  | 1871805 | 93.003  | ug/l   | 89     |
| 23) Vinyl Acetate             | 4.83 | 43  | 5548974 | 478.765 | ug/l   | 99     |
| 24) 1,1-Dichloroethane        | 4.77 | 63  | 1302367 | 98.847  | ug/l   | 99     |
| 25) 2-Butanone                | 5.84 | 43  | 880843  | 487.796 | ug/l   | 99     |
| 26) 2,2-Dichloropropane       | 5.78 | 77  | 1250801 | 90.098  | ug/l   | 97     |
| 27) cis-1,2-Dichloroethene    | 5.80 | 96  | 607420  | 90.143  | ug/l   | 93     |
| 28) Bromochloromethane        | 6.20 | 49  | 480975  | 93.578  | ug/l   | 94     |
| 29) Tetrahydrofuran           | 6.23 | 42  | 414041  | 477.466 | ug/l   | 96     |
| 30) Chloroform                | 6.42 | 83  | 1509166 | 96.911  | ug/l   | 97     |
| 31) Cyclohexane               | 6.72 | 56  | 854908  | 95.366  | ug/l   | 100    |
| 32) 1,1,1-Trichloroethane     | 6.63 | 97  | 1418627 | 94.597  | ug/l   | 97     |
| 36) 1,1-Dichloropropene       | 6.90 | 75  | 954956  | 92.444  | ug/l   | 97     |
| 37) Ethyl Acetate             | 5.94 | 43  | 459265  | 99.596  | ug/l   | 96     |
| 38) Carbon Tetrachloride      | 6.87 | 117 | 1336101 | 103.145 | ug/l   | 98     |

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 Sample : VSTDICC100  
 Misc : 5.00µl/5ml/MSVOA D/SOIL  
 ALS Vial : 31 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 VSTDICC100

Manual Integrations  
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MMDadoda  
 1/29/2019 4:55:51 PM

Quant Time: Jan 29 13:46:39 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D012819S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Jan 29 12:47:39 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 8.63  | 83   | 847380   | 97.953   | ug/l   | 98       |
| 40) Benzene                    | 7.21  | 78   | 2022691  | 99.210   | ug/l   | 100      |
| 41) Methacrylonitrile          | 6.22  | 41   | 287005m  | 94.651   | ug/l   |          |
| 42) 1,2-Dichloroethane         | 7.34  | 62   | 1188787  | 100.369  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 9.00  | 43   | 636452   | 105.823  | ug/l # | 96       |
| 44) Trichloroethene            | 8.30  | 130  | 689991   | 99.832   | ug/l   | 99       |
| 45) 1,2-Dichloropropane        | 8.71  | 63   | 542444   | 98.286   | ug/l   | 100      |
| 46) Dibromomethane             | 8.82  | 93   | 435184   | 101.574  | ug/l   | 96       |
| 47) Bromodichloromethane       | 9.14  | 83   | 1158620  | 100.188  | ug/l   | 98       |
| 48) Methyl methacrylate        | 8.89  | 41   | 422712   | 101.922  | ug/l   | 96       |
| 49) 1,4-Dioxane                | 8.85  | 88   | 71907    | 2236.273 | ug/l   | 95       |
| 51) 4-Methyl-2-Pentanone       | 10.08 | 43   | 1897406  | 487.163  | ug/l   | 100      |
| 52) Toluene                    | 10.29 | 92   | 1156264  | 89.407   | ug/l   | 97       |
| 53) t-1,3-Dichloropropene      | 10.69 | 75   | 1024656  | 100.730  | ug/l   | 97       |
| 54) cis-1,3-Dichloropropene    | 9.81  | 75   | 1036792  | 99.392   | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 10.97 | 97   | 420296   | 95.321   | ug/l   | 98       |
| 56) Ethyl methacrylate         | 10.82 | 69   | 524390   | 98.175   | ug/l   | 96       |
| 57) 1,3-Dichloropropane        | 11.19 | 76   | 758344   | 100.633  | ug/l   | 97       |
| 58) 2-Chloroethyl Vinyl ether  | 9.63  | 63   | 1322184  | 471.771  | ug/l   | 98       |
| 59) 2-Hexanone                 | 11.32 | 43   | 1414220  | 482.914  | ug/l   | 97       |
| 60) Dibromochloromethane       | 11.47 | 129  | 800754   | 101.016  | ug/l   | 97       |
| 61) 1,2-Dibromoethane          | 11.59 | 107  | 527259   | 101.536  | ug/l   | 98       |
| 64) Tetrachloroethene          | 11.04 | 164  | 593989   | 94.592   | ug/l   | 99       |
| 65) Chlorobenzene              | 12.19 | 112  | 1401050  | 89.604   | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 12.31 | 131  | 592299   | 88.170   | ug/l   | 99       |
| 67) Ethyl Benzene              | 12.32 | 91   | 2359023  | 83.902   | ug/l   | 98       |
| 68) m/p-Xylenes                | 12.47 | 106  | 1556776  | 170.186  | ug/l   | 97       |
| 69) o-Xylene                   | 12.85 | 106  | 796087   | 87.930   | ug/l   | 99       |
| 70) Styrene                    | 12.87 | 104  | 1338614  | 88.170   | ug/l   | 98       |
| 71) Bromoform                  | 13.03 | 173  | 508812   | 100.529  | ug/l # | 98       |
| 73) Isopropylbenzene           | 13.20 | 105  | 2450065  | 90.372   | ug/l   | 99       |
| 74) N-amyl acetate             | 13.07 | 43   | 863108   | 103.557  | ug/l   | 96       |
| 75) 1,1,2,2-Tetrachloroethane  | 13.50 | 83   | 489037   | 99.067   | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 13.53 | 75   | 636773   | 102.122  | ug/l   | 99       |
| 77) Bromobenzene               | 13.47 | 156  | 683832   | 98.123   | ug/l   | 98       |
| 78) n-propylbenzene            | 13.58 | 91   | 3187671  | 93.662   | ug/l   | 98       |
| 79) 2-Chlorotoluene            | 13.64 | 91   | 1929676  | 92.958   | ug/l   | 92       |
| 80) 1,3,5-Trimethylbenzene     | 14.04 | 105  | 2140235  | 91.700   | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 13.27 | 75   | 164814   | 101.385  | ug/l   | 93       |
| 82) 4-Chlorotoluene            | 13.75 | 91   | 2104553  | 91.220   | ug/l   | 91       |
| 83) tert-Butylbenzene          | 13.99 | 119  | 2197159  | 89.979   | ug/l   | 96       |
| 84) 1,2,4-Trimethylbenzene     | 14.04 | 105  | 2140235  | 91.700   | ug/l   | 99       |
| 85) sec-Butylbenzene           | 14.17 | 105  | 2561538  | 92.155   | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 14.30 | 119  | 2103266  | 93.200   | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 14.26 | 146  | 1137052  | 91.219   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 14.34 | 146  | 1142399  | 94.324   | ug/l   | 96       |
| 89) n-Butylbenzene             | 14.60 | 91   | 2015726  | 85.610   | ug/l   | 99       |
| 90) Hexachloroethane           | 14.81 | 117  | 646974   | 96.339   | ug/l   | 80       |
| 91) 1,2-Dichlorobenzene        | 14.61 | 146  | 885923   | 85.625   | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropropan | 15.18 | 75   | 136462   | 116.358  | ug/l   | 72       |

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Sample : VSTDICC100  
Misc : 5.00g/5ml/MSVOA D/SOIL  
ALS Vial : 31 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
ClientSampleId :  
VSTDICC100

Manual Integrations  
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1/29/2019 4:55:51 PM

Quant Time: Jan 29 13:46:39 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D012819S.M  
Quant Title : SW846 8260  
QLast Update : Tue Jan 29 12:47:39 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.74 | 180  | 869153   | 97.016 | ug/l  | 96       |
| 94) Hexachlorobutadiene    | 15.84 | 225  | 571753   | 85.059 | ug/l  | 98       |
| 95) Naphthalene            | 15.93 | 128  | 1300806  | 94.502 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 16.08 | 180  | 714015   | 91.655 | ug/l  | 99       |

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

