

Data Path : Z:\VOASRV\HPCHEM1\MSVOA V\DATA\VV011819\  
 Data File : VV009226.D  
 Acq On : 18 Jan 2019 17:49  
 Operator : SY/MD  
 Sample : VSTDICC150  
 Misc : 5.00 G/5ML/MSVOA V/SOIL  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTDICC150

Manual Integrations  
 APPROVED

MMDadoda  
 1/21/2019 10:45:42 AM

Quant Time: Jan 19 03:23:05 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\82V011819S.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Jan 19 02:50:58 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 4.73  | 168  | 93454    | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.66  | 114  | 163727   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 8.90  | 117  | 156432   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 11.30 | 152  | 80932    | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |        |         |      |
|---------------------------|--------|-----|----------|--------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 5.07   | 65  | 195483   | 156.44 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =      | 312.88% |      |
| 35) Dibromofluoromethane  | 4.64   | 113 | 169614   | 157.81 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =      | 315.62% |      |
| 50) Toluene-d8            | 7.36   | 98  | 640811   | 157.48 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =      | 314.96% |      |
| 62) 4-Bromofluorobenzene  | 10.12  | 95  | 253865   | 160.32 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =      | 320.64% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.14 | 85  | 106464  | 147.523 | ug/l | 98     |
| 3) Chloromethane              | 1.25 | 50  | 162475  | 158.765 | ug/l | 99     |
| 4) Vinyl Chloride             | 1.33 | 62  | 153020  | 152.148 | ug/l | 100    |
| 5) Bromomethane               | 1.53 | 94  | 98937   | 150.416 | ug/l | 98     |
| 6) Chloroethane               | 1.60 | 64  | 93742   | 149.289 | ug/l | 99     |
| 7) Trichlorofluoromethane     | 1.76 | 101 | 87932   | 150.308 | ug/l | 99     |
| 8) Diethyl Ether              | 1.96 | 74  | 77972   | 159.619 | ug/l | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.14 | 101 | 131395  | 144.613 | ug/l | 97     |
| 10) Methyl Iodide             | 2.26 | 142 | 232456  | 158.686 | ug/l | 99     |
| 11) Tert butyl alcohol        | 2.66 | 59  | 55104   | 760.656 | ug/l | 98     |
| 12) 1,1-Dichloroethene        | 2.14 | 96  | 138032  | 157.766 | ug/l | 96     |
| 13) Acrolein                  | 2.05 | 56  | 48425   | 814.606 | ug/l | 100    |
| 14) Allyl chloride            | 2.42 | 41  | 242185  | 153.459 | ug/l | 98     |
| 15) Acrylonitrile             | 2.76 | 53  | 171126  | 835.165 | ug/l | 99     |
| 16) Acetone                   | 2.17 | 43  | 194801  | 757.211 | ug/l | 98     |
| 17) Carbon Disulfide          | 2.32 | 76  | 419308  | 154.764 | ug/l | 100    |
| 18) Methyl Acetate            | 2.45 | 43  | 111153  | 164.504 | ug/l | 98     |
| 19) Methyl tert-butyl Ether   | 2.80 | 73  | 219581  | 153.536 | ug/l | 99     |
| 20) Methylene Chloride        | 2.53 | 84  | 149136  | 149.439 | ug/l | 97     |
| 21) trans-1,2-Dichloroethene  | 2.78 | 96  | 148265  | 153.583 | ug/l | 100    |
| 22) Diisopropyl ether         | 3.32 | 45  | 567083  | 157.813 | ug/l | 92     |
| 23) Vinyl Acetate             | 3.30 | 43  | 1644007 | 841.008 | ug/l | 98     |
| 24) 1,1-Dichloroethane        | 3.22 | 63  | 331096  | 156.564 | ug/l | 100    |
| 25) 2-Butanone                | 4.01 | 43  | 280943  | 870.430 | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 3.95 | 77  | 187259  | 158.691 | ug/l | 100    |
| 27) cis-1,2-Dichloroethene    | 3.95 | 96  | 197490  | 159.747 | ug/l | 98     |
| 28) Bromochloromethane        | 4.29 | 49  | 145120  | 163.373 | ug/l | 98     |
| 29) Tetrahydrofuran           | 4.38 | 42  | 167768  | 868.064 | ug/l | 99     |
| 30) Chloroform                | 4.42 | 83  | 350510  | 157.278 | ug/l | 100    |
| 31) Cyclohexane               | 4.72 | 56  | 267168  | 148.022 | ug/l | 95     |
| 32) 1,1,1-Trichloroethane     | 4.65 | 97  | 272554  | 150.839 | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 4.87 | 75  | 249625  | 156.173 | ug/l | 100    |
| 37) Ethyl Acetate             | 4.12 | 43  | 116427  | 172.292 | ug/l | 98     |
| 38) Carbon Tetrachloride      | 4.87 | 117 | 255255  | 156.675 | ug/l | 99     |

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 Misc : 5.00 G/5ML/MSVOA V/SOIL  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 MSVOA\_V  
 ClientSampleId :  
 VSTDICC150

Manual Integrations  
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MMDadoda  
 1/21/2019 10:45:42 AM

Quant Time: Jan 19 03:23:05 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_V\METHOD\82V011819S.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Jan 19 02:50:58 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 6.17  | 83   | 297491   | 154.864  | ug/l   | 96       |
| 40) Benzene                    | 5.14  | 78   | 731220   | 157.253  | ug/l   | 98       |
| 41) Methacrylonitrile          | 4.30  | 41   | 70804    | 178.725  | ug/l   | 95       |
| 42) 1,2-Dichloroethane         | 5.17  | 62   | 246225   | 157.946  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 5.32  | 43   | 235072   | 177.695  | ug/l   | 99       |
| 44) Trichloroethene            | 5.96  | 130  | 188278   | 161.037  | ug/l   | 99       |
| 45) 1,2-Dichloropropane        | 6.22  | 63   | 184137   | 158.637  | ug/l   | 98       |
| 46) Dibromomethane             | 6.35  | 93   | 101157   | 165.011  | ug/l   | 99       |
| 47) Bromodichloromethane       | 6.55  | 83   | 265848   | 163.365  | ug/l   | 98       |
| 48) Methyl methacrylate        | 6.41  | 41   | 119166   | 171.660  | ug/l   | 96       |
| 49) 1,4-Dioxane                | 6.41  | 88   | 28488    | 3456.140 | ug/l   | 98       |
| 51) 4-Methyl-2-Pentanone       | 7.27  | 43   | 588520   | 850.763  | ug/l   | 98       |
| 52) Toluene                    | 7.43  | 92   | 461749   | 156.630  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 7.69  | 75   | 274951   | 172.287  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 7.07  | 75   | 306248   | 166.112  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 7.88  | 97   | 137017   | 166.944  | ug/l   | 97       |
| 56) Ethyl methacrylate         | 7.83  | 69   | 184971   | 179.307  | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 8.05  | 76   | 254870   | 164.687  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 6.93  | 63   | 27105    | 2924.100 | ug/l # | 85       |
| 59) 2-Hexanone                 | 8.18  | 43   | 426852   | 860.729  | ug/l   | 98       |
| 60) Dibromochloromethane       | 8.29  | 129  | 173238   | 171.421  | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 8.40  | 107  | 138957   | 169.401  | ug/l   | 100      |
| 64) Tetrachloroethene          | 8.02  | 164  | 150025   | 154.631  | ug/l   | 99       |
| 65) Chlorobenzene              | 8.92  | 112  | 512170   | 155.574  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 9.02  | 131  | 187557   | 160.426  | ug/l   | 99       |
| 67) Ethyl Benzene              | 9.05  | 91   | 921618   | 155.252  | ug/l   | 100      |
| 68) m/p-Xylenes                | 9.18  | 106  | 693404   | 313.070  | ug/l   | 98       |
| 69) o-Xylene                   | 9.59  | 106  | 335436   | 157.835  | ug/l   | 100      |
| 70) Styrene                    | 9.60  | 104  | 559100   | 160.389  | ug/l   | 99       |
| 71) Bromoform                  | 9.77  | 173  | 98789    | 174.576  | ug/l # | 100      |
| 73) Isopropylbenzene           | 9.97  | 105  | 919820   | 152.717  | ug/l   | 100      |
| 74) N-amyl acetate             | 9.84  | 43   | 222972   | 174.181  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 10.29 | 83   | 168746   | 157.418  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 10.32 | 75   | 130565m  | 161.416  | ug/l   |          |
| 77) Bromobenzene               | 10.26 | 156  | 206006   | 156.632  | ug/l   | 100      |
| 78) n-propylbenzene            | 10.40 | 91   | 1090502  | 151.597  | ug/l   | 98       |
| 79) 2-Chlorotoluene            | 10.47 | 91   | 658525   | 153.360  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 10.59 | 105  | 784056   | 153.028  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 10.05 | 75   | 53672    | 174.385  | ug/l   | 97       |
| 82) 4-Chlorotoluene            | 10.59 | 91   | 780622   | 150.945  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 10.91 | 119  | 750319   | 154.565  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 10.96 | 105  | 807527   | 154.137  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 11.13 | 105  | 956069   | 153.247  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 11.29 | 119  | 850702   | 153.406  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 11.23 | 146  | 416248   | 156.468  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 11.32 | 146  | 417411   | 155.491  | ug/l   | 99       |
| 89) n-Butylbenzene             | 11.70 | 91   | 833417   | 153.106  | ug/l   | 98       |
| 90) Hexachloroethane           | 11.95 | 117  | 164252   | 161.495  | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene        | 11.69 | 146  | 373359   | 156.069  | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 12.48 | 75   | 30712    | 163.526  | ug/l   | 93       |

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Operator : SY/MD  
Sample : VSTDICC150  
Misc : 5.00 G/5ML/MSVOA V/SOIL  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
MSVOA\_V  
ClientSampleId :  
VSTDICC150

Manual Integrations  
APPROVED

MMDadoda  
1/21/2019 10:45:42 AM

Quant Time: Jan 19 03:23:05 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_V\METHOD\82V011819S.M  
Quant Title : SW846 8260  
QLast Update : Sat Jan 19 02:50:58 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|----------------------------|-------|------|----------|---------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.31 | 180  | 263488   | 165.552 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 13.49 | 225  | 143334   | 157.307 | ug/l  | 99       |
| 95) Naphthalene            | 13.55 | 128  | 499397   | 174.175 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 13.79 | 180  | 225260   | 160.560 | ug/l  | 99       |

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

