

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX090219\  
 Data File : VX012016.D  
 Acq On : 02 Sep 2019 15:10  
 Operator : SY/SP  
 Sample : VSTDICV050  
 Misc : 5.00g/5.0mL/MSVOA X/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 ICVVX090219

Manual Integrations  
 APPROVED

sam  
 9/3/2019 2:15:50 PM

Quant Time: Sep 03 05:22:55 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X090219S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Sep 03 05:18:49 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.65  | 168  | 396989   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 527335   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 501284   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 296247   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.05   | 65  | 188031   | 53.60 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 107.20% |      |
| 35) Dibromofluoromethane  | 5.48   | 113 | 182137   | 52.67 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.34% |      |
| 50) Toluene-d8            | 8.71   | 98  | 655226   | 53.80 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 107.60% |      |
| 62) 4-Bromofluorobenzene  | 11.14  | 95  | 268558   | 50.99 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.98% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.19 | 85  | 121549  | 50.726  | ug/l | 97     |
| 3) Chloromethane              | 1.31 | 50  | 132061  | 55.453  | ug/l | 99     |
| 4) Vinyl Chloride             | 1.39 | 62  | 130637  | 54.002  | ug/l | 99     |
| 5) Bromomethane               | 1.62 | 94  | 94033   | 54.824  | ug/l | 99     |
| 6) Chloroethane               | 1.71 | 64  | 82965   | 54.223  | ug/l | 98     |
| 7) Trichlorofluoromethane     | 1.92 | 101 | 230464  | 52.481  | ug/l | 99     |
| 8) Diethyl Ether              | 2.17 | 74  | 74333   | 55.668  | ug/l | 100    |
| 9) 1,1,2-Trichlorotrifluoroet | 2.37 | 101 | 149387  | 53.418  | ug/l | 99     |
| 10) Methyl Iodide             | 2.50 | 142 | 152065  | 46.076  | ug/l | 99     |
| 11) Tert butyl alcohol        | 3.03 | 59  | 78466   | 270.745 | ug/l | 98     |
| 12) 1,1-Dichloroethene        | 2.36 | 96  | 141638  | 55.509  | ug/l | 97     |
| 13) Acrolein                  | 2.28 | 56  | 26336   | 248.211 | ug/l | 97     |
| 14) Allyl chloride            | 2.72 | 41  | 237829  | 54.385  | ug/l | 99     |
| 15) Acrylonitrile             | 3.12 | 53  | 189105  | 276.811 | ug/l | 99     |
| 16) Acetone                   | 2.43 | 43  | 174341  | 253.214 | ug/l | 97     |
| 17) Carbon Disulfide          | 2.56 | 76  | 419982  | 58.341  | ug/l | 99     |
| 18) Methyl Acetate            | 2.76 | 43  | 99775   | 55.922  | ug/l | 99     |
| 19) Methyl tert-butyl Ether   | 3.18 | 73  | 420220  | 55.243  | ug/l | 99     |
| 20) Methylene Chloride        | 2.84 | 84  | 163750  | 52.655  | ug/l | 99     |
| 21) trans-1,2-Dichloroethene  | 3.15 | 96  | 165145  | 54.447  | ug/l | 99     |
| 22) Diisopropyl ether         | 3.84 | 45  | 480615  | 54.649  | ug/l | 98     |
| 23) Vinyl Acetate             | 3.80 | 43  | 1554463 | 281.111 | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 3.68 | 63  | 275648  | 53.745  | ug/l | 99     |
| 25) 2-Butanone                | 4.65 | 43  | 259788  | 276.966 | ug/l | 100    |
| 26) 2,2-Dichloropropane       | 4.57 | 77  | 241173  | 50.694  | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 4.58 | 96  | 189369  | 54.341  | ug/l | 100    |
| 28) Bromochloromethane        | 5.00 | 49  | 109787  | 52.084  | ug/l | 98     |
| 29) Tetrahydrofuran           | 5.11 | 42  | 162934  | 282.450 | ug/l | 99     |
| 30) Chloroform                | 5.19 | 83  | 304325  | 54.059  | ug/l | 99     |
| 31) Cyclohexane               | 5.57 | 56  | 226018  | 52.896  | ug/l | 98     |
| 32) 1,1,1-Trichloroethane     | 5.48 | 97  | 278260  | 53.128  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 5.79 | 75  | 216943  | 53.764  | ug/l | 99     |
| 37) Ethyl Acetate             | 4.82 | 43  | 115032  | 56.948  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 5.77 | 117 | 262276  | 53.452  | ug/l | 99     |

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 Sample : VSTDICV050  
 Misc : 5.00g/5.0mL/MSVOA X/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleID :  
 ICVVX090219

Manual Integrations  
 APPROVED

sam  
 9/3/2019 2:15:50 PM

Quant Time: Sep 03 05:22:55 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X090219S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Sep 03 05:18:49 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 7.45  | 83   | 257982   | 52.654   | ug/l   | 100      |
| 40) Benzene                    | 6.13  | 78   | 637182   | 54.675   | ug/l   | 98       |
| 41) Methacrylonitrile          | 5.03  | 41   | 67389    | 55.357   | ug/l   | 98       |
| 42) 1,2-Dichloroethane         | 6.18  | 62   | 214074   | 54.224   | ug/l   | 99       |
| 43) Isopropyl Acetate          | 6.43  | 43   | 232392   | 55.659   | ug/l   | 100      |
| 44) Trichloroethene            | 7.20  | 130  | 207108   | 53.507   | ug/l   | 97       |
| 45) 1,2-Dichloropropane        | 7.50  | 63   | 158561   | 54.069   | ug/l   | 98       |
| 46) Dibromomethane             | 7.65  | 93   | 96905    | 55.128   | ug/l   | 99       |
| 47) Bromodichloromethane       | 7.89  | 83   | 239817   | 54.044   | ug/l   | 97       |
| 48) Methyl methacrylate        | 7.76  | 41   | 115137   | 55.923   | ug/l   | 99       |
| 49) 1,4-Dioxane                | 7.73  | 88   | 31727    | 1098.424 | ug/l   | 97       |
| 51) 4-Methyl-2-Pentanone       | 8.64  | 43   | 579728   | 276.272  | ug/l   | 100      |
| 52) Toluene                    | 8.78  | 92   | 430834   | 54.562   | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 246988   | 54.985   | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 8.43  | 75   | 278646   | 55.112   | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 140251   | 54.654   | ug/l   | 99       |
| 56) Ethyl methacrylate         | 9.17  | 69   | 189333   | 55.557   | ug/l   | 100      |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 230724   | 54.746   | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 8.31  | 63   | 427173   | 275.835  | ug/l   | 99       |
| 59) 2-Hexanone                 | 9.48  | 43   | 412566   | 276.184  | ug/l   | 100      |
| 60) Dibromochloromethane       | 9.57  | 129  | 195959   | 54.932   | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 9.67  | 107  | 142305   | 55.675   | ug/l   | 99       |
| 64) Tetrachloroethene          | 9.33  | 164  | 216534   | 52.486   | ug/l   | 98       |
| 65) Chlorobenzene              | 10.14 | 112  | 504176   | 53.280   | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.21 | 131  | 204653   | 53.893   | ug/l   | 100      |
| 67) Ethyl Benzene              | 10.25 | 91   | 844134   | 52.802   | ug/l   | 99       |
| 68) m/p-Xylenes                | 10.35 | 106  | 662821   | 105.586  | ug/l   | 99       |
| 69) o-Xylene                   | 10.70 | 106  | 320655   | 52.657   | ug/l   | 100      |
| 70) Styrene                    | 10.71 | 104  | 564792   | 54.057   | ug/l   | 99       |
| 71) Bromoform                  | 10.85 | 173  | 144654   | 54.901   | ug/l # | 99       |
| 73) Isopropylbenzene           | 11.01 | 105  | 871020   | 52.688   | ug/l   | 100      |
| 74) N-amyl acetate             | 10.89 | 43   | 225043   | 54.592   | ug/l   | 100      |
| 75) 1,1,2,2-Tetrachloroethane  | 11.26 | 83   | 162247   | 53.608   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 11.29 | 75   | 119248m  | 50.851   | ug/l   |          |
| 77) Bromobenzene               | 11.25 | 156  | 260872   | 53.970   | ug/l   | 99       |
| 78) n-propylbenzene            | 11.35 | 91   | 981443   | 52.756   | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 582323   | 52.873   | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 11.50 | 105  | 757162   | 53.094   | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 51603    | 51.911   | ug/l   | 99       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 702522   | 53.159   | ug/l   | 100      |
| 83) tert-Butylbenzene          | 11.77 | 119  | 785095   | 53.261   | ug/l   | 100      |
| 84) 1,2,4-Trimethylbenzene     | 11.80 | 105  | 764966   | 52.930   | ug/l   | 100      |
| 85) sec-Butylbenzene           | 11.94 | 105  | 890536   | 52.595   | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 12.06 | 119  | 873480   | 52.690   | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 477465   | 52.670   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 12.09 | 146  | 476963   | 52.957   | ug/l   | 100      |
| 89) n-Butylbenzene             | 12.39 | 91   | 757413   | 52.756   | ug/l   | 100      |
| 90) Hexachloroethane           | 12.59 | 117  | 165907   | 53.306   | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 439332   | 53.682   | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 12.99 | 75   | 32315    | 54.381   | ug/l   | 97       |

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Operator : SY/SP  
Sample : VSTDICV050  
Misc : 5.00g/5.0mL/MSVOA X/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
ICVVX090219

Manual Integrations  
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sam  
9/3/2019 2:15:50 PM

Quant Time: Sep 03 05:22:55 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X090219S.M  
Quant Title : SW846 8260  
QLast Update : Tue Sep 03 05:18:49 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.64 | 180  | 381868   | 53.627 | ug/l  | 100      |
| 94) Hexachlorobutadiene    | 13.78 | 225  | 260269   | 52.314 | ug/l  | 98       |
| 95) Naphthalene            | 13.83 | 128  | 606798   | 55.420 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 14.02 | 180  | 340709   | 54.416 | ug/l  | 100      |

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

