

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX083119\  
 Data File : VX011964.D  
 Acq On : 31 Aug 2019 22:07  
 Operator : SY/SP  
 Sample : VSTDCCC050  
 Misc : 5.00g/5.0mL/MSVOA X/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

sam  
 9/3/2019 12:53:07 PM

Quant Time: Sep 01 03:47:21 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X082919S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Aug 30 01:59:05 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.64  | 168  | 313564   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.84  | 114  | 450817   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.10 | 117  | 432171   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 255669   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.04   | 65  | 165509   | 55.09 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 110.18% |      |
| 35) Dibromofluoromethane  | 5.48   | 113 | 158255   | 54.74 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 109.48% |      |
| 50) Toluene-d8            | 8.71   | 98  | 549090   | 53.14 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 106.28% |      |
| 62) 4-Bromofluorobenzene  | 11.14  | 95  | 232624   | 51.32 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.64% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.19 | 85  | 86149   | 45.521  | ug/l | 98     |
| 3) Chloromethane              | 1.31 | 50  | 101414  | 46.226  | ug/l | 100    |
| 4) Vinyl Chloride             | 1.39 | 62  | 100022  | 47.745  | ug/l | 97     |
| 5) Bromomethane               | 1.62 | 94  | 76596   | 52.842  | ug/l | 99     |
| 6) Chloroethane               | 1.71 | 64  | 67567   | 51.822  | ug/l | 99     |
| 7) Trichlorofluoromethane     | 1.92 | 101 | 181336  | 49.841  | ug/l | 100    |
| 8) Diethyl Ether              | 2.17 | 74  | 68634   | 54.891  | ug/l | 98     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.37 | 101 | 118468  | 49.960  | ug/l | 98     |
| 10) Methyl Iodide             | 2.50 | 142 | 126381  | 48.904  | ug/l | 99     |
| 11) Tert butyl alcohol        | 3.03 | 59  | 80851   | 279.733 | ug/l | 100    |
| 12) 1,1-Dichloroethene        | 2.36 | 96  | 113192  | 51.397  | ug/l | 98     |
| 13) Acrolein                  | 2.28 | 56  | 31951   | 222.104 | ug/l | 97     |
| 14) Allyl chloride            | 2.71 | 41  | 216981  | 52.523  | ug/l | 99     |
| 15) Acrylonitrile             | 3.12 | 53  | 193180  | 281.274 | ug/l | 99     |
| 16) Acetone                   | 2.42 | 43  | 171284  | 264.986 | ug/l | 100    |
| 17) Carbon Disulfide          | 2.56 | 76  | 294393  | 46.604  | ug/l | 99     |
| 18) Methyl Acetate            | 2.76 | 43  | 107197  | 59.910  | ug/l | 98     |
| 19) Methyl tert-butyl Ether   | 3.17 | 73  | 402379  | 56.398  | ug/l | 100    |
| 20) Methylene Chloride        | 2.84 | 84  | 150303  | 54.985  | ug/l | 95     |
| 21) trans-1,2-Dichloroethene  | 3.15 | 96  | 138399  | 53.349  | ug/l | 98     |
| 22) Diisopropyl ether         | 3.84 | 45  | 466260  | 55.285  | ug/l | 99     |
| 23) Vinyl Acetate             | 3.80 | 43  | 1462147 | 269.655 | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 3.68 | 63  | 256795  | 55.216  | ug/l | 99     |
| 25) 2-Butanone                | 4.65 | 43  | 263036  | 279.397 | ug/l | 98     |
| 26) 2,2-Dichloropropane       | 4.56 | 77  | 195524  | 50.125  | ug/l | 100    |
| 27) cis-1,2-Dichloroethene    | 4.58 | 96  | 174934  | 57.248  | ug/l | 98     |
| 28) Bromochloromethane        | 5.00 | 49  | 110681  | 53.036  | ug/l | 96     |
| 29) Tetrahydrofuran           | 5.11 | 42  | 163310  | 277.920 | ug/l | 99     |
| 30) Chloroform                | 5.19 | 83  | 283587  | 57.028  | ug/l | 99     |
| 31) Cyclohexane               | 5.56 | 56  | 170303  | 45.399  | ug/l | 98     |
| 32) 1,1,1-Trichloroethane     | 5.48 | 97  | 242414  | 54.879  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 5.78 | 75  | 177226  | 49.621  | ug/l | 99     |
| 37) Ethyl Acetate             | 4.81 | 43  | 115212  | 54.496  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 5.77 | 117 | 215626  | 52.056  | ug/l | 99     |

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 Operator : SY/SP  
 Sample : VSTDCCC050  
 Misc : 5.00g/5.0mL/MSVOA X/SOIL  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
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sam  
 9/3/2019 12:53:07 PM

Quant Time: Sep 01 03:47:21 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X082919S.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Aug 30 01:59:05 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 7.45  | 83   | 187837   | 44.154   | ug/l   | 98       |
| 40) Benzene                    | 6.12  | 78   | 568782   | 53.352   | ug/l   | 98       |
| 41) Methacrylonitrile          | 5.02  | 41   | 68022    | 54.645   | ug/l   | 99       |
| 42) 1,2-Dichloroethane         | 6.18  | 62   | 202520   | 55.860   | ug/l   | 100      |
| 43) Isopropyl Acetate          | 6.43  | 43   | 232251   | 54.184   | ug/l   | 99       |
| 44) Trichloroethene            | 7.20  | 130  | 176491   | 53.506   | ug/l   | 97       |
| 45) 1,2-Dichloropropane        | 7.50  | 63   | 151204   | 54.221   | ug/l   | 99       |
| 46) Dibromomethane             | 7.65  | 93   | 91384    | 55.217   | ug/l   | 98       |
| 47) Bromodichloromethane       | 7.89  | 83   | 229317   | 55.878   | ug/l   | 100      |
| 48) Methyl methacrylate        | 7.76  | 41   | 114685   | 54.990   | ug/l   | 99       |
| 49) 1,4-Dioxane                | 7.73  | 88   | 33184    | 1157.077 | ug/l   | 97       |
| 51) 4-Methyl-2-Pentanone       | 8.64  | 43   | 595254   | 273.367  | ug/l   | 99       |
| 52) Toluene                    | 8.78  | 92   | 379636   | 53.826   | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 9.03  | 75   | 228074   | 54.255   | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 8.43  | 75   | 253542   | 53.729   | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 135941   | 56.108   | ug/l   | 98       |
| 56) Ethyl methacrylate         | 9.17  | 69   | 185496   | 55.164   | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 224891   | 55.923   | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 8.30  | 63   | 436982   | 272.840  | ug/l   | 98       |
| 59) 2-Hexanone                 | 9.48  | 43   | 417641   | 270.012  | ug/l   | 99       |
| 60) Dibromochloromethane       | 9.57  | 129  | 186473   | 57.304   | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 9.67  | 107  | 135691   | 56.487   | ug/l   | 100      |
| 64) Tetrachloroethene          | 9.33  | 164  | 196701   | 56.582   | ug/l   | 98       |
| 65) Chlorobenzene              | 10.14 | 112  | 457470   | 54.624   | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 10.21 | 131  | 188946   | 55.791   | ug/l   | 99       |
| 67) Ethyl Benzene              | 10.25 | 91   | 751146   | 52.728   | ug/l   | 100      |
| 68) m/p-Xylenes                | 10.35 | 106  | 582036   | 105.810  | ug/l   | 100      |
| 69) o-Xylene                   | 10.70 | 106  | 287393   | 53.615   | ug/l   | 100      |
| 70) Styrene                    | 10.71 | 104  | 514556   | 54.461   | ug/l   | 100      |
| 71) Bromoform                  | 10.85 | 173  | 136040   | 56.808   | ug/l # | 100      |
| 73) Isopropylbenzene           | 11.01 | 105  | 765818   | 52.131   | ug/l   | 100      |
| 74) N-amyl acetate             | 10.89 | 43   | 223945   | 51.369   | ug/l # | 91       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.26 | 83   | 161172   | 53.609   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 11.29 | 75   | 121115m  | 48.157   | ug/l   |          |
| 77) Bromobenzene               | 11.25 | 156  | 233828   | 54.883   | ug/l   | 97       |
| 78) n-propylbenzene            | 11.35 | 91   | 860324   | 51.646   | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 529341   | 52.792   | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 11.50 | 105  | 669977   | 52.838   | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 49347    | 49.291   | ug/l   | 98       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 636941   | 52.655   | ug/l   | 99       |
| 83) tert-Butylbenzene          | 11.76 | 119  | 675176   | 52.477   | ug/l   | 100      |
| 84) 1,2,4-Trimethylbenzene     | 11.80 | 105  | 682126   | 52.492   | ug/l   | 100      |
| 85) sec-Butylbenzene           | 11.94 | 105  | 768826   | 51.446   | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 12.06 | 119  | 752825   | 51.951   | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 428366   | 54.099   | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 12.09 | 146  | 430967   | 53.839   | ug/l   | 99       |
| 89) n-Butylbenzene             | 12.38 | 91   | 642011   | 50.077   | ug/l   | 99       |
| 90) Hexachloroethane           | 12.59 | 117  | 151012   | 53.867   | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene        | 12.38 | 146  | 404005   | 54.879   | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 12.99 | 75   | 32024    | 53.473   | ug/l   | 96       |

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Sample : VSTDCCC050  
Misc : 5.00g/5.0mL/MSVOA X/SOIL  
ALS Vial : 1 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
VSTDCCC050

Manual Integrations  
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sam  
9/3/2019 12:53:07 PM

Quant Time: Sep 01 03:47:21 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X082919S.M  
Quant Title : SW846 8260  
QLast Update : Fri Aug 30 01:59:05 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.64 | 180  | 329917   | 53.223 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 13.77 | 225  | 210302   | 50.801 | ug/l  | 98       |
| 95) Naphthalene            | 13.83 | 128  | 567663   | 53.360 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 14.01 | 180  | 296815   | 52.951 | ug/l  | 100      |

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

