

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW062818\  
 Data File : VW003630.D  
 Acq On : 28 Jun 2018 11:13  
 Operator : SY/AP  
 Sample : VSTDCCC050  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

apatel  
 6/29/2018 10:21:55 AM

Quant Time: Jun 29 07:03:28 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W061318S.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Jun 16 05:18:54 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 239403   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.85  | 114  | 366102   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.64 | 117  | 338630   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.57 | 152  | 179466   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.31   | 65  | 132123   | 50.95 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.90% |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 121308   | 53.33 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 106.66% |      |
| 50) Toluene-d8            | 10.33  | 98  | 486043   | 53.88 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 107.76% |      |
| 62) 4-Bromofluorobenzene  | 12.63  | 95  | 177299   | 55.54 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 111.08% |      |

## Target Compounds

|                               |      |     |         |        |        | Qvalue |
|-------------------------------|------|-----|---------|--------|--------|--------|
| 2) Dichlorodifluoromethane    | 2.01 | 85  | 37752m  | 52.16  | ug/l   |        |
| 3) Chloromethane              | 2.21 | 50  | 87089   | 47.62  | ug/l   | 98     |
| 4) Vinyl Chloride             | 2.36 | 62  | 124449  | 46.68  | ug/l   | 99     |
| 5) Bromomethane               | 2.78 | 94  | 75386   | 42.55  | ug/l   | 100    |
| 6) Chloroethane               | 2.92 | 64  | 80462   | 43.36  | ug/l   | 99     |
| 7) Trichlorofluoromethane     | 3.25 | 101 | 80931   | 50.67  | ug/l   | 92     |
| 8) Diethyl Ether              | 3.67 | 74  | 54491   | 46.45  | ug/l   | 96     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.06 | 101 | 112034  | 50.52  | ug/l   | 99     |
| 10) Methyl Iodide             | 4.26 | 142 | 165157  | 49.24  | ug/l   | 99     |
| 11) Tert butyl alcohol        | 5.26 | 59  | 33057   | 237.70 | ug/l # | 79     |
| 12) 1,1-Dichloroethene        | 4.03 | 96  | 107712  | 49.70  | ug/l   | 95     |
| 13) Acrolein                  | 3.90 | 56  | 45235   | 227.50 | ug/l   | 98     |
| 14) Allyl chloride            | 4.66 | 41  | 191242  | 50.94  | ug/l   | 98     |
| 15) Acrylonitrile             | 5.38 | 53  | 121868  | 252.47 | ug/l   | 100    |
| 16) Acetone                   | 4.15 | 43  | 144979  | 266.58 | ug/l   | 94     |
| 17) Carbon Disulfide          | 4.37 | 76  | 305746  | 47.72  | ug/l   | 99     |
| 18) Methyl Acetate            | 4.68 | 43  | 67497   | 52.32  | ug/l   | 97     |
| 19) Methyl tert-butyl Ether   | 5.43 | 73  | 206440  | 50.86  | ug/l   | 98     |
| 20) Methylene Chloride        | 4.91 | 84  | 117084  | 50.73  | ug/l   | 98     |
| 21) trans-1,2-Dichloroethene  | 5.41 | 96  | 118069  | 50.06  | ug/l   | 96     |
| 22) Diisopropyl ether         | 6.31 | 45  | 397094  | 52.56  | ug/l   | 99     |
| 23) Vinyl Acetate             | 6.26 | 43  | 1109788 | 254.90 | ug/l   | 99     |
| 24) 1,1-Dichloroethane        | 6.21 | 63  | 230307  | 51.35  | ug/l   | 98     |
| 25) 2-Butanone                | 7.18 | 43  | 177400  | 262.32 | ug/l   | 99     |
| 26) 2,2-Dichloropropane       | 7.17 | 77  | 150134  | 50.16  | ug/l   | 99     |
| 27) cis-1,2-Dichloroethene    | 7.17 | 96  | 132487  | 51.13  | ug/l   | 98     |
| 28) Bromochloromethane        | 7.51 | 49  | 102905  | 55.13  | ug/l   | 98     |
| 29) Tetrahydrofuran           | 7.54 | 42  | 102813  | 248.76 | ug/l   | 99     |
| 30) Chloroform                | 7.68 | 83  | 237437  | 51.96  | ug/l   | 99     |
| 31) Cyclohexane               | 7.96 | 56  | 200539  | 47.86  | ug/l   | 98     |
| 32) 1,1,1-Trichloroethane     | 7.87 | 97  | 192522  | 51.04  | ug/l   | 99     |
| 36) 1,1-Dichloropropene       | 8.09 | 75  | 185470  | 52.46  | ug/l   | 99     |
| 37) Ethyl Acetate             | 7.26 | 43  | 71548   | 48.85  | ug/l   | 98     |
| 38) Carbon Tetrachloride      | 8.07 | 117 | 181514  | 52.34  | ug/l   | 98     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW062818\  
 Data File : VW003630.D  
 Acq On : 28 Jun 2018 11:13  
 Operator : SY/AP  
 Sample : VSTDCCC050  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleID :  
 VSTDCCC050

Manual Integrations  
 APPROVED

apatel  
 6/29/2018 10:21:55 AM

Quant Time: Jun 29 07:03:28 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W061318S.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Jun 16 05:18:54 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.34  | 83   | 213689   | 52.23   | ug/l   | 98       |
| 40) Benzene                    | 8.32  | 78   | 515190   | 52.86   | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.49  | 41   | 45999    | 51.18   | ug/l   | 100      |
| 42) 1,2-Dichloroethane         | 8.40  | 62   | 155231   | 50.84   | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.43  | 43   | 143090   | 49.20   | ug/l   | 99       |
| 44) Trichloroethene            | 9.09  | 130  | 132845   | 51.44   | ug/l   | 96       |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 133029   | 53.61   | ug/l   | 99       |
| 46) Dibromomethane             | 9.46  | 93   | 65134    | 51.27   | ug/l   | 97       |
| 47) Bromodichloromethane       | 9.65  | 83   | 172202   | 52.88   | ug/l   | 100      |
| 48) Methyl methacrylate        | 9.44  | 41   | 71614    | 52.40   | ug/l   | 97       |
| 49) 1,4-Dioxane                | 9.50  | 88   | 19466    | 1014.82 | ug/l   | 99       |
| 51) 4-Methyl-2-Pentanone       | 10.22 | 43   | 377951   | 255.03  | ug/l   | 99       |
| 52) Toluene                    | 10.39 | 92   | 328982   | 52.64   | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.61 | 75   | 174490   | 52.46   | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 10.08 | 75   | 200754   | 53.02   | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 91799    | 51.28   | ug/l   | 98       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 113684   | 52.30   | ug/l   | 97       |
| 57) 1,3-Dichloropropane        | 10.94 | 76   | 160037   | 51.83   | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.93  | 63   | 258740   | 265.51  | ug/l   | 98       |
| 59) 2-Hexanone                 | 10.98 | 43   | 281769   | 272.16  | ug/l   | 100      |
| 60) Dibromochloromethane       | 11.13 | 129  | 111730   | 52.48   | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.24 | 107  | 86595    | 51.14   | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.87 | 164  | 113943   | 50.31   | ug/l   | 98       |
| 65) Chlorobenzene              | 11.66 | 112  | 360051   | 51.06   | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.74 | 131  | 128324   | 51.78   | ug/l   | 100      |
| 67) Ethyl Benzene              | 11.74 | 91   | 658989   | 52.72   | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.85 | 106  | 501079   | 105.45  | ug/l   | 99       |
| 69) o-Xylene                   | 12.17 | 106  | 233768   | 53.08   | ug/l   | 100      |
| 70) Styrene                    | 12.19 | 104  | 394302   | 53.79   | ug/l   | 100      |
| 71) Bromoform                  | 12.35 | 173  | 65507    | 51.01   | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.47 | 105  | 662669   | 53.09   | ug/l   | 99       |
| 74) N-amyl acetate             | 12.28 | 43   | 140347   | 49.40   | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.72 | 83   | 108435   | 51.35   | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 76521m   | 49.88   | ug/l   |          |
| 77) Bromobenzene               | 12.76 | 156  | 146165   | 50.28   | ug/l   | 96       |
| 78) n-propylbenzene            | 12.81 | 91   | 825335   | 54.00   | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.90 | 91   | 456104   | 52.80   | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.95 | 105  | 561601   | 53.60   | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.52 | 75   | 35210    | 52.81   | ug/l   | 99       |
| 82) 4-Chlorotoluene            | 13.00 | 91   | 482135   | 52.62   | ug/l   | 100      |
| 83) tert-Butylbenzene          | 13.21 | 119  | 491205   | 55.01   | ug/l   | 97       |
| 84) 1,2,4-Trimethylbenzene     | 13.26 | 105  | 576816   | 53.52   | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.40 | 105  | 712519   | 53.68   | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.51 | 119  | 626015   | 53.48   | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.51 | 146  | 307426   | 51.48   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.58 | 146  | 302625   | 50.97   | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.83 | 91   | 615899   | 53.98   | ug/l   | 100      |
| 90) Hexachloroethane           | 14.10 | 117  | 111577   | 52.69   | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene        | 13.88 | 146  | 270104   | 51.63   | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.49 | 75   | 17566    | 49.43   | ug/l   | 98       |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW062818\  
Data File : VW003630.D  
Acq On : 28 Jun 2018 11:13  
Operator : SY/AP  
Sample : VSTDCCC050  
Misc : 5.00G/5ML/MSVOA W/SOIL  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :  
VSTDCCC050

Manual Integrations  
APPROVED

apatel  
6/29/2018 10:21:55 AM

Quant Time: Jun 29 07:03:28 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W061318S.M  
Quant Title : SW846 8260  
QLast Update : Sat Jun 16 05:18:54 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.15 | 180  | 190810   | 51.96 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.25 | 225  | 112635   | 50.99 | ug/l  | 98       |
| 95) Naphthalene            | 15.38 | 128  | 321151   | 51.55 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.57 | 180  | 165313   | 51.14 | ug/l  | 99       |

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

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA W\DATA\VW062818\  
Data File : VW003630.D  
Acq On : 28 Jun 2018 11:13  
Operator : SY/AP  
Sample : VSTDCCC050  
Misc : 5.00G/5ML/MSVOA W/SOIL  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :  
VSTDCCC050

Manual Integrations  
APPROVED

apatel  
6/29/2018 10:21:55 AM

Quant Time: Jun 29 07:03:28 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_W\METHOD\82W061318S.M  
Quant Title : SW846 8260  
QLast Update : Sat Jun 16 05:18:54 2018  
Response via : Initial Calibration

