

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW042220\  
 Data File : VW015319.D  
 Acq On : 22 Apr 2020 19:51  
 Operator : SY/VA  
 Sample : VSTDCCC050  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 22 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

MMDadoda  
 4/23/2020 1:33:04 PM

Quant Time: Apr 23 07:52:51 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W042020S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Apr 21 06:39:58 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 212821   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.84  | 114  | 307140   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 298092   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.56 | 152  | 168685   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.31   | 65  | 87759    | 50.43 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.86% |      |
| 35) Dibromofluoromethane  | 7.88   | 113 | 89016    | 52.32 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 104.64% |      |
| 50) Toluene-d8            | 10.32  | 98  | 357891   | 50.01 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.02% |      |
| 62) 4-Bromofluorobenzene  | 12.62  | 95  | 140415   | 51.42 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.84% |      |

## Target Compounds

|                               |      |     |        |         |        | Qvalue |
|-------------------------------|------|-----|--------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 2.00 | 85  | 78769  | 46.869  | ug/l   | 98     |
| 3) Chloromethane              | 2.22 | 50  | 86295  | 47.151  | ug/l   | 99     |
| 4) Vinyl Chloride             | 2.36 | 62  | 101125 | 46.792  | ug/l   | 98     |
| 5) Bromomethane               | 2.75 | 94  | 86930  | 56.571  | ug/l   | 92     |
| 6) Chloroethane               | 2.92 | 64  | 63844  | 47.625  | ug/l   | 99     |
| 7) Trichlorofluoromethane     | 3.26 | 101 | 148959 | 48.708  | ug/l   | 99     |
| 8) Diethyl Ether              | 3.68 | 74  | 43761  | 50.980  | ug/l   | 86     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.06 | 101 | 93601  | 49.632  | ug/l   | 91     |
| 10) Methyl Iodide             | 4.28 | 142 | 94958  | 47.939  | ug/l   | 99     |
| 11) Tert butyl alcohol        | 5.17 | 59  | 31242  | 220.222 | ug/l   | 99     |
| 12) 1,1-Dichloroethene        | 4.04 | 96  | 89565  | 49.340  | ug/l   | 92     |
| 13) Acrolein                  | 3.90 | 56  | 20104  | 270.753 | ug/l   | 97     |
| 14) Allyl chloride            | 4.67 | 41  | 112593 | 46.755  | ug/l # | 84     |
| 15) Acrylonitrile             | 5.37 | 53  | 79092  | 242.117 | ug/l   | 99     |
| 16) Acetone                   | 4.13 | 43  | 58483  | 192.397 | ug/l   | 100    |
| 17) Carbon Disulfide          | 4.39 | 76  | 252528 | 46.813  | ug/l   | 99     |
| 18) Methyl Acetate            | 4.67 | 43  | 38431  | 47.763  | ug/l   | 95     |
| 19) Methyl tert-butyl Ether   | 5.43 | 73  | 215513 | 51.718  | ug/l   | 96     |
| 20) Methylene Chloride        | 4.92 | 84  | 96588  | 48.484  | ug/l   | 90     |
| 21) trans-1,2-Dichloroethene  | 5.43 | 96  | 104203 | 50.615  | ug/l   | 93     |
| 22) Diisopropyl ether         | 6.32 | 45  | 240256 | 52.006  | ug/l   | 94     |
| 23) Vinyl Acetate             | 6.26 | 43  | 686333 | 253.167 | ug/l   | 95     |
| 24) 1,1-Dichloroethane        | 6.22 | 63  | 163846 | 51.174  | ug/l   | 98     |
| 25) 2-Butanone                | 7.17 | 43  | 95175  | 235.998 | ug/l # | 88     |
| 26) 2,2-Dichloropropane       | 7.17 | 77  | 155928 | 46.292  | ug/l   | 99     |
| 27) cis-1,2-Dichloroethene    | 7.17 | 96  | 118573 | 53.349  | ug/l   | 96     |
| 28) Bromochloromethane        | 7.51 | 49  | 60824  | 52.251  | ug/l # | 72     |
| 29) Tetrahydrofuran           | 7.53 | 42  | 62558  | 248.982 | ug/l   | 87     |
| 30) Chloroform                | 7.68 | 83  | 183385 | 53.070  | ug/l   | 100    |
| 31) Cyclohexane               | 7.95 | 56  | 142363 | 44.235  | ug/l   | 89     |
| 32) 1,1,1-Trichloroethane     | 7.87 | 97  | 170120 | 51.010  | ug/l   | 99     |
| 36) 1,1-Dichloropropene       | 8.09 | 75  | 140053 | 50.522  | ug/l   | 98     |
| 37) Ethyl Acetate             | 7.25 | 43  | 45433  | 50.500  | ug/l   | 97     |
| 38) Carbon Tetrachloride      | 8.07 | 117 | 151242 | 49.925  | ug/l   | 97     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW042220\  
 Data File : VW015319.D  
 Acq On : 22 Apr 2020 19:51  
 Operator : SY/VA  
 Sample : VSTDCCC050  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 22 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleID :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

MMDadoda  
 4/23/2020 1:33:04 PM

Quant Time: Apr 23 07:52:51 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W042020S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Apr 21 06:39:58 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 9.34  | 83   | 174462   | 47.284  | ug/l   | 96       |
| 40) Benzene                    | 8.32  | 78   | 380934   | 51.442  | ug/l   | 96       |
| 41) Methacrylonitrile          | 7.49  | 41   | 29114    | 53.934  | ug/l   | 97       |
| 42) 1,2-Dichloroethane         | 8.40  | 62   | 113423   | 52.030  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.42  | 43   | 93955    | 49.792  | ug/l   | 95       |
| 44) Trichloroethene            | 9.09  | 130  | 121585   | 53.678  | ug/l   | 94       |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 88646    | 51.477  | ug/l   | 98       |
| 46) Dibromomethane             | 9.46  | 93   | 52908    | 53.113  | ug/l # | 88       |
| 47) Bromodichloromethane       | 9.65  | 83   | 140536   | 52.775  | ug/l   | 98       |
| 48) Methyl methacrylate        | 9.43  | 41   | 42462    | 47.603  | ug/l # | 81       |
| 49) 1,4-Dioxane                | 9.45  | 88   | 12788    | 962.972 | ug/l   | 93       |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 223800   | 252.661 | ug/l   | 96       |
| 52) Toluene                    | 10.39 | 92   | 270956   | 52.283  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.60 | 75   | 137812   | 52.485  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 10.07 | 75   | 158765   | 52.020  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 75755    | 54.310  | ug/l   | 96       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 92204    | 51.312  | ug/l   | 93       |
| 57) 1,3-Dichloropropane        | 10.93 | 76   | 123932   | 53.637  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 9.92  | 63   | 208440   | 250.202 | ug/l   | 90       |
| 59) 2-Hexanone                 | 10.97 | 43   | 153447   | 242.682 | ug/l   | 96       |
| 60) Dibromochloromethane       | 11.13 | 129  | 100541   | 54.591  | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 11.23 | 107  | 73592    | 54.070  | ug/l   | 97       |
| 64) Tetrachloroethene          | 10.86 | 164  | 109304   | 51.377  | ug/l   | 94       |
| 65) Chlorobenzene              | 11.66 | 112  | 302139   | 51.653  | ug/l   | 97       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.73 | 131  | 111688   | 53.125  | ug/l   | 98       |
| 67) Ethyl Benzene              | 11.73 | 91   | 550834   | 50.496  | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.84 | 106  | 431098   | 100.822 | ug/l   | 99       |
| 69) o-Xylene                   | 12.16 | 106  | 207678   | 52.036  | ug/l   | 98       |
| 70) Styrene                    | 12.18 | 104  | 358145   | 52.645  | ug/l   | 99       |
| 71) Bromoform                  | 12.35 | 173  | 63498    | 53.603  | ug/l # | 97       |
| 73) Isopropylbenzene           | 12.46 | 105  | 566969   | 48.477  | ug/l   | 100      |
| 74) N-amyl acetate             | 12.27 | 43   | 96474    | 47.414  | ug/l   | 95       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.71 | 83   | 79839    | 48.079  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 50671m   | 38.830  | ug/l   |          |
| 77) Bromobenzene               | 12.75 | 156  | 137022   | 50.993  | ug/l   | 82       |
| 78) n-propylbenzene            | 12.80 | 91   | 659941   | 48.463  | ug/l   | 96       |
| 79) 2-Chlorotoluene            | 12.89 | 91   | 383473   | 49.969  | ug/l   | 96       |
| 80) 1,3,5-Trimethylbenzene     | 12.94 | 105  | 504609   | 50.086  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 12.51 | 75   | 26793    | 44.882  | ug/l   | 93       |
| 82) 4-Chlorotoluene            | 12.99 | 91   | 406155   | 49.846  | ug/l   | 97       |
| 83) tert-Butylbenzene          | 13.21 | 119  | 439892   | 49.956  | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 13.25 | 105  | 506609   | 50.982  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.38 | 105  | 593452   | 48.800  | ug/l   | 97       |
| 86) p-Isopropyltoluene         | 13.50 | 119  | 566761   | 50.156  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 13.50 | 146  | 278012   | 52.072  | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene        | 13.58 | 146  | 266517   | 50.924  | ug/l   | 96       |
| 89) n-Butylbenzene             | 13.82 | 91   | 506348   | 49.024  | ug/l   | 98       |
| 90) Hexachloroethane           | 14.09 | 117  | 104111   | 50.238  | ug/l   | 76       |
| 91) 1,2-Dichlorobenzene        | 13.87 | 146  | 245409   | 52.896  | ug/l   | 97       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.49 | 75   | 14321    | 47.656  | ug/l   | 83       |

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA W\DATA\VW042220\  
Data File : VW015319.D  
Acq On : 22 Apr 2020 19:51  
Operator : SY/VA  
Sample : VSTDCCC050  
Misc : 5.00G/5ML/MSVOA W/SOIL  
ALS Vial : 22 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :  
VSTDCCC050EC

Manual Integrations  
APPROVED

MMDadoda  
4/23/2020 1:33:04 PM

Quant Time: Apr 23 07:52:51 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_W\METHOD\82W042020S.M  
Quant Title : SW846 8260  
QLast Update : Tue Apr 21 06:39:58 2020  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.13 | 180  | 174171   | 54.010 | ug/l  | 97       |
| 94) Hexachlorobutadiene    | 15.24 | 225  | 111080   | 51.666 | ug/l  | 97       |
| 95) Naphthalene            | 15.36 | 128  | 273092   | 52.645 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.55 | 180  | 146789   | 55.946 | ug/l  | 97       |

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

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA W\DATA\VW042220\  
Data File : VW015319.D  
Acq On : 22 Apr 2020 19:51  
Operator : SY/VA  
Sample : VSTDCCC050  
Misc : 5.00G/5ML/MSVOA W/SOIL  
ALS Vial : 22 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :  
VSTDCCC050EC

Manual Integrations  
APPROVED

MMDadoda  
4/23/2020 1:33:04 PM

Quant Time: Apr 23 07:52:51 2020  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_W\METHOD\82W042020S.M  
Quant Title : SW846 8260  
QLast Update : Tue Apr 21 06:39:58 2020  
Response via : Initial Calibration

