

Data Path : Z:\VOASRV\HPCHEM1\MSVOA Y\DATA\VY092619\  
 Data File : VY000160.D  
 Acq On : 26 Sep 2019 18:11  
 Operator : SY/MD  
 Sample : VSTDCCC050  
 Misc : 5.00g/5.00ml/MSVOA Y/SOIL  
 ALS Vial : 21 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleId :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

MMDadoda  
 10/2/2019 9:13:23 AM

Quant Time: Sep 26 18:45:58 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_Y\METHODS\82Y092619S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Sep 26 14:30:12 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.79  | 168  | 167019   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.69  | 114  | 292723   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.49 | 117  | 259109   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.42 | 152  | 124135   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.15   | 65  | 81734    | 55.88 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 111.76% |      |
| 35) Dibromofluoromethane  | 7.72   | 113 | 83143    | 54.24 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 108.48% |      |
| 50) Toluene-d8            | 10.18  | 98  | 338675   | 52.21 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 104.42% |      |
| 62) 4-Bromofluorobenzene  | 12.48  | 95  | 112849   | 47.73 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 95.46%  |      |

## Target Compounds

|                               |      |     |        |         |        | Qvalue |
|-------------------------------|------|-----|--------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.90 | 85  | 62631  | 54.782  | ug/l   | 98     |
| 3) Chloromethane              | 2.11 | 50  | 91467  | 53.933  | ug/l   | 98     |
| 4) Vinyl Chloride             | 2.24 | 62  | 103534 | 49.741  | ug/l   | 94     |
| 5) Bromomethane               | 2.63 | 94  | 72812  | 51.878  | ug/l   | 99     |
| 6) Chloroethane               | 2.79 | 64  | 66186  | 51.221  | ug/l   | 92     |
| 7) Trichlorofluoromethane     | 3.12 | 101 | 128341 | 51.154  | ug/l   | 98     |
| 8) Diethyl Ether              | 3.53 | 74  | 58242  | 58.226  | ug/l   | 95     |
| 9) 1,1,2-Trichlorotrifluoroet | 3.90 | 101 | 88576  | 54.086  | ug/l   | 95     |
| 10) Methyl Iodide             | 4.08 | 142 | 125808 | 49.823  | ug/l   | 99     |
| 11) Tert butyl alcohol        | 4.97 | 59  | 44101  | 301.791 | ug/l   | 99     |
| 12) 1,1-Dichloroethene        | 3.86 | 96  | 89476  | 52.099  | ug/l   | 99     |
| 13) Acrolein                  | 3.73 | 56  | 48146  | 265.301 | ug/l   | 95     |
| 14) Allyl chloride            | 4.47 | 41  | 113269 | 52.704  | ug/l   | 99     |
| 15) Acrylonitrile             | 5.16 | 53  | 134996 | 296.753 | ug/l   | 98     |
| 16) Acetone                   | 3.95 | 43  | 89149  | 240.274 | ug/l # | 87     |
| 17) Carbon Disulfide          | 4.19 | 76  | 285080 | 53.513  | ug/l   | 98     |
| 18) Methyl Acetate            | 4.48 | 43  | 56967  | 53.706  | ug/l   | 99     |
| 19) Methyl tert-butyl Ether   | 5.22 | 73  | 232053 | 57.074  | ug/l   | 98     |
| 20) Methylene Chloride        | 4.71 | 84  | 111495 | 63.205  | ug/l   | 93     |
| 21) trans-1,2-Dichloroethene  | 5.22 | 96  | 102926 | 53.789  | ug/l   | 94     |
| 22) Diisopropyl ether         | 6.12 | 45  | 239012 | 52.919  | ug/l   | 97     |
| 23) Vinyl Acetate             | 6.06 | 43  | 800353 | 282.755 | ug/l   | 98     |
| 24) 1,1-Dichloroethane        | 6.02 | 63  | 148367 | 54.265  | ug/l   | 97     |
| 25) 2-Butanone                | 7.00 | 43  | 153726 | 273.758 | ug/l   | 99     |
| 26) 2,2-Dichloropropane       | 6.99 | 77  | 125355 | 50.423  | ug/l   | 99     |
| 27) cis-1,2-Dichloroethene    | 6.99 | 96  | 115070 | 54.110  | ug/l   | 99     |
| 28) Bromochloromethane        | 7.33 | 49  | 58979  | 56.620  | ug/l   | 99     |
| 29) Tetrahydrofuran           | 7.35 | 42  | 97909  | 282.834 | ug/l   | 96     |
| 30) Chloroform                | 7.51 | 83  | 151649 | 52.995  | ug/l   | 96     |
| 31) Cyclohexane               | 7.78 | 56  | 139032 | 49.186  | ug/l   | 97     |
| 32) 1,1,1-Trichloroethane     | 7.71 | 97  | 128998 | 51.411  | ug/l   | 99     |
| 36) 1,1-Dichloropropene       | 7.92 | 75  | 120860 | 49.683  | ug/l   | 98     |
| 37) Ethyl Acetate             | 7.08 | 43  | 66947  | 52.098  | ug/l   | 96     |
| 38) Carbon Tetrachloride      | 7.90 | 117 | 115305 | 48.554  | ug/l   | 98     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA Y\DATA\VY092619\  
 Data File : VY000160.D  
 Acq On : 26 Sep 2019 18:11  
 Operator : SY/MD  
 Sample : VSTDCCC050  
 Misc : 5.00g/5.00ml/MSVOA Y/SOIL  
 ALS Vial : 21 Sample Multiplier: 1

Instrument :  
 MSVOA\_Y  
 ClientSampleID :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

MMDadoda  
 10/2/2019 9:13:23 AM

Quant Time: Sep 26 18:45:58 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_Y\METHODS\82Y092619S.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Sep 26 14:30:12 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 9.18  | 83   | 172735   | 50.064   | ug/l   | 98       |
| 40) Benzene                    | 8.16  | 78   | 390880   | 50.868   | ug/l   | 99       |
| 41) Methacrylonitrile          | 7.32  | 41   | 40426m   | 65.310   | ug/l   |          |
| 42) 1,2-Dichloroethane         | 8.24  | 62   | 95745    | 51.210   | ug/l   | 99       |
| 43) Isopropyl Acetate          | 8.28  | 43   | 127714   | 53.803   | ug/l   | 100      |
| 44) Trichloroethene            | 8.94  | 130  | 118770   | 48.367   | ug/l   | 98       |
| 45) 1,2-Dichloropropane        | 9.22  | 63   | 89418    | 52.750   | ug/l   | 92       |
| 46) Dibromomethane             | 9.31  | 93   | 55103    | 53.265   | ug/l   | 95       |
| 47) Bromodichloromethane       | 9.50  | 83   | 120411   | 51.637   | ug/l   | 89       |
| 48) Methyl methacrylate        | 9.30  | 41   | 55192    | 51.924   | ug/l   | 99       |
| 49) 1,4-Dioxane                | 9.30  | 88   | 19023    | 1190.211 | ug/l   | 95       |
| 51) 4-Methyl-2-Pentanone       | 10.07 | 43   | 337473   | 273.906  | ug/l   | 99       |
| 52) Toluene                    | 10.24 | 92   | 251537   | 50.545   | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.47 | 75   | 130506   | 53.280   | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene    | 9.93  | 75   | 153795   | 52.981   | ug/l   | 93       |
| 55) 1,1,2-Trichloroethane      | 10.64 | 97   | 82023    | 53.323   | ug/l   | 97       |
| 56) Ethyl methacrylate         | 10.51 | 69   | 110062   | 55.005   | ug/l   | 96       |
| 57) 1,3-Dichloropropane        | 10.79 | 76   | 131636   | 53.253   | ug/l   | 98       |
| 58) 2-Chloroethyl Vinyl ether  | 9.78  | 63   | 251803   | 267.928  | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.83 | 43   | 240851   | 275.046  | ug/l   | 98       |
| 60) Dibromochloromethane       | 10.99 | 129  | 93824    | 53.957   | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 11.09 | 107  | 79194    | 53.951   | ug/l   | 98       |
| 64) Tetrachloroethene          | 10.72 | 164  | 124324   | 48.436   | ug/l   | 96       |
| 65) Chlorobenzene              | 11.52 | 112  | 272566   | 50.549   | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.59 | 131  | 91710    | 50.333   | ug/l   | 97       |
| 67) Ethyl Benzene              | 11.59 | 91   | 458295   | 49.722   | ug/l   | 98       |
| 68) m/p-Xylenes                | 11.70 | 106  | 373408   | 100.213  | ug/l   | 99       |
| 69) o-Xylene                   | 12.03 | 106  | 177746   | 50.016   | ug/l   | 99       |
| 70) Styrene                    | 12.04 | 104  | 303436   | 50.453   | ug/l   | 99       |
| 71) Bromoform                  | 12.20 | 173  | 57370    | 53.581   | ug/l # | 99       |
| 73) Isopropylbenzene           | 12.33 | 105  | 448106   | 50.033   | ug/l   | 98       |
| 74) N-amyl acetate             | 12.14 | 43   | 116702   | 53.831   | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.58 | 83   | 76425    | 54.820   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.63 | 75   | 71573m   | 57.289   | ug/l   |          |
| 77) Bromobenzene               | 12.61 | 156  | 109477   | 49.480   | ug/l   | 97       |
| 78) n-propylbenzene            | 12.67 | 91   | 534182   | 50.033   | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 12.75 | 91   | 291324   | 50.149   | ug/l   | 98       |
| 80) 1,3,5-Trimethylbenzene     | 12.81 | 105  | 379554   | 50.944   | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-buten | 12.38 | 75   | 33583    | 53.569   | ug/l   | 97       |
| 82) 4-Chlorotoluene            | 12.85 | 91   | 303239   | 50.100   | ug/l   | 99       |
| 83) tert-Butylbenzene          | 13.07 | 119  | 317320   | 49.459   | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 13.11 | 105  | 378943   | 50.330   | ug/l   | 100      |
| 85) sec-Butylbenzene           | 13.25 | 105  | 467464   | 50.749   | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.36 | 119  | 412948   | 50.341   | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.36 | 146  | 207089   | 48.848   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.44 | 146  | 211433   | 50.102   | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.69 | 91   | 394332   | 50.584   | ug/l   | 99       |
| 90) Hexachloroethane           | 13.95 | 117  | 78856    | 50.884   | ug/l   | 95       |
| 91) 1,2-Dichlorobenzene        | 13.74 | 146  | 194066   | 50.102   | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.36 | 75   | 15354    | 55.818   | ug/l   | 94       |

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA Y\DATA\VY092619\  
Data File : VY000160.D  
Acq On : 26 Sep 2019 18:11  
Operator : SY/MD  
Sample : VSTDCCC050  
Misc : 5.00g/5.00ml/MSVOA Y/SOIL  
ALS Vial : 21 Sample Multiplier: 1

Instrument :  
MSVOA\_Y  
ClientSampleId :  
VSTDCCC050EC

Manual Integrations  
APPROVED

MMDadoda  
10/2/2019 9:13:23 AM

Quant Time: Sep 26 18:45:58 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_Y\METHODS\82Y092619S.M  
Quant Title : SW846 8260  
QLast Update : Thu Sep 26 14:30:12 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.00 | 180  | 134869   | 50.185 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.11 | 225  | 64159    | 48.930 | ug/l  | 97       |
| 95) Naphthalene            | 15.23 | 128  | 316093   | 52.528 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.42 | 180  | 120452   | 49.975 | ug/l  | 98       |

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

