

Data Path : Z:\VOASRV\HPCHEM1\MSVOA D\DATA\VD082018\  
 Data File : VD059825.D  
 Acq On : 20 Aug 2018 12:02  
 Operator : JC/SY  
 Sample : VSTDIC005  
 Misc : 5.00g/5ml/MSVOA D/SOIL  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleId :  
 VSTDIC005

Manual Integrations  
 APPROVED

apatel  
 8/21/2018 10:22:58 AM

Quant Time: Aug 21 04:26:52 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D082018S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Aug 21 02:29:07 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.60  | 168  | 974691   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.65  | 114  | 1451292  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.66 | 117  | 1182821  | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.88 | 152  | 535133   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |       |     |          |      |        |      |
|---------------------------|-------|-----|----------|------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 5.97  | 65  | 43245    | 5.50 | ug/l   | 0.00 |
| Spiked Amount 50.000      |       |     | Recovery | =    | 11.00% |      |
| 35) Dibromofluoromethane  | 5.50  | 113 | 53811    | 4.97 | ug/l   | 0.00 |
| Spiked Amount 50.000      |       |     | Recovery | =    | 9.94%  |      |
| 50) Toluene-d8            | 8.67  | 98  | 156078   | 5.33 | ug/l   | 0.00 |
| Spiked Amount 50.000      |       |     | Recovery | =    | 10.66% |      |
| 62) 4-Bromofluorobenzene  | 11.91 | 95  | 62977    | 5.52 | ug/l   | 0.00 |
| Spiked Amount 50.000      |       |     | Recovery | =    | 11.04% |      |

## Target Compounds

|                               |      |     |        |       |        | Qvalue |
|-------------------------------|------|-----|--------|-------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.33 | 85  | 51652  | 6.17  | ug/l   | 97     |
| 3) Chloromethane              | 1.47 | 50  | 44001  | 6.34  | ug/l   | 97     |
| 4) Vinyl Chloride             | 1.54 | 62  | 31265  | 5.56  | ug/l   | 97     |
| 5) Bromomethane               | 1.77 | 94  | 5756m  | 7.59  | ug/l   |        |
| 6) Chloroethane               | 1.86 | 64  | 8383   | 5.95  | ug/l   | 100    |
| 7) Trichlorofluoromethane     | 2.07 | 101 | 33399  | 5.68  | ug/l   | 97     |
| 8) Diethyl Ether              | 2.32 | 74  | 6691   | 5.17  | ug/l   | 96     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.52 | 101 | 21083  | 5.73  | ug/l   | 91     |
| 10) Methyl Iodide             | 2.66 | 142 | 16062  | 4.22  | ug/l   | 94     |
| 11) Tert butyl alcohol        | 3.22 | 59  | 8275   | 28.20 | ug/l # | 49     |
| 12) 1,1-Dichloroethene        | 2.52 | 96  | 17565  | 6.10  | ug/l   | 88     |
| 13) Acrolein                  | 2.44 | 56  | 6041   | 21.85 | ug/l   | 84     |
| 14) Allyl chloride            | 2.89 | 41  | 44560  | 5.84  | ug/l   | 94     |
| 15) Acrylonitrile             | 3.33 | 53  | 37500  | 28.30 | ug/l   | 91     |
| 16) Acetone                   | 2.58 | 43  | 31245  | 23.60 | ug/l   | 99     |
| 17) Carbon Disulfide          | 2.73 | 76  | 60294  | 6.26  | ug/l   | 99     |
| 18) Methyl Acetate            | 2.90 | 43  | 20553  | 7.11  | ug/l # | 89     |
| 19) Methyl tert-butyl Ether   | 3.37 | 73  | 95248  | 5.64  | ug/l   | 98     |
| 20) Methylene Chloride        | 3.04 | 84  | 44926  | 10.01 | ug/l   | 94     |
| 21) trans-1,2-Dichloroethene  | 3.35 | 96  | 50053  | 6.22  | ug/l   | 99     |
| 22) Diisopropyl ether         | 4.03 | 45  | 216653 | 5.52  | ug/l   | 95     |
| 23) Vinyl Acetate             | 3.97 | 43  | 549226 | 25.89 | ug/l   | 99     |
| 24) 1,1-Dichloroethane        | 3.93 | 63  | 95031  | 5.53  | ug/l   | 100    |
| 25) 2-Butanone                | 4.79 | 43  | 97975  | 24.64 | ug/l   | 99     |
| 26) 2,2-Dichloropropane       | 4.75 | 77  | 81884  | 6.01  | ug/l   | 98     |
| 27) cis-1,2-Dichloroethene    | 4.75 | 96  | 56103  | 5.42  | ug/l   | 93     |
| 28) Bromochloromethane        | 5.10 | 49  | 48080  | 5.46  | ug/l   | 90     |
| 29) Tetrahydrofuran           | 5.14 | 42  | 53098  | 26.62 | ug/l   | 99     |
| 30) Chloroform                | 5.28 | 83  | 89786  | 5.31  | ug/l   | 99     |
| 31) Cyclohexane               | 5.55 | 56  | 105838 | 6.75  | ug/l   | 97     |
| 32) 1,1,1-Trichloroethane     | 5.46 | 97  | 77798  | 5.45  | ug/l   | 98     |
| 36) 1,1-Dichloropropene       | 5.70 | 75  | 73526  | 5.89  | ug/l   | 99     |
| 37) Ethyl Acetate             | 4.88 | 43  | 48922  | 5.39  | ug/l   | 99     |
| 38) Carbon Tetrachloride      | 5.68 | 117 | 70617  | 5.69  | ug/l   | 98     |

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 Data File : VD059825.D  
 Acq On : 20 Aug 2018 12:02  
 Operator : JC/SY  
 Sample : VSTDIC005  
 Misc : 5.00g/5ml/MSVOA D/SOIL  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_D  
 ClientSampleID :  
 VSTDIC005

Manual Integrations  
 APPROVED

apatel  
 8/21/2018 10:22:58 AM

Quant Time: Aug 21 04:26:52 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D082018S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Aug 21 02:29:07 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|-------|--------|----------|
| 39) Methylcyclohexane          | 7.24  | 83   | 75053    | 5.66  | ug/l   | 99       |
| 40) Benzene                    | 5.97  | 78   | 177464   | 5.51  | ug/l   | 98       |
| 41) Methacrylonitrile          | 5.08  | 41   | 26054    | 5.57  | ug/l   | 95       |
| 42) 1,2-Dichloroethane         | 6.08  | 62   | 53717    | 5.19  | ug/l   | 96       |
| 43) Isopropyl Acetate          | 7.57  | 43   | 68182    | 5.47  | ug/l # | 94       |
| 44) Trichloroethene            | 6.94  | 130  | 49621    | 5.22  | ug/l   | 94       |
| 45) 1,2-Dichloropropane        | 7.30  | 63   | 48251    | 5.16  | ug/l   | 99       |
| 46) Dibromomethane             | 7.42  | 93   | 28943    | 4.99  | ug/l   | 98       |
| 47) Bromodichloromethane       | 7.70  | 83   | 66843    | 5.19  | ug/l   | 94       |
| 48) Methyl methacrylate        | 7.46  | 41   | 37692    | 5.41  | ug/l   | 93       |
| 49) 1,4-Dioxane                | 7.45  | 88   | 5410     | 93.16 | ug/l # | 57       |
| 51) 4-Methyl-2-Pentanone       | 8.55  | 43   | 206494   | 24.09 | ug/l   | 97       |
| 52) Toluene                    | 8.76  | 92   | 113433   | 5.55  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 9.15  | 75   | 63585    | 5.42  | ug/l   | 96       |
| 54) cis-1,3-Dichloropropene    | 8.32  | 75   | 74038    | 5.26  | ug/l   | 97       |
| 55) 1,1,2-Trichloroethane      | 9.42  | 97   | 41882    | 5.75  | ug/l   | 96       |
| 56) Ethyl methacrylate         | 9.27  | 69   | 43009    | 5.14  | ug/l # | 89       |
| 57) 1,3-Dichloropropane        | 9.63  | 76   | 55350    | 5.22  | ug/l   | 97       |
| 58) 2-Chloroethyl Vinyl ether  | 8.15  | 63   | 108633   | 25.29 | ug/l   | 97       |
| 59) 2-Hexanone                 | 9.74  | 43   | 149317   | 23.65 | ug/l   | 98       |
| 60) Dibromochloromethane       | 9.92  | 129  | 47212    | 5.05  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 10.06 | 107  | 40045    | 5.17  | ug/l   | 97       |
| 64) Tetrachloroethene          | 9.47  | 164  | 48371    | 5.57  | ug/l   | 97       |
| 65) Chlorobenzene              | 10.69 | 112  | 124159   | 5.40  | ug/l   | 97       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.82 | 131  | 43223    | 5.44  | ug/l   | 94       |
| 67) Ethyl Benzene              | 10.83 | 91   | 222171   | 5.89  | ug/l   | 95       |
| 68) m/p-Xylenes                | 10.98 | 106  | 162187   | 11.73 | ug/l   | 98       |
| 69) o-Xylene                   | 11.38 | 106  | 75696    | 5.60  | ug/l   | 95       |
| 70) Styrene                    | 11.41 | 104  | 133302   | 5.69  | ug/l   | 97       |
| 71) Bromoform                  | 11.57 | 173  | 34566    | 4.98  | ug/l # | 97       |
| 73) Isopropylbenzene           | 11.74 | 105  | 209348   | 5.74  | ug/l   | 97       |
| 74) N-amyl acetate             | 11.62 | 43   | 85748    | 5.31  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.05 | 83   | 43422    | 5.17  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 12.09 | 75   | 48426    | 5.54  | ug/l   | 97       |
| 77) Bromobenzene               | 12.02 | 156  | 55042    | 5.43  | ug/l   | 90       |
| 78) n-propylbenzene            | 12.12 | 91   | 266373   | 5.81  | ug/l   | 94       |
| 79) 2-Chlorotoluene            | 12.19 | 91   | 147352   | 5.63  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.29 | 105  | 162604   | 5.94  | ug/l   | 97       |
| 81) trans-1,4-Dichloro-2-buten | 11.82 | 75   | 13753    | 5.08  | ug/l   | 89       |
| 82) 4-Chlorotoluene            | 12.30 | 91   | 171120   | 6.29  | ug/l   | 92       |
| 83) tert-Butylbenzene          | 12.55 | 119  | 159336m  | 4.95  | ug/l   |          |
| 84) 1,2,4-Trimethylbenzene     | 12.60 | 105  | 171758   | 5.67  | ug/l   | 95       |
| 85) sec-Butylbenzene           | 12.73 | 105  | 223546   | 5.79  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 12.86 | 119  | 173446   | 5.72  | ug/l   | 97       |
| 87) 1,3-Dichlorobenzene        | 12.81 | 146  | 92284    | 5.40  | ug/l   | 97       |
| 88) 1,4-Dichlorobenzene        | 12.90 | 146  | 92159    | 5.36  | ug/l   | 96       |
| 89) n-Butylbenzene             | 13.17 | 91   | 194485   | 6.40  | ug/l   | 97       |
| 90) Hexachloroethane           | 13.37 | 117  | 45355    | 5.30  | ug/l   | 80       |
| 91) 1,2-Dichlorobenzene        | 13.17 | 146  | 85058    | 6.11  | ug/l   | 97       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.75 | 75   | 6796     | 5.47  | ug/l   | 58       |

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Sample : VSTDICC005  
Misc : 5.00g/5ml/MSVOA D/SOIL  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
MSVOA\_D  
ClientSampleId :  
VSTDICC005

Manual Integrations  
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apatel  
8/21/2018 10:22:58 AM

Quant Time: Aug 21 04:26:52 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_D\METHOD\82D082018S.M  
Quant Title : SW846 8260  
QLast Update : Tue Aug 21 02:29:07 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.32 | 180  | 66184    | 5.33 | ug/l  | 96       |
| 94) Hexachlorobutadiene    | 14.41 | 225  | 42815    | 5.19 | ug/l  | 99       |
| 95) Naphthalene            | 14.49 | 128  | 101838   | 5.14 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 14.63 | 180  | 55393    | 5.14 | ug/l  | 97       |

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

