

Data Path : Z:\VOASRV\HPCHEM1\MSVOA F\DATA\VF072418\  
 Data File : VF059638.D  
 Acq On : 24 Jul 2018 17:58  
 Operator : VA/AP  
 Sample : VSTDIC075  
 Misc : 5.00µ/5mL/MSVOA F/SOIL  
 ALS Vial : 86 Sample Multiplier: 1

Instrument :  
 MSVOA\_F  
 ClientSampleId :  
 VSTDIC075

Manual Integrations  
 APPROVED

apatel  
 7/25/2018 2:30:25 PM

Quant Time: Jul 25 01:31:51 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F072418S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jul 25 00:58:12 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.03  | 168  | 237585   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 5.75  | 114  | 335511   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 9.90  | 117  | 311127   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.62 | 152  | 196717   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 5.01   | 65  | 242292   | 66.14 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 132.28% |      |
| 35) Dibromofluoromethane  | 4.28   | 113 | 207672   | 67.65 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 135.30% |      |
| 50) Toluene-d8            | 7.70   | 98  | 507224   | 66.01 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 132.02% |      |
| 62) 4-Bromofluorobenzene  | 11.50  | 95  | 278552   | 63.61 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 127.22% |      |

## Target Compounds

|                               |      |     |         |         |        | Qvalue |
|-------------------------------|------|-----|---------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 0.98 | 85  | 180523  | 61.757  | ug/l   | 95     |
| 3) Chloromethane              | 1.08 | 50  | 92840   | 67.268  | ug/l   | 93     |
| 4) Vinyl Chloride             | 1.15 | 62  | 101344  | 66.795  | ug/l   | 94     |
| 5) Bromomethane               | 1.33 | 94  | 76670   | 59.250  | ug/l   | 84     |
| 6) Chloroethane               | 1.42 | 64  | 60100   | 64.871  | ug/l   | 97     |
| 7) Trichlorofluoromethane     | 1.53 | 101 | 269503m | 65.694  | ug/l   |        |
| 8) Diethyl Ether              | 1.69 | 74  | 37513   | 64.642  | ug/l   | 91     |
| 9) 1,1,2-Trichlorotrifluoroet | 1.88 | 101 | 141444  | 67.111  | ug/l   | 93     |
| 10) Methyl Iodide             | 1.92 | 142 | 209111  | 60.245  | ug/l   | 98     |
| 11) Tert butyl alcohol        | 2.68 | 59  | 39575   | 269.183 | ug/l   | 93     |
| 12) 1,1-Dichloroethene        | 1.84 | 96  | 105100  | 63.858  | ug/l # | 96     |
| 13) Acrolein                  | 2.08 | 56  | 23165   | 320.968 | ug/l   | 100    |
| 14) Allyl chloride            | 2.18 | 41  | 177096  | 59.468  | ug/l   | 98     |
| 15) Acrylonitrile             | 3.06 | 53  | 65246   | 287.366 | ug/l   | 99     |
| 16) Acetone                   | 2.32 | 43  | 155673  | 252.905 | ug/l   | 96     |
| 17) Carbon Disulfide          | 1.83 | 76  | 256004  | 59.841  | ug/l   | 99     |
| 18) Methyl Acetate            | 2.44 | 43  | 57990   | 55.530  | ug/l   | 94     |
| 19) Methyl tert-butyl Ether   | 2.52 | 73  | 283114  | 59.404  | ug/l   | 98     |
| 20) Methylene Chloride        | 2.27 | 84  | 92214   | 49.524  | ug/l   | 93     |
| 21) trans-1,2-Dichloroethene  | 2.40 | 96  | 103309  | 60.497  | ug/l   | 97     |
| 22) Diisopropyl ether         | 2.92 | 45  | 349487  | 64.185  | ug/l   | 99     |
| 23) Vinyl Acetate             | 3.32 | 43  | 807662  | 297.645 | ug/l   | 97     |
| 24) 1,1-Dichloroethane        | 2.98 | 63  | 244766  | 62.405  | ug/l   | 98     |
| 25) 2-Butanone                | 4.50 | 43  | 197581  | 307.479 | ug/l   | 98     |
| 26) 2,2-Dichloropropane       | 3.74 | 77  | 191116  | 58.529  | ug/l   | 98     |
| 27) cis-1,2-Dichloroethene    | 3.62 | 96  | 128478  | 65.562  | ug/l   | 98     |
| 28) Bromochloromethane        | 3.87 | 49  | 90234   | 62.600  | ug/l   | 95     |
| 29) Tetrahydrofuran           | 4.24 | 42  | 76609   | 292.622 | ug/l   | 97     |
| 30) Chloroform                | 4.02 | 83  | 340239  | 62.843  | ug/l   | 99     |
| 31) Cyclohexane               | 3.84 | 56  | 140777  | 64.026  | ug/l   | 92     |
| 32) 1,1,1-Trichloroethane     | 4.26 | 97  | 283504  | 58.538  | ug/l   | 99     |
| 36) 1,1-Dichloropropene       | 4.44 | 75  | 217997  | 64.611  | ug/l   | 99     |
| 37) Ethyl Acetate             | 4.28 | 43  | 85999   | 64.773  | ug/l # | 64     |
| 38) Carbon Tetrachloride      | 4.16 | 117 | 306587  | 60.033  | ug/l   | 90     |

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 ALS Vial : 86 Sample Multiplier: 1

Instrument :  
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Manual Integrations  
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apatel  
 7/25/2018 2:30:25 PM

Quant Time: Jul 25 01:31:51 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F072418S.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jul 25 00:58:12 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 5.62  | 83   | 163778   | 60.181   | ug/l   | 87       |
| 40) Benzene                    | 4.79  | 78   | 389272   | 63.111   | ug/l   | 99       |
| 41) Methacrylonitrile          | 4.91  | 41   | 41218    | 62.851   | ug/l   | 93       |
| 42) 1,2-Dichloroethane         | 5.10  | 62   | 240676   | 58.977   | ug/l   | 95       |
| 43) Isopropyl Acetate          | 7.10  | 43   | 100677   | 60.892   | ug/l # | 98       |
| 44) Trichloroethene            | 5.66  | 130  | 148036   | 62.900   | ug/l   | 89       |
| 45) 1,2-Dichloropropane        | 6.39  | 63   | 102756   | 62.304   | ug/l   | 96       |
| 46) Dibromomethane             | 6.24  | 93   | 85767    | 63.970   | ug/l   | 96       |
| 47) Bromodichloromethane       | 6.53  | 83   | 251493   | 61.255   | ug/l   | 95       |
| 48) Methyl methacrylate        | 6.86  | 41   | 76080    | 60.436   | ug/l   | 98       |
| 49) 1,4-Dioxane                | 6.85  | 88   | 12199    | 1378.551 | ug/l # | 80       |
| 51) 4-Methyl-2-Pentanone       | 8.40  | 43   | 374390   | 302.690  | ug/l   | 100      |
| 52) Toluene                    | 7.77  | 92   | 271611   | 58.223   | ug/l   | 98       |
| 53) t-1,3-Dichloropropene      | 8.42  | 75   | 206007   | 59.949   | ug/l   | 96       |
| 54) cis-1,3-Dichloropropene    | 7.45  | 75   | 214723   | 62.725   | ug/l   | 96       |
| 55) 1,1,2-Trichloroethane      | 8.62  | 97   | 92476    | 59.759   | ug/l   | 92       |
| 56) Ethyl methacrylate         | 8.75  | 69   | 110510   | 64.418   | ug/l   | 94       |
| 57) 1,3-Dichloropropane        | 8.99  | 76   | 165223   | 61.099   | ug/l   | 96       |
| 58) 2-Chloroethyl Vinyl ether  | 7.77  | 63   | 61931    | 304.143  | ug/l   | 100      |
| 59) 2-Hexanone                 | 9.62  | 43   | 296623   | 301.863  | ug/l   | 100      |
| 60) Dibromochloromethane       | 8.85  | 129  | 175272   | 63.075   | ug/l   | 97       |
| 61) 1,2-Dibromoethane          | 9.13  | 107  | 113384   | 63.660   | ug/l   | 96       |
| 64) Tetrachloroethene          | 8.29  | 164  | 154444   | 66.298   | ug/l   | 95       |
| 65) Chlorobenzene              | 9.92  | 112  | 371025   | 65.409   | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.06 | 131  | 166844   | 64.558   | ug/l   | 98       |
| 67) Ethyl Benzene              | 10.03 | 91   | 671097   | 65.325   | ug/l   | 100      |
| 68) m/p-Xylenes                | 10.26 | 106  | 462853   | 129.862  | ug/l   | 100      |
| 69) o-Xylene                   | 10.82 | 106  | 256937   | 66.848   | ug/l   | 99       |
| 70) Styrene                    | 10.89 | 104  | 370226   | 64.659   | ug/l   | 99       |
| 71) Bromoform                  | 10.88 | 173  | 100448   | 63.315   | ug/l   | 94       |
| 73) Isopropylbenzene           | 11.22 | 105  | 808652   | 64.842   | ug/l   | 98       |
| 74) N-amyl acetate             | 11.45 | 43   | 194704   | 71.077   | ug/l   | 94       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.78 | 83   | 130193   | 63.153   | ug/l   | 97       |
| 76) 1,2,3-Trichloropropane     | 11.88 | 75   | 108589   | 60.142   | ug/l   | 100      |
| 77) Bromobenzene               | 11.59 | 156  | 193469   | 60.822   | ug/l   | 94       |
| 78) n-propylbenzene            | 11.68 | 91   | 895382   | 60.185   | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 11.81 | 91   | 559419   | 62.531   | ug/l   | 97       |
| 80) 1,3,5-Trimethylbenzene     | 11.91 | 105  | 708378   | 63.293   | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-buten | 11.94 | 75   | 62960    | 84.235   | ug/l   | 98       |
| 82) 4-Chlorotoluene            | 11.98 | 91   | 600158   | 60.533   | ug/l   | 98       |
| 83) tert-Butylbenzene          | 12.21 | 119  | 716764   | 64.842   | ug/l   | 96       |
| 84) 1,2,4-Trimethylbenzene     | 12.28 | 105  | 718065   | 63.342   | ug/l   | 97       |
| 85) sec-Butylbenzene           | 12.38 | 105  | 938869   | 65.421   | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 12.54 | 119  | 817004   | 65.034   | ug/l   | 97       |
| 87) 1,3-Dichlorobenzene        | 12.55 | 146  | 375392   | 60.764   | ug/l   | 96       |
| 88) 1,4-Dichlorobenzene        | 12.63 | 146  | 376050   | 65.295   | ug/l   | 96       |
| 89) n-Butylbenzene             | 12.91 | 91   | 796755   | 66.020   | ug/l   | 97       |
| 90) Hexachloroethane           | 12.99 | 117  | 198120   | 63.172   | ug/l # | 1        |
| 91) 1,2-Dichlorobenzene        | 13.01 | 146  | 366064   | 62.979   | ug/l   | 97       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.71 | 75   | 34011    | 67.813   | ug/l   | 91       |

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Sample : VSTDICC075  
Misc : 5.00g/5mL/MSVOA F/SOIL  
ALS Vial : 86 Sample Multiplier: 1

Instrument :  
MSVOA\_F  
ClientSampleId :  
VSTDICC075

Manual Integrations  
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apatel  
7/25/2018 2:30:25 PM

Quant Time: Jul 25 01:31:51 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_F\METHODS\82F072418S.M  
Quant Title : SW846 8260  
QLast Update : Wed Jul 25 00:58:12 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.26 | 180  | 298212   | 68.659 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 14.25 | 225  | 209997   | 69.267 | ug/l  | 93       |
| 95) Naphthalene            | 14.52 | 128  | 517410   | 73.899 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 14.67 | 180  | 277124   | 70.373 | ug/l  | 97       |

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

