

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW081918\  
 Data File : VW004762.D  
 Acq On : 18 Aug 2018 06:05  
 Operator : SY/AP  
 Sample : VW0819SBS02  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 36 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VW0819SBS02

Manual Integrations  
 APPROVED

apatel  
 8/20/2018 9:56:49 AM

Quant Time: Aug 18 07:07:16 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W081918S.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Aug 18 01:49:53 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.95  | 168  | 616131   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.85  | 114  | 963125   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.63 | 117  | 916656   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.57 | 152  | 487169   | 50.00 | ug/l  | 0.00     |

|                             |        |     |          |       |         |      |
|-----------------------------|--------|-----|----------|-------|---------|------|
| System Monitoring Compounds |        |     |          |       |         |      |
| 33) 1,2-Dichloroethane-d4   | 8.31   | 65  | 319132   | 53.57 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 107.14% |      |
| 35) Dibromofluoromethane    | 7.88   | 113 | 320311   | 52.04 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 104.08% |      |
| 50) Toluene-d8              | 10.33  | 98  | 1260999  | 52.48 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 104.96% |      |
| 62) 4-Bromofluorobenzene    | 12.62  | 95  | 454568   | 52.58 | ug/l    | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =     | 105.16% |      |

|                               |      |     |         |        |        |     |
|-------------------------------|------|-----|---------|--------|--------|-----|
| Target Compounds              |      |     |         | Qvalue |        |     |
| 2) Dichlorodifluoromethane    | 2.01 | 85  | 80594   | 19.75  | ug/l   | 96  |
| 3) Chloromethane              | 2.21 | 50  | 113960  | 21.36  | ug/l   | 99  |
| 4) Vinyl Chloride             | 2.37 | 62  | 174193  | 22.18  | ug/l   | 100 |
| 5) Bromomethane               | 2.78 | 94  | 110012  | 22.68  | ug/l   | 100 |
| 6) Chloroethane               | 2.92 | 64  | 105474  | 22.26  | ug/l   | 99  |
| 7) Trichlorofluoromethane     | 3.26 | 101 | 79142   | 21.39  | ug/l   | 100 |
| 8) Diethyl Ether              | 3.68 | 74  | 76821   | 22.96  | ug/l   | 100 |
| 9) 1,1,2-Trichlorotrifluoroet | 4.06 | 101 | 134395  | 21.09  | ug/l   | 99  |
| 10) Methyl Iodide             | 4.26 | 142 | 217044  | 22.43  | ug/l   | 100 |
| 11) Tert butyl alcohol        | 5.21 | 59  | 37938   | 114.00 | ug/l # | 91  |
| 12) 1,1-Dichloroethene        | 4.04 | 96  | 136998  | 21.58  | ug/l   | 96  |
| 13) Acrolein                  | 3.89 | 56  | 48489   | 108.58 | ug/l   | 97  |
| 14) Allyl chloride            | 4.67 | 41  | 207092  | 21.49  | ug/l   | 99  |
| 15) Acrylonitrile             | 5.37 | 53  | 164267  | 117.08 | ug/l   | 98  |
| 16) Acetone                   | 4.14 | 43  | 148670  | 97.77  | ug/l   | 98  |
| 17) Carbon Disulfide          | 4.37 | 76  | 458040  | 21.95  | ug/l   | 98  |
| 18) Methyl Acetate            | 4.68 | 43  | 76429   | 23.45  | ug/l   | 98  |
| 19) Methyl tert-butyl Ether   | 5.42 | 73  | 189374  | 22.98  | ug/l   | 100 |
| 20) Methylene Chloride        | 4.91 | 84  | 183442  | 24.19  | ug/l   | 96  |
| 21) trans-1,2-Dichloroethene  | 5.42 | 96  | 151315  | 22.40  | ug/l   | 95  |
| 22) Diisopropyl ether         | 6.31 | 45  | 440456  | 23.78  | ug/l   | 99  |
| 23) Vinyl Acetate             | 6.26 | 43  | 1150075 | 109.79 | ug/l   | 98  |
| 24) 1,1-Dichloroethane        | 6.21 | 63  | 270481  | 22.47  | ug/l   | 99  |
| 25) 2-Butanone                | 7.18 | 43  | 237532  | 109.63 | ug/l   | 99  |
| 26) 2,2-Dichloropropane       | 7.17 | 77  | 134731  | 19.38  | ug/l   | 98  |
| 27) cis-1,2-Dichloroethene    | 7.17 | 96  | 163051  | 22.42  | ug/l   | 99  |
| 28) Bromochloromethane        | 7.51 | 49  | 108833  | 21.47  | ug/l   | 100 |
| 29) Tetrahydrofuran           | 7.54 | 42  | 126344  | 114.36 | ug/l   | 99  |
| 30) Chloroform                | 7.68 | 83  | 266555  | 22.52  | ug/l   | 97  |
| 31) Cyclohexane               | 7.96 | 56  | 244785  | 21.03  | ug/l   | 96  |
| 32) 1,1,1-Trichloroethane     | 7.87 | 97  | 205230  | 21.87  | ug/l   | 98  |
| 36) 1,1-Dichloropropene       | 8.09 | 75  | 207798  | 20.94  | ug/l   | 100 |
| 37) Ethyl Acetate             | 7.26 | 43  | 89053   | 22.52  | ug/l   | 99  |
| 38) Carbon Tetrachloride      | 8.07 | 117 | 189089  | 20.70  | ug/l   | 97  |

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 Sample : VW0819SBS02  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 36 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VW0819SBS02

Manual Integrations  
 APPROVED

apatel  
 8/20/2018 9:56:49 AM

Quant Time: Aug 18 07:07:16 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W081918S.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Aug 18 01:49:53 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 39) Methylcyclohexane          | 9.34  | 83   | 243399   | 19.62  | ug/l   | 97       |
| 40) Benzene                    | 8.32  | 78   | 624823   | 21.67  | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.49  | 41   | 47612    | 21.21  | ug/l   | 93       |
| 42) 1,2-Dichloroethane         | 8.40  | 62   | 164004   | 22.18  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.43  | 43   | 157204   | 22.13  | ug/l   | 99       |
| 44) Trichloroethene            | 9.09  | 130  | 153816   | 21.01  | ug/l   | 98       |
| 45) 1,2-Dichloropropane        | 9.37  | 63   | 151914   | 21.54  | ug/l   | 99       |
| 46) Dibromomethane             | 9.46  | 93   | 77433    | 22.16  | ug/l   | 99       |
| 47) Bromodichloromethane       | 9.65  | 83   | 179358   | 21.49  | ug/l   | 98       |
| 48) Methyl methacrylate        | 9.44  | 41   | 74063    | 22.22  | ug/l   | 98       |
| 49) 1,4-Dioxane                | 9.48  | 88   | 24012    | 470.35 | ug/l # | 85       |
| 51) 4-Methyl-2-Pentanone       | 10.21 | 43   | 538558   | 112.17 | ug/l   | 99       |
| 52) Toluene                    | 10.39 | 92   | 382194   | 22.10  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.61 | 75   | 172832   | 20.56  | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene    | 10.07 | 75   | 205555   | 20.51  | ug/l   | 96       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 112409   | 22.63  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 126594   | 21.33  | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 10.93 | 76   | 189351   | 22.08  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.93  | 63   | 301173   | 109.79 | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.98 | 43   | 357202   | 109.80 | ug/l   | 99       |
| 60) Dibromochloromethane       | 11.13 | 129  | 120813   | 21.68  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.24 | 107  | 102658   | 21.62  | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.87 | 164  | 145928   | 23.29  | ug/l   | 98       |
| 65) Chlorobenzene              | 11.66 | 112  | 417341   | 21.15  | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 11.74 | 131  | 141301   | 21.21  | ug/l   | 100      |
| 67) Ethyl Benzene              | 11.74 | 91   | 700152   | 20.93  | ug/l   | 100      |
| 68) m/p-Xylenes                | 11.85 | 106  | 555680   | 42.70  | ug/l   | 99       |
| 69) o-Xylene                   | 12.17 | 106  | 256514   | 21.29  | ug/l   | 99       |
| 70) Styrene                    | 12.19 | 104  | 435949   | 21.54  | ug/l   | 100      |
| 71) Bromoform                  | 12.35 | 173  | 73679    | 20.95  | ug/l # | 97       |
| 73) Isopropylbenzene           | 12.47 | 105  | 694061   | 20.94  | ug/l   | 99       |
| 74) N-amyl acetate             | 12.28 | 43   | 146078   | 21.33  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.72 | 83   | 135645   | 22.09  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 88387m   | 20.58  | ug/l   |          |
| 77) Bromobenzene               | 12.75 | 156  | 171655   | 21.40  | ug/l   | 99       |
| 78) n-propylbenzene            | 12.81 | 91   | 865666   | 21.40  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.90 | 91   | 496645   | 21.30  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 12.95 | 105  | 614128   | 21.81  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 12.52 | 75   | 35223    | 19.06  | ug/l   | 97       |
| 82) 4-Chlorotoluene            | 12.99 | 91   | 532986   | 21.52  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 13.21 | 119  | 502895   | 20.88  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 13.26 | 105  | 633768   | 21.88  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.39 | 105  | 757800   | 21.08  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 13.51 | 119  | 657051   | 21.00  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.51 | 146  | 350946   | 21.51  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.59 | 146  | 348497   | 21.37  | ug/l   | 100      |
| 89) n-Butylbenzene             | 13.84 | 91   | 608297   | 20.11  | ug/l   | 99       |
| 90) Hexachloroethane           | 14.10 | 117  | 116634   | 20.45  | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene        | 13.88 | 146  | 319133   | 21.77  | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 14.49 | 75   | 21071    | 21.96  | ug/l   | 97       |

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Acq On : 18 Aug 2018 06:05  
Operator : SY/AP  
Sample : VW0819SBSD02  
Misc : 5.00G/5ML/MSVOA W/SOIL  
ALS Vial : 36 Sample Multiplier: 1

Instrument :  
MSVOA\_W  
ClientSampleId :  
VW0819SBSD02

Manual Integrations  
APPROVED

apatel  
8/20/2018 9:56:49 AM

Quant Time: Aug 18 07:07:16 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W081918S.M  
Quant Title : SW846 8260  
QLast Update : Sat Aug 18 01:49:53 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.14 | 180  | 213819   | 20.63 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 15.24 | 225  | 124791   | 19.61 | ug/l  | 99       |
| 95) Naphthalene            | 15.38 | 128  | 378432   | 21.03 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 15.57 | 180  | 195109   | 21.22 | ug/l  | 99       |

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

