

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW091118\  
 Data File : VW005268.D  
 Acq On : 11 Sep 2018 12:04  
 Operator : SY/AP  
 Sample : VW0911SBSD01  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
 VW0911SBSD01

Manual Integrations  
 APPROVED

apatel  
 9/12/2018 10:29:17 AM

Quant Time: Sep 11 12:45:42 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W091018S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Sep 11 03:48:23 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 7.96  | 168  | 455179   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 8.85  | 114  | 625558   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 11.64 | 117  | 614993   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 13.57 | 152  | 343817   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 8.32   | 65  | 169723   | 49.99 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.98%  |      |
| 35) Dibromofluoromethane  | 7.89   | 113 | 171182   | 52.24 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 104.48% |      |
| 50) Toluene-d8            | 10.33  | 98  | 849529   | 51.30 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.60% |      |
| 62) 4-Bromofluorobenzene  | 12.63  | 95  | 309699   | 51.13 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.26% |      |

## Target Compounds

|                               |      |     |        |        |      | Qvalue |
|-------------------------------|------|-----|--------|--------|------|--------|
| 2) Dichlorodifluoromethane    | 2.00 | 85  | 92633  | 23.59  | ug/l | 98     |
| 3) Chloromethane              | 2.22 | 50  | 111401 | 21.22  | ug/l | 97     |
| 4) Vinyl Chloride             | 2.36 | 62  | 103735 | 21.53  | ug/l | 97     |
| 5) Bromomethane               | 2.75 | 94  | 73862  | 23.70  | ug/l | 99     |
| 6) Chloroethane               | 2.91 | 64  | 56850  | 21.42  | ug/l | 98     |
| 7) Trichlorofluoromethane     | 3.26 | 101 | 119535 | 21.93  | ug/l | 97     |
| 8) Diethyl Ether              | 3.69 | 74  | 39031  | 20.09  | ug/l | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 4.06 | 101 | 81626  | 20.96  | ug/l | 99     |
| 10) Methyl Iodide             | 4.28 | 142 | 76369  | 18.06  | ug/l | 100    |
| 11) Tert butyl alcohol        | 5.17 | 59  | 35220  | 126.50 | ug/l | 96     |
| 12) 1,1-Dichloroethene        | 4.04 | 96  | 75027  | 20.93  | ug/l | 99     |
| 13) Acrolein                  | 3.90 | 56  | 27471  | 102.15 | ug/l | 98     |
| 14) Allyl chloride            | 4.68 | 41  | 108054 | 19.61  | ug/l | 98     |
| 15) Acrylonitrile             | 5.38 | 53  | 88308  | 100.74 | ug/l | 99     |
| 16) Acetone                   | 4.13 | 43  | 65861  | 104.51 | ug/l | 94     |
| 17) Carbon Disulfide          | 4.39 | 76  | 257683 | 20.47  | ug/l | 100    |
| 18) Methyl Acetate            | 4.68 | 43  | 38125  | 20.27  | ug/l | 99     |
| 19) Methyl tert-butyl Ether   | 5.43 | 73  | 175693 | 20.57  | ug/l | 98     |
| 20) Methylene Chloride        | 4.92 | 84  | 103762 | 20.19  | ug/l | 98     |
| 21) trans-1,2-Dichloroethene  | 5.43 | 96  | 86870  | 20.75  | ug/l | 96     |
| 22) Diisopropyl ether         | 6.32 | 45  | 229535 | 20.69  | ug/l | 94     |
| 23) Vinyl Acetate             | 6.27 | 43  | 626593 | 101.37 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 6.22 | 63  | 140270 | 20.55  | ug/l | 98     |
| 25) 2-Butanone                | 7.18 | 43  | 107356 | 108.00 | ug/l | 97     |
| 26) 2,2-Dichloropropane       | 7.18 | 77  | 130574 | 22.06  | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 7.18 | 96  | 93669  | 20.91  | ug/l | 99     |
| 28) Bromochloromethane        | 7.52 | 49  | 50117  | 19.90  | ug/l | 97     |
| 29) Tetrahydrofuran           | 7.54 | 42  | 67810  | 101.23 | ug/l | 99     |
| 30) Chloroform                | 7.68 | 83  | 143126 | 20.89  | ug/l | 100    |
| 31) Cyclohexane               | 7.96 | 56  | 151704 | 20.88  | ug/l | 95     |
| 32) 1,1,1-Trichloroethane     | 7.88 | 97  | 129742 | 20.96  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 8.09 | 75  | 124391 | 21.70  | ug/l | 99     |
| 37) Ethyl Acetate             | 7.26 | 43  | 47509  | 21.79  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 8.07 | 117 | 118028 | 21.98  | ug/l | 99     |

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 Sample : VW0911SBSD01  
 Misc : 5.00G/5ML/MSVOA W/SOIL  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_W  
 ClientSampleId :  
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Manual Integrations  
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apatel  
 9/12/2018 10:29:17 AM

Quant Time: Sep 11 12:45:42 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W091018S.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Sep 11 03:48:23 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 39) Methylcyclohexane          | 9.34  | 83   | 151337   | 19.89  | ug/l   | 94       |
| 40) Benzene                    | 8.33  | 78   | 369860   | 21.91  | ug/l   | 100      |
| 41) Methacrylonitrile          | 7.49  | 41   | 26555    | 23.74  | ug/l   | 95       |
| 42) 1,2-Dichloroethane         | 8.41  | 62   | 87111    | 21.57  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 8.43  | 43   | 84631    | 20.91  | ug/l   | 97       |
| 44) Trichloroethene            | 9.10  | 130  | 102550   | 22.14  | ug/l   | 92       |
| 45) 1,2-Dichloropropane        | 9.38  | 63   | 78935    | 19.45  | ug/l   | 98       |
| 46) Dibromomethane             | 9.46  | 93   | 38295    | 19.28  | ug/l   | 97       |
| 47) Bromodichloromethane       | 9.65  | 83   | 96444    | 19.85  | ug/l   | 97       |
| 48) Methyl methacrylate        | 9.45  | 41   | 39215    | 18.66  | ug/l   | 99       |
| 49) 1,4-Dioxane                | 9.45  | 88   | 15240    | 410.90 | ug/l   | 95       |
| 51) 4-Methyl-2-Pentanone       | 10.22 | 43   | 231973   | 101.83 | ug/l   | 100      |
| 52) Toluene                    | 10.40 | 92   | 259742   | 21.17  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 10.62 | 75   | 108255   | 20.61  | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene    | 10.08 | 75   | 131246   | 20.87  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 10.79 | 97   | 66540    | 21.01  | ug/l   | 95       |
| 56) Ethyl methacrylate         | 10.65 | 69   | 79864    | 19.89  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 10.94 | 76   | 108857   | 20.70  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 9.93  | 63   | 179717   | 102.97 | ug/l   | 99       |
| 59) 2-Hexanone                 | 10.98 | 43   | 170098   | 103.57 | ug/l   | 99       |
| 60) Dibromochloromethane       | 11.13 | 129  | 73193    | 20.82  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 11.24 | 107  | 61034    | 21.01  | ug/l   | 99       |
| 64) Tetrachloroethene          | 10.87 | 164  | 99213    | 21.74  | ug/l   | 99       |
| 65) Chlorobenzene              | 11.66 | 112  | 288145   | 21.39  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 11.74 | 131  | 86111    | 21.41  | ug/l   | 99       |
| 67) Ethyl Benzene              | 11.74 | 91   | 501970   | 21.40  | ug/l   | 99       |
| 68) m/p-Xylenes                | 11.85 | 106  | 411098   | 43.48  | ug/l   | 98       |
| 69) o-Xylene                   | 12.18 | 106  | 185743   | 21.12  | ug/l   | 98       |
| 70) Styrene                    | 12.19 | 104  | 308896   | 21.52  | ug/l   | 99       |
| 71) Bromoform                  | 12.36 | 173  | 45406    | 20.82  | ug/l # | 97       |
| 73) Isopropylbenzene           | 12.48 | 105  | 510274   | 21.01  | ug/l   | 100      |
| 74) N-amyl acetate             | 12.28 | 43   | 90333    | 19.54  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 12.72 | 83   | 77432    | 21.21  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 12.77 | 75   | 54333m   | 20.55  | ug/l   |          |
| 77) Bromobenzene               | 12.76 | 156  | 121860   | 21.29  | ug/l   | 98       |
| 78) n-propylbenzene            | 12.81 | 91   | 621668   | 21.31  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 12.90 | 91   | 355430   | 21.24  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 12.95 | 105  | 442282   | 21.38  | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-buten | 12.52 | 75   | 22496    | 19.95  | ug/l   | 98       |
| 82) 4-Chlorotoluene            | 13.00 | 91   | 372821   | 21.20  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 13.21 | 119  | 384065   | 21.23  | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 13.26 | 105  | 444721   | 21.39  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 13.39 | 105  | 551861   | 21.23  | ug/l   | 97       |
| 86) p-Isopropyltoluene         | 13.51 | 119  | 493533   | 21.44  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 13.51 | 146  | 256618   | 21.35  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 13.58 | 146  | 254834   | 21.59  | ug/l   | 99       |
| 89) n-Butylbenzene             | 13.83 | 91   | 444149   | 20.53  | ug/l   | 99       |
| 90) Hexachloroethane           | 14.10 | 117  | 77580    | 21.04  | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene        | 13.88 | 146  | 224075   | 21.21  | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropropan | 14.49 | 75   | 11922    | 19.64  | ug/l   | 98       |

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ALS Vial : 5 Sample Multiplier: 1

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apatel  
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Quant Time: Sep 11 12:45:42 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_W\METHOD\82W091018S.M  
Quant Title : SW846 8260  
QLast Update : Tue Sep 11 03:48:23 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 15.15 | 180  | 151626   | 20.29 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 15.25 | 225  | 100074   | 20.92 | ug/l  | 100      |
| 95) Naphthalene            | 15.38 | 128  | 234129   | 19.33 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 15.57 | 180  | 132020   | 20.53 | ug/l  | 99       |

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

