

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX081518\  
 Data File : VX004110.D  
 Acq On : 16 Aug 2018 08:53  
 Operator : JC/MD  
 Sample : J4495-03MS  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 44 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 SS050MW504-180814MS

Manual Integrations  
 APPROVED

MMDadoda  
 8/16/2018 4:40:17 PM

Quant Time: Aug 16 14:19:29 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X081418W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Aug 14 13:27:25 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 266140   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.87  | 114  | 431841   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 416884   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 258705   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.07   | 65  | 212926   | 56.78 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 113.56% |      |
| 35) Dibromofluoromethane  | 5.51   | 113 | 166488   | 51.51 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.02% |      |
| 50) Toluene-d8            | 8.72   | 98  | 686229   | 52.37 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 104.74% |      |
| 62) 4-Bromofluorobenzene  | 11.14  | 95  | 248379   | 52.26 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 104.52% |      |

## Target Compounds

|                               |      |     |         |        |      | Qvalue |
|-------------------------------|------|-----|---------|--------|------|--------|
| 2) Dichlorodifluoromethane    | 1.20 | 85  | 133564  | 51.55  | ug/l | 99     |
| 3) Chloromethane              | 1.32 | 50  | 162571  | 51.14  | ug/l | 99     |
| 4) Vinyl Chloride             | 1.40 | 62  | 187012  | 54.37  | ug/l | 99     |
| 5) Bromomethane               | 1.64 | 94  | 96062   | 55.13  | ug/l | 99     |
| 6) Chloroethane               | 1.73 | 64  | 122766  | 54.42  | ug/l | 99     |
| 7) Trichlorofluoromethane     | 1.93 | 101 | 249343  | 51.67  | ug/l | 98     |
| 8) Diethyl Ether              | 2.18 | 74  | 112262  | 53.29  | ug/l | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.39 | 101 | 146732  | 48.74  | ug/l | 99     |
| 10) Methyl Iodide             | 2.51 | 142 | 170359  | 52.69  | ug/l | 100    |
| 11) Tert butyl alcohol        | 3.04 | 59  | 171937  | 227.70 | ug/l | 100    |
| 12) 1,1-Dichloroethene        | 2.38 | 96  | 145781  | 52.07  | ug/l | 97     |
| 13) Acrolein                  | 2.29 | 56  | 109129  | 214.63 | ug/l | 99     |
| 14) Allyl chloride            | 2.73 | 41  | 253548  | 47.59  | ug/l | 97     |
| 15) Acrylonitrile             | 3.14 | 53  | 483953  | 257.05 | ug/l | 99     |
| 16) Acetone                   | 2.43 | 43  | 493110  | 252.93 | ug/l | 100    |
| 17) Carbon Disulfide          | 2.57 | 76  | 403434  | 50.80  | ug/l | 99     |
| 18) Methyl Acetate            | 2.77 | 43  | 229240  | 52.91  | ug/l | 98     |
| 19) Methyl tert-butyl Ether   | 3.20 | 73  | 517401  | 52.45  | ug/l | 100    |
| 20) Methylene Chloride        | 2.86 | 84  | 175313  | 55.08  | ug/l | 99     |
| 21) trans-1,2-Dichloroethene  | 3.17 | 96  | 163578  | 51.45  | ug/l | 98     |
| 22) Diisopropyl ether         | 3.87 | 45  | 541355  | 51.86  | ug/l | 98     |
| 23) Vinyl Acetate             | 3.82 | 43  | 2271131 | 264.89 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 3.70 | 63  | 311409  | 52.67  | ug/l | 99     |
| 25) 2-Butanone                | 4.69 | 43  | 801353  | 252.62 | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 4.59 | 77  | 104384  | 22.21  | ug/l | 92     |
| 27) cis-1,2-Dichloroethene    | 4.60 | 96  | 201138  | 56.25  | ug/l | 94     |
| 28) Bromochloromethane        | 5.03 | 49  | 155624  | 57.37  | ug/l | 96     |
| 29) Tetrahydrofuran           | 5.15 | 42  | 406574  | 250.87 | ug/l | 98     |
| 30) Chloroform                | 5.21 | 83  | 305842  | 53.00  | ug/l | 98     |
| 31) Cyclohexane               | 5.58 | 56  | 258112  | 49.80  | ug/l | 98     |
| 32) 1,1,1-Trichloroethane     | 5.50 | 97  | 256609  | 53.21  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 5.81 | 75  | 219324  | 44.63  | ug/l | 100    |
| 37) Ethyl Acetate             | 4.85 | 43  | 247606  | 46.27  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 5.79 | 117 | 219381  | 45.95  | ug/l | 96     |

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 ALS Vial : 44 Sample Multiplier: 1

Instrument :  
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 ClientSampleId :  
 SS050MW504-180814MS

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 8/16/2018 4:40:17 PM

Quant Time: Aug 16 14:19:29 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X081418W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Aug 14 13:27:25 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|--------------------------------|-------|------|----------|--------|-------|----------|
| 39) Methylcyclohexane          | 7.46  | 83   | 254011   | 45.56  | ug/l  | 99       |
| 40) Benzene                    | 6.15  | 78   | 730110   | 49.48  | ug/l  | 100      |
| 41) Methacrylonitrile          | 5.06  | 41   | 136935   | 45.69  | ug/l  | 99       |
| 42) 1,2-Dichloroethane         | 6.20  | 62   | 253818   | 49.14  | ug/l  | 100      |
| 43) Isopropyl Acetate          | 6.46  | 43   | 385211   | 48.84  | ug/l  | 100      |
| 44) Trichloroethene            | 7.21  | 130  | 191552   | 47.82  | ug/l  | 94       |
| 45) 1,2-Dichloropropane        | 7.52  | 63   | 189849   | 50.26  | ug/l  | 99       |
| 46) Dibromomethane             | 7.67  | 93   | 123068   | 49.85  | ug/l  | 99       |
| 47) Bromodichloromethane       | 7.90  | 83   | 237973   | 50.90  | ug/l  | 99       |
| 48) Methyl methacrylate        | 7.78  | 41   | 203076   | 51.14  | ug/l  | 98       |
| 49) 1,4-Dioxane                | 7.76  | 88   | 72677    | 812.98 | ug/l  | 96       |
| 51) 4-Methyl-2-Pentanone       | 8.65  | 43   | 1654715  | 255.85 | ug/l  | 100      |
| 52) Toluene                    | 8.79  | 92   | 468702   | 50.23  | ug/l  | 100      |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 232392   | 46.01  | ug/l  | 100      |
| 54) cis-1,3-Dichloropropene    | 8.44  | 75   | 245190   | 43.84  | ug/l  | 100      |
| 55) 1,1,2-Trichloroethane      | 9.22  | 97   | 191149   | 49.60  | ug/l  | 98       |
| 56) Ethyl methacrylate         | 9.18  | 69   | 276671   | 52.80  | ug/l  | 99       |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 321630   | 50.30  | ug/l  | 100      |
| 59) 2-Hexanone                 | 9.50  | 43   | 1244082  | 255.59 | ug/l  | 100      |
| 60) Dibromochloromethane       | 9.59  | 129  | 190963   | 51.49  | ug/l  | 99       |
| 61) 1,2-Dibromoethane          | 9.68  | 107  | 197101   | 50.17  | ug/l  | 99       |
| 64) Tetrachloroethene          | 9.34  | 164  | 180050   | 45.57  | ug/l  | 95       |
| 65) Chlorobenzene              | 10.14 | 112  | 505452   | 46.94  | ug/l  | 94       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.23 | 131  | 179943   | 48.99  | ug/l  | 99       |
| 67) Ethyl Benzene              | 10.26 | 91   | 851524   | 49.94  | ug/l  | 100      |
| 68) m/p-Xylenes                | 10.36 | 106  | 651483   | 97.56  | ug/l  | 98       |
| 69) o-Xylene                   | 10.70 | 106  | 329514   | 51.63  | ug/l  | 97       |
| 70) Styrene                    | 10.71 | 104  | 553984   | 51.58  | ug/l  | 99       |
| 71) Bromoform                  | 10.86 | 173  | 144204   | 49.51  | ug/l  | 98       |
| 73) Isopropylbenzene           | 11.02 | 105  | 896349   | 51.20  | ug/l  | 97       |
| 74) N-amyl acetate             | 6.46  | 43   | 385211   | 46.78  | ug/l  | # 100    |
| 75) 1,1,2,2-Tetrachloroethane  | 11.27 | 83   | 297332   | 48.63  | ug/l  | 99       |
| 76) 1,2,3-Trichloropropane     | 11.30 | 75   | 254750m  | 49.10  | ug/l  |          |
| 77) Bromobenzene               | 11.26 | 156  | 237805   | 49.27  | ug/l  | 99       |
| 78) n-propylbenzene            | 11.36 | 91   | 1017121  | 51.91  | ug/l  | 100      |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 567772   | 47.55  | ug/l  | 100      |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 707797   | 49.37  | ug/l  | 100      |
| 81) trans-1,4-Dichloro-2-buten | 11.08 | 75   | 64171    | 38.29  | ug/l  | 97       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 678166   | 48.05  | ug/l  | 98       |
| 83) tert-Butylbenzene          | 11.77 | 119  | 738613   | 51.10  | ug/l  | 99       |
| 84) 1,2,4-Trimethylbenzene     | 11.81 | 105  | 776552   | 52.30  | ug/l  | 100      |
| 85) sec-Butylbenzene           | 11.95 | 105  | 852577   | 50.40  | ug/l  | 100      |
| 86) p-Isopropyltoluene         | 12.07 | 119  | 779979   | 50.93  | ug/l  | 100      |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 432230   | 46.96  | ug/l  | 99       |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 443589   | 46.82  | ug/l  | 100      |
| 89) n-Butylbenzene             | 12.39 | 91   | 594420   | 49.26  | ug/l  | 99       |
| 90) Hexachloroethane           | 12.60 | 117  | 108081   | 47.17  | ug/l  | 98       |
| 91) 1,2-Dichlorobenzene        | 12.40 | 146  | 431907   | 52.03  | ug/l  | 97       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.00 | 75   | 51100    | 47.56  | ug/l  | 98       |
| 93) 1,2,4-Trichlorobenzene     | 13.65 | 180  | 270481   | 47.67  | ug/l  | 98       |

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Quant Title : SW846 8260  
QLast Update : Tue Aug 14 13:27:25 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 94) Hexachlorobutadiene    | 13.79 | 225  | 126015   | 44.30 | ug/l  | 99       |
| 95) Naphthalene            | 13.83 | 128  | 901456   | 49.84 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 14.02 | 180  | 305513   | 49.37 | ug/l  | 100      |

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

