

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX081318\  
 Data File : VX004010.D  
 Acq On : 13 Aug 2018 19:40  
 Operator : JC/MD  
 Sample : J4429-06MS  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 21 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 FL-0540MS

Manual Integrations  
 APPROVED

MMDadoda  
 8/14/2018 12:56:11 PM

Quant Time: Aug 14 05:26:49 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X080618W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Aug 13 01:34:27 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 303175   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.87  | 114  | 469234   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 436215   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 278615   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.07   | 65  | 205678   | 51.18 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.36% |      |
| 35) Dibromofluoromethane  | 5.51   | 113 | 167409   | 47.09 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 94.18%  |      |
| 50) Toluene-d8            | 8.72   | 98  | 661807   | 47.87 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 95.74%  |      |
| 62) 4-Bromofluorobenzene  | 11.14  | 95  | 249875   | 55.86 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 111.72% |      |

## Target Compounds

|                               |      |     |         |        |        | Qvalue |
|-------------------------------|------|-----|---------|--------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.20 | 85  | 150815  | 49.09  | ug/l   | 98     |
| 3) Chloromethane              | 1.32 | 50  | 181849  | 43.50  | ug/l   | 100    |
| 4) Vinyl Chloride             | 1.40 | 62  | 199748  | 47.92  | ug/l   | 99     |
| 5) Bromomethane               | 1.64 | 94  | 94658   | 35.65  | ug/l   | 99     |
| 6) Chloroethane               | 1.72 | 64  | 138973  | 52.11  | ug/l   | 97     |
| 7) Trichlorofluoromethane     | 1.93 | 101 | 275606  | 50.08  | ug/l   | 96     |
| 8) Diethyl Ether              | 2.18 | 74  | 122893  | 49.67  | ug/l   | 98     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.39 | 101 | 171933  | 49.98  | ug/l   | 100    |
| 10) Methyl Iodide             | 2.51 | 142 | 160752  | 37.56  | ug/l   | 100    |
| 11) Tert butyl alcohol        | 3.05 | 59  | 203363  | 210.58 | ug/l # | 73     |
| 12) 1,1-Dichloroethene        | 2.37 | 96  | 161366  | 49.59  | ug/l   | 98     |
| 13) Acrolein                  | 2.29 | 56  | 99158   | 186.28 | ug/l   | 98     |
| 14) Allyl chloride            | 2.73 | 41  | 308054  | 49.11  | ug/l   | 97     |
| 15) Acrylonitrile             | 3.14 | 53  | 616123  | 267.37 | ug/l   | 94     |
| 16) Acetone                   | 2.44 | 43  | 561205  | 234.72 | ug/l   | 100    |
| 17) Carbon Disulfide          | 2.57 | 76  | 417370  | 42.04  | ug/l   | 100    |
| 18) Methyl Acetate            | 2.77 | 43  | 269544  | 51.78  | ug/l   | 98     |
| 19) Methyl tert-butyl Ether   | 3.20 | 73  | 596051  | 51.69  | ug/l # | 1      |
| 20) Methylene Chloride        | 2.86 | 84  | 205960  | 35.53  | ug/l # | 93     |
| 21) trans-1,2-Dichloroethene  | 3.17 | 96  | 178182  | 48.23  | ug/l   | 99     |
| 22) Diisopropyl ether         | 3.87 | 45  | 614545  | 53.30  | ug/l   | 99     |
| 23) Vinyl Acetate             | 3.82 | 43  | 2424603 | 252.72 | ug/l   | 100    |
| 24) 1,1-Dichloroethane        | 3.70 | 63  | 342761  | 50.04  | ug/l   | 100    |
| 25) 2-Butanone                | 4.70 | 43  | 921607  | 256.38 | ug/l   | 98     |
| 26) 2,2-Dichloropropane       | 4.59 | 77  | 233211  | 47.21  | ug/l   | 100    |
| 27) cis-1,2-Dichloroethene    | 4.60 | 96  | 208705  | 52.07  | ug/l   | 97     |
| 28) Bromochloromethane        | 5.02 | 49  | 151065  | 51.54  | ug/l   | 96     |
| 29) Tetrahydrofuran           | 5.15 | 42  | 470093  | 254.43 | ug/l   | 98     |
| 30) Chloroform                | 5.22 | 83  | 346560  | 53.75  | ug/l   | 93     |
| 31) Cyclohexane               | 5.58 | 56  | 1436175 | 247.94 | ug/l   | 98     |
| 32) 1,1,1-Trichloroethane     | 5.50 | 97  | 284879  | 52.68  | ug/l   | 99     |
| 36) 1,1-Dichloropropene       | 5.80 | 75  | 253234  | 48.18  | ug/l   | 100    |
| 37) Ethyl Acetate             | 4.85 | 43  | 272548  | 47.14  | ug/l   | 99     |
| 38) Carbon Tetrachloride      | 5.79 | 117 | 250553  | 50.09  | ug/l   | 97     |

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 Sample : J4429-06MS  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 21 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleID :  
 FL-0540MS

Manual Integrations  
 APPROVED

MMDadoda  
 8/14/2018 12:56:11 PM

Quant Time: Aug 14 05:26:49 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X080618W.M  
 Quant Title : SW846 8260  
 QLast Update : Mon Aug 13 01:34:27 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 39) Methylcyclohexane          | 7.46  | 83   | 1551356  | 250.37 | ug/l   | 99       |
| 40) Benzene                    | 6.15  | 78   | 790376   | 50.08  | ug/l   | 99       |
| 41) Methacrylonitrile          | 5.06  | 41   | 158825   | 49.88  | ug/l   | 100      |
| 42) 1,2-Dichloroethane         | 6.20  | 62   | 276755   | 51.87  | ug/l   | 97       |
| 43) Isopropyl Acetate          | 6.46  | 43   | 458481   | 52.70  | ug/l   | 98       |
| 44) Trichloroethene            | 7.21  | 130  | 211049   | 48.90  | ug/l   | 95       |
| 45) 1,2-Dichloropropane        | 7.52  | 63   | 203552   | 49.95  | ug/l   | 99       |
| 46) Dibromomethane             | 7.67  | 93   | 134157   | 50.71  | ug/l   | 99       |
| 47) Bromodichloromethane       | 7.90  | 83   | 262287   | 52.62  | ug/l   | 99       |
| 48) Methyl methacrylate        | 7.78  | 41   | 222361   | 50.28  | ug/l   | 97       |
| 49) 1,4-Dioxane                | 7.76  | 88   | 89264    | 856.85 | ug/l   | 96       |
| 51) 4-Methyl-2-Pentanone       | 8.65  | 43   | 1874787  | 259.99 | ug/l   | 100      |
| 52) Toluene                    | 8.79  | 92   | 510903   | 51.24  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 295892   | 52.52  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 8.44  | 75   | 312744   | 51.48  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 9.22  | 97   | 205663   | 50.47  | ug/l   | 99       |
| 56) Ethyl methacrylate         | 9.18  | 69   | 331609   | 56.09  | ug/l   | 96       |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 354678   | 52.01  | ug/l   | 99       |
| 59) 2-Hexanone                 | 9.50  | 43   | 1412920  | 262.13 | ug/l   | 100      |
| 60) Dibromochloromethane       | 9.59  | 129  | 211644   | 55.71  | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 9.68  | 107  | 219537   | 53.81  | ug/l   | 99       |
| 64) Tetrachloroethene          | 9.34  | 164  | 197911   | 46.12  | ug/l   | 94       |
| 65) Chlorobenzene              | 10.14 | 112  | 550360   | 48.49  | ug/l   | 90       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.23 | 131  | 204632   | 52.44  | ug/l   | 99       |
| 67) Ethyl Benzene              | 10.26 | 91   | 2507168  | 134.94 | ug/l   | 100      |
| 68) m/p-Xylenes                | 10.36 | 106  | 1356942  | 186.90 | ug/l   | 92       |
| 69) o-Xylene                   | 10.70 | 106  | 382442   | 55.80  | ug/l   | 95       |
| 70) Styrene                    | 10.71 | 104  | 625005   | 55.70  | ug/l   | 99       |
| 71) Bromoform                  | 10.86 | 173  | 166375   | 57.02  | ug/l   | 98       |
| 73) Isopropylbenzene           | 11.02 | 105  | 1626318  | 78.91  | ug/l   | 96       |
| 74) N-amyl acetate             | 6.46  | 43   | 458481   | 42.78  | ug/l # | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.27 | 83   | 336543   | 47.64  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 11.30 | 75   | 296995m  | 48.26  | ug/l   |          |
| 77) Bromobenzene               | 11.26 | 156  | 265815   | 48.34  | ug/l   | 98       |
| 78) n-propylbenzene            | 11.36 | 91   | 2416434  | 104.41 | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 729345   | 51.69  | ug/l   | 97       |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 2191514  | 130.40 | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 11.08 | 75   | 93039    | 46.08  | ug/l   | 98       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 939824   | 56.85  | ug/l   | 92       |
| 83) tert-Butylbenzene          | 11.77 | 119  | 863953   | 52.25  | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 11.81 | 105  | 4953972  | 293.16 | ug/l   | 95       |
| 85) sec-Butylbenzene           | 11.94 | 105  | 1134905  | 58.16  | ug/l   | 98       |
| 86) p-Isopropyltoluene         | 12.07 | 119  | 1053868  | 60.19  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 12.03 | 146  | 502116   | 49.40  | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 502683   | 47.68  | ug/l   | 99       |
| 89) n-Butylbenzene             | 12.39 | 91   | 868818   | 56.94  | ug/l # | 89       |
| 90) Hexachloroethane           | 12.60 | 117  | 173570   | 61.05  | ug/l   | 71       |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 459670   | 45.63  | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.00 | 75   | 65181    | 45.04  | ug/l   | 95       |
| 93) 1,2,4-Trichlorobenzene     | 13.65 | 180  | 343710   | 47.44  | ug/l   | 97       |

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Sample : J4429-06MS  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 21 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
FL-0540MS

Manual Integrations  
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8/14/2018 12:56:11 PM

Quant Time: Aug 14 05:26:49 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X080618W.M  
Quant Title : SW846 8260  
QLast Update : Mon Aug 13 01:34:27 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 94) Hexachlorobutadiene    | 13.79 | 225  | 144268   | 42.51 | ug/l  | 97       |
| 95) Naphthalene            | 13.83 | 128  | 1548361  | 74.61 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 14.02 | 180  | 373056   | 51.59 | ug/l  | 97       |

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

