

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX082718\  
 Data File : VX004265.D  
 Acq On : 27 Aug 2018 16:43  
 Operator : JC/MD  
 Sample : VX0827MBSD01  
 Misc : 5.00µL/100µL/5.00mL/MSVOA\_X/MEOH  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleID :  
 VX0827MBSD01

Manual Integrations  
 APPROVED

MMDadoda  
 8/28/2018 3:54:25 PM

Quant Time: Aug 28 01:17:56 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X082218W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Aug 23 05:39:44 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.66  | 168  | 277503   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 452649   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 412422   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 257532   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.07   | 65  | 199482   | 55.15 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 110.30% |      |
| 35) Dibromofluoromethane  | 5.50   | 113 | 164293   | 48.79 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.58%  |      |
| 50) Toluene-d8            | 8.71   | 98  | 609049   | 47.92 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 95.84%  |      |
| 62) 4-Bromofluorobenzene  | 11.14  | 95  | 240831   | 50.78 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.56% |      |

## Target Compounds

|                               |      |     |        |        |      | Qvalue |
|-------------------------------|------|-----|--------|--------|------|--------|
| 2) Dichlorodifluoromethane    | 1.19 | 85  | 47280  | 14.71  | ug/l | 95     |
| 3) Chloromethane              | 1.32 | 50  | 79249  | 22.47  | ug/l | 99     |
| 4) Vinyl Chloride             | 1.40 | 62  | 72111  | 19.83  | ug/l | 98     |
| 5) Bromomethane               | 1.63 | 94  | 36996  | 19.40  | ug/l | 97     |
| 6) Chloroethane               | 1.71 | 64  | 60392  | 22.51  | ug/l | 99     |
| 7) Trichlorofluoromethane     | 1.92 | 101 | 80686  | 16.19  | ug/l | 96     |
| 8) Diethyl Ether              | 2.18 | 74  | 54182  | 25.39  | ug/l | 96     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.37 | 101 | 48234  | 15.46  | ug/l | 98     |
| 10) Methyl Iodide             | 2.50 | 142 | 62119  | 20.40  | ug/l | 97     |
| 11) Tert butyl alcohol        | 3.08 | 59  | 101273 | 131.35 | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 2.37 | 96  | 55905  | 19.02  | ug/l | 97     |
| 13) Acrolein                  | 2.29 | 56  | 23077  | 124.15 | ug/l | 97     |
| 14) Allyl chloride            | 2.72 | 41  | 123213 | 22.81  | ug/l | 95     |
| 15) Acrylonitrile             | 3.15 | 53  | 236859 | 124.05 | ug/l | 99     |
| 16) Acetone                   | 2.45 | 43  | 196360 | 129.09 | ug/l | 97     |
| 17) Carbon Disulfide          | 2.56 | 76  | 129381 | 16.39  | ug/l | 99     |
| 18) Methyl Acetate            | 2.78 | 43  | 155340 | 28.94  | ug/l | 100    |
| 19) Methyl tert-butyl Ether   | 3.20 | 73  | 246989 | 25.49  | ug/l | 98     |
| 20) Methylene Chloride        | 2.85 | 84  | 81109  | 23.30  | ug/l | 97     |
| 21) trans-1,2-Dichloroethene  | 3.16 | 96  | 67269  | 20.67  | ug/l | 99     |
| 22) Diisopropyl ether         | 3.87 | 45  | 240823 | 23.88  | ug/l | 96     |
| 23) Vinyl Acetate             | 3.82 | 43  | 962579 | 117.77 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 3.69 | 63  | 132101 | 22.48  | ug/l | 99     |
| 25) 2-Butanone                | 4.71 | 43  | 304484 | 124.20 | ug/l | 100    |
| 26) 2,2-Dichloropropane       | 4.58 | 77  | 93260  | 20.23  | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 4.59 | 96  | 81482  | 22.08  | ug/l | 99     |
| 28) Bromochloromethane        | 5.02 | 49  | 59520  | 22.87  | ug/l | 99     |
| 29) Tetrahydrofuran           | 5.16 | 42  | 194117 | 124.92 | ug/l | 99     |
| 30) Chloroform                | 5.21 | 83  | 130625 | 22.17  | ug/l | 96     |
| 31) Cyclohexane               | 5.57 | 56  | 76240  | 15.03  | ug/l | 96     |
| 32) 1,1,1-Trichloroethane     | 5.49 | 97  | 94163  | 19.16  | ug/l | 100    |
| 36) 1,1-Dichloropropene       | 5.79 | 75  | 83119  | 16.33  | ug/l | 98     |
| 37) Ethyl Acetate             | 4.86 | 43  | 109678 | 21.91  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 5.78 | 117 | 73031  | 15.26  | ug/l | 96     |

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 Sample : VX0827MBSD01  
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 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
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 VX0827MBSD01

Manual Integrations  
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MMDadoda  
 8/28/2018 3:54:25 PM

Quant Time: Aug 28 01:17:56 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X082218W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Aug 23 05:39:44 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 39) Methylcyclohexane          | 7.46  | 83   | 70354    | 12.11  | ug/l   | 99       |
| 40) Benzene                    | 6.14  | 78   | 304309   | 20.01  | ug/l   | 100      |
| 41) Methacrylonitrile          | 5.06  | 41   | 63346    | 21.84  | ug/l   | 99       |
| 42) 1,2-Dichloroethane         | 6.20  | 62   | 107138   | 20.66  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 6.46  | 43   | 170797   | 22.21  | ug/l   | 99       |
| 44) Trichloroethene            | 7.21  | 130  | 77514    | 18.42  | ug/l   | 98       |
| 45) 1,2-Dichloropropane        | 7.52  | 63   | 77862    | 20.46  | ug/l   | 99       |
| 46) Dibromomethane             | 7.67  | 93   | 51031    | 20.14  | ug/l   | 98       |
| 47) Bromodichloromethane       | 7.90  | 83   | 88351    | 18.74  | ug/l   | 98       |
| 48) Methyl methacrylate        | 7.78  | 41   | 88426    | 21.49  | ug/l   | 99       |
| 49) 1,4-Dioxane                | 7.76  | 88   | 43499    | 465.59 | ug/l   | 99       |
| 51) 4-Methyl-2-Pentanone       | 8.65  | 43   | 589987   | 105.59 | ug/l   | 100      |
| 52) Toluene                    | 8.79  | 92   | 188097   | 19.76  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 104724   | 20.11  | ug/l   | 97       |
| 54) cis-1,3-Dichloropropene    | 8.44  | 75   | 116740   | 20.58  | ug/l   | 97       |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 81081    | 21.10  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 9.18  | 69   | 115357   | 22.05  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 137198   | 21.18  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 8.31  | 63   | 302493   | 112.87 | ug/l   | 100      |
| 59) 2-Hexanone                 | 9.50  | 43   | 458157   | 107.48 | ug/l   | 100      |
| 60) Dibromochloromethane       | 9.59  | 129  | 70767    | 18.90  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 9.67  | 107  | 81085    | 20.39  | ug/l   | 99       |
| 64) Tetrachloroethene          | 9.34  | 164  | 70983    | 17.42  | ug/l   | 98       |
| 65) Chlorobenzene              | 10.14 | 112  | 202611   | 19.57  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.22 | 131  | 67468    | 18.90  | ug/l   | 97       |
| 67) Ethyl Benzene              | 10.26 | 91   | 319830   | 19.03  | ug/l   | 95       |
| 68) m/p-Xylenes                | 10.36 | 106  | 257423   | 39.16  | ug/l   | 97       |
| 69) o-Xylene                   | 10.70 | 106  | 130153   | 20.93  | ug/l   | 98       |
| 70) Styrene                    | 10.71 | 104  | 213042   | 21.16  | ug/l   | 99       |
| 71) Bromoform                  | 10.86 | 173  | 51809    | 18.00  | ug/l # | 98       |
| 73) Isopropylbenzene           | 11.02 | 105  | 329930   | 19.51  | ug/l   | 100      |
| 74) N-amyl acetate             | 10.90 | 43   | 150629   | 23.13  | ug/l # | 95       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.27 | 83   | 130879   | 22.11  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 11.30 | 75   | 114805m  | 21.92  | ug/l   |          |
| 77) Bromobenzene               | 11.26 | 156  | 99695    | 21.01  | ug/l   | 97       |
| 78) n-propylbenzene            | 11.36 | 91   | 385232   | 19.80  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 242441   | 20.25  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 281413   | 20.09  | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 33029    | 20.46  | ug/l   | 95       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 285091   | 20.23  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 11.77 | 119  | 275479   | 19.55  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 11.81 | 105  | 304646   | 21.19  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 11.94 | 105  | 309581   | 18.50  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 12.07 | 119  | 275364   | 18.36  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 177260   | 19.84  | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 184074   | 19.54  | ug/l   | 100      |
| 89) n-Butylbenzene             | 12.39 | 91   | 223919   | 18.36  | ug/l   | 99       |
| 90) Hexachloroethane           | 12.60 | 117  | 33375    | 15.92  | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 164396   | 20.14  | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.00 | 75   | 22009    | 21.11  | ug/l   | 97       |

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Misc : 5.00µL/100µL/5.00mL/MSVOA\_X/MEOH  
ALS Vial : 8 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
VX0827MBSD01

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Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X082218W.M  
Quant Title : SW846 8260  
QLast Update : Thu Aug 23 05:39:44 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.65 | 180  | 122688   | 20.65 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 13.79 | 225  | 42527    | 15.29 | ug/l  | 95       |
| 95) Naphthalene            | 13.83 | 128  | 416067   | 24.76 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 14.02 | 180  | 129086   | 20.53 | ug/l  | 99       |

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

