

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX062018\  
 Data File : VX002742.D  
 Acq On : 20 Jun 2018 15:27  
 Operator : JC/MD  
 Sample : VX0620WBSD01  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VX0620WBSD01

Manual Integrations  
 APPROVED

apatel  
 6/22/2018 8:08:33 AM

Quant Time: Jun 21 04:42:16 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X061518W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Jun 16 01:37:33 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 258124   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.87  | 114  | 358132   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 339800   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 211712   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 6.07   | 65  | 177725   | 45.31 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 90.62% |      |
| 35) Dibromofluoromethane  | 5.51   | 113 | 142517   | 49.86 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.72% |      |
| 50) Toluene-d8            | 8.72   | 98  | 515288   | 47.48 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 94.96% |      |
| 62) 4-Bromofluorobenzene  | 11.14  | 95  | 194176   | 47.22 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 94.44% |      |

## Target Compounds

|                               |      |     |        |        |      | Qvalue |
|-------------------------------|------|-----|--------|--------|------|--------|
| 2) Dichlorodifluoromethane    | 1.20 | 85  | 56938  | 20.78  | ug/l | 99     |
| 3) Chloromethane              | 1.32 | 50  | 56862  | 17.44  | ug/l | 99     |
| 4) Vinyl Chloride             | 1.40 | 62  | 64455  | 19.06  | ug/l | 90     |
| 5) Bromomethane               | 1.64 | 94  | 27754  | 13.60  | ug/l | 99     |
| 6) Chloroethane               | 1.72 | 64  | 46007  | 20.64  | ug/l | 97     |
| 7) Trichlorofluoromethane     | 1.93 | 101 | 113610 | 20.67  | ug/l | 98     |
| 8) Diethyl Ether              | 2.19 | 74  | 38875  | 18.60  | ug/l | 98     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.39 | 101 | 63283  | 20.60  | ug/l | 99     |
| 10) Methyl Iodide             | 2.51 | 142 | 43818  | 14.66  | ug/l | 99     |
| 11) Tert butyl alcohol        | 3.08 | 59  | 68871  | 84.93  | ug/l | 98     |
| 12) 1,1-Dichloroethene        | 2.37 | 96  | 55755  | 19.33  | ug/l | 99     |
| 13) Acrolein                  | 2.30 | 56  | 44668  | 121.14 | ug/l | 99     |
| 14) Allyl chloride            | 2.73 | 41  | 109667 | 19.15  | ug/l | 98     |
| 15) Acrylonitrile             | 3.15 | 53  | 170531 | 96.37  | ug/l | 99     |
| 16) Acetone                   | 2.45 | 43  | 184165 | 106.42 | ug/l | 99     |
| 17) Carbon Disulfide          | 2.57 | 76  | 148163 | 21.66  | ug/l | 99     |
| 18) Methyl Acetate            | 2.78 | 43  | 92547  | 20.07  | ug/l | 99     |
| 19) Methyl tert-butyl Ether   | 3.21 | 73  | 205127 | 18.96  | ug/l | 98     |
| 20) Methylene Chloride        | 2.86 | 84  | 63047  | 17.77  | ug/l | 96     |
| 21) trans-1,2-Dichloroethene  | 3.17 | 96  | 59904  | 19.15  | ug/l | 94     |
| 22) Diisopropyl ether         | 3.88 | 45  | 202047 | 19.50  | ug/l | 99     |
| 23) Vinyl Acetate             | 3.83 | 43  | 863565 | 99.59  | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 3.70 | 63  | 116517 | 20.72  | ug/l | 100    |
| 25) 2-Butanone                | 4.71 | 43  | 238426 | 104.91 | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 4.59 | 77  | 85889  | 21.26  | ug/l | 98     |
| 27) cis-1,2-Dichloroethene    | 4.60 | 96  | 64509  | 20.26  | ug/l | 97     |
| 28) Bromochloromethane        | 5.03 | 49  | 53582  | 20.35  | ug/l | 97     |
| 29) Tetrahydrofuran           | 5.17 | 42  | 146620 | 98.44  | ug/l | 96     |
| 30) Chloroform                | 5.22 | 83  | 115145 | 21.23  | ug/l | 99     |
| 31) Cyclohexane               | 5.58 | 56  | 93533  | 20.20  | ug/l | 96     |
| 32) 1,1,1-Trichloroethane     | 5.50 | 97  | 98446  | 21.71  | ug/l | 100    |
| 36) 1,1-Dichloropropene       | 5.81 | 75  | 81116  | 21.33  | ug/l | 98     |
| 37) Ethyl Acetate             | 4.87 | 43  | 90258  | 20.97  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 5.79 | 117 | 87933  | 23.22  | ug/l | 94     |

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 Sample : VX0620WBSD01  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleID :  
 VX0620WBSD01

Manual Integrations  
 APPROVED

apatel  
 6/22/2018 8:08:33 AM

Quant Time: Jun 21 04:42:16 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X061518W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Jun 16 01:37:33 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 39) Methylcyclohexane          | 7.46  | 83   | 95401    | 21.46  | ug/l   | 97       |
| 40) Benzene                    | 6.15  | 78   | 243859   | 21.38  | ug/l   | 99       |
| 41) Methacrylonitrile          | 5.07  | 41   | 51813    | 21.32  | ug/l   | 97       |
| 42) 1,2-Dichloroethane         | 6.20  | 62   | 95849    | 21.71  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 6.47  | 43   | 147598   | 20.69  | ug/l   | 100      |
| 44) Trichloroethene            | 7.22  | 130  | 69858    | 21.22  | ug/l   | 99       |
| 45) 1,2-Dichloropropane        | 7.52  | 63   | 64010    | 21.33  | ug/l   | 99       |
| 46) Dibromomethane             | 7.67  | 93   | 43957    | 21.89  | ug/l   | 99       |
| 47) Bromodichloromethane       | 7.90  | 83   | 80207    | 22.65  | ug/l   | 100      |
| 48) Methyl methacrylate        | 7.79  | 41   | 75105    | 20.60  | ug/l   | 97       |
| 49) 1,4-Dioxane                | 7.76  | 88   | 26271    | 380.59 | ug/l   | 99       |
| 51) 4-Methyl-2-Pentanone       | 8.65  | 43   | 481094   | 105.05 | ug/l   | 99       |
| 52) Toluene                    | 8.79  | 92   | 158430   | 21.78  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 8.44  | 75   | 90301    | 20.73  | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 9.04  | 75   | 83980    | 20.79  | ug/l   | 97       |
| 55) 1,1,2-Trichloroethane      | 9.22  | 97   | 63165    | 21.49  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 9.18  | 69   | 93530    | 20.67  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 9.38  | 76   | 106411   | 21.40  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 8.32  | 63   | 217097   | 99.22  | ug/l   | 99       |
| 59) 2-Hexanone                 | 9.50  | 43   | 367434   | 106.47 | ug/l   | 98       |
| 60) Dibromochloromethane       | 9.59  | 129  | 63969    | 21.65  | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 9.68  | 107  | 67426    | 22.15  | ug/l   | 99       |
| 64) Tetrachloroethene          | 9.34  | 164  | 74111    | 19.65  | ug/l   | 98       |
| 65) Chlorobenzene              | 10.14 | 112  | 179697   | 21.53  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.23 | 131  | 63891    | 22.46  | ug/l   | 99       |
| 67) Ethyl Benzene              | 10.26 | 91   | 303179   | 21.54  | ug/l   | 98       |
| 68) m/p-Xylenes                | 10.36 | 106  | 235781   | 43.43  | ug/l   | 99       |
| 69) o-Xylene                   | 10.70 | 106  | 113569   | 21.29  | ug/l   | 99       |
| 70) Styrene                    | 10.71 | 104  | 187926   | 21.42  | ug/l   | 100      |
| 71) Bromoform                  | 10.86 | 173  | 48501    | 21.75  | ug/l # | 98       |
| 73) Isopropylbenzene           | 11.02 | 105  | 306758   | 21.66  | ug/l   | 99       |
| 74) N-amyl acetate             | 6.47  | 43   | 147598   | 20.98  | ug/l # | 100      |
| 75) 1,1,2,2-Tetrachloroethane  | 11.27 | 83   | 97128    | 23.23  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 11.30 | 75   | 91821m   | 22.98  | ug/l   |          |
| 77) Bromobenzene               | 11.26 | 156  | 87159    | 22.10  | ug/l   | 95       |
| 78) n-propylbenzene            | 11.37 | 91   | 352196   | 21.69  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 11.43 | 91   | 208358   | 21.49  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 260029   | 21.73  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 11.08 | 75   | 20332    | 19.11  | ug/l   | 91       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 248538   | 21.72  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 11.77 | 119  | 255411   | 22.16  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 11.81 | 105  | 267736   | 21.93  | ug/l   | 98       |
| 85) sec-Butylbenzene           | 11.95 | 105  | 308920   | 21.55  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 12.07 | 119  | 280994   | 21.67  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 12.03 | 146  | 155521   | 21.50  | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 158094   | 21.48  | ug/l   | 100      |
| 89) n-Butylbenzene             | 12.39 | 91   | 238610   | 20.86  | ug/l   | 99       |
| 90) Hexachloroethane           | 12.60 | 117  | 38360    | 20.60  | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene        | 12.40 | 146  | 158383   | 21.75  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.01 | 75   | 20069    | 22.91  | ug/l   | 98       |

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Sample : VX0620WBSD01  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
VX0620WBSD01

Manual Integrations  
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apatel  
6/22/2018 8:08:33 AM

Quant Time: Jun 21 04:42:16 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X061518W.M  
Quant Title : SW846 8260  
QLast Update : Sat Jun 16 01:37:33 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.65 | 180  | 112983   | 21.38 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 13.79 | 225  | 59121    | 21.24 | ug/l  | 99       |
| 95) Naphthalene            | 13.84 | 128  | 319516   | 22.47 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 14.02 | 180  | 115512   | 21.76 | ug/l  | 100      |

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

