

Data Path : Z:\VOASRV\HPCHEM1\MSVOA\_X\DATA\VX101218\  
 Data File : VX005282.D  
 Acq On : 12 Oct 2018 09:12  
 Operator : JC/MD  
 Sample : VSTDIC005  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VSTDIC005

Manual Integrations  
 APPROVED

MMDadoda  
 10/17/2018 9:04:21 AM

Quant Time: Oct 12 10:48:32 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X101218W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Oct 12 10:42:03 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 275696   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 370434   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 340661   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 188041   | 50.00 | ug/l  | 0.00     |

|                             |        |     |          |      |        |      |
|-----------------------------|--------|-----|----------|------|--------|------|
| System Monitoring Compounds |        |     |          |      |        |      |
| 33) 1,2-Dichloroethane-d4   | 6.07   | 65  | 17804    | 5.01 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =    | 10.02% |      |
| 35) Dibromofluoromethane    | 5.50   | 113 | 14101    | 4.16 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =    | 8.32%  |      |
| 50) Toluene-d8              | 8.71   | 98  | 45318    | 3.99 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =    | 7.98%  |      |
| 62) 4-Bromofluorobenzene    | 11.14  | 95  | 15587    | 3.84 | ug/l   | 0.00 |
| Spiked Amount               | 50.000 |     | Recovery | =    | 7.68%  |      |

| Target Compounds              |      |     |        |       |      | Qvalue |
|-------------------------------|------|-----|--------|-------|------|--------|
| 2) Dichlorodifluoromethane    | 1.20 | 85  | 10049  | 3.89  | ug/l | 98     |
| 3) Chloromethane              | 1.32 | 50  | 15402  | 4.33  | ug/l | 99     |
| 4) Vinyl Chloride             | 1.40 | 62  | 15867  | 4.35  | ug/l | 98     |
| 5) Bromomethane               | 1.64 | 94  | 10131  | 5.82  | ug/l | 96     |
| 6) Chloroethane               | 1.71 | 64  | 9924   | 4.20  | ug/l | # 82   |
| 7) Trichlorofluoromethane     | 1.92 | 101 | 22930  | 4.74  | ug/l | 99     |
| 8) Diethyl Ether              | 2.19 | 74  | 10059  | 4.64  | ug/l | 90     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.38 | 101 | 12676  | 4.13  | ug/l | 92     |
| 10) Methyl Iodide             | 2.51 | 142 | 8839   | 2.62  | ug/l | 97     |
| 11) Tert butyl alcohol        | 3.08 | 59  | 22394  | 26.40 | ug/l | 97     |
| 12) 1,1-Dichloroethene        | 2.37 | 96  | 12199  | 4.23  | ug/l | 95     |
| 13) Acrolein                  | 2.29 | 56  | 18559  | 55.43 | ug/l | 93     |
| 14) Allyl chloride            | 2.73 | 41  | 28812  | 4.86  | ug/l | 93     |
| 15) Acrylonitrile             | 3.15 | 53  | 53163  | 26.03 | ug/l | 98     |
| 16) Acetone                   | 2.45 | 43  | 48123  | 27.74 | ug/l | 91     |
| 17) Carbon Disulfide          | 2.56 | 76  | 37807  | 4.54  | ug/l | 98     |
| 18) Methyl Acetate            | 2.78 | 43  | 26030  | 5.35  | ug/l | 97     |
| 19) Methyl tert-butyl Ether   | 3.20 | 73  | 44392  | 4.39  | ug/l | 96     |
| 20) Methylene Chloride        | 2.85 | 84  | 15615  | 4.39  | ug/l | 87     |
| 21) trans-1,2-Dichloroethene  | 3.16 | 96  | 14575  | 4.58  | ug/l | 95     |
| 22) Diisopropyl ether         | 3.87 | 45  | 46206  | 4.33  | ug/l | # 94   |
| 23) Vinyl Acetate             | 3.82 | 43  | 206776 | 23.96 | ug/l | 96     |
| 24) 1,1-Dichloroethane        | 3.69 | 63  | 28264  | 4.69  | ug/l | 95     |
| 25) 2-Butanone                | 4.71 | 43  | 67284  | 24.37 | ug/l | 91     |
| 26) 2,2-Dichloropropane       | 4.59 | 77  | 19839  | 4.80  | ug/l | 96     |
| 27) cis-1,2-Dichloroethene    | 4.59 | 96  | 15463  | 4.35  | ug/l | 92     |
| 28) Bromochloromethane        | 5.01 | 49  | 12822  | 4.65  | ug/l | 90     |
| 29) Tetrahydrofuran           | 5.16 | 42  | 42360  | 25.44 | ug/l | # 88   |
| 30) Chloroform                | 5.22 | 83  | 25218  | 4.29  | ug/l | # 80   |
| 31) Cyclohexane               | 5.57 | 56  | 20747  | 4.03  | ug/l | 88     |
| 32) 1,1,1-Trichloroethane     | 5.48 | 97  | 21380  | 4.52  | ug/l | 98     |
| 36) 1,1-Dichloropropene       | 5.79 | 75  | 18253  | 4.06  | ug/l | 98     |
| 37) Ethyl Acetate             | 4.86 | 43  | 24349  | 4.76  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 5.77 | 117 | 19858  | 4.52  | ug/l | 88     |

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 Data File : VX005282.D  
 Acq On : 12 Oct 2018 09:12  
 Operator : JC/MD  
 Sample : VSTDIC005  
 Misc : 5.0mL/MSVOA\_X/WATER  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleID :  
 VSTDIC005

Manual Integrations  
 APPROVED

MMDadoda  
 10/17/2018 9:04:21 AM

Quant Time: Oct 12 10:48:32 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X101218W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Oct 12 10:42:03 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc  | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|-------|--------|----------|
| 39) Methylcyclohexane          | 7.46  | 83   | 20893    | 4.45  | ug/l   | 88       |
| 40) Benzene                    | 6.14  | 78   | 59003    | 4.42  | ug/l   | 97       |
| 41) Methacrylonitrile          | 5.06  | 41   | 12984    | 4.61  | ug/l   | 96       |
| 42) 1,2-Dichloroethane         | 6.20  | 62   | 21119    | 4.77  | ug/l   | 98       |
| 43) Isopropyl Acetate          | 6.47  | 43   | 31555    | 4.64  | ug/l   | 96       |
| 44) Trichloroethene            | 7.21  | 130  | 16239    | 4.68  | ug/l   | 90       |
| 45) 1,2-Dichloropropane        | 7.52  | 63   | 14442    | 4.50  | ug/l   | 92       |
| 46) Dibromomethane             | 7.66  | 93   | 9092     | 4.48  | ug/l   | 98       |
| 47) Bromodichloromethane       | 7.90  | 83   | 17655    | 4.60  | ug/l   | 90       |
| 48) Methyl methacrylate        | 7.77  | 41   | 15522    | 4.62  | ug/l   | 94       |
| 49) 1,4-Dioxane                | 7.76  | 88   | 7117     | 89.44 | ug/l # | 87       |
| 51) 4-Methyl-2-Pentanone       | 8.65  | 43   | 107383   | 22.40 | ug/l   | 95       |
| 52) Toluene                    | 8.79  | 92   | 30908    | 3.93  | ug/l   | 95       |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 16872    | 3.77  | ug/l   | 94       |
| 54) cis-1,3-Dichloropropene    | 8.44  | 75   | 18650    | 4.08  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 13399    | 3.96  | ug/l   | 96       |
| 56) Ethyl methacrylate         | 9.18  | 69   | 16824    | 3.51  | ug/l   | 93       |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 22090    | 4.02  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 8.32  | 63   | 51997    | 23.67 | ug/l   | 95       |
| 59) 2-Hexanone                 | 9.50  | 43   | 85842    | 23.34 | ug/l   | 89       |
| 60) Dibromochloromethane       | 9.59  | 129  | 12687    | 3.98  | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 9.67  | 107  | 14001    | 4.33  | ug/l   | 97       |
| 64) Tetrachloroethene          | 9.34  | 164  | 13902    | 3.27  | ug/l   | 98       |
| 65) Chlorobenzene              | 10.14 | 112  | 36317    | 4.29  | ug/l   | 93       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.22 | 131  | 12486    | 4.28  | ug/l   | 97       |
| 67) Ethyl Benzene              | 10.25 | 91   | 55786    | 4.05  | ug/l   | 99       |
| 68) m/p-Xylenes                | 10.36 | 106  | 43719    | 8.25  | ug/l   | 97       |
| 69) o-Xylene                   | 10.70 | 106  | 21006    | 4.12  | ug/l   | 97       |
| 70) Styrene                    | 10.71 | 104  | 33353    | 3.95  | ug/l   | 98       |
| 71) Bromoform                  | 10.86 | 173  | 10585    | 4.42  | ug/l # | 99       |
| 73) Isopropylbenzene           | 11.02 | 105  | 54828    | 4.43  | ug/l   | 100      |
| 74) N-amyl acetate             | 10.90 | 43   | 24950    | 4.79  | ug/l   | 94       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.27 | 83   | 21955    | 5.50  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 11.30 | 75   | 19030m   | 5.03  | ug/l   |          |
| 77) Bromobenzene               | 11.26 | 156  | 16628    | 4.86  | ug/l   | 99       |
| 78) n-propylbenzene            | 11.36 | 91   | 62467    | 4.39  | ug/l   | 98       |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 39194    | 4.54  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 46953    | 4.51  | ug/l   | 95       |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 5428     | 4.57  | ug/l # | 87       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 46191    | 4.58  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 11.77 | 119  | 46040    | 4.65  | ug/l   | 96       |
| 84) 1,2,4-Trimethylbenzene     | 11.80 | 105  | 47428    | 4.46  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 11.94 | 105  | 56522    | 4.48  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 12.07 | 119  | 49325    | 4.42  | ug/l   | 95       |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 30051    | 4.71  | ug/l   | 98       |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 32525    | 4.93  | ug/l   | 94       |
| 89) n-Butylbenzene             | 12.39 | 91   | 43721    | 4.30  | ug/l   | 95       |
| 90) Hexachloroethane           | 12.60 | 117  | 8265     | 4.63  | ug/l   | 97       |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 30879    | 4.78  | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.00 | 75   | 5066     | 5.94  | ug/l   | 91       |

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Data File : VX005282.D  
Acq On : 12 Oct 2018 09:12  
Operator : JC/MD  
Sample : VSTDICC005  
Misc : 5.0mL/MSVOA\_X/WATER  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
VSTDICC005

Manual Integrations  
APPROVED

MMDadoda  
10/17/2018 9:04:21 AM

Quant Time: Oct 12 10:48:32 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X101218W.M  
Quant Title : SW846 8260  
QLast Update : Fri Oct 12 10:42:03 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.65 | 180  | 21497    | 4.70 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 13.79 | 225  | 12136    | 5.08 | ug/l  | 98       |
| 95) Naphthalene            | 13.83 | 128  | 57494    | 4.48 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 14.02 | 180  | 21963    | 4.67 | ug/l  | 99       |

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

