

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN121319\
 Data File : VN059591.D
 Acq On : 13 Dec 2019 18:12
 Operator : JC/SP
 Sample : VSTDIC005
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 MSVOA_N
 Client Sampled :
 VSTDIC005

Manual Integrations
 APPROVED

apatel
 12/16/2019 12:49:06 PM

Quant Time: Dec 13 22:39:02 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_N\METHODS\82N121319W.M
 Quant Title : SW846 8260
 QLast Update : Fri Dec 13 22:31:32 2019
 Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene | 7.64 | 168 | 252149 | 50.00 | ug/l | 0.00 |
| 34) 1,4-Difluorobenzene | 8.57 | 114 | 408213 | 50.00 | ug/l | 0.00 |
| 63) Chlorobenzene-d5 | 11.40 | 117 | 358377 | 50.00 | ug/l | 0.00 |
| 72) 1,4-Dichlorobenzene-d4 | 13.34 | 152 | 151625 | 50.00 | ug/l | 0.00 |

System Monitoring Compounds

| | | | | | | |
|---------------------------|--------|-----|----------|------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 8.00 | 65 | 20282 | 5.60 | ug/l | 0.00 |
| Spiked Amount | 50.000 | | Recovery | = | 11.20% | |
| 35) Dibromofluoromethane | 7.56 | 113 | 13430 | 5.42 | ug/l | 0.00 |
| Spiked Amount | 50.000 | | Recovery | = | 10.84% | |
| 50) Toluene-d8 | 10.08 | 98 | 52977 | 5.20 | ug/l | 0.00 |
| Spiked Amount | 50.000 | | Recovery | = | 10.40% | |
| 62) 4-Bromofluorobenzene | 12.40 | 95 | 18527 | 5.03 | ug/l | 0.00 |
| Spiked Amount | 50.000 | | Recovery | = | 10.06% | |

Target Compounds

| | | | | | | Qvalue |
|-------------------------------|------|-----|--------|--------|--------|--------|
| 2) Dichlorodifluoromethane | 1.83 | 85 | 18302 | 6.105 | ug/l | 99 |
| 3) Chloromethane | 2.04 | 50 | 27018 | 5.886 | ug/l | 97 |
| 4) Vinyl Chloride | 2.17 | 62 | 27004 | 6.030 | ug/l | 100 |
| 5) Bromomethane | 2.52 | 94 | 17518 | 6.400 | ug/l | 95 |
| 6) Chloroethane | 2.67 | 64 | 13914 | 5.237 | ug/l | 95 |
| 7) Trichlorofluoromethane | 2.99 | 101 | 28970 | 5.433 | ug/l | 93 |
| 8) Diethyl Ether | 3.38 | 74 | 8983 | 4.953 | ug/l | 92 |
| 9) 1,1,2-Trichlorotrifluoroet | 3.73 | 101 | 15190 | 5.519 | ug/l | 98 |
| 10) Methyl Iodide | 3.92 | 142 | 16726 | 4.447 | ug/l | 98 |
| 11) Tert butyl alcohol | 4.76 | 59 | 17350 | 28.365 | ug/l | 96 |
| 12) 1,1-Dichloroethene | 3.71 | 96 | 14136 | 5.254 | ug/l | 96 |
| 13) Acrolein | 3.58 | 56 | 10809 | 30.995 | ug/l | 96 |
| 14) Allyl chloride | 4.29 | 41 | 28066 | 5.438 | ug/l | 95 |
| 15) Acrylonitrile | 4.95 | 53 | 41803 | 26.526 | ug/l | 98 |
| 16) Acetone | 3.79 | 43 | 51492 | 28.928 | ug/l | 97 |
| 17) Carbon Disulfide | 4.02 | 76 | 47038 | 4.761 | ug/l | 99 |
| 18) Methyl Acetate | 4.30 | 43 | 23139 | 5.222 | ug/l | 98 |
| 19) Methyl tert-butyl Ether | 5.01 | 73 | 48648 | 5.445 | ug/l | 99 |
| 20) Methylene Chloride | 4.52 | 84 | 17014 | 4.990 | ug/l | 97 |
| 21) trans-1,2-Dichloroethene | 5.01 | 96 | 15370 | 5.340 | ug/l | 95 |
| 22) Diisopropyl ether | 5.92 | 45 | 51100 | 5.203 | ug/l | 95 |
| 23) Vinyl Acetate | 5.86 | 43 | 190339 | 23.400 | ug/l | 99 |
| 24) 1,1-Dichloroethane | 5.82 | 63 | 30148 | 5.401 | ug/l | 97 |
| 25) 2-Butanone | 6.81 | 43 | 64704 | 28.024 | ug/l | 99 |
| 26) 2,2-Dichloropropane | 6.80 | 77 | 27540 | 5.457 | ug/l | 97 |
| 27) cis-1,2-Dichloroethene | 6.80 | 96 | 17411 | 5.371 | ug/l | 99 |
| 28) Bromochloromethane | 7.17 | 49 | 5814 | 3.198 | ug/l # | 98 |
| 29) Tetrahydrofuran | 7.19 | 42 | 40515 | 25.718 | ug/l | 98 |
| 30) Chloroform | 7.35 | 83 | 29394 | 5.339 | ug/l | 98 |
| 31) Cyclohexane | 7.63 | 56 | 31642 | 5.831 | ug/l # | 80 |
| 32) 1,1,1-Trichloroethane | 7.54 | 97 | 26429 | 5.409 | ug/l | 99 |
| 36) 1,1-Dichloropropene | 7.77 | 75 | 22174 | 5.214 | ug/l | 98 |
| 37) Ethyl Acetate | 6.90 | 43 | 24199 | 5.460 | ug/l | 99 |
| 38) Carbon Tetrachloride | 7.75 | 117 | 23096 | 5.495 | ug/l | 97 |

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|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane | 9.07 | 83 | 24201 | 5.079 | ug/l | 96 |
| 40) Benzene | 8.02 | 78 | 64843 | 5.326 | ug/l | 99 |
| 41) Methacrylonitrile | 7.15 | 41 | 9380m | 4.593 | ug/l | |
| 42) 1,2-Dichloroethane | 8.10 | 62 | 25512 | 5.613 | ug/l | 99 |
| 43) Isopropyl Acetate | 8.14 | 43 | 38336 | 5.202 | ug/l # | 92 |
| 44) Trichloroethene | 8.82 | 130 | 17152 | 5.559 | ug/l | 94 |
| 45) 1,2-Dichloropropane | 9.10 | 63 | 17362 | 5.386 | ug/l | 100 |
| 46) Dibromomethane | 9.19 | 93 | 11549 | 5.407 | ug/l | 98 |
| 47) Bromodichloromethane | 9.39 | 83 | 22778 | 5.376 | ug/l | 99 |
| 48) Methyl methacrylate | 9.19 | 41 | 16683 | 5.157 | ug/l | 97 |
| 49) 1,4-Dioxane | 9.19 | 88 | 4440 | 102.607 | ug/l # | 90 |
| 51) 4-Methyl-2-Pentanone | 9.97 | 43 | 111960 | 26.133 | ug/l | 99 |
| 52) Toluene | 10.15 | 92 | 39827 | 5.482 | ug/l | 97 |
| 53) t-1,3-Dichloropropene | 10.37 | 75 | 25306 | 5.119 | ug/l | 99 |
| 54) cis-1,3-Dichloropropene | 9.83 | 75 | 26661 | 5.262 | ug/l | 98 |
| 55) 1,1,2-Trichloroethane | 10.55 | 97 | 15209 | 5.175 | ug/l | 94 |
| 56) Ethyl methacrylate | 10.42 | 69 | 19525 | 4.495 | ug/l | 94 |
| 57) 1,3-Dichloropropane | 10.70 | 76 | 26684 | 5.314 | ug/l | 99 |
| 58) 2-Chloroethyl Vinyl ether | 9.68 | 63 | 37833 | 27.504 | ug/l | 99 |
| 59) 2-Hexanone | 10.74 | 43 | 84621 | 26.063 | ug/l | 98 |
| 60) Dibromochloromethane | 10.90 | 129 | 16100 | 5.053 | ug/l | 99 |
| 61) 1,2-Dibromoethane | 11.00 | 107 | 15466 | 5.062 | ug/l | 99 |
| 64) Tetrachloroethene | 10.62 | 164 | 19097 | 6.867 | ug/l | 98 |
| 65) Chlorobenzene | 11.43 | 112 | 41795 | 5.462 | ug/l | 95 |
| 66) 1,1,1,2-Tetrachloroethane | 11.50 | 131 | 16010 | 5.600 | ug/l | 99 |
| 67) Ethyl Benzene | 11.51 | 91 | 72058 | 5.241 | ug/l | 99 |
| 68) m/p-Xylenes | 11.62 | 106 | 53255 | 10.455 | ug/l | 96 |
| 69) o-Xylene | 11.95 | 106 | 24874 | 5.230 | ug/l | 100 |
| 70) Styrene | 11.96 | 104 | 37123 | 4.713 | ug/l | 98 |
| 71) Bromoform | 12.12 | 173 | 10894 | 4.916 | ug/l # | 97 |
| 73) Isopropylbenzene | 12.25 | 105 | 65286 | 5.508 | ug/l | 99 |
| 74) N-amyl acetate | 12.07 | 43 | 28085 | 5.408 | ug/l | 97 |
| 75) 1,1,2,2-Tetrachloroethane | 12.50 | 83 | 20684 | 5.229 | ug/l | 95 |
| 76) 1,2,3-Trichloropropane | 12.55 | 75 | 18148m | 4.549 | ug/l | |
| 77) Bromobenzene | 12.53 | 156 | 15791 | 5.432 | ug/l | 97 |
| 78) n-propylbenzene | 12.59 | 91 | 74653 | 5.181 | ug/l | 100 |
| 79) 2-Chlorotoluene | 12.67 | 91 | 45614 | 5.304 | ug/l | 99 |
| 80) 1,3,5-Trimethylbenzene | 12.73 | 105 | 55292 | 5.513 | ug/l | 98 |
| 81) trans-1,4-Dichloro-2-buten | 12.30 | 75 | 7779 | 5.150 | ug/l | 99 |
| 82) 4-Chlorotoluene | 12.77 | 91 | 46419 | 5.299 | ug/l | 100 |
| 83) tert-Butylbenzene | 12.99 | 119 | 46670 | 5.591 | ug/l | 99 |
| 84) 1,2,4-Trimethylbenzene | 13.04 | 105 | 54041 | 5.463 | ug/l | 99 |
| 85) sec-Butylbenzene | 13.17 | 105 | 61738 | 5.398 | ug/l | 99 |
| 86) p-Isopropyltoluene | 13.29 | 119 | 54886 | 5.379 | ug/l | 99 |
| 87) 1,3-Dichlorobenzene | 13.28 | 146 | 28649 | 5.377 | ug/l | 99 |
| 88) 1,4-Dichlorobenzene | 13.36 | 146 | 28720 | 5.517 | ug/l | 95 |
| 89) n-Butylbenzene | 13.62 | 91 | 49262 | 5.122 | ug/l | 99 |
| 90) Hexachloroethane | 13.87 | 117 | 10431 | 5.532 | ug/l | 94 |
| 91) 1,2-Dichlorobenzene | 13.65 | 146 | 27854 | 5.550 | ug/l | 99 |
| 92) 1,2-Dibromo-3-Chloropropan | 14.27 | 75 | 6136 | 6.118 | ug/l | 77 |

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|----------------------------|-------|------|----------|-------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 14.91 | 180 | 18109 | 5.305 | ug/l | 98 |
| 94) Hexachlorobutadiene | 15.01 | 225 | 10191 | 5.913 | ug/l | 97 |
| 95) Naphthalene | 15.12 | 128 | 50559 | 5.027 | ug/l | 99 |
| 96) 1,2,3-Trichlorobenzene | 15.29 | 180 | 18849 | 5.373 | ug/l | 98 |

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

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