

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX110421\
 Data File : VX025072.D
 Acq On : 04 Nov 2021 14:47
 Operator : JC/MD
 Sample : M4068-09
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 21 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 MDL-WATER-03-QT4-2021

Quant Time: Nov 07 00:01:19 2021
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X110421W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Wed Nov 03 23:52:56 2021
 Response via : Initial Calibration

Manual Integrations APPROVED

Reviewed By : John Carlone 11/08/2021
 Supervised By : Mahesh Dadoda 11/10/2021

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	4.904	128	23210	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	6.763	114	128466	30.000	ug/l	0.00
57) Chlorobenzene-d5	10.055	117	112932	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	5.958	65	64381	29.064	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery =	96.867%		
60) 4-Bromofluorobenzene	11.085	95	59144	28.704	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery =	95.667%		
63) Toluene-d8	8.653	98	153477	29.425	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery =	98.067%		
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.166	85	3648	2.053	ug/l	90
3) Chloromethane	1.294	50	2018	2.161	ug/l #	81
4) Vinyl Chloride	1.374	62	2270	2.120	ug/l	98
5) Bromomethane	1.611	94	2030	2.309	ug/l	82
6) Chloroethane	1.697	64	1185	1.963	ug/l	90
7) Trichlorofluoromethane	1.892	101	5635	2.180	ug/l #	75
8) Diethyl Ether	2.130	74	1958	3.197	ug/l	82
9) 1,1,2-Trichlorotrifluo...	2.331	101	3376	2.504	ug/l	98
10) 1,1-Dichloroethene	2.319	96	2511	2.197	ug/l	96
11) Methyl Iodide	2.459	142	2453	5.261	ug/l	90
12) Methyl Acetate	2.709	43	5091	2.120	ug/l #	82
13) Acrolein	2.245	56	2252	20.586	ug/l #	82
14) Acrylonitrile	3.075	53	7260	10.732	ug/l	99
15) Acetone	2.404	58	2484m	12.018	ug/l	
16) Carbon Disulfide	2.520	76	6631	2.273	ug/l	97
17) Allyl chloride	2.672	41	3848	2.110	ug/l	93
18) Methylene Chloride	2.794	84	3428	2.562	ug/l #	84
19) trans-1,2-Dichloroethene	3.093	96	2624	2.088	ug/l	93
20) Diisopropyl ether	3.764	45	8227	2.085	ug/l	93
21) 1,1-Dichloroethane	3.617	63	6347	2.425	ug/l #	93
22) cis-1,2-Dichloroethene	4.489	96	3247m	2.178	ug/l	
23) tert-Butyl Alcohol	3.008	59	4719m	11.471	ug/l	
24) Methyl tert-Butyl Ether	3.123	73	10448	2.162	ug/l #	61
25) Chloroform	5.093	83	6957m	2.292	ug/l	
26) Cyclohexane	5.477	56	4849m	2.322	ug/l	
29) 1,1-Dichloropropene	5.696	75	4562m	2.208	ug/l	
30) 2-Butanone	4.574	43	10767m	10.334	ug/l	
31) 2,2-Dichloropropane	4.471	77	5766	2.197	ug/l	93
32) 1,1,1-Trichloroethane	5.385	97	6301	2.120	ug/l #	71
33) Carbon Tetrachloride	5.684	117	5393	2.068	ug/l #	92
34) Benzene	6.044	78	11692	2.219	ug/l #	86
35) Methacrylonitrile	4.922	41	2414m	2.349	ug/l	
36) 1,2-Dichloroethane	6.092	62	5482	2.147	ug/l #	93
37) Trichloroethene	7.123	130	3371	2.289	ug/l	97
38) Methylcyclohexane	7.379	83	4813	2.170	ug/l	94
39) 1,2-Dichloropropane	7.434	63	3058	2.127	ug/l #	89
40) Dibromomethane	7.592	93	2607	2.327	ug/l	91
41) Bromodichloromethane	7.824	83	5017	2.109	ug/l #	87
42) Vinyl Acetate	3.727	43	29742	9.541	ug/l #	94

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43) Ethyl Acetate	4.715	43	4108m	2.057	ug/l	
44) Isopropyl Acetate	6.348	43	6426	2.057	ug/l	96
45) 1,4-Dioxane	7.714	88	1374m	41.422	ug/l	
46) Methyl methacrylate	7.696	41	3207	2.100	ug/l	82
47) n-amyl Acetate	10.848	43	4746	1.884	ug/l	92
48) t-1,3-Dichloropropene	8.982	75	5043	1.968	ug/l	96
49) cis-1,3-Dichloropropene	8.366	75	5147	2.013	ug/l #	87
50) 1,1,2-Trichloroethane	9.159	97	2573	1.696	ug/l	94
51) Ethyl methacrylate	9.116	69	4042	1.653	ug/l	89
52) 1,3-Dichloropropane	9.305	76	5833	2.251	ug/l	97
53) Dibromochloromethane	9.519	129	3052	1.763	ug/l	96
54) 1,2-Dibromoethane	9.616	107	3231	1.907	ug/l	95
55) 2-Chloroethyl vinyl ether	8.244	63	12690	11.666	ug/l	97
56) Bromoform	10.805	173	2268	1.973	ug/l #	95
58) 4-Methyl-2-Pentanone	8.580	43	24049	12.632	ug/l #	90
59) 2-Hexanone	9.433	43	20441	13.974	ug/l	90
61) Tetrachloroethene	9.275	164	3024	2.285	ug/l #	88
62) Toluene	8.720	91	12494	2.163	ug/l	96
64) Chlorobenzene	10.079	112	8003	2.294	ug/l	94
65) 1,1,1,2-Tetrachloroethane	10.165	131	3330	2.136	ug/l	98
66) Ethyl Benzene	10.195	91	14249	2.086	ug/l	96
67) m/p-Xylenes	10.305	106	9568	4.074	ug/l	84
68) o-Xylene	10.646	106	4801	2.093	ug/l	66
69) Styrene	10.659	104	7821	2.007	ug/l	93
70) Isopropylbenzene	10.963	105	14507	2.177	ug/l	93
71) 1,1,2,2-Tetrachloroethane	11.213	83	4773	2.170	ug/l	98
72) 1,2,3-Trichloropropane	11.238	75	4301m	2.019	ug/l	
73) Bromobenzene	11.201	156	3223	2.164	ug/l	86
74) n-propylbenzene	11.305	91	15574	1.971	ug/l	99
75) 2-Chlorotoluene	11.366	91	9335	1.885	ug/l	99
76) 1,3,5-Trimethylbenzene	11.457	105	11924	2.052	ug/l	90
77) t-1,4-Dichloro-2-butene	11.018	75	1309	1.825	ug/l	91
78) 4-Chlorotoluene	11.457	91	11227	1.986	ug/l	99
79) tert-butylbenzene	11.713	119	11976	2.187	ug/l	93
80) 1,2,4-Trimethylbenzene	11.756	105	11496	2.011	ug/l	94
81) sec-Butylbenzene	11.890	105	14105	2.070	ug/l	100
82) p-Isopropyltoluene	12.012	119	11514	2.038	ug/l	97
83) 1,3-Dichlorobenzene	11.969	146	5824	2.103	ug/l	94
84) 1,4-Dichlorobenzene	12.049	146	5532	2.006	ug/l	90
85) n-Butylbenzene	12.335	91	9515	1.846	ug/l	94
86) Hexachloroethane	12.536	117	1995	1.980	ug/l	93
87) 1,2-Dichlorobenzene	12.335	146	5582	2.047	ug/l	94
88) 1,2-Dibromo-3-Chloropr...	12.951	75	1121	1.863	ug/l	83
89) 1,2,4-Trichlorobenzene	13.591	180	2682	1.624	ug/l #	97
90) Hexachlorobutadiene	13.731	225	1740	2.085	ug/l	94
91) Naphthalene	13.780	128	6134	1.087	ug/l #	92
92) 1,2,3-Trichlorobenzene	13.963	180	2720	1.615	ug/l	88

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

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