

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX102119\
 Data File : VX013158.D
 Acq On : 21 Oct 2019 17:41
 Operator : JC/SP
 Sample : K5111-09 2.5PPB MDL
 Misc : 5.0mL/MSVOA X/WATER
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 MDL-MDL-WATER-03-QT4-2019DL

Manual Integrations
 APPROVED

MMDadoda
 10/22/2019 12:32:08 PM

Quant Time: Oct 22 02:17:53 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA X\METHOD\624X102119W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Tue Oct 22 01:53:07 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.01	128	27554	30.00	ug/l	0.00
28) 1,4-Difluorobenzene	6.85	114	155966	30.00	ug/l	0.00
57) Chlorobenzene-d5	10.11	117	136180	30.00	ug/l	0.00

System Monitoring Compounds

27) 1,2-Dichloroethane-d4	6.05	65	64171	29.58	ug/l	0.00
Spiked Amount	30.000	Range	50 - 169	Recovery	=	98.60%
60) 4-Bromofluorobenzene	11.14	95	66615	28.09	ug/l	0.00
Spiked Amount	30.000	Range	56 - 143	Recovery	=	93.63%
63) Toluene-d8	8.71	98	188983	31.20	ug/l	0.00
Spiked Amount	30.000	Range	66 - 137	Recovery	=	104.00%

Target Compounds

					Ovalue
2) Dichlorodifluoromethane	1.19	85	4313	2.180	ug/l 99
3) Chloromethane	1.32	50	4052	2.349	ug/l 96
4) Vinyl Chloride	1.40	62	4096	2.297	ug/l 100
5) Bromomethane	1.64	94	3107	3.229	ug/l 93
6) Chloroethane	1.72	64	3099	2.723	ug/l 98
7) Trichlorofluoromethane	1.92	101	6432	2.245	ug/l 89
8) Diethyl Ether	2.18	74	2354	2.407	ug/l 98
9) 1,1,2-Trichlorotrifluoroet	2.37	101	4179	2.388	ug/l 95
10) 1,1-Dichloroethene	2.37	96	3907	2.311	ug/l 90
11) Methyl Iodide	2.50	142	3823	1.756	ug/l 93
12) Methyl Acetate	2.76	43	5530	2.533	ug/l 94
13) Acrolein	2.28	56	3401	10.467	ug/l 94
14) Acrylonitrile	3.13	53	10487	11.488	ug/l 98
15) Acetone	2.44	58	3372	11.212	ug/l 91
16) Carbon Disulfide	2.56	76	10948	2.425	ug/l 99
17) Allyl chloride	2.72	41	6247	2.323	ug/l 84
18) Methylene Chloride	2.85	84	5322	2.719	ug/l 95
19) trans-1,2-Dichloroethene	3.15	96	3985	2.222	ug/l 95
20) Diisopropyl ether	3.85	45	12177	2.342	ug/l # 86
21) 1,1-Dichloroethane	3.70	63	6993	2.215	ug/l # 90
22) cis-1,2-Dichloroethene	4.59	96	4671	2.284	ug/l 89
23) tert-Butyl Alcohol	3.03	59	7109	14.781	ug/l # 100
24) Methyl tert-Butyl Ether	3.18	73	13418m	2.302	ug/l
25) Chloroform	5.20	83	7667	2.311	ug/l 93
26) Cyclohexane	5.57	56	6200	2.238	ug/l # 87
29) 1,1-Dichloropropene	5.79	75	5553	2.292	ug/l # 86
30) 2-Butanone	4.67	43	15338	12.068	ug/l # 53
31) 2,2-Dichloropropane	4.57	77	6276	2.240	ug/l # 84
32) 1,1,1-Trichloroethane	5.48	97	6389m	2.179	ug/l
33) Carbon Tetrachloride	5.78	117	5560	2.206	ug/l 92
34) Benzene	6.14	78	16842	2.415	ug/l 96
35) Methacrylonitrile	5.03	41	3007	2.307	ug/l 77
36) 1,2-Dichloroethane	6.18	62	6137	2.327	ug/l # 93
37) Trichloroethene	7.20	130	4702	2.430	ug/l 96
38) Methylcyclohexane	7.46	83	6610	2.237	ug/l 96
39) 1,2-Dichloropropane	7.51	63	3963	2.315	ug/l 96
40) Dibromomethane	7.65	93	2942	2.406	ug/l 97

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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)

41) Bromodichloromethane	7.89	83	5223	2.118	ug/l #	94
42) Vinyl Acetate	3.80	43	50070	11.361	ug/l	99
43) Ethyl Acetate	4.83	43	5261	2.270	ug/l	99
44) Isopropyl Acetate	6.43	43	8833	2.267	ug/l	96
45) 1,4-Dioxane	7.74	88	2441	49.543	ug/l #	83
46) Methyl methacrylate	7.76	41	4381	2.285	ug/l	88
47) n-amyl Acetate	10.89	43	6604	2.011	ug/l	96
48) t-1,3-Dichloropropene	9.04	75	5418	2.003	ug/l #	88
49) cis-1,3-Dichloropropene	8.43	75	6488	2.204	ug/l #	82
50) 1,1,2-Trichloroethane	9.21	97	4314	2.389	ug/l	97
51) Ethyl methacrylate	9.18	69	5962	2.105	ug/l	90
52) 1,3-Dichloropropane	9.37	76	6880	2.262	ug/l	94
53) Dibromochloromethane	9.58	129	3853	1.978	ug/l	96
54) 1,2-Dibromoethane	9.67	107	4336	2.245	ug/l	99
55) 2-Chloroethyl vinyl ether	8.31	63	14075	12.236	ug/l	99
56) Bromoform	10.85	173	2412	1.745	ug/l	97
58) 4-Methyl-2-Pentanone	8.64	43	27664	12.056	ug/l	99
59) 2-Hexanone	9.49	43	21032	11.695	ug/l	99
61) Tetrachloroethene	9.33	164	4489	2.486	ug/l	91
62) Toluene	8.78	91	18454	2.510	ug/l	95
64) Chlorobenzene	10.14	112	11737	2.490	ug/l	97
65) 1,1,1,2-Tetrachloroethane	10.21	131	3913	2.216	ug/l	95
66) Ethyl Benzene	10.25	91	20321	2.402	ug/l	98
67) m/p-Xylenes	10.35	106	14633	4.551	ug/l	98
68) o-Xylene	10.69	106	7277	2.371	ug/l	97
69) Styrene	10.71	104	11048	2.091	ug/l	97
70) Isopropylbenzene	11.01	105	18530	2.200	ug/l	96
71) 1,1,2,2-Tetrachloroethane	11.26	83	6249	2.421	ug/l	98
72) 1,2,3-Trichloropropane	11.29	75	5240m	2.337	ug/l	
73) Bromobenzene	11.25	156	4565	2.258	ug/l	98
74) n-propylbenzene	11.35	91	20557	2.223	ug/l	99
75) 2-Chlorotoluene	11.42	91	13139	2.271	ug/l	100
76) 1,3,5-Trimethylbenzene	11.50	105	15549	2.199	ug/l	95
77) t-1,4-Dichloro-2-butene	11.07	75	1616	1.857	ug/l	93
78) 4-Chlorotoluene	11.51	91	14976	2.266	ug/l	97
79) tert-butylbenzene	11.76	119	14893	2.187	ug/l	98
80) 1,2,4-Trimethylbenzene	11.81	105	15272	2.162	ug/l	98
81) sec-Butylbenzene	11.94	105	17840	2.199	ug/l	99
82) p-Isopropyltoluene	12.06	119	15146	2.042	ug/l	99
83) 1,3-Dichlorobenzene	12.03	146	8535	2.312	ug/l	98
84) 1,4-Dichlorobenzene	12.09	146	8183	2.241	ug/l	98
85) n-Butylbenzene	12.39	91	12036	1.911	ug/l	98
86) Hexachloroethane	12.59	117	2384	1.842	ug/l	86
87) 1,2-Dichlorobenzene	12.39	146	8345	2.330	ug/l	98
88) 1,2-Dibromo-3-Chloropropan	12.99	75	1159	1.822	ug/l	86
89) 1,2,4-Trichlorobenzene	13.64	180	4764	2.139	ug/l	98
90) Hexachlorobutadiene	13.78	225	2678	2.368	ug/l	97
91) Naphthalene	13.83	128	15132	2.089	ug/l	98
92) 1,2,3-Trichlorobenzene	14.01	180	4824	2.114	ug/l	97

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

