

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN101219\
 Data File : VN058689.D
 Acq On : 11 Oct 2019 9:41
 Operator : JC/SP
 Sample : K5111-09
 Misc : 5.00mL/MSVOA N/WATER
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 MDL-MDL-WATER-03-QT4-2019

Manual Integrations
 APPROVED

MMDadoda
 10/14/2019 4:59:21 PM

Quant Time: Oct 11 17:39:42 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA N\METHODS\624N101119W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Oct 11 04:26:47 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	7.17	128	68169	30.00	ug/l	0.00
28) 1,4-Difluorobenzene	8.57	114	386349	30.00	ug/l	0.00
57) Chlorobenzene-d5	11.41	117	346564	30.00	ug/l	0.00

System Monitoring Compounds

27) 1,2-Dichloroethane-d4	8.01	65	185001	31.98	ug/l	0.00
Spiked Amount	30.000	Range	50 - 169	Recovery	=	106.60%
60) 4-Bromofluorobenzene	12.40	95	169394	27.94	ug/l	0.00
Spiked Amount	30.000	Range	56 - 143	Recovery	=	93.13%
63) Toluene-d8	10.08	98	492900	30.12	ug/l	0.00
Spiked Amount	30.000	Range	66 - 137	Recovery	=	100.40%

Target Compounds

					Ovalue
2) Dichlorodifluoromethane	1.83	85	10874	2.944 ug/l	95
3) Chloromethane	2.04	50	14248	2.888 ug/l	98
4) Vinyl Chloride	2.17	62	14491	2.842 ug/l	96
5) Bromomethane	2.55	94	10067	3.198 ug/l	94
6) Chloroethane	2.69	64	8701	2.715 ug/l	90
7) Trichlorofluoromethane	3.00	101	18249	2.908 ug/l	90
8) Diethyl Ether	3.38	74	6576	2.747 ug/l	88
9) 1,1,2-Trichlorotrifluoroet	3.74	101	10730	2.955 ug/l	98
10) 1,1-Dichloroethene	3.71	96	10037	2.814 ug/l	98
11) Methyl Iodide	3.93	142	12892	2.595 ug/l	94
12) Methyl Acetate	4.31	43	16016	2.807 ug/l	96
13) Acrolein	3.59	56	9551	15.148 ug/l #	55
14) Acrylonitrile	4.96	53	29962	13.325 ug/l	97
15) Acetone	3.79	58	8906	13.343 ug/l	86
16) Carbon Disulfide	4.03	76	30814	2.962 ug/l	96
17) Allyl chloride	4.29	41	20738m	2.921 ug/l	
18) Methylene Chloride	4.53	84	12944	2.997 ug/l	87
19) trans-1,2-Dichloroethene	5.02	96	11604	2.988 ug/l	88
20) Diisopropyl ether	5.92	45	39576	2.736 ug/l #	89
21) 1,1-Dichloroethane	5.83	63	23140	2.889 ug/l	99
22) cis-1,2-Dichloroethene	6.81	96	13343	2.882 ug/l	95
23) tert-Butyl Alcohol	4.76	59	13412m	14.583 ug/l	
24) Methyl tert-Butyl Ether	5.02	73	36964m	2.778 ug/l	
25) Chloroform	7.36	83	23758	2.974 ug/l	96
26) Cyclohexane	7.63	56	19062	2.712 ug/l #	96
29) 1,1-Dichloropropene	7.78	75	15611	2.567 ug/l	98
30) 2-Butanone	6.82	43	44576	12.970 ug/l	99
31) 2,2-Dichloropropane	6.80	77	21585	3.011 ug/l	96
32) 1,1,1-Trichloroethane	7.55	97	20558	2.923 ug/l #	80
33) Carbon Tetrachloride	7.75	117	17039	2.799 ug/l	99
34) Benzene	8.02	78	48849	2.728 ug/l #	23
35) Methacrylonitrile	7.17	41	10519m	3.465 ug/l	
36) 1,2-Dichloroethane	8.11	62	20775	3.035 ug/l #	95
37) Trichloroethene	8.82	130	12731	2.894 ug/l	98
38) Methylcyclohexane	9.07	83	18478	2.621 ug/l	99
39) 1,2-Dichloropropane	9.10	63	14334	2.929 ug/l	97
40) Dibromomethane	9.19	93	8857	2.867 ug/l	99

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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Bromodichloromethane	9.39	83	17093	2.709	ug/l	98
42) Vinyl Acetate	5.87	43	158782	13.192	ug/l	99
43) Ethyl Acetate	6.91	43	16326	2.420	ug/l	95
44) Isopropyl Acetate	8.15	43	29311	2.683	ug/l #	86
45) 1,4-Dioxane	9.19	88	4895	58.343	ug/l #	86
46) Methyl methacrylate	9.19	41	12250	2.442	ug/l	96
47) n-amyl Acetate	12.07	43	21269	2.196	ug/l	96
48) t-1,3-Dichloropropene	10.38	75	20208m	2.761	ug/l	
49) cis-1,3-Dichloropropene	9.83	75	19904	2.590	ug/l #	88
50) 1,1,2-Trichloroethane	10.56	97	12883	2.922	ug/l	96
51) Ethyl methacrylate	10.43	69	16005	2.270	ug/l	97
52) 1,3-Dichloropropane	10.71	76	21512	2.739	ug/l	95
53) Dibromochloromethane	10.90	129	12056	2.548	ug/l	96
54) 1,2-Dibromoethane	11.00	107	12079	2.643	ug/l	100
55) 2-Chloroethyl vinyl ether	9.69	63	41328	11.783	ug/l	100
56) Bromoform	12.13	173	7837	2.377	ug/l	98
58) 4-Methyl-2-Pentanone	9.98	43	84262	13.328	ug/l	97
59) 2-Hexanone	10.75	43	63724	12.857	ug/l	99
61) Tetrachloroethene	10.63	164	11048	2.950	ug/l	95
62) Toluene	10.15	91	52825	2.834	ug/l	99
64) Chlorobenzene	11.43	112	31147	2.733	ug/l	100
65) 1,1,1,2-Tetrachloroethane	11.51	131	12580	2.944	ug/l	97
66) Ethyl Benzene	11.51	91	54873	2.658	ug/l	99
67) m/p-Xylenes	11.62	106	39043	5.063	ug/l	96
68) o-Xylene	11.95	106	19531	2.612	ug/l	96
69) Styrene	11.97	104	28509	2.308	ug/l	97
70) Isopropylbenzene	12.25	105	50886	2.521	ug/l	98
71) 1,1,2,2-Tetrachloroethane	12.51	83	18543	2.729	ug/l	99
72) 1,2,3-Trichloropropane	12.56	75	16831m	2.733	ug/l	
73) Bromobenzene	12.53	156	13297	2.712	ug/l	98
74) n-propylbenzene	12.59	91	59649	2.525	ug/l	99
75) 2-Chlorotoluene	12.68	91	38326	2.696	ug/l	97
76) 1,3,5-Trimethylbenzene	12.74	105	42608	2.465	ug/l	99
77) t-1,4-Dichloro-2-butene	12.30	75	5358	2.284	ug/l	96
78) 4-Chlorotoluene	12.78	91	35336	2.412	ug/l	100
79) tert-butylbenzene	13.00	119	38235	2.589	ug/l	97
80) 1,2,4-Trimethylbenzene	13.04	105	41812	2.434	ug/l	100
81) sec-Butylbenzene	13.18	105	47286	2.379	ug/l	98
82) p-Isopropyltoluene	13.29	119	42468	2.379	ug/l	99
83) 1,3-Dichlorobenzene	13.29	146	22026	2.483	ug/l	96
84) 1,4-Dichlorobenzene	13.37	146	22076	2.491	ug/l	98
85) n-Butylbenzene	13.62	91	36157	2.213	ug/l	98
86) Hexachloroethane	13.88	117	8291	2.552	ug/l	100
87) 1,2-Dichlorobenzene	13.66	146	22600	2.580	ug/l	98
88) 1,2-Dibromo-3-Chloropropan	14.28	75	4005	2.648	ug/l	96
89) 1,2,4-Trichlorobenzene	14.92	180	12210	2.208	ug/l	100
90) Hexachlorobutadiene	15.01	225	7745	2.712	ug/l	97
91) Naphthalene	15.13	128	34220	2.096	ug/l	99
92) 1,2,3-Trichlorobenzene	15.30	180	11743	2.181	ug/l	99

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

