

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN042619\  
 Data File : VN055263.D  
 Acq On : 26 Apr 2019 00:19  
 Operator : JC/SP  
 Sample : VSTDCCC020  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 18 Sample Multiplier: 1

**Instrument :**  
 MSVOA\_N  
**ClientSampled :**  
 VSTDCCC020EC

**Manual Integrations**  
**APPROVED**  
 MMDadoda  
 4/26/2019 10:58:33 AM

Quant Time: Apr 26 05:51:55 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA N\METHODS\624N042619W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Fri Apr 26 05:19:18 2019  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	7.20	128	68461	30.00	ug/l	0.00
28) 1,4-Difluorobenzene	8.59	114	374140	30.00	ug/l	0.00
57) Chlorobenzene-d5	11.41	117	313982	30.00	ug/l	0.00

System Monitoring Compounds	R.T.	QIon	Response	Conc	Units	Dev(Min)
27) 1,2-Dichloroethane-d4	8.03	65	160554	29.71	ug/l	0.00
Spiked Amount	30.000	Range 50 - 169	Recovery	=	99.03%	
60) 4-Bromofluorobenzene	12.40	95	141290	29.32	ug/l	0.00
Spiked Amount	30.000	Range 56 - 143	Recovery	=	97.73%	
63) Toluene-d8	10.09	98	460584	30.87	ug/l	0.00
Spiked Amount	30.000	Range 66 - 137	Recovery	=	102.90%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	1.85	85	71759	19.219	ug/l	100
3) Chloromethane	2.06	50	102655	19.660	ug/l	97
4) Vinyl Chloride	2.19	62	86822	20.402	ug/l	98
5) Bromomethane	2.56	94	48933	20.639	ug/l	97
6) Chloroethane	2.70	64	48344	20.392	ug/l	97
7) Trichlorofluoromethane	3.02	101	127188	20.330	ug/l	93
8) Diethyl Ether	3.41	74	50976	20.072	ug/l	90
9) 1,1,2-Trichlorotrifluoroet	3.76	101	76709	19.264	ug/l	98
10) 1,1-Dichloroethene	3.74	96	72111	19.452	ug/l	99
11) Methyl Iodide	3.96	142	112585	19.312	ug/l	98
12) Methyl Acetate	4.33	43	103921	19.314	ug/l	96
13) Acrolein	3.61	56	21219	88.649	ug/l	94
14) Acrylonitrile	4.99	53	183486	96.006	ug/l	99
15) Acetone	3.82	58	39264	85.278	ug/l	90
16) Carbon Disulfide	4.06	76	190720	18.928	ug/l	99
17) Allyl chloride	4.33	41	153694	19.252	ug/l	98
18) Methylene Chloride	4.55	84	93844	20.390	ug/l	96
19) trans-1,2-Dichloroethene	5.05	96	78712	19.488	ug/l	95
20) Diisopropyl ether	5.96	45	325615	20.006	ug/l	98
21) 1,1-Dichloroethane	5.85	63	172015	20.338	ug/l	99
22) cis-1,2-Dichloroethene	6.83	96	93649	20.014	ug/l	98
23) tert-Butyl Alcohol	4.79	59	34625	88.739	ug/l #	100
24) Methyl tert-Butyl Ether	5.05	73	237792	19.684	ug/l	99
25) Chloroform	7.37	83	165124	20.776	ug/l	98
26) Cyclohexane	7.65	56	143298	19.508	ug/l #	97
29) 1,1-Dichloropropene	7.80	75	115383	19.459	ug/l	99
30) 2-Butanone	6.84	43	213204	88.725	ug/l	100
31) 2,2-Dichloropropane	6.82	77	91874	16.359	ug/l	98
32) 1,1,1-Trichloroethane	7.57	97	129355	19.625	ug/l	99
33) Carbon Tetrachloride	7.77	117	107618	19.581	ug/l	95
34) Benzene	8.04	78	354571	19.974	ug/l	99
35) Methacrylonitrile	7.17	41	55452	20.009	ug/l	96
36) 1,2-Dichloroethane	8.13	62	126538	19.982	ug/l	100
37) Trichloroethene	8.84	130	86163	19.232	ug/l	97
38) Methylcyclohexane	9.08	83	116391	18.347	ug/l	99
39) 1,2-Dichloropropane	9.12	63	103720	20.411	ug/l	96
40) Dibromomethane	9.21	93	59015	20.043	ug/l	97

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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Bromodichloromethane	9.40	83	118774	19.835	ug/l	94
42) Vinyl Acetate	5.90	43	1073000	93.246	ug/l	100
43) Ethyl Acetate	6.93	43	93728	18.821	ug/l	95
44) Isopropyl Acetate	8.17	43	168267	18.362	ug/l	95
45) 1,4-Dioxane	9.20	88	17752	373.783	ug/l	96
46) Methyl methacrylate	9.20	41	76595	17.752	ug/l	97
47) n-amyl Acetate	12.07	43	101978	15.643	ug/l	97
48) t-1,3-Dichloropropene	10.38	75	102920	17.467	ug/l	95
49) cis-1,3-Dichloropropene	9.84	75	128251	18.762	ug/l	98
50) 1,1,2-Trichloroethane	10.56	97	80062	19.948	ug/l	97
51) Ethyl methacrylate	10.43	69	96724	17.727	ug/l	99
52) 1,3-Dichloropropane	10.71	76	134555	18.935	ug/l	99
53) Dibromochloromethane	10.90	129	75844	18.273	ug/l	97
54) 1,2-Dibromoethane	11.01	107	74067	19.021	ug/l	99
55) 2-Chloroethyl vinyl ether	9.70	63	140691	85.547	ug/l	99
56) Bromoform	12.13	173	47978	17.637	ug/l	97
58) 4-Methyl-2-Pentanone	9.99	43	462433	94.339	ug/l	99
59) 2-Hexanone	10.75	43	278703	88.816	ug/l	100
61) Tetrachloroethene	10.63	164	86280	21.177	ug/l	96
62) Toluene	10.16	91	362256	20.392	ug/l	98
64) Chlorobenzene	11.43	112	213332	20.270	ug/l	97
65) 1,1,1,2-Tetrachloroethane	11.51	131	80015	20.381	ug/l	100
66) Ethyl Benzene	11.51	91	373855	19.800	ug/l	99
67) m/p-Xylenes	11.62	106	273798	39.599	ug/l	98
68) o-Xylene	11.95	106	139015	20.145	ug/l	93
69) Styrene	11.96	104	207240	19.386	ug/l	99
70) Isopropylbenzene	12.25	105	366110	20.155	ug/l	100
71) 1,1,2,2-Tetrachloroethane	12.50	83	97937	19.562	ug/l	96
72) 1,2,3-Trichloropropane	12.55	75	77482m	17.853	ug/l	
73) Bromobenzene	12.53	156	82664	19.144	ug/l	100
74) n-propylbenzene	12.59	91	384580	18.971	ug/l	99
75) 2-Chlorotoluene	12.67	91	241421	19.415	ug/l	98
76) 1,3,5-Trimethylbenzene	12.73	105	280289	18.802	ug/l	97
77) t-1,4-Dichloro-2-butene	12.30	75	18444	15.967	ug/l	90
78) 4-Chlorotoluene	12.77	91	219812	18.595	ug/l	99
79) tert-butylbenzene	12.99	119	255983	19.936	ug/l	98
80) 1,2,4-Trimethylbenzene	13.04	105	272557	18.963	ug/l	100
81) sec-Butylbenzene	13.17	105	323716	19.071	ug/l	98
82) p-Isopropyltoluene	13.29	119	254054	18.043	ug/l	100
83) 1,3-Dichlorobenzene	13.28	146	127392	18.187	ug/l	97
84) 1,4-Dichlorobenzene	13.36	146	115789	17.514	ug/l	98
85) n-Butylbenzene	13.61	91	168561	15.701	ug/l	98
86) Hexachloroethane	13.88	117	43869	18.264	ug/l	99
87) 1,2-Dichlorobenzene	13.65	146	130395	18.604	ug/l	99
88) 1,2-Dibromo-3-Chloropropan	14.27	75	12319	16.810	ug/l	92
89) 1,2,4-Trichlorobenzene	14.91	180	37178	13.406	ug/l	98
90) Hexachlorobutadiene	15.01	225	41040	17.477	ug/l	97
91) Naphthalene	15.13	128	82817	12.923	ug/l	99
92) 1,2,3-Trichlorobenzene	15.31	180	40068	13.848	ug/l	97

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Internal Standards R.T. QIon Response Conc Units Dev(Min)  
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(#) = qualifier out of range (m) = manual integration (+) = signals summed

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