

Data Path : Z:\VOASRV\HPCHEM1\MSVOA N\DATA\VN071319\  
 Data File : VN056684.D  
 Acq On : 12 Jul 2019 12:29  
 Operator : JC/SP  
 Sample : VSTDIC005  
 Misc : 5.00mL/MSVOA N/WATER  
 ALS Vial : 8 Sample Multiplier: 1

**Instrument :**  
 MSVOA\_N  
**ClientSampled :**  
 VSTDIC005

**Manual Integrations**  
**APPROVED**  
 MMDadoda  
 7/16/2019 9:59:29 AM

Quant Time: Jul 13 00:00:50 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA N\METHODS\624N071319W.M  
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS  
 QLast Update : Fri Jul 12 23:38:18 2019  
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	7.19	128	53174	30.00	ug/l	0.00
28) 1,4-Difluorobenzene	8.59	114	290266	30.00	ug/l	0.00
57) Chlorobenzene-d5	11.41	117	248851	30.00	ug/l	0.00

System Monitoring Compounds

27) 1,2-Dichloroethane-d4	8.03	65	108296	29.72	ug/l	0.00
Spiked Amount	30.000	Range	50 - 169	Recovery	=	99.07%
60) 4-Bromofluorobenzene	12.40	95	105889	27.58	ug/l	0.00
Spiked Amount	30.000	Range	56 - 143	Recovery	=	91.93%
63) Toluene-d8	10.09	98	349066	30.25	ug/l	0.00
Spiked Amount	30.000	Range	66 - 137	Recovery	=	100.83%

Target Compounds

					Ovalue
2) Dichlorodifluoromethane	1.85	85	13002	4.703	ug/l 100
3) Chloromethane	2.06	50	18556	4.701	ug/l 98
4) Vinyl Chloride	2.18	62	18779	5.001	ug/l 96
5) Bromomethane	2.55	94	14421m	7.078	ug/l
6) Chloroethane	2.69	64	11297	5.418	ug/l 95
7) Trichlorofluoromethane	3.00	101	24961	5.190	ug/l 98
8) Diethyl Ether	3.40	74	10470	5.200	ug/l 98
9) 1,1,2-Trichlorotrifluoroet	3.75	101	16430	5.406	ug/l 90
10) 1,1-Dichloroethene	3.73	96	15555	5.252	ug/l 92
11) Methyl Iodide	3.95	142	15399	3.657	ug/l 99
12) Methyl Acetate	4.33	43	28066	7.070	ug/l 97
13) Acrolein	3.61	56	10687	29.526	ug/l 97
14) Acrylonitrile	4.99	53	46224	26.445	ug/l 98
15) Acetone	3.82	58	13734	25.697	ug/l 94
16) Carbon Disulfide	4.05	76	39361	5.393	ug/l 99
17) Allyl chloride	4.32	41	26909	5.181	ug/l 97
18) Methylene Chloride	4.55	84	19068	5.438	ug/l 89
19) trans-1,2-Dichloroethene	5.03	96	16673	5.185	ug/l 90
20) Diisopropyl ether	5.96	45	54470	5.117	ug/l 98
21) 1,1-Dichloroethane	5.85	63	31550	5.244	ug/l 97
22) cis-1,2-Dichloroethene	6.83	96	19996	5.295	ug/l 98
23) tert-Butyl Alcohol	4.79	59	15674	23.915	ug/l # 100
24) Methyl tert-Butyl Ether	5.05	73	50006	5.131	ug/l 98
25) Chloroform	7.37	83	31112	5.265	ug/l 98
26) Cyclohexane	7.65	56	28297	5.068	ug/l # 98
29) 1,1-Dichloropropene	7.79	75	23200	5.261	ug/l 97
30) 2-Butanone	6.84	43	64230	25.874	ug/l 99
31) 2,2-Dichloropropane	6.82	77	21432	5.052	ug/l 97
32) 1,1,1-Trichloroethane	7.57	97	24088	5.141	ug/l 100
33) Carbon Tetrachloride	7.77	117	19962	4.990	ug/l 99
34) Benzene	8.04	78	71719	5.223	ug/l # 67
35) Methacrylonitrile	7.18	41	10718	5.242	ug/l 96
36) 1,2-Dichloroethane	8.13	62	24058	5.402	ug/l 99
37) Trichloroethene	8.84	130	19860	5.490	ug/l 99
38) Methylcyclohexane	9.08	83	28238	5.098	ug/l 99
39) 1,2-Dichloropropane	9.12	63	19271	5.228	ug/l 100
40) Dibromomethane	9.21	93	12605	5.503	ug/l 96

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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) Bromodichloromethane	9.40	83	21071	4.947	ug/l	97
42) Vinyl Acetate	5.90	43	200914	23.209	ug/l	100
43) Ethyl Acetate	6.93	43	24579	5.238	ug/l	99
44) Isopropyl Acetate	8.17	43	36812	5.045	ug/l #	88
45) 1,4-Dioxane	9.20	88	7219	99.596	ug/l	89
46) Methyl methacrylate	9.20	41	16667	4.641	ug/l	97
47) n-amyl Acetate	12.07	43	26333	4.355	ug/l	98
48) t-1,3-Dichloropropene	10.38	75	22562	4.932	ug/l	96
49) cis-1,3-Dichloropropene	9.84	75	25209	4.794	ug/l	99
50) 1,1,2-Trichloroethane	10.56	97	18243	5.427	ug/l	97
51) Ethyl methacrylate	10.43	69	24805	4.717	ug/l	94
52) 1,3-Dichloropropane	10.71	76	29125	5.078	ug/l	100
53) Dibromochloromethane	10.90	129	16050	4.837	ug/l	99
54) 1,2-Dibromoethane	11.00	107	18062	5.148	ug/l	98
55) 2-Chloroethyl vinyl ether	9.70	63	59693	22.477	ug/l	99
56) Bromoform	12.12	173	11181	4.602	ug/l #	94
58) 4-Methyl-2-Pentanone	9.99	43	121182	26.674	ug/l	99
59) 2-Hexanone	10.75	43	87457	25.593	ug/l	99
61) Tetrachloroethene	10.63	164	19888	6.121	ug/l	95
62) Toluene	10.16	91	75579	5.339	ug/l	99
64) Chlorobenzene	11.43	112	45928	5.378	ug/l	98
65) 1,1,1,2-Tetrachloroethane	11.51	131	16199	5.228	ug/l	99
66) Ethyl Benzene	11.51	91	77762	5.060	ug/l	99
67) m/p-Xylenes	11.62	106	58389	10.235	ug/l	99
68) o-Xylene	11.95	106	29959	5.352	ug/l	93
69) Styrene	11.96	104	44986	4.834	ug/l	98
70) Isopropylbenzene	12.25	105	75850	5.174	ug/l	99
71) 1,1,2,2-Tetrachloroethane	12.50	83	25920	5.377	ug/l	99
72) 1,2,3-Trichloropropane	12.55	75	21067m	5.209	ug/l	
73) Bromobenzene	12.53	156	19305	5.100	ug/l	95
74) n-propylbenzene	12.59	91	79955	4.783	ug/l	100
75) 2-Chlorotoluene	12.67	91	51470	5.164	ug/l	100
76) 1,3,5-Trimethylbenzene	12.73	105	63466	5.081	ug/l	98
77) t-1,4-Dichloro-2-butene	12.30	75	5144	3.911	ug/l	81
78) 4-Chlorotoluene	12.77	91	45783	4.733	ug/l	100
79) tert-butylbenzene	12.99	119	55536	5.222	ug/l	98
80) 1,2,4-Trimethylbenzene	13.04	105	61682	4.998	ug/l	100
81) sec-Butylbenzene	13.17	105	71967	5.096	ug/l	100
82) p-Isopropyltoluene	13.29	119	61648	4.833	ug/l	99
83) 1,3-Dichlorobenzene	13.28	146	29972	4.751	ug/l	98
84) 1,4-Dichlorobenzene	13.36	146	26934	4.436	ug/l	97
85) n-Butylbenzene	13.61	91	45819	4.292	ug/l	99
86) Hexachloroethane	13.87	117	8809	4.541	ug/l	96
87) 1,2-Dichlorobenzene	13.65	146	31843	5.009	ug/l	97
88) 1,2-Dibromo-3-Chloropropan	14.27	75	3644	4.243	ug/l	94
89) 1,2,4-Trichlorobenzene	14.91	180	14149	4.037	ug/l	98
90) Hexachlorobutadiene	15.01	225	12585	5.687	ug/l	95
91) Naphthalene	15.13	128	34219	3.546	ug/l	99
92) 1,2,3-Trichlorobenzene	15.31	180	17023	4.640	ug/l	99

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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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