

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN042021\
 Data File : VN066684.D
 Acq On : 20 Apr 2021 16:27
 Operator : JC/MD
 Sample : M2032-02 10X
 Misc : 5.00mL/MSVOA_N/WATER
 ALS Vial : 14 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :

Quant Time: Apr 21 10:08:57 2021
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N042021W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Tue Apr 20 12:52:17 2021
 Response via : Initial Calibration

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

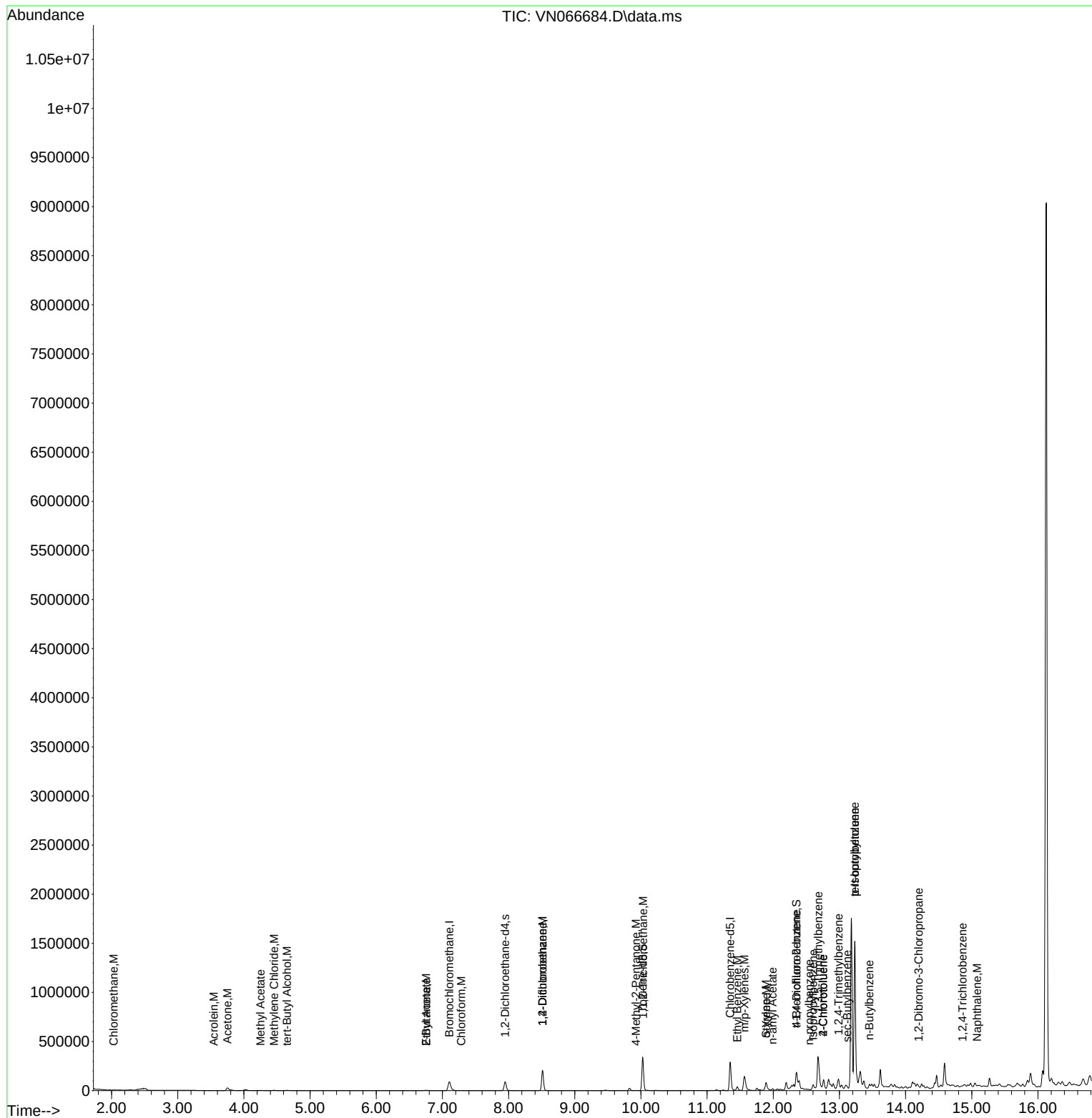
Internal Standards						
1) Bromochloromethane	7.106	128	35327	30.00	ug/l	0.00
28) 1,4-Difluorobenzene	8.514	114	183933	30.00	ug/l	0.00
57) Chlorobenzene-d5	11.348	117	182372	30.00	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	7.948	65	78221	30.73	ug/l	0.00
Spiked Amount	30.000	Range	91 - 110	Recovery	=	102.43%
60) 4-Bromofluorobenzene	12.349	95	80082	28.02	ug/l	0.00
Spiked Amount	30.000	Range	63 - 112	Recovery	=	93.40%
63) Toluene-d8	10.026	98	240279	28.64	ug/l	0.00
Spiked Amount	30.000	Range	91 - 112	Recovery	=	95.47%
Target Compounds						
					Qvalue	
3) Chloromethane	2.031	50	1456	0.54	ug/l	95
12) Methyl Acetate	4.249	43	4495	1.80	ug/l #	89
13) Acrolein	3.544	56	127	0.36	ug/l	90
15) Acetone	3.750	58	15200	52.65	ug/l	85
18) Methylene Chloride	4.456	84	2616	1.11	ug/l	96
23) tert-Butyl Alcohol	4.652	59	2720	7.27	ug/l #	100
25) Chloroform	7.285	83	928	0.24	ug/l	100
30) 2-Butanone	6.754	43	4584	3.28	ug/l #	76
36) 1,2-Dichloroethane	8.514	62	5894	1.92	ug/l #	76
43) Ethyl Acetate	6.754	43	4584	1.49	ug/l #	84
47) n-amyl Acetate	11.989	43	3359	20.15	ug/l	95
50) 1,1,2-Trichloroethane	10.034	97	9313	4.15	ug/l #	1
58) 4-Methyl-2-Pentanone	9.924	43	1696	0.55	ug/l #	63
66) Ethyl Benzene	11.456	91	29289	2.65	ug/l	99
67) m/p-Xylenes	11.563	106	49445	11.91	ug/l	97
68) o-Xylene	11.893	106	24523	6.09	ug/l	93
69) Styrene	11.890	104	1490	0.23	ug/l #	1
70) Isopropylbenzene	12.604	105	40541	3.85	ug/l	96
74) n-propylbenzene	12.542	91	5089	0.42	ug/l	96
75) 2-Chlorotoluene	12.754	91	2321	0.32	ug/l	44
76) 1,3,5-Trimethylbenzene	12.679	105	56496	6.35	ug/l	100
77) t-1,4-Dichloro-2-butene	12.349	75	39936	41.83	ug/l #	10
78) 4-Chlorotoluene	12.754	91	2321	0.32	ug/l	46
79) tert-butylbenzene	13.231	119	825164	110.81	ug/l	60
80) 1,2,4-Trimethylbenzene	12.987	105	54132	6.34	ug/l	100
81) sec-Butylbenzene	13.116	105	3236	0.33	ug/l	90
82) p-Isopropyltoluene	13.231	119	825164	97.34	ug/l	99
85) n-Butylbenzene	13.451	91	6124	0.87	ug/l	81
88) 1,2-Dibromo-3-Chloropr...	14.197	75	179	0.30	ug/l #	1
89) 1,2,4-Trichlorobenzene	14.859	180	724	0.29	ug/l #	77
91) Naphthalene	15.079	128	5947	0.99	ug/l #	71

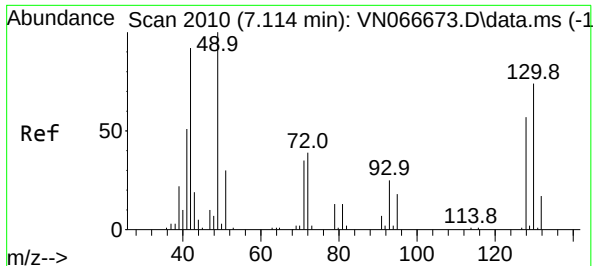
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN042021\
Data File : VN066684.D
Acq On : 20 Apr 2021 16:27
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Misc : 5.00mL/MSVOA_N/WATER
ALS Vial : 14 Sample Multiplier: 1

Instrument :
MSVOA_N
ClientSampleId :

Quant Time: Apr 21 10:08:57 2021
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N042021W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Tue Apr 20 12:52:17 2021
Response via : Initial Calibration

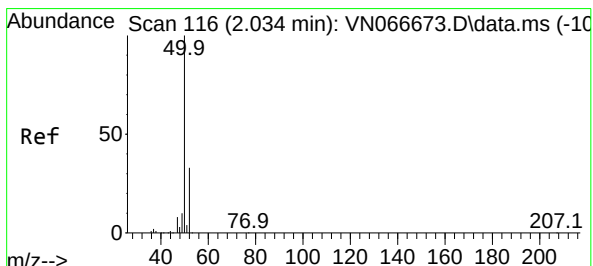
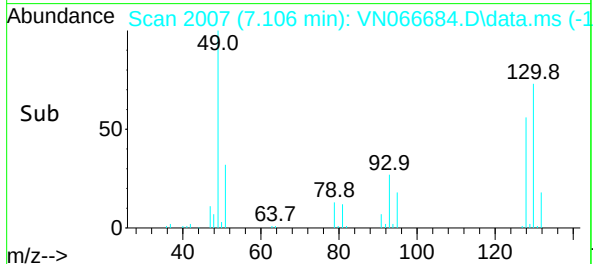
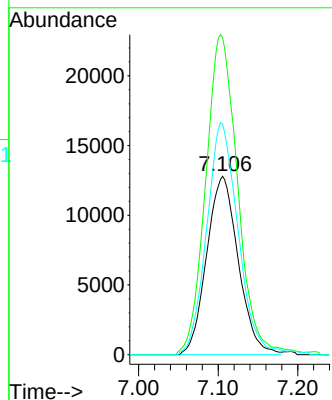
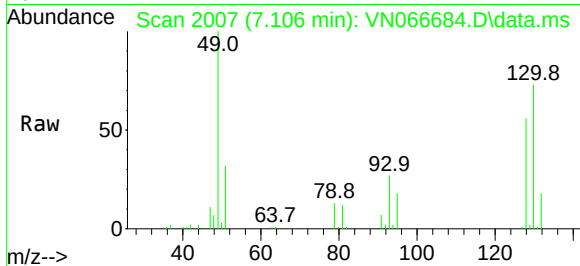




#1
Bromochloromethane
Concen: 30.00 ug/l
RT: 7.106 min Scan# 2007
Delta R.T. -0.008 min
Lab File: VN066684.D
Acq: 20 Apr 2021 16:27

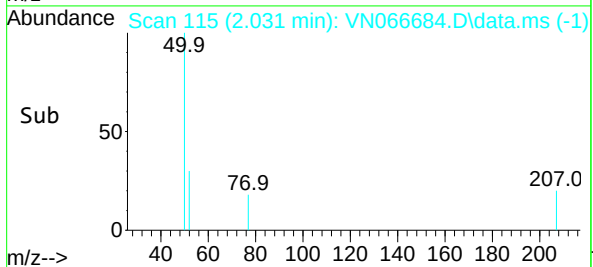
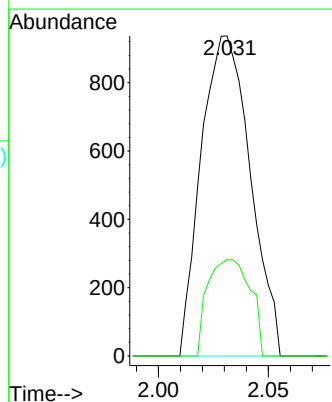
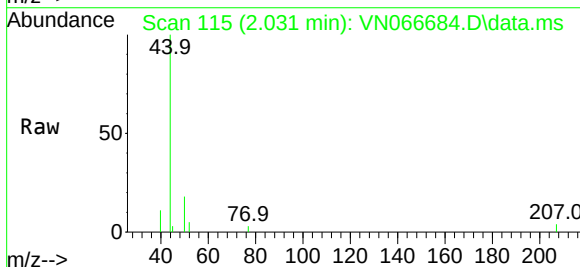
Instrument :
MSVOA_N
ClientSampleId :

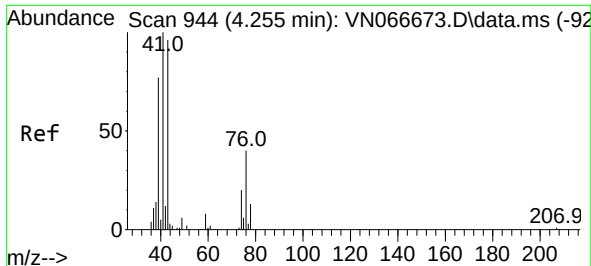
Tgt Ion:128 Resp: 35327
Ion Ratio Lower Upper
128 100
49 181.3 0.0 429.3
130 129.3 0.0 328.5



#3
Chloromethane
Concen: 0.54 ug/l
RT: 2.031 min Scan# 115
Delta R.T. -0.003 min
Lab File: VN066684.D
Acq: 20 Apr 2021 16:27

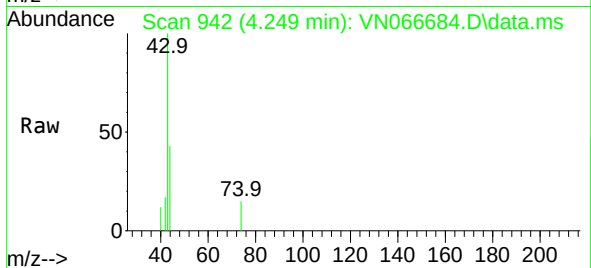
Tgt Ion: 50 Resp: 1456
Ion Ratio Lower Upper
50 100
52 30.1 26.2 39.4



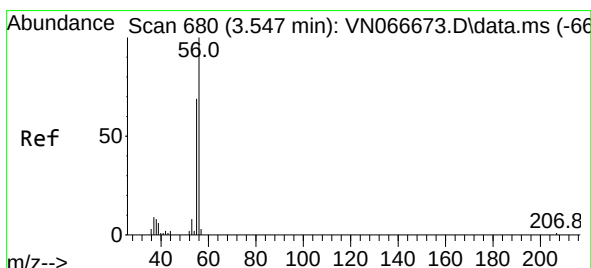
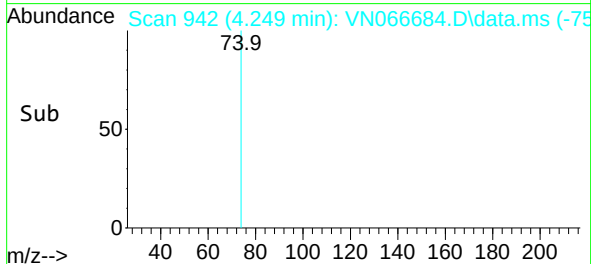
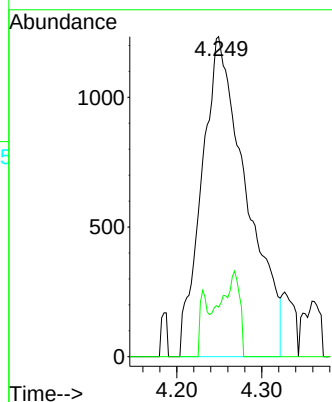


#12
Methyl Acetate
Concen: 1.80 ug/l
RT: 4.249 min Scan# 942
Delta R.T. -0.006 min
Lab File: VN066684.D
Acq: 20 Apr 2021 16:27

Instrument :
MSVOA_N
ClientSampleId :

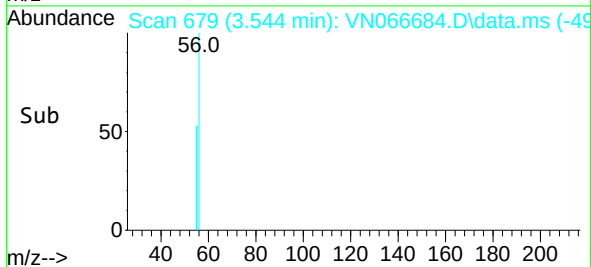
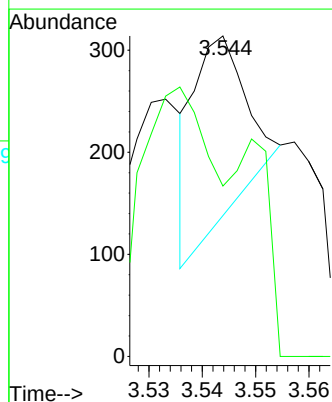
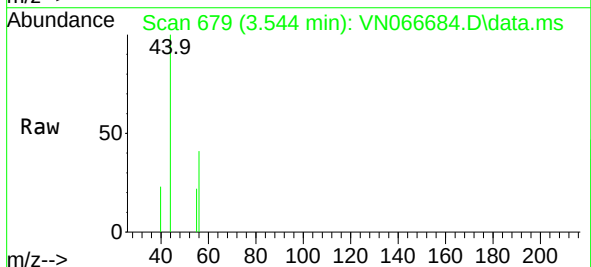


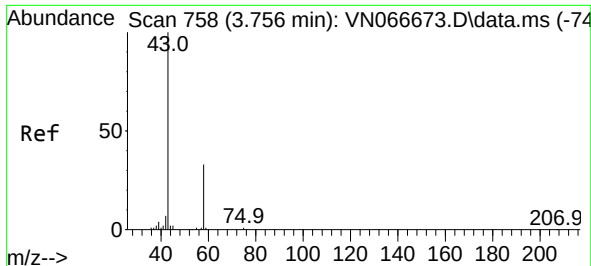
Tgt Ion: 43 Resp: 4495
Ion Ratio Lower Upper
43 100
74 17.0 18.0 27.0#



#13
Acrolein
Concen: 0.36 ug/l
RT: 3.544 min Scan# 679
Delta R.T. -0.003 min
Lab File: VN066684.D
Acq: 20 Apr 2021 16:27

Tgt Ion: 56 Resp: 127
Ion Ratio Lower Upper
56 100
55 75.6 54.1 81.1

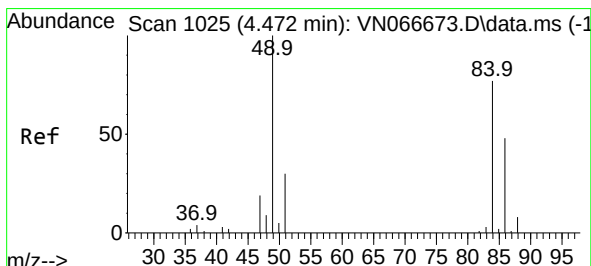
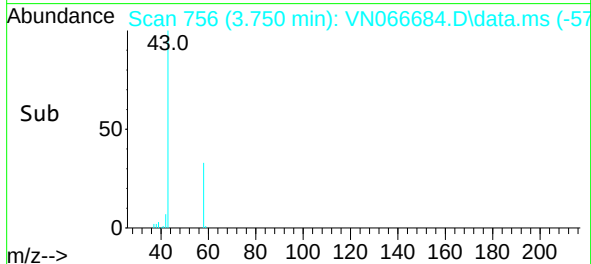
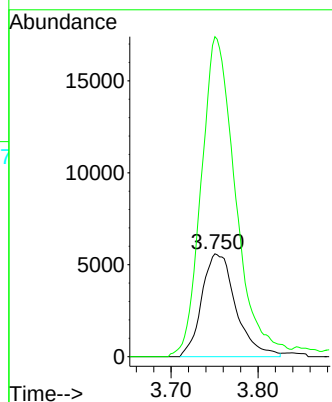
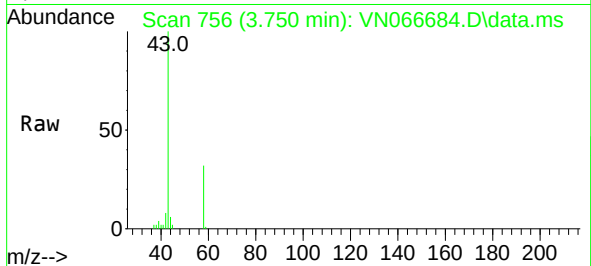




#15
Acetone
Concen: 52.65 ug/l
RT: 3.750 min Scan# 756
Delta R.T. -0.006 min
Lab File: VN066684.D
Acq: 20 Apr 2021 16:27

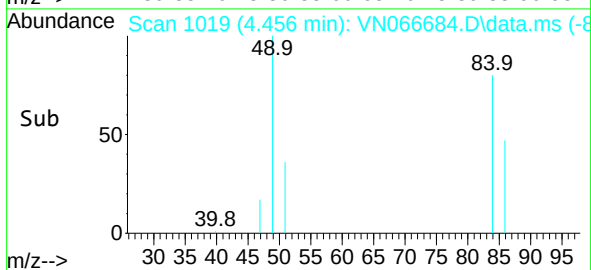
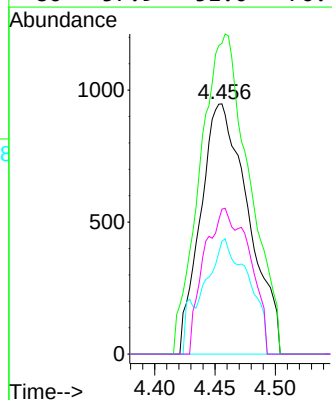
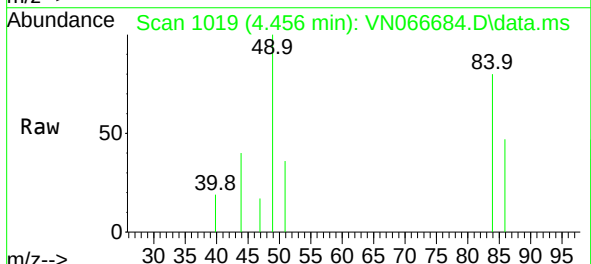
Instrument :
MSVOA_N
ClientSampleId :

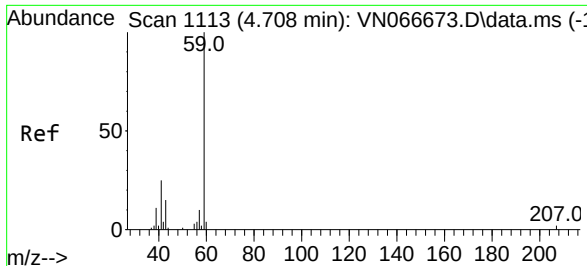
Tgt Ion: 58 Resp: 15200
Ion Ratio Lower Upper
58 100
43 302.0 267.3 400.9



#18
Methylene Chloride
Concen: 1.11 ug/l
RT: 4.456 min Scan# 1019
Delta R.T. -0.016 min
Lab File: VN066684.D
Acq: 20 Apr 2021 16:27

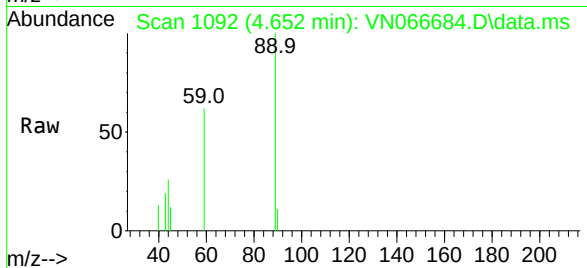
Tgt Ion: 84 Resp: 2616
Ion Ratio Lower Upper
84 100
49 124.3 98.9 148.3
51 45.1 30.8 46.2
86 57.9 51.0 76.4



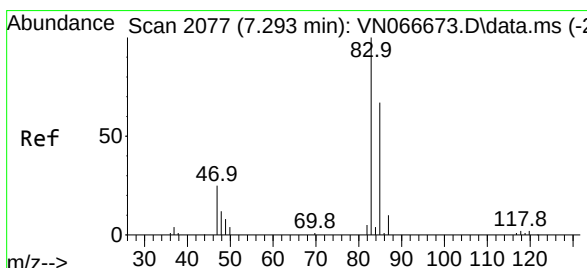
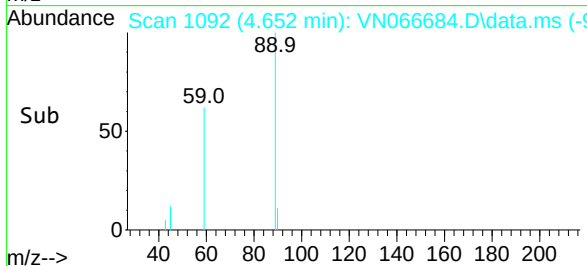
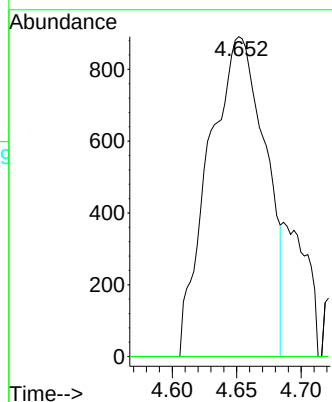


#23
tert-Butyl Alcohol
Concen: 7.27 ug/l
RT: 4.652 min Scan# 1092
Delta R.T. -0.056 min
Lab File: VN066684.D
Acq: 20 Apr 2021 16:27

Instrument :
MSVOA_N
ClientSampled :

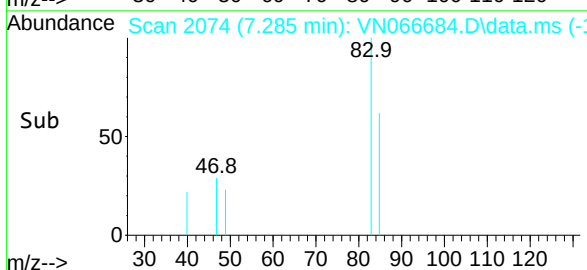
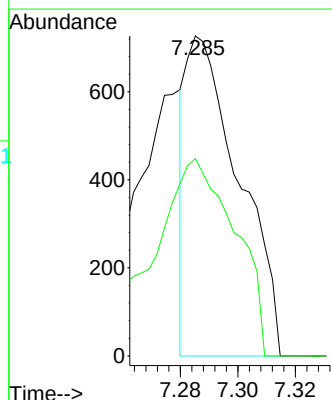
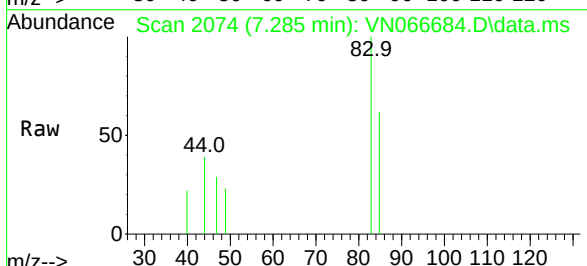


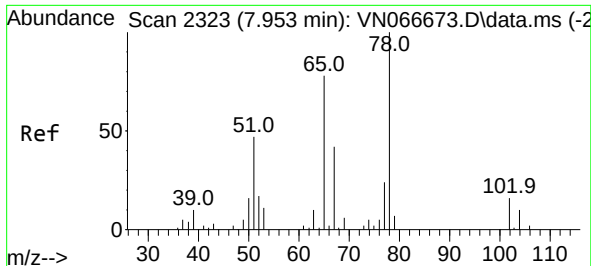
Tgt Ion: 59 Resp: 2720
Ion Ratio Lower Upper
59 100
52 0.0 0.1 0.1#



#25
Chloroform
Concen: 0.24 ug/l
RT: 7.285 min Scan# 2074
Delta R.T. -0.008 min
Lab File: VN066684.D
Acq: 20 Apr 2021 16:27

Tgt Ion: 83 Resp: 928
Ion Ratio Lower Upper
83 100
85 61.6 49.4 74.2



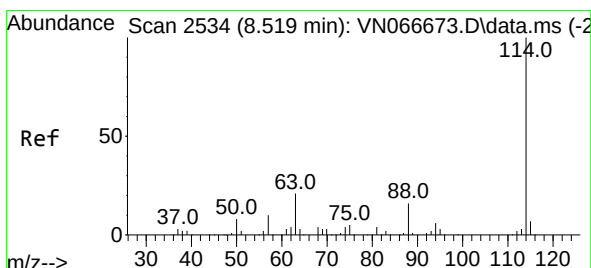
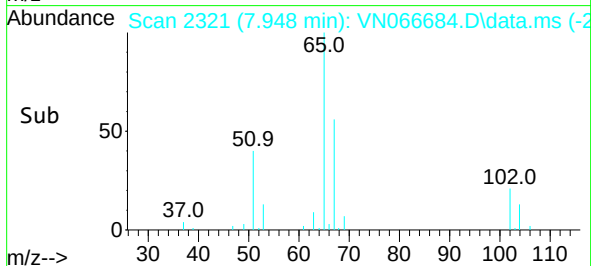
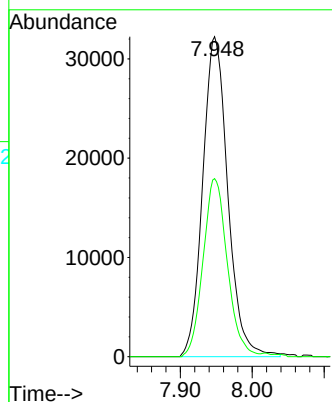
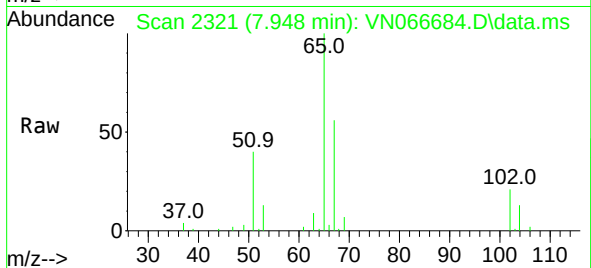


#27

1,2-Dichloroethane-d4
Concen: 30.73 ug/l
RT: 7.948 min Scan# 2321
Delta R.T. -0.005 min
Lab File: VN066684.D
Acq: 20 Apr 2021 16:27

Instrument :
MSVOA_N
ClientSampled :

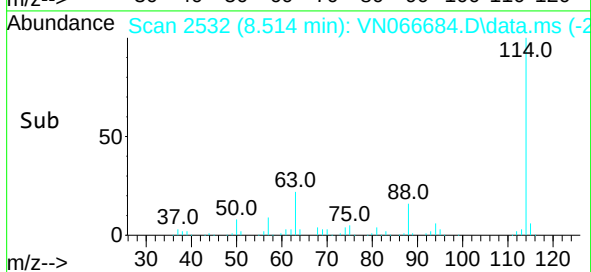
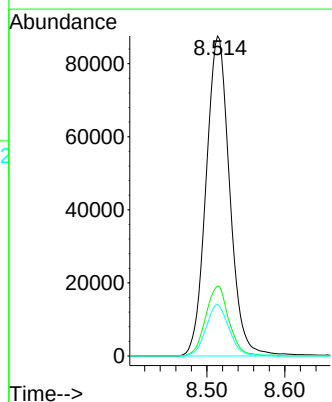
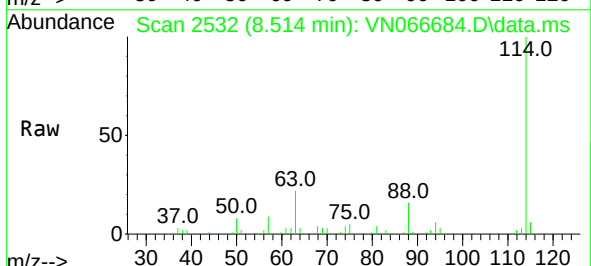
Tgt Ion: 65 Resp: 78221
Ion Ratio Lower Upper
65 100
67 53.8 42.2 63.4

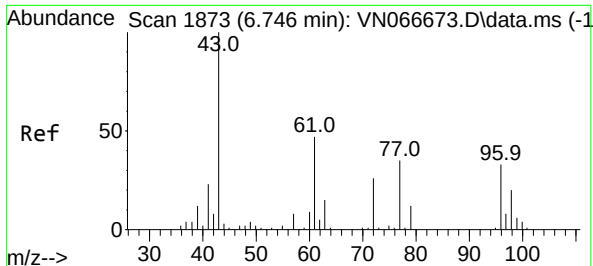


#28

1,4-Difluorobenzene
Concen: 30.00 ug/l
RT: 8.514 min Scan# 2532
Delta R.T. -0.005 min
Lab File: VN066684.D
Acq: 20 Apr 2021 16:27

Tgt Ion: 114 Resp: 183933
Ion Ratio Lower Upper
114 100
63 21.6 17.4 26.0
88 15.7 12.6 19.0

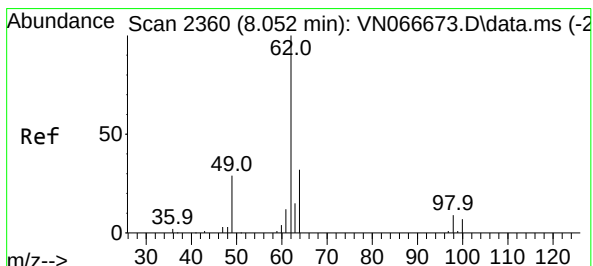
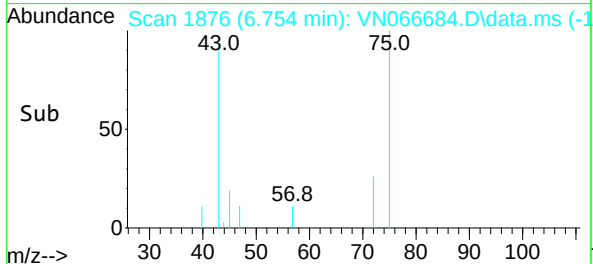
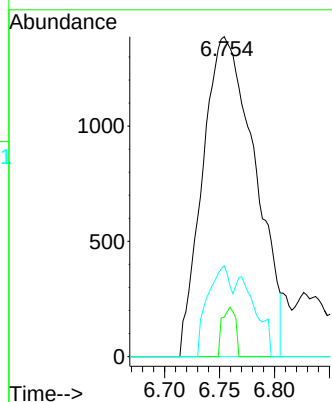
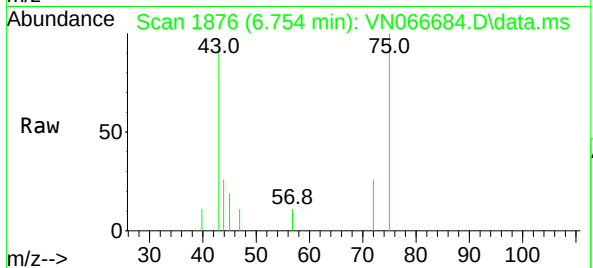




#30
2-Butanone
Concen: 3.28 ug/l
RT: 6.754 min Scan# 1876
Delta R.T. 0.008 min
Lab File: VN066684.D
Acq: 20 Apr 2021 16:27

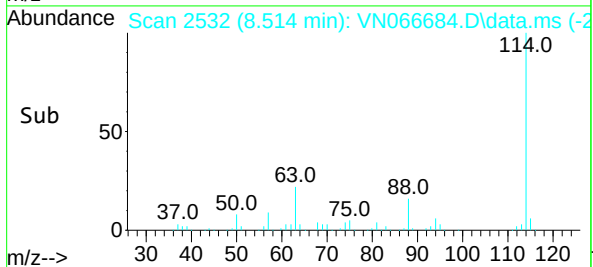
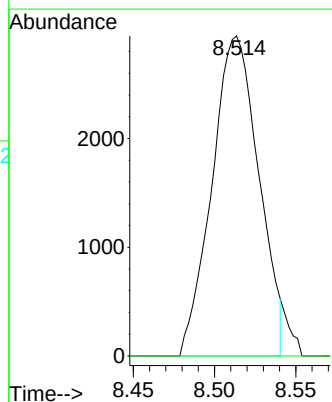
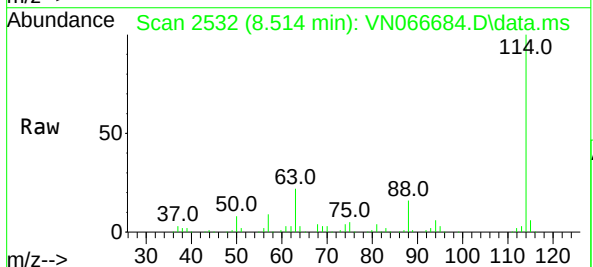
Instrument :
MSVOA_N
ClientSampled :

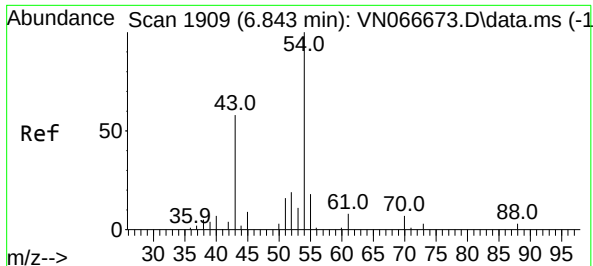
Tgt Ion: 43 Resp: 4584
Ion Ratio Lower Upper
43 100
57 2.7 6.9 10.3#
72 12.7 20.9 31.3#



#36
1,2-Dichloroethane
Concen: 1.92 ug/l
RT: 8.514 min Scan# 2532
Delta R.T. 0.462 min
Lab File: VN066684.D
Acq: 20 Apr 2021 16:27

Tgt Ion: 62 Resp: 5894
Ion Ratio Lower Upper
62 100
98 0.0 6.9 10.3#





#43

Ethyl Acetate

Concen: 1.49 ug/l

RT: 6.754 min Scan# 1876

Delta R.T. -0.089 min

Lab File: VN066684.D

Acq: 20 Apr 2021 16:27

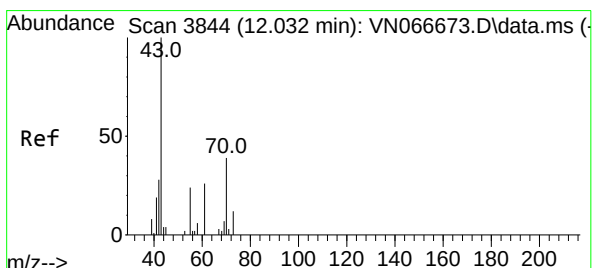
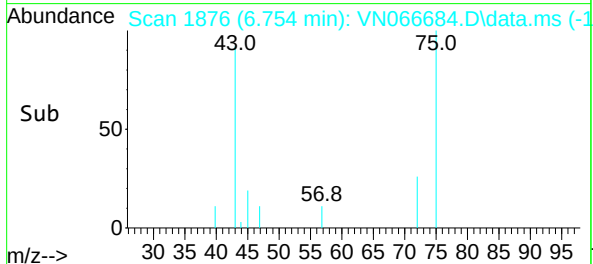
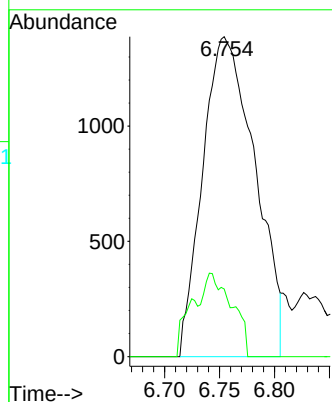
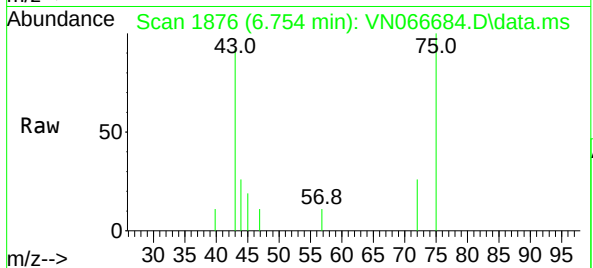
Tgt Ion: 43 Resp: 4584

Ion Ratio Lower Upper

43 100

45 2.2 6.3 9.5#

Instrument :
MSVOA_N
ClientSampleId :



#47

n-amy1 Acetate

Concen: 20.15 ug/l

RT: 11.989 min Scan# 3828

Delta R.T. -0.043 min

Lab File: VN066684.D

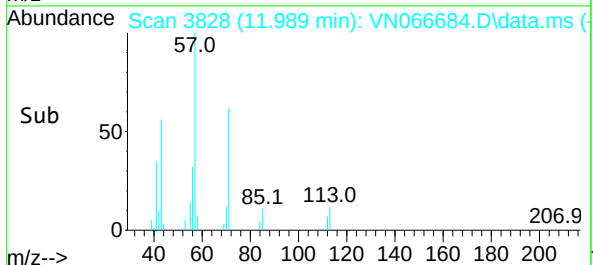
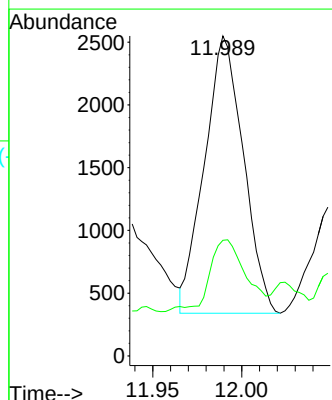
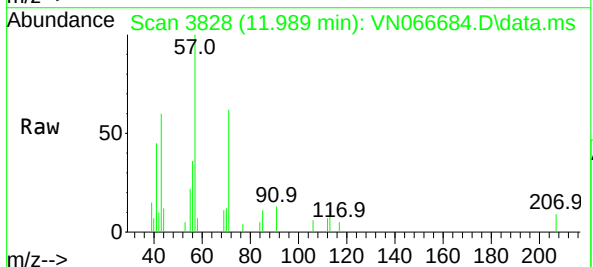
Acq: 20 Apr 2021 16:27

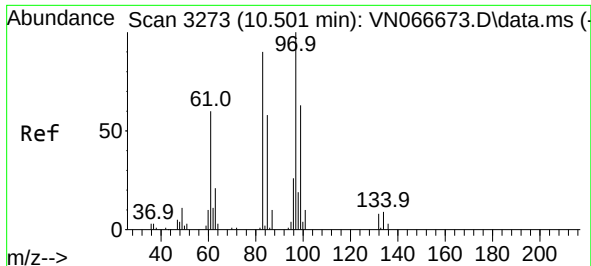
Tgt Ion: 43 Resp: 3359

Ion Ratio Lower Upper

43 100

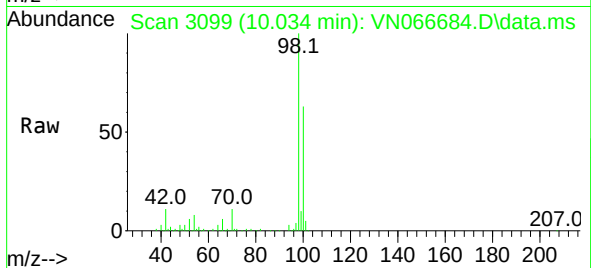
55 19.9 17.7 26.5



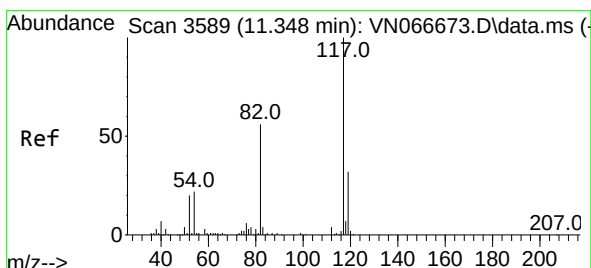
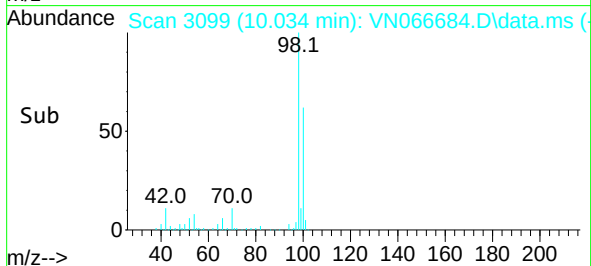
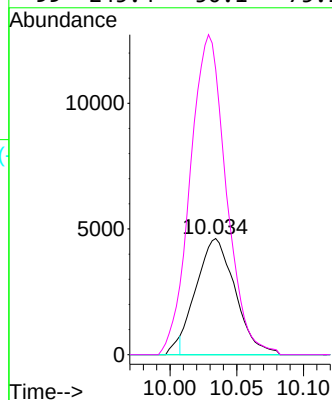


#50
1,1,2-Trichloroethane
Concen: 4.15 ug/l
RT: 10.034 min Scan# 3099
Delta R.T. -0.467 min
Lab File: VN066684.D
Acq: 20 Apr 2021 16:27

Instrument :
MSVOA_N
ClientSampleId :

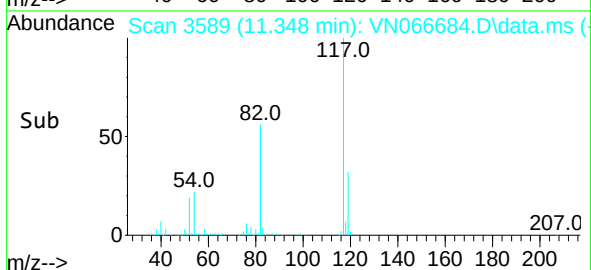
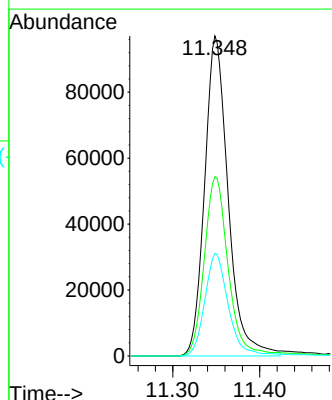
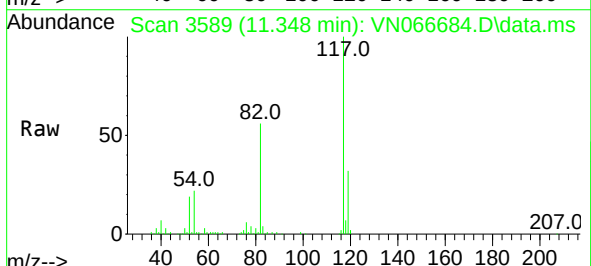


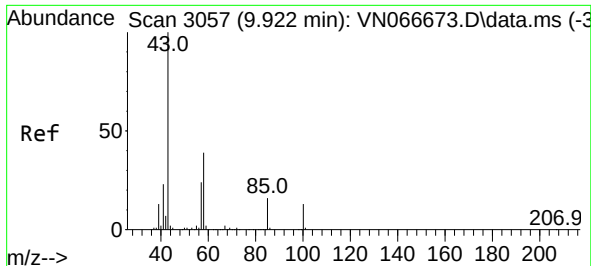
Tgt Ion:	97	Resp:	9313
Ion	Ratio	Lower	Upper
97	100		
83	0.0	68.8	103.2#
85	0.0	44.8	67.2#
99	245.4	50.1	75.1#



#57
Chlorobenzene-d5
Concen: 30.00 ug/l
RT: 11.348 min Scan# 3589
Delta R.T. 0.000 min
Lab File: VN066684.D
Acq: 20 Apr 2021 16:27

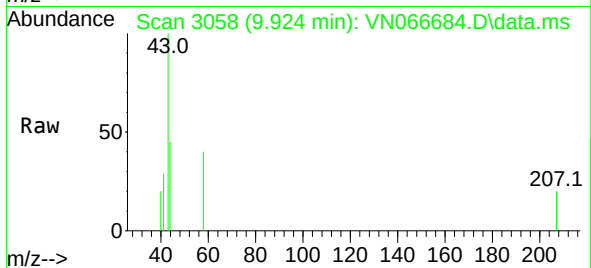
Tgt Ion:	117	Resp:	182372
Ion	Ratio	Lower	Upper
117	100		
82	56.5	45.0	67.6
119	31.5	25.5	38.3



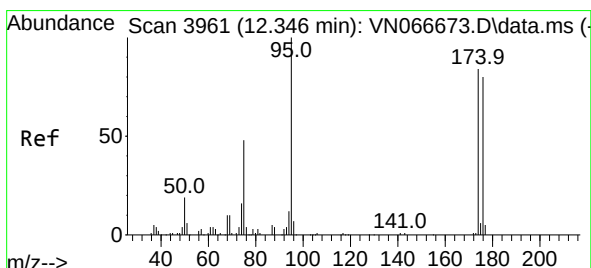
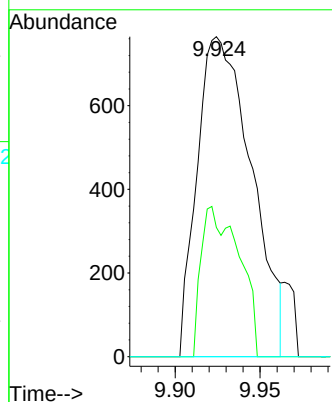
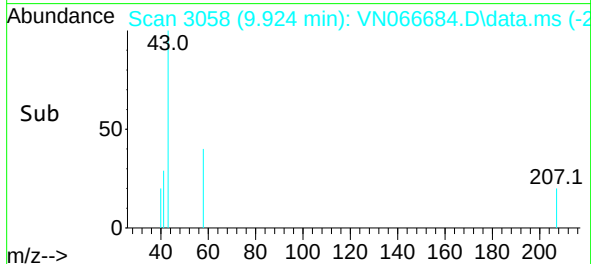


#58
4-Methyl-2-Pentanone
Concen: 0.55 ug/l
RT: 9.924 min Scan# 3058
Delta R.T. 0.002 min
Lab File: VN066684.D
Acq: 20 Apr 2021 16:27

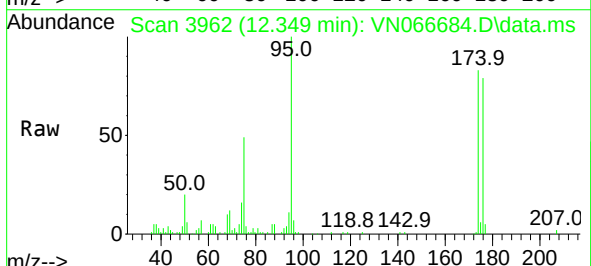
Instrument :
MSVOA_N
ClientSampleId :



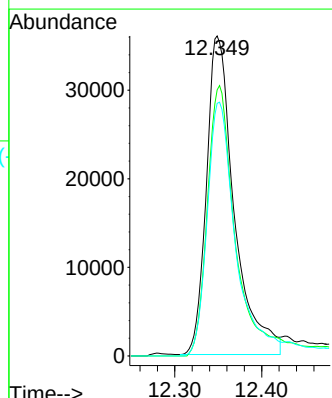
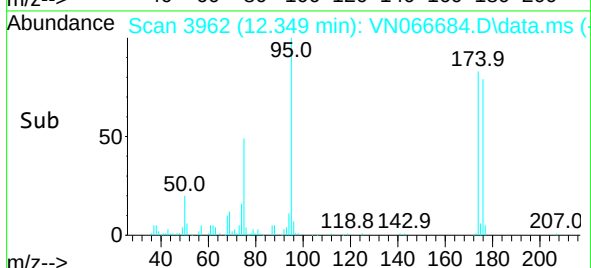
Tgt Ion: 43 Resp: 1696
Ion Ratio Lower Upper
43 100
58 16.7 30.4 45.6#
85 0.0 13.8 20.8#

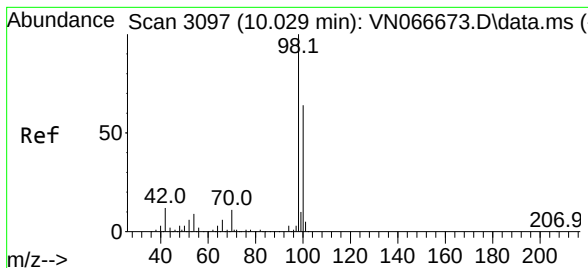


#60
4-Bromofluorobenzene
Concen: 28.02 ug/l
RT: 12.349 min Scan# 3962
Delta R.T. 0.003 min
Lab File: VN066684.D
Acq: 20 Apr 2021 16:27



Tgt Ion: 95 Resp: 80082
Ion Ratio Lower Upper
95 100
174 87.7 68.1 102.1
176 79.4 65.4 98.0

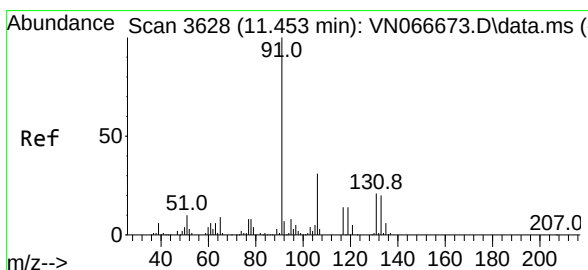
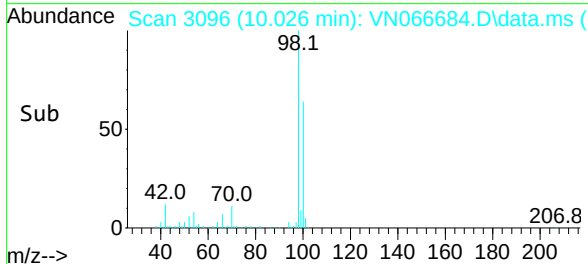
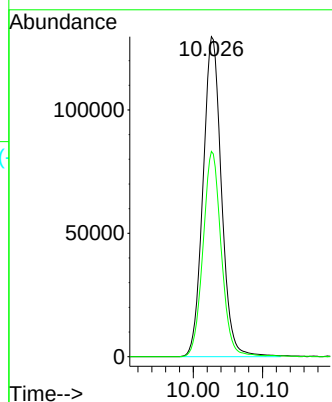
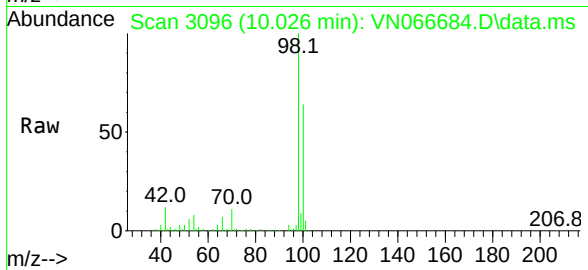




#63
Toluene-d8
Concen: 28.64 ug/l
RT: 10.026 min Scan# 3096
Delta R.T. -0.003 min
Lab File: VN066684.D
Acq: 20 Apr 2021 16:27

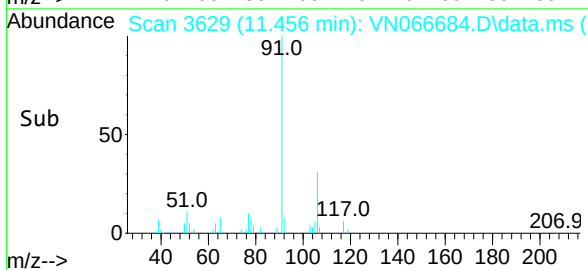
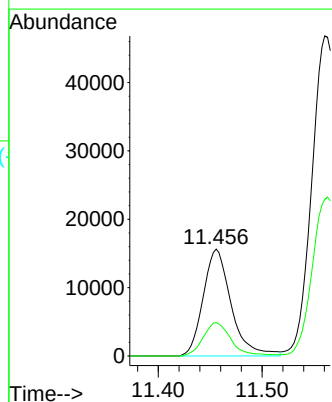
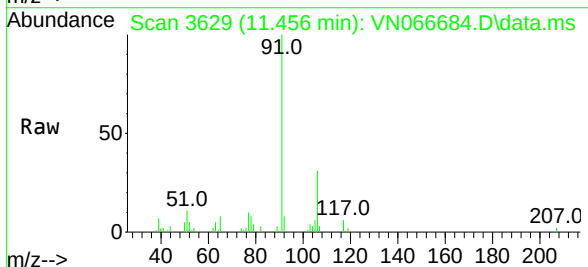
Instrument :
MSVOA_N
ClientSampled :

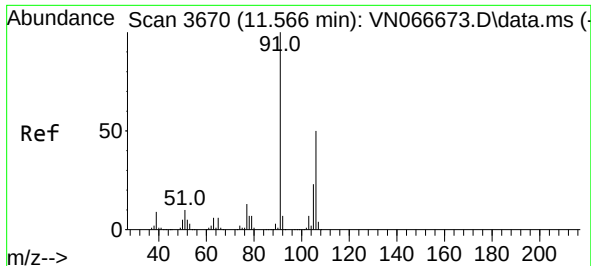
Tgt Ion: 98 Resp: 240279
Ion Ratio Lower Upper
98 100
100 63.2 51.1 76.7



#66
Ethyl Benzene
Concen: 2.65 ug/l
RT: 11.456 min Scan# 3629
Delta R.T. 0.003 min
Lab File: VN066684.D
Acq: 20 Apr 2021 16:27

Tgt Ion: 91 Resp: 29289
Ion Ratio Lower Upper
91 100
106 31.4 25.5 38.3

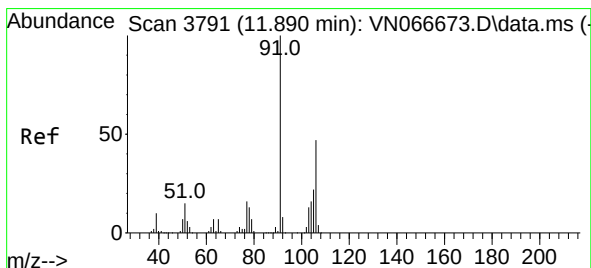
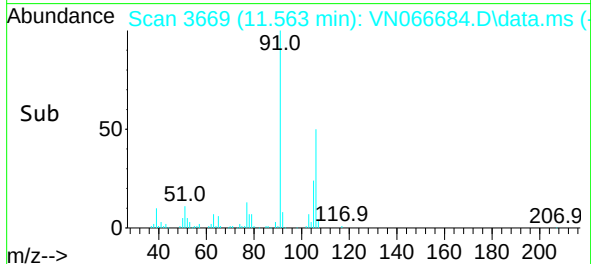
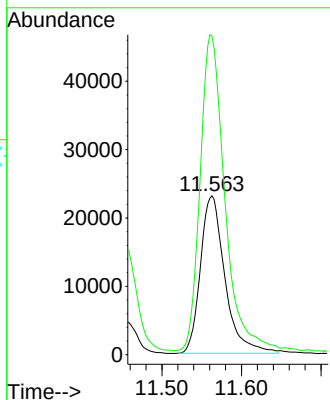
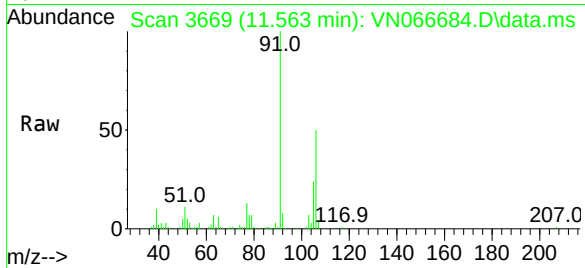




#67
m/p-Xylenes
Concen: 11.91 ug/l
RT: 11.563 min Scan# 3669
Delta R.T. -0.003 min
Lab File: VN066684.D
Acq: 20 Apr 2021 16:27

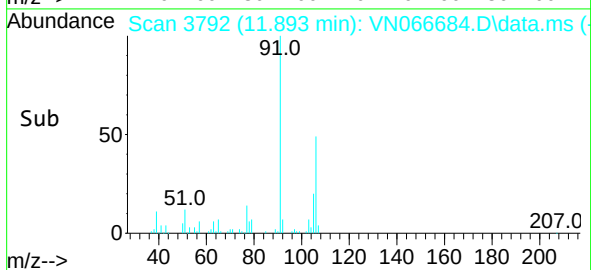
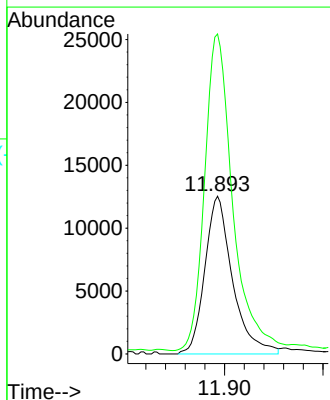
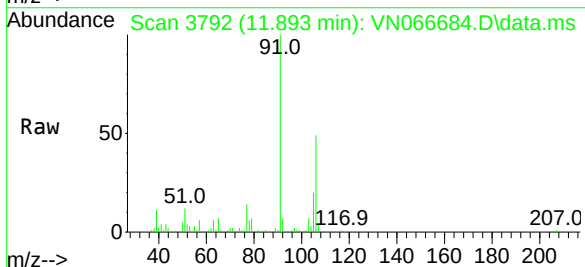
Instrument :
MSVOA_N
ClientSampleId :

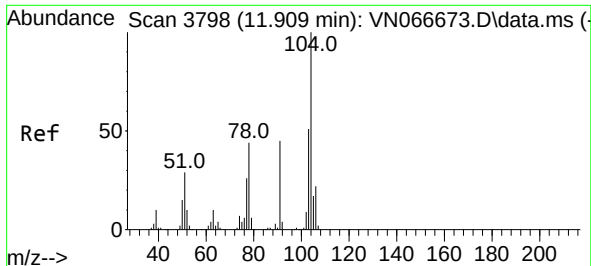
Tgt Ion:106 Resp: 49445
Ion Ratio Lower Upper
106 100
91 201.8 164.8 247.2



#68
o-Xylene
Concen: 6.09 ug/l
RT: 11.893 min Scan# 3792
Delta R.T. 0.003 min
Lab File: VN066684.D
Acq: 20 Apr 2021 16:27

Tgt Ion:106 Resp: 24523
Ion Ratio Lower Upper
106 100
91 203.4 107.1 321.4

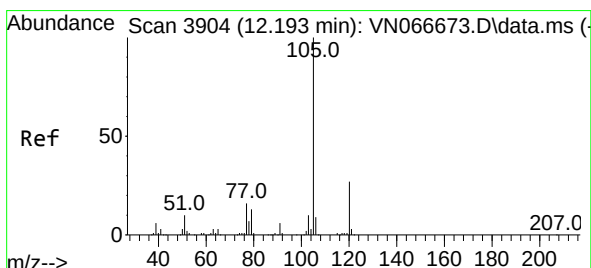
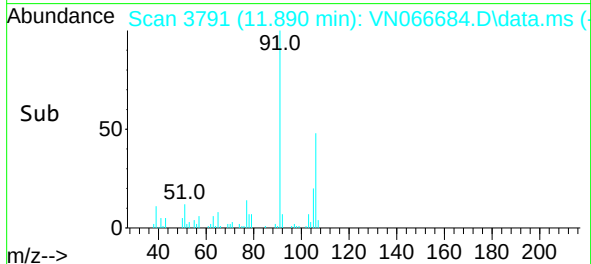
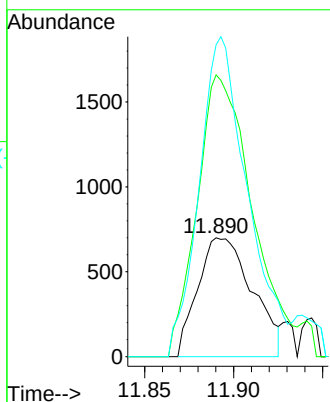
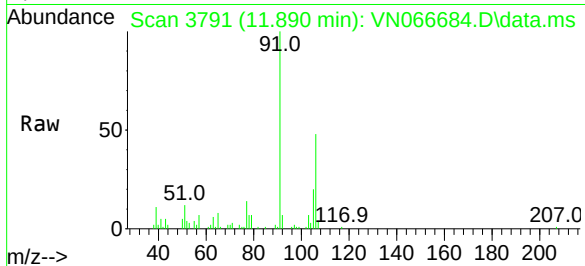




#69
Styrene
Concen: 0.23 ug/l
RT: 11.890 min Scan# 3791
Delta R.T. -0.019 min
Lab File: VN066684.D
Acq: 20 Apr 2021 16:27

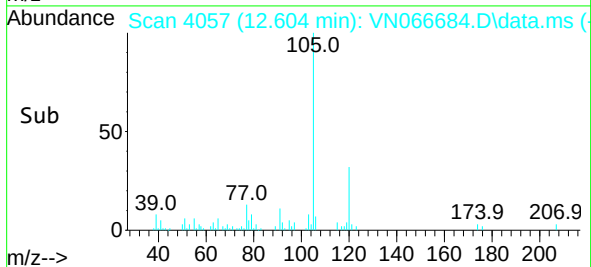
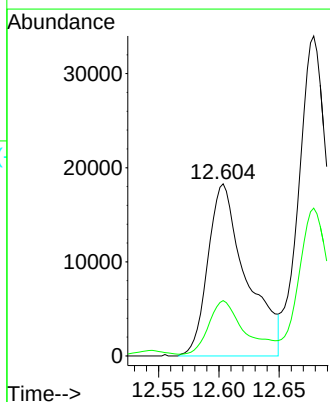
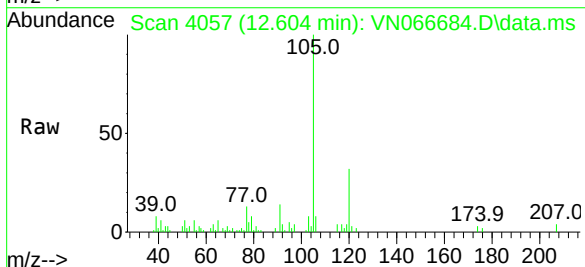
Instrument :
MSVOA_N
ClientSampleId :

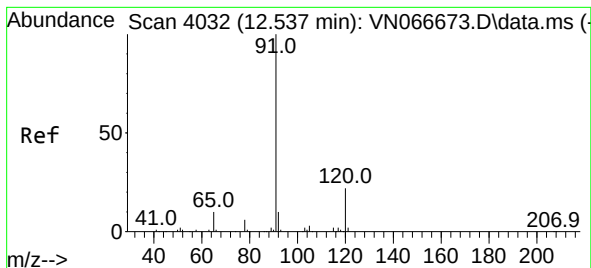
Tgt Ion:104 Resp: 1490
Ion Ratio Lower Upper
104 100
78 240.5 41.0 61.6#
103 239.1 43.7 65.5#



#70
Isopropylbenzene
Concen: 3.85 ug/l
RT: 12.604 min Scan# 4057
Delta R.T. 0.411 min
Lab File: VN066684.D
Acq: 20 Apr 2021 16:27

Tgt Ion:105 Resp: 40541
Ion Ratio Lower Upper
105 100
120 28.9 18.7 34.7





#74

n-propylbenzene

Concen: 0.42 ug/l

RT: 12.542 min Scan# 4034

Delta R.T. 0.005 min

Lab File: VN066684.D

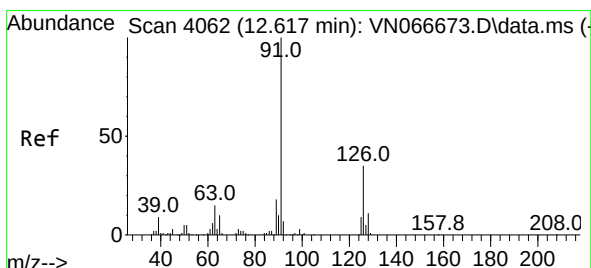
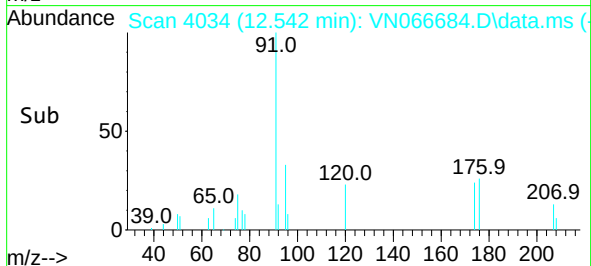
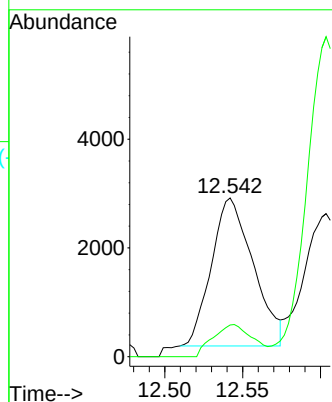
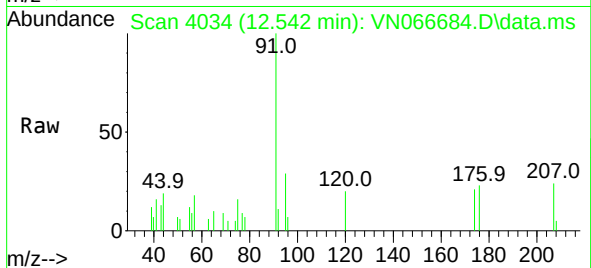
Acq: 20 Apr 2021 16:27

Tgt Ion: 91 Resp: 5089

Ion Ratio Lower Upper

91 100

120 20.4 0.0 45.2



#75

2-Chlorotoluene

Concen: 0.32 ug/l

RT: 12.754 min Scan# 4113

Delta R.T. 0.137 min

Lab File: VN066684.D

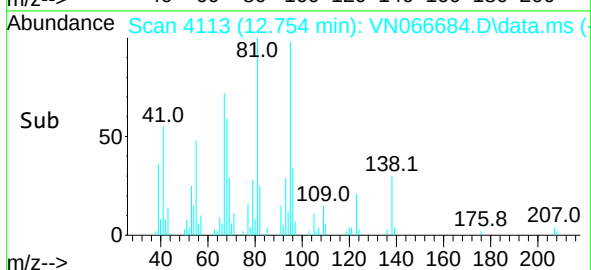
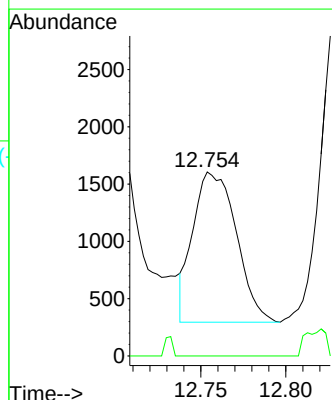
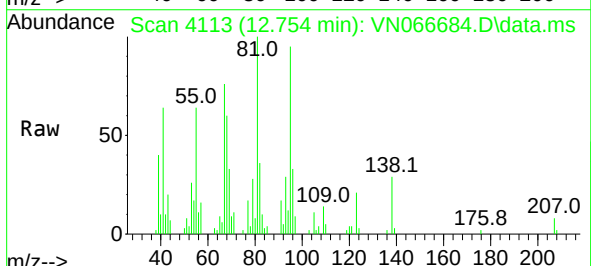
Acq: 20 Apr 2021 16:27

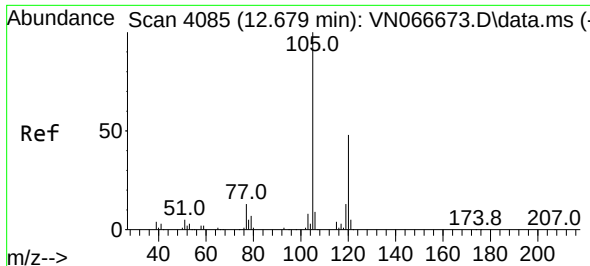
Tgt Ion: 91 Resp: 2321

Ion Ratio Lower Upper

91 100

126 2.3 0.0 68.6

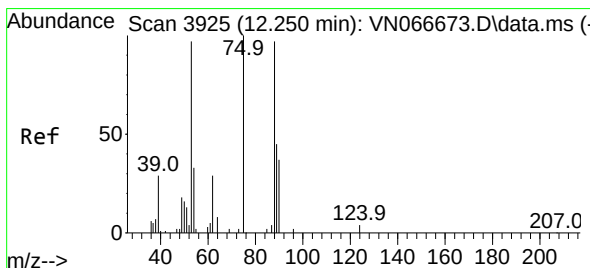
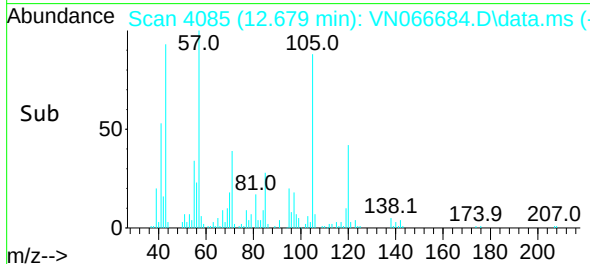
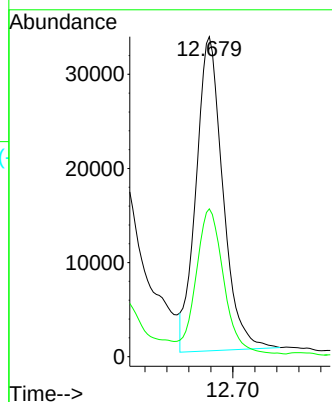
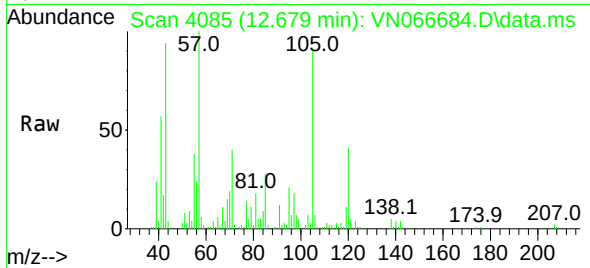




#76
1,3,5-Trimethylbenzene
Concen: 6.35 ug/l
RT: 12.679 min Scan# 4085
Delta R.T. -0.000 min
Lab File: VN066684.D
Acq: 20 Apr 2021 16:27

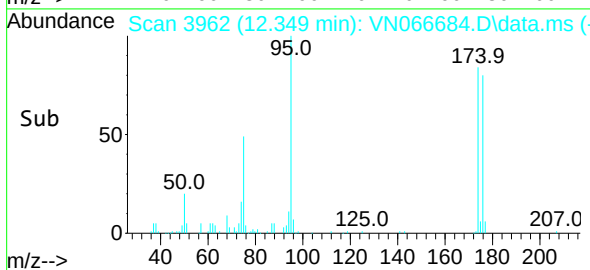
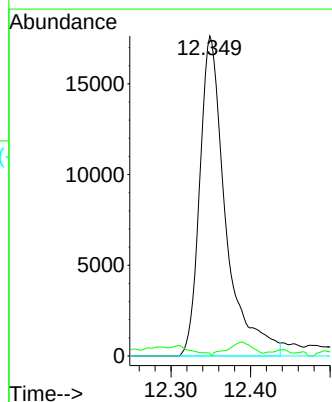
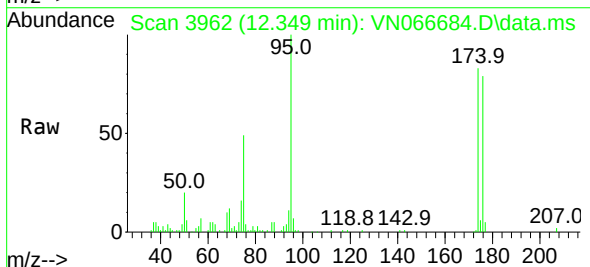
Instrument :
MSVOA_N
ClientSampleId :

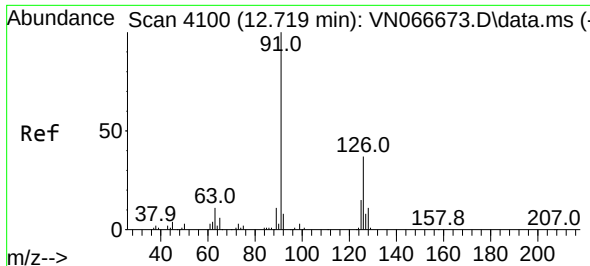
Tgt Ion:105 Resp: 56496
Ion Ratio Lower Upper
105 100
120 49.1 0.0 98.2



#77
t-1,4-Dichloro-2-butene
Concen: 41.83 ug/l
RT: 12.349 min Scan# 3962
Delta R.T. 0.099 min
Lab File: VN066684.D
Acq: 20 Apr 2021 16:27

Tgt Ion: 75 Resp: 39936
Ion Ratio Lower Upper
75 100
53 0.0 49.6 149.0#
89 0.0 22.9 68.7#

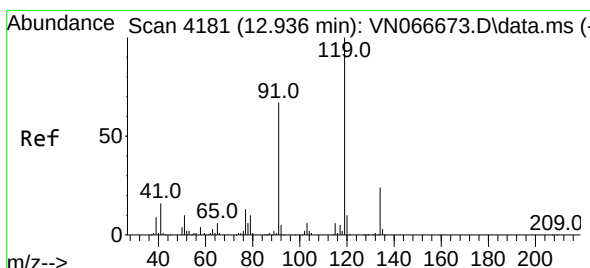
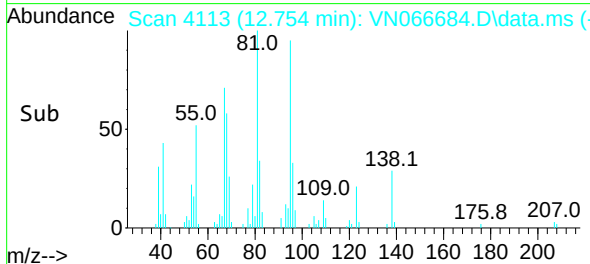
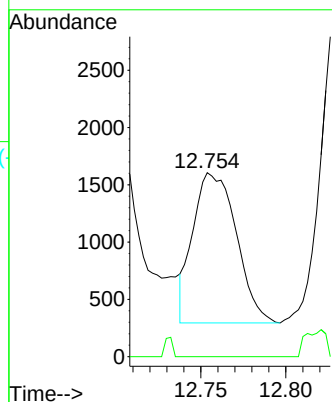
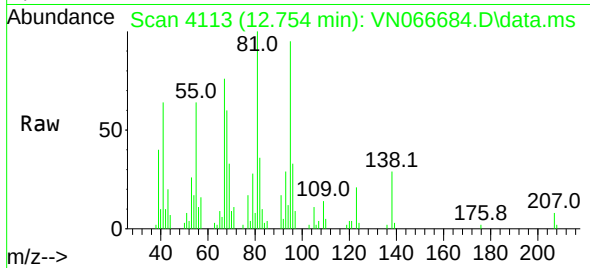




#78
4-Chlorotoluene
Concen: 0.32 ug/l
RT: 12.754 min Scan# 4113
Delta R.T. 0.035 min
Lab File: VN066684.D
Acq: 20 Apr 2021 16:27

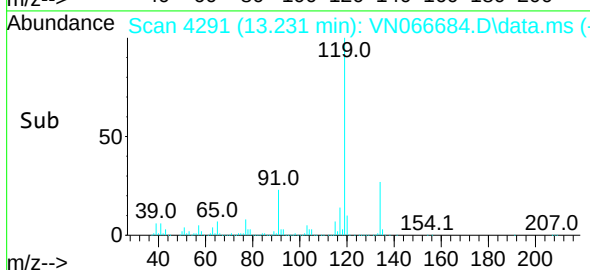
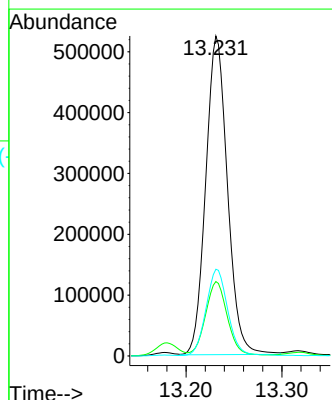
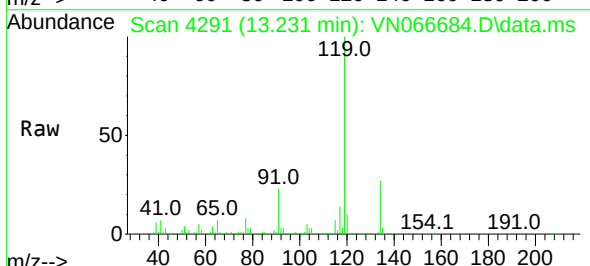
Instrument :
MSVOA_N
ClientSampleId :

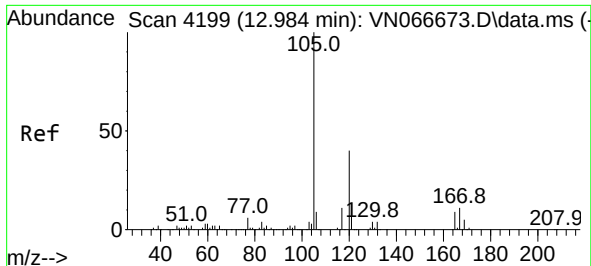
Tgt Ion: 91 Resp: 2321
Ion Ratio Lower Upper
91 100
126 2.3 0.0 65.4



#79
tert-butylbenzene
Concen: 110.81 ug/l
RT: 13.231 min Scan# 4291
Delta R.T. 0.295 min
Lab File: VN066684.D
Acq: 20 Apr 2021 16:27

Tgt Ion: 119 Resp: 825164
Ion Ratio Lower Upper
119 100
91 23.5 0.0 133.4
134 26.9 0.0 51.0

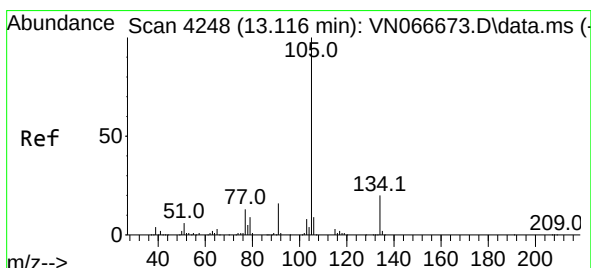
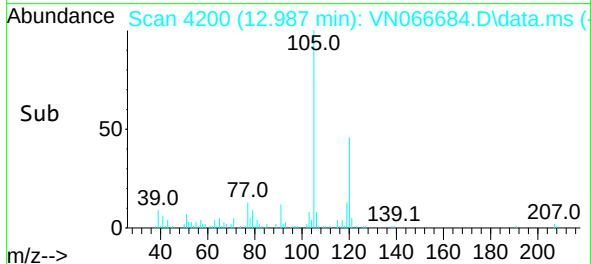
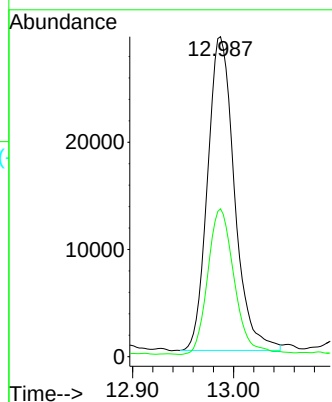
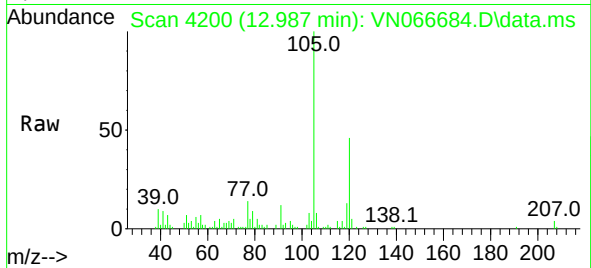




#80
1,2,4-Trimethylbenzene
Concen: 6.34 ug/l
RT: 12.987 min Scan# 4200
Delta R.T. 0.003 min
Lab File: VN066684.D
Acq: 20 Apr 2021 16:27

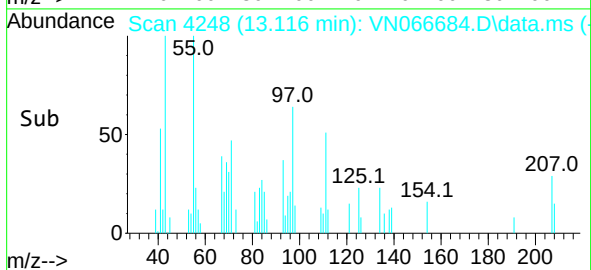
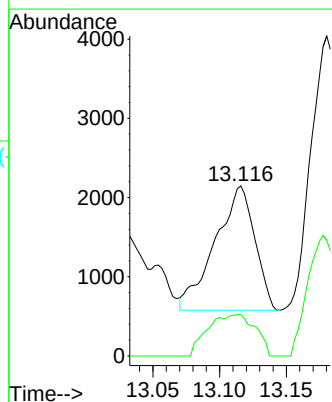
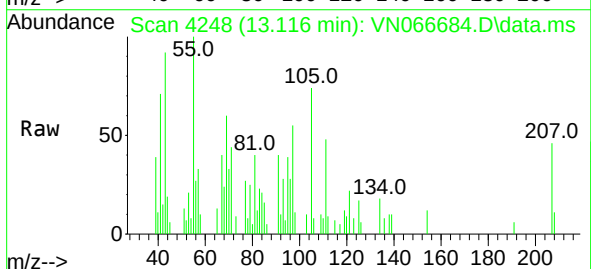
Instrument :
MSVOA_N
ClientSampleId :

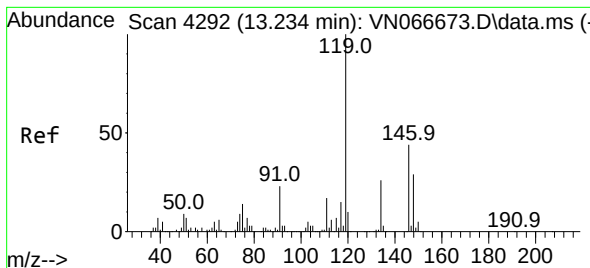
Tgt Ion:105 Resp: 54132
Ion Ratio Lower Upper
105 100
120 45.5 0.0 90.6



#81
sec-Butylbenzene
Concen: 0.33 ug/l
RT: 13.116 min Scan# 4248
Delta R.T. -0.000 min
Lab File: VN066684.D
Acq: 20 Apr 2021 16:27

Tgt Ion:105 Resp: 3236
Ion Ratio Lower Upper
105 100
134 15.5 0.0 40.0

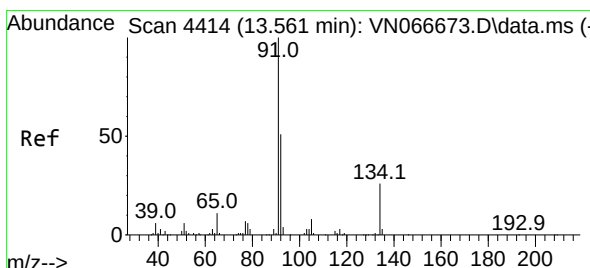
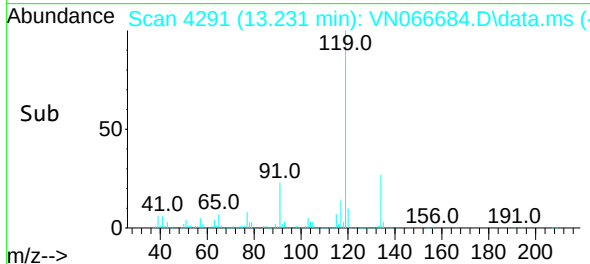
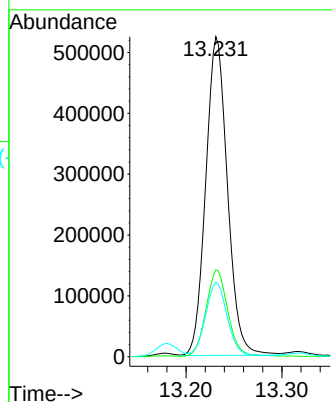
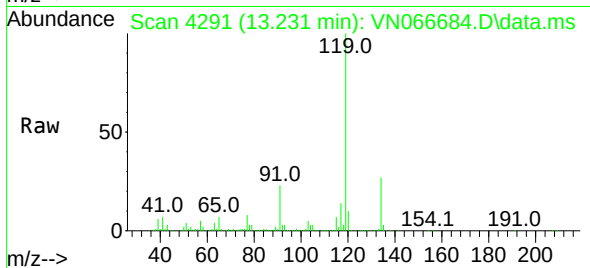




#82
p-Isopropyltoluene
Concen: 97.34 ug/l
RT: 13.231 min Scan# 4291
Delta R.T. -0.003 min
Lab File: VN066684.D
Acq: 20 Apr 2021 16:27

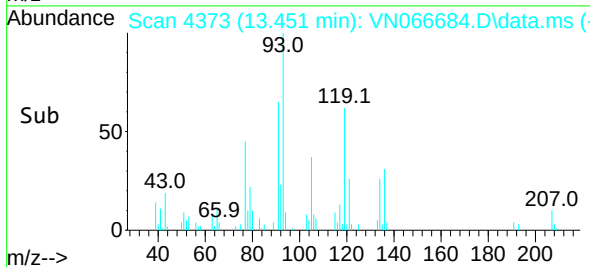
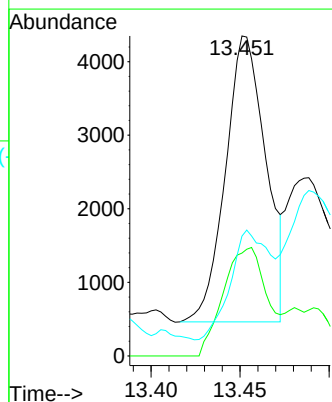
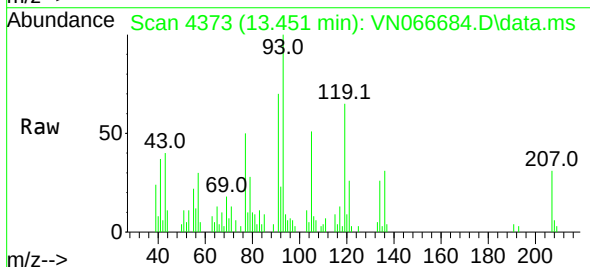
Instrument :
MSVOA_N
ClientSampleId :

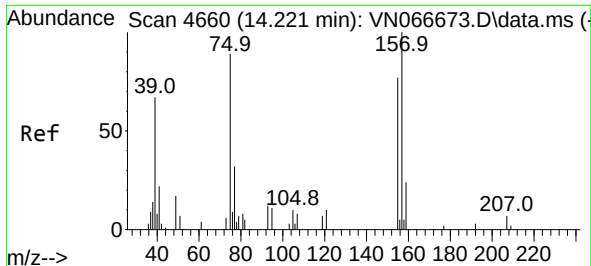
Tgt Ion:119 Resp: 825164
Ion Ratio Lower Upper
119 100
134 26.9 0.0 53.4
91 23.5 0.0 47.6



#85
n-Butylbenzene
Concen: 0.87 ug/l
RT: 13.451 min Scan# 4373
Delta R.T. -0.110 min
Lab File: VN066684.D
Acq: 20 Apr 2021 16:27

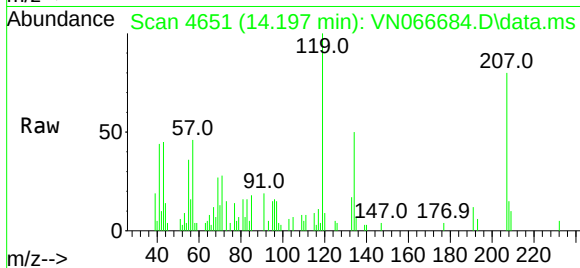
Tgt Ion: 91 Resp: 6124
Ion Ratio Lower Upper
91 100
92 40.9 0.0 102.6
134 37.5 0.0 49.0



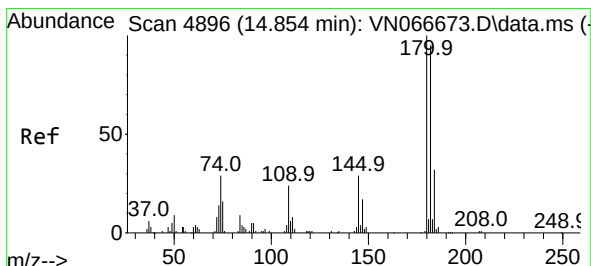
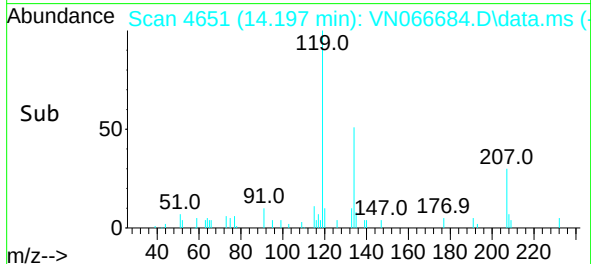
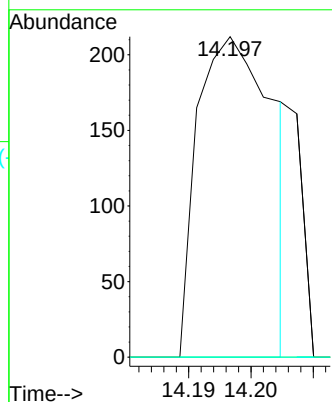


#88
 1,2-Dibromo-3-Chloropropane
 Concen: 0.30 ug/l
 RT: 14.197 min Scan# 4651
 Delta R.T. -0.024 min
 Lab File: VN066684.D
 Acq: 20 Apr 2021 16:27

Instrument :
 MSVOA_N
 ClientSampleId :

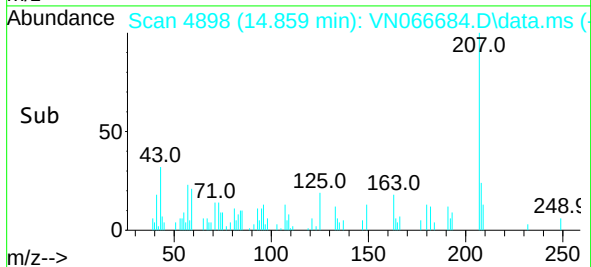
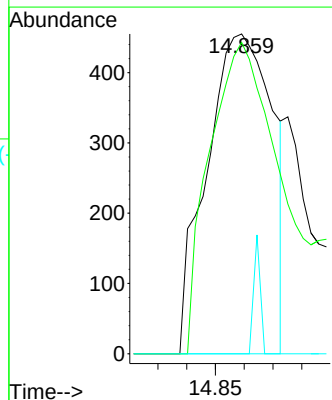
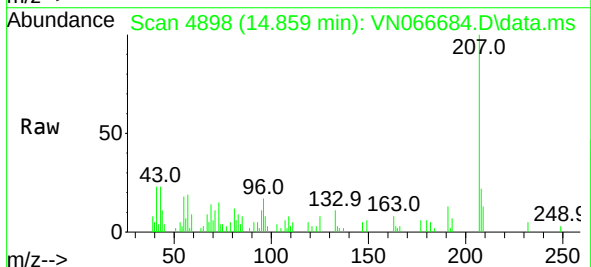


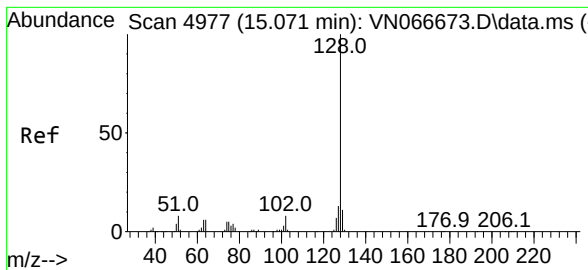
Tgt Ion: 75 Resp: 179
 Ion Ratio Lower Upper
 75 100
 155 0.0 68.3 102.5#
 157 0.0 87.8 131.6#



#89
 1,2,4-Trichlorobenzene
 Concen: 0.29 ug/l
 RT: 14.859 min Scan# 4898
 Delta R.T. 0.005 min
 Lab File: VN066684.D
 Acq: 20 Apr 2021 16:27

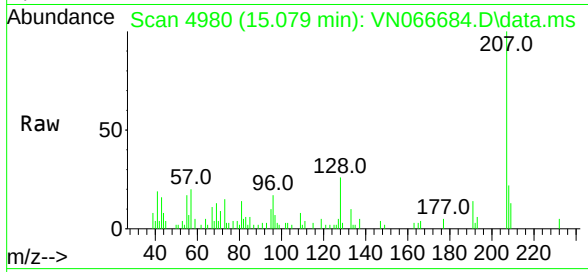
Tgt Ion: 180 Resp: 724
 Ion Ratio Lower Upper
 180 100
 182 105.1 74.3 111.5
 145 0.0 23.4 35.0#





#91
Naphthalene
Concen: 0.99 ug/l
RT: 15.079 min Scan# 4980
Delta R.T. 0.008 min
Lab File: VN066684.D
Acq: 20 Apr 2021 16:27

Instrument :
MSVOA_N
ClientSampleId :



Tgt Ion:	128	Resp:	5947
Ion Ratio	100	Lower	Upper
127	0.5	10.2	15.2#
129	1.1	8.6	13.0#

