

Data Path : Z:\voasrv\HPCHEM1\MSVOA_N\Data\VN050721\
 Data File : VN067044.D
 Acq On : 7 May 2021 5:58
 Operator : JC/MD
 Sample : M2313-01
 Misc : 5.00mL/MSVOA_N/WATER
 ALS Vial : 49 Sample Multiplier: 1

Instrument :
 MSVOA_N
 ClientSampleId :
 210505078-02-VOA

Quant Time: May 07 07:34:36 2021
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_N\methods\624N050721W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri May 07 07:26:20 2021
 Response via : Initial Calibration

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

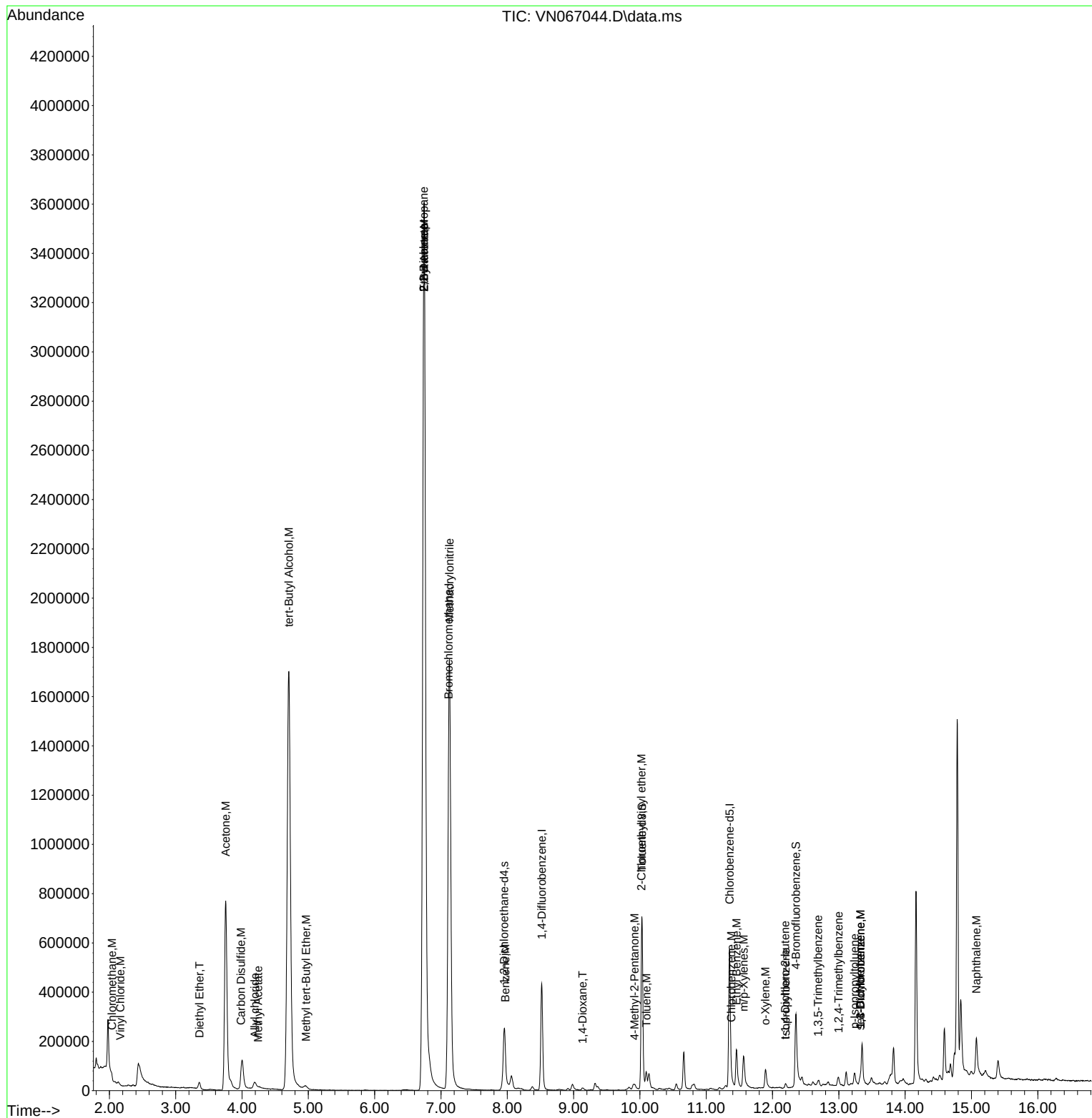
Internal Standards						
1) Bromochloromethane	7.115	128	67565	30.00	ug/l	0.00
28) 1,4-Difluorobenzene	8.520	114	361621	30.00	ug/l	0.00
57) Chlorobenzene-d5	11.352	117	336467	30.00	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	7.954	65	198050	33.45	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery =	111.50%#		
60) 4-Bromofluorobenzene	12.353	95	139051	24.84	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery =	82.80%		
63) Toluene-d8	10.030	98	488668	29.32	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery =	97.73%		
Target Compounds						Qvalue
3) Chloromethane	2.038	50	4606	0.65	ug/l	92
4) Vinyl Chloride	2.164	62	1934	0.28	ug/l #	85
8) Diethyl Ether	3.357	74	11027	3.94	ug/l	88
12) Methyl Acetate	4.245	43	1118	0.20	ug/l #	81
15) Acetone	3.754	58	400254	638.02	ug/l	92
16) Carbon Disulfide	3.985	76	21455	1.69	ug/l	96
17) Allyl chloride	4.191	41	38740	5.16	ug/l #	49
23) tert-Butyl Alcohol	4.706	59	3441160	3997.13	ug/l #	100
24) Methyl tert-Butyl Ether	4.964	73	19651	1.54	ug/l #	66
30) 2-Butanone	6.747	43	2591322	854.50	ug/l	97
31) 2,2-Dichloropropane	6.742	77	174936	22.92	ug/l #	54
34) Benzene	7.970	78	43075	2.10	ug/l #	17
35) Methacrylonitrile	7.131	41	760556	268.18	ug/l #	44
43) Ethyl Acetate	6.747	43	2591322	362.69	ug/l #	62
45) 1,4-Dioxane	9.137	88	1323	19.08	ug/l #	51
55) 2-Chloroethyl vinyl ether	10.025	63	300	0.25	ug/l #	1
58) 4-Methyl-2-Pentanone	9.917	43	12967	2.06	ug/l #	92
62) Toluene	10.097	91	47176	2.27	ug/l	100
64) Chlorobenzene	11.379	112	8202	0.68	ug/l	97
66) Ethyl Benzene	11.457	91	116652	5.54	ug/l	98
67) m/p-Xylenes	11.564	106	48161	6.09	ug/l	81
68) o-Xylene	11.894	106	23257	2.98	ug/l	96
70) Isopropylbenzene	12.200	105	10048	0.50	ug/l #	74
76) 1,3,5-Trimethylbenzene	12.685	105	7687	0.43	ug/l	77
77) t-1,4-Dichloro-2-butene	12.192	75	524	7.57	ug/l	88
80) 1,2,4-Trimethylbenzene	12.994	105	24479	1.46	ug/l	97
81) sec-Butylbenzene	13.323	105	15166	0.76	ug/l	62
82) p-Isopropyltoluene	13.238	119	29537	1.85	ug/l	84
83) 1,3-Dichlorobenzene	13.326	146	4360	0.54	ug/l	88
84) 1,4-Dichlorobenzene	13.326	146	4360	0.52	ug/l	90
91) Naphthalene	15.075	128	161748	13.89	ug/l	99

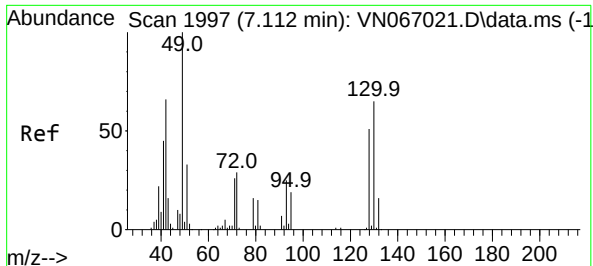
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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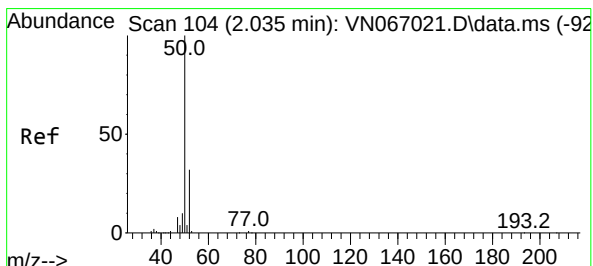
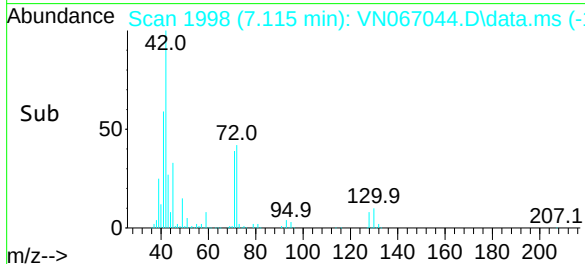
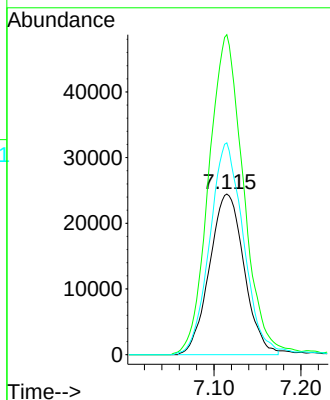
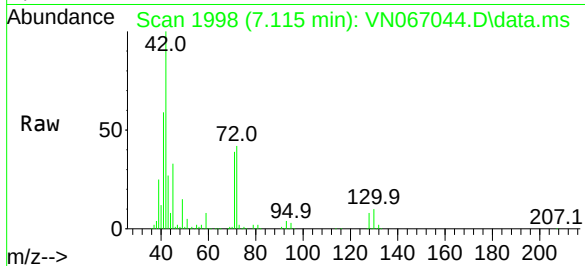




#1
Bromochloromethane
Concen: 30.00 ug/l
RT: 7.115 min Scan# 1998
Delta R.T. 0.003 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

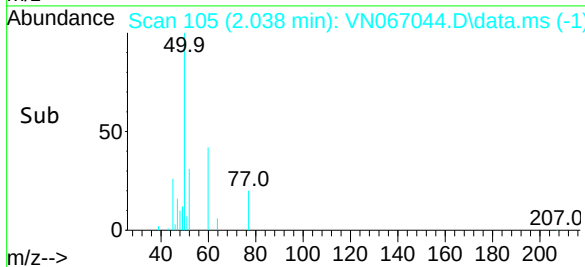
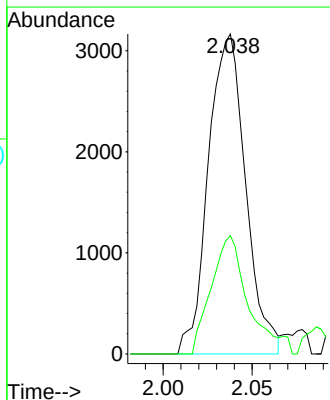
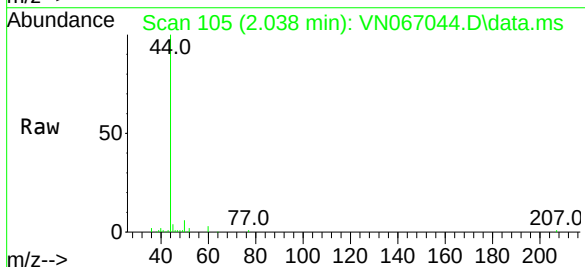
Instrument :
MSVOA_N
ClientSampleId :
210505078-02-VOA

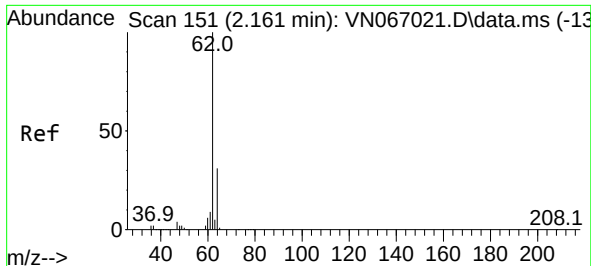
Tgt Ion:128 Resp: 67565
Ion Ratio Lower Upper
128 100
49 199.9 0.0 486.3
130 128.5 0.0 326.0



#3
Chloromethane
Concen: 0.65 ug/l
RT: 2.038 min Scan# 105
Delta R.T. 0.003 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

Tgt Ion: 50 Resp: 4606
Ion Ratio Lower Upper
50 100
52 37.0 25.9 38.9

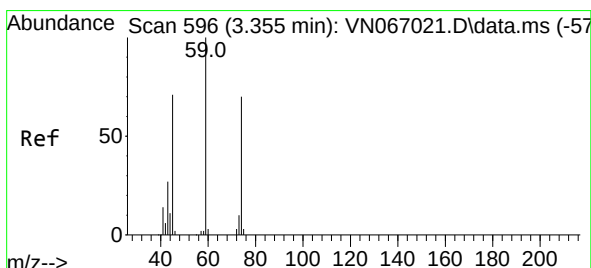
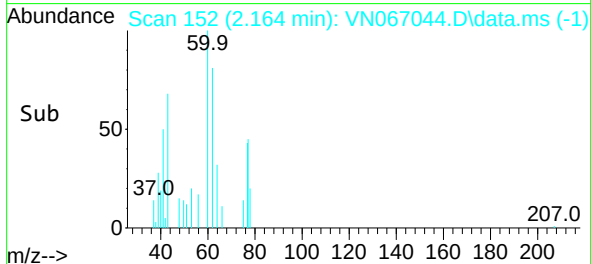
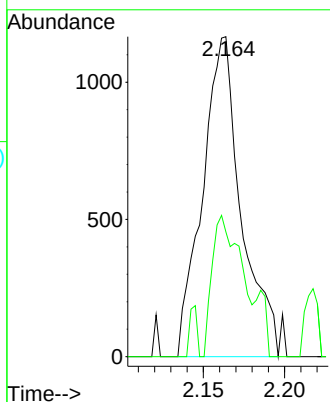
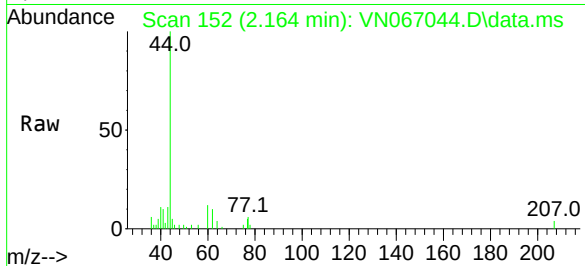




#4
 Vinyl Chloride
 Concen: 0.28 ug/l
 RT: 2.164 min Scan# 152
 Delta R.T. 0.003 min
 Lab File: VN067044.D
 Acq: 7 May 2021 5:58

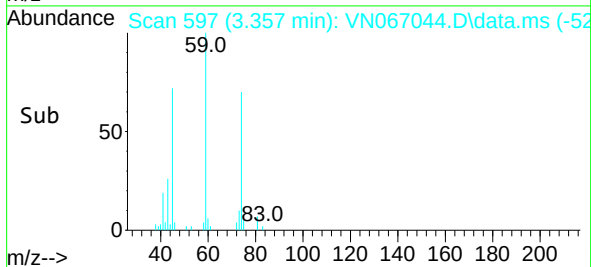
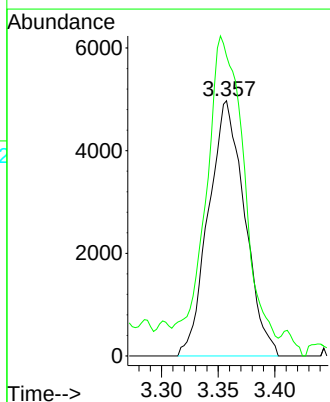
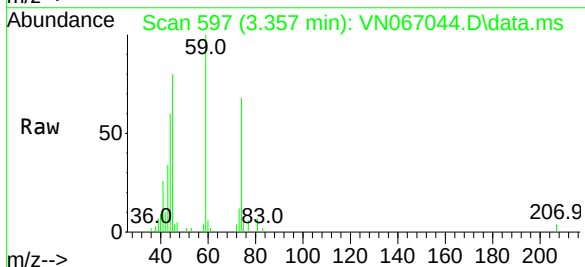
Instrument :
 MSVOA_N
 ClientSampleId :
 210505078-02-VOA

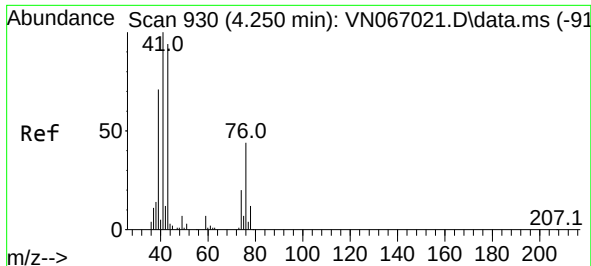
Tgt Ion: 62 Resp: 1934
 Ion Ratio Lower Upper
 62 100
 64 39.0 24.7 37.1#



#8
 Diethyl Ether
 Concen: 3.94 ug/l
 RT: 3.357 min Scan# 597
 Delta R.T. 0.003 min
 Lab File: VN067044.D
 Acq: 7 May 2021 5:58

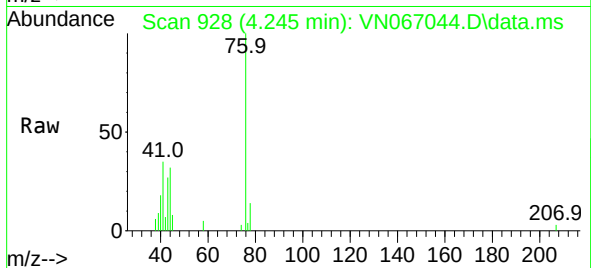
Tgt Ion: 74 Resp: 11027
 Ion Ratio Lower Upper
 74 100
 45 118.0 21.1 190.3



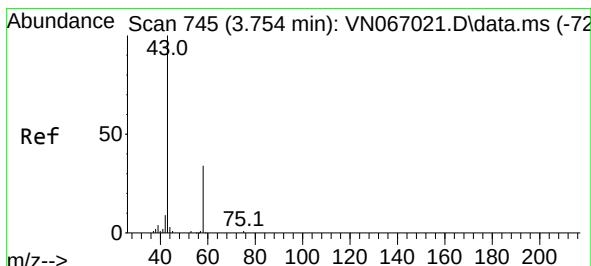
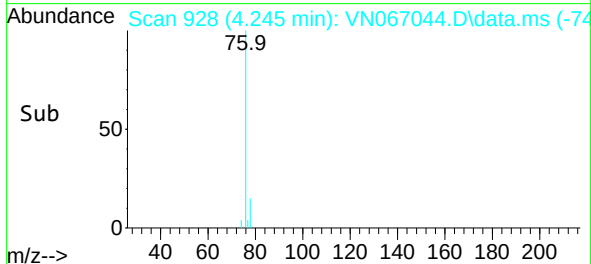
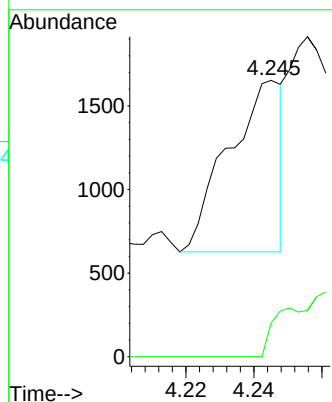


#12
Methyl Acetate
Concen: 0.20 ug/l
RT: 4.245 min Scan# 928
Delta R.T. -0.005 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

Instrument :
MSVOA_N
ClientSampleId :
210505078-02-VOA

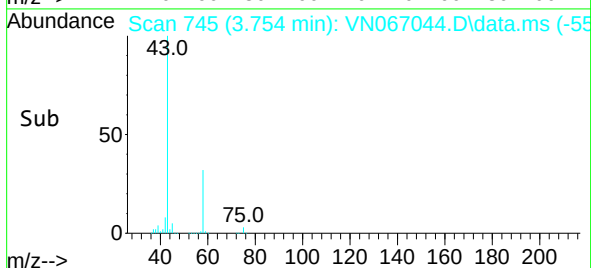
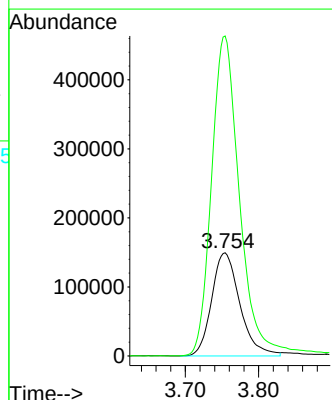
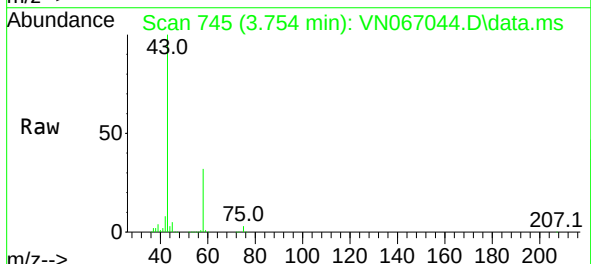


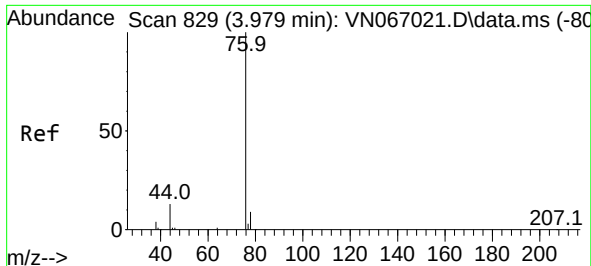
Tgt Ion: 43 Resp: 1118
Ion Ratio Lower Upper
43 100
74 12.5 17.2 25.8#



#15
Acetone
Concen: 638.02 ug/l
RT: 3.754 min Scan# 745
Delta R.T. 0.000 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

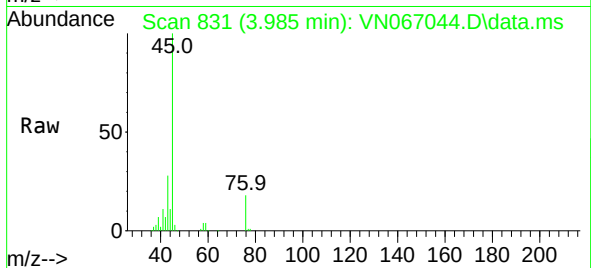
Tgt Ion: 58 Resp: 400254
Ion Ratio Lower Upper
58 100
43 310.0 235.0 352.6



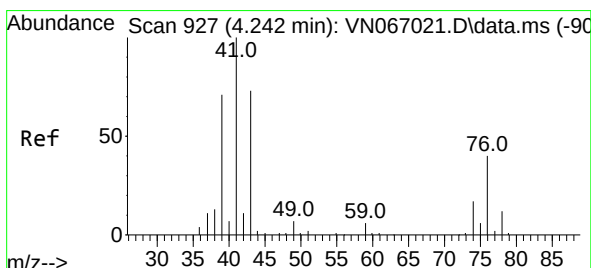
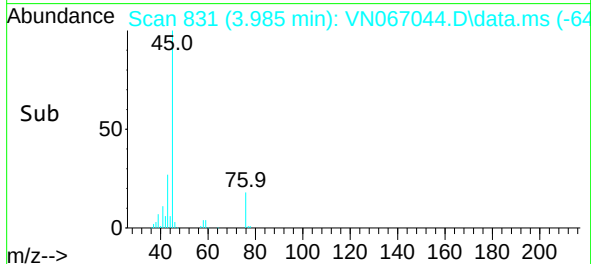
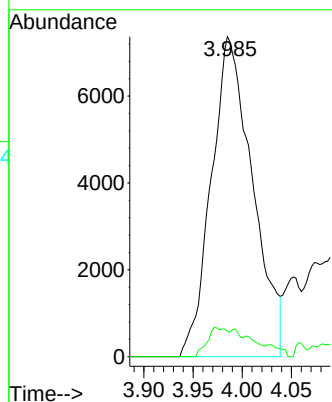


#16
Carbon Disulfide
Concen: 1.69 ug/l
RT: 3.985 min Scan# 831
Delta R.T. 0.005 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

Instrument :
MSVOA_N
ClientSampleId :
210505078-02-VOA

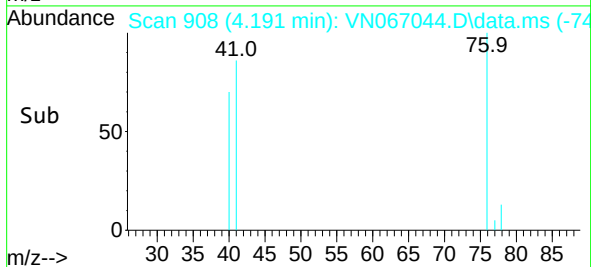
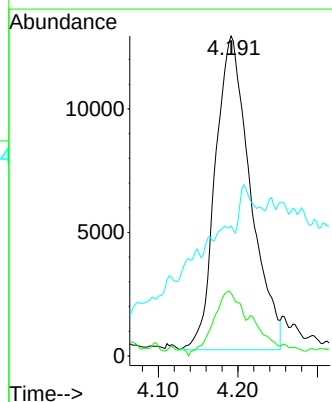
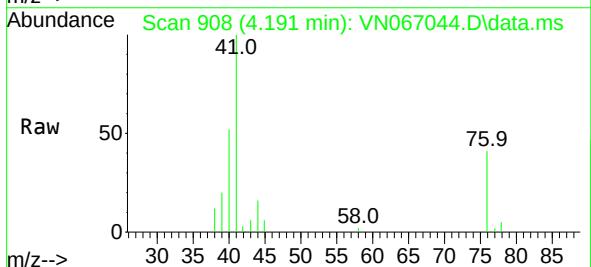


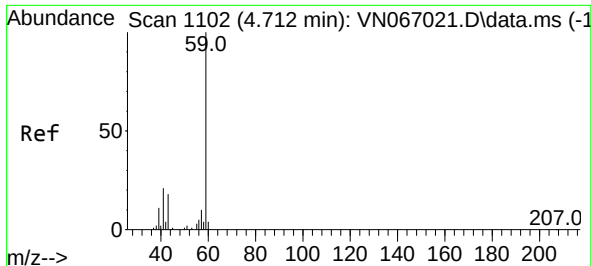
Tgt Ion: 76 Resp: 21455
Ion Ratio Lower Upper
76 100
78 7.9 7.5 11.3



#17
Allyl chloride
Concen: 5.16 ug/l
RT: 4.191 min Scan# 908
Delta R.T. -0.051 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

Tgt Ion: 41 Resp: 38740
Ion Ratio Lower Upper
41 100
39 17.9 33.1 99.5#
76 16.4 17.9 53.8#

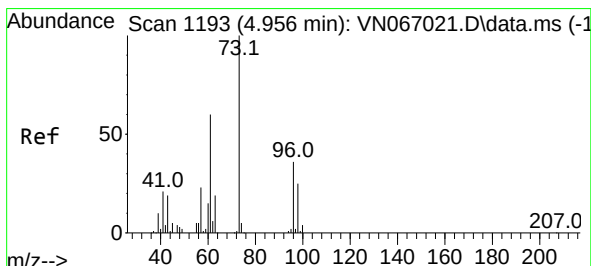
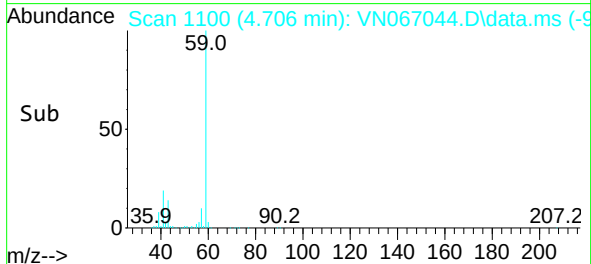
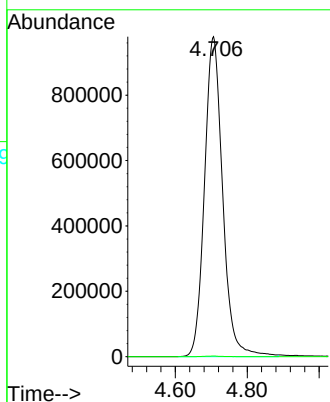
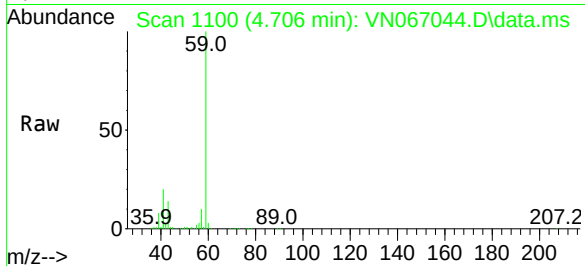




#23
tert-Butyl Alcohol
Concen: 3997.13 ug/l
RT: 4.706 min Scan# 1100
Delta R.T. -0.005 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

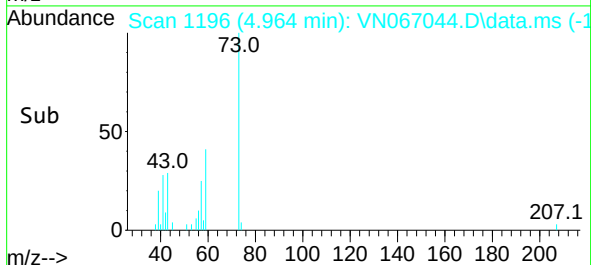
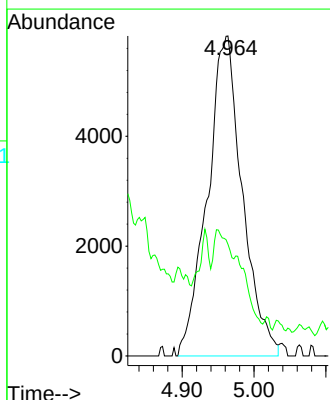
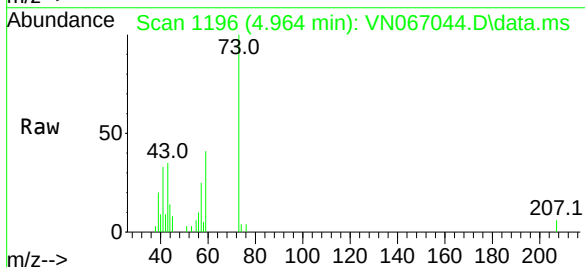
Instrument :
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ClientSampleId :
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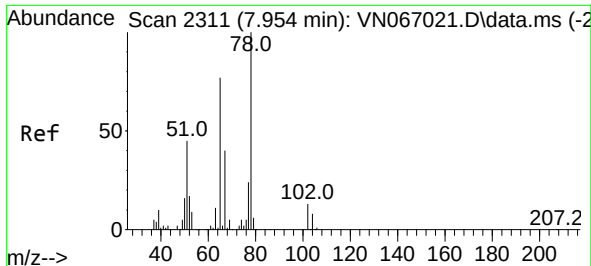
Tgt Ion: 59 Resp: 3441160
Ion Ratio Lower Upper
59 100
52 0.0 0.0 0.0#



#24
Methyl tert-Butyl Ether
Concen: 1.54 ug/l
RT: 4.964 min Scan# 1196
Delta R.T. 0.008 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

Tgt Ion: 73 Resp: 19651
Ion Ratio Lower Upper
73 100
43 4.5 16.2 24.4#





#27

1,2-Dichloroethane-d4

Concen: 33.45 ug/l

RT: 7.954 min Scan# 2311

Delta R.T. 0.000 min

Lab File: VN067044.D

Acq: 7 May 2021 5:58

Tgt Ion: 65 Resp: 198050

Ion Ratio Lower Upper

65 100

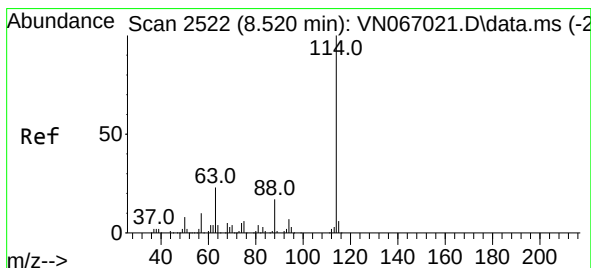
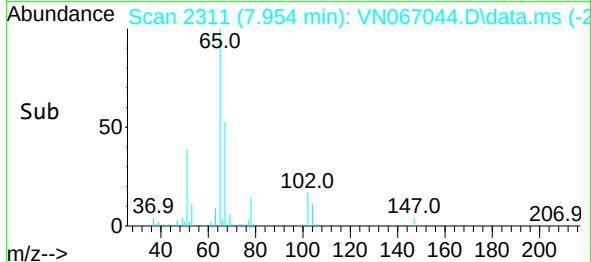
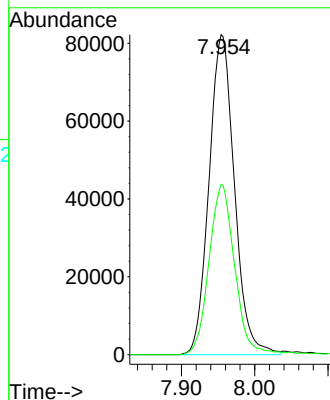
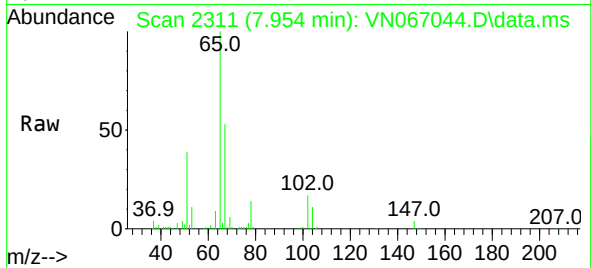
67 53.2 41.6 62.4

Instrument :

MSVOA_N

ClientSampleId :

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#28

1,4-Difluorobenzene

Concen: 30.00 ug/l

RT: 8.520 min Scan# 2522

Delta R.T. 0.000 min

Lab File: VN067044.D

Acq: 7 May 2021 5:58

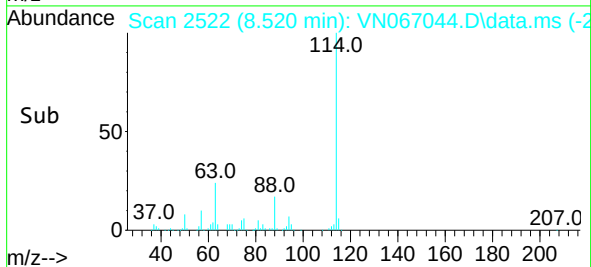
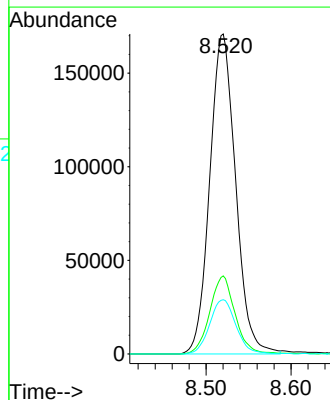
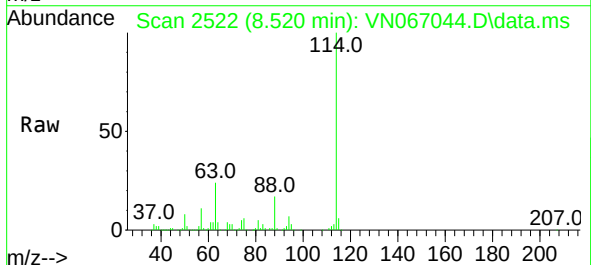
Tgt Ion: 114 Resp: 361621

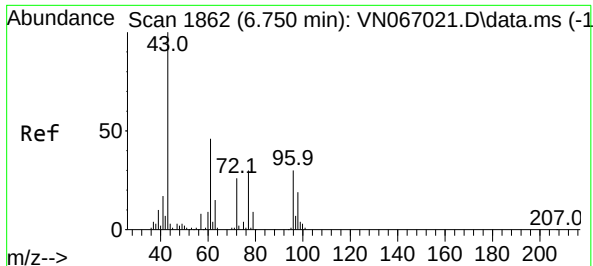
Ion Ratio Lower Upper

114 100

63 23.9 18.8 28.2

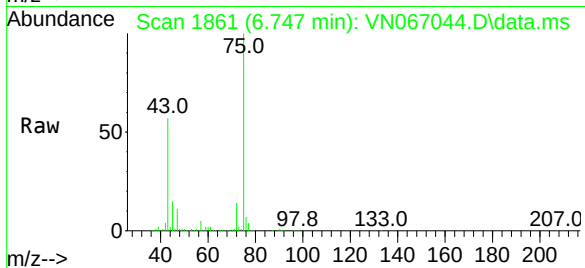
88 17.3 13.8 20.6





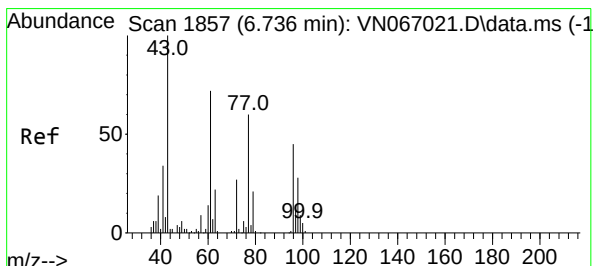
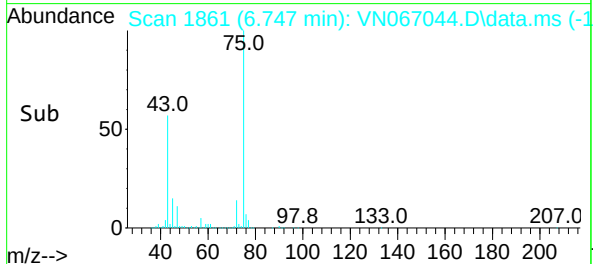
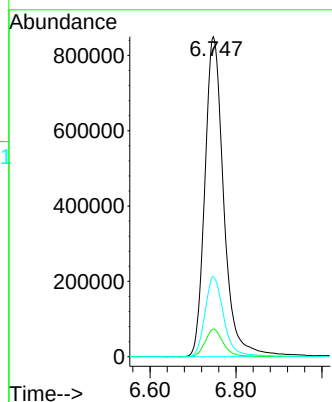
#30
2-Butanone
Concen: 854.50 ug/l
RT: 6.747 min Scan# 1861
Delta R.T. -0.003 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

Instrument :
MSVOA_N
ClientSampleId :
210505078-02-VOA



Tgt Ion: 43 Resp: 2591322

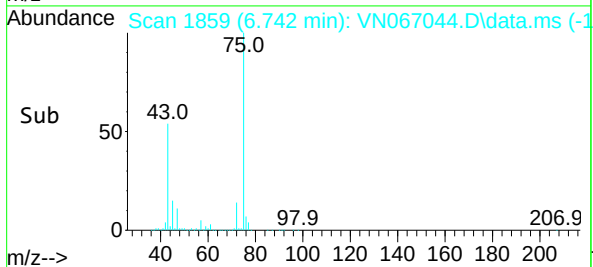
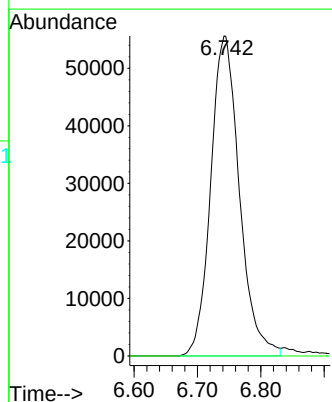
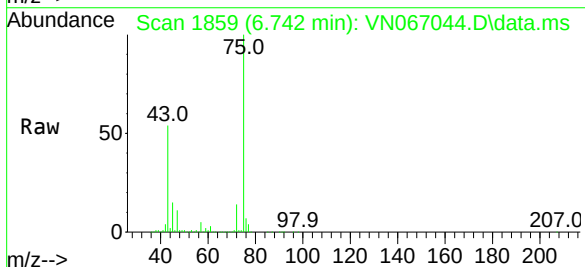
Ion	Ratio	Lower	Upper
43	100		
57	8.3	6.5	9.7
72	24.4	21.2	31.8

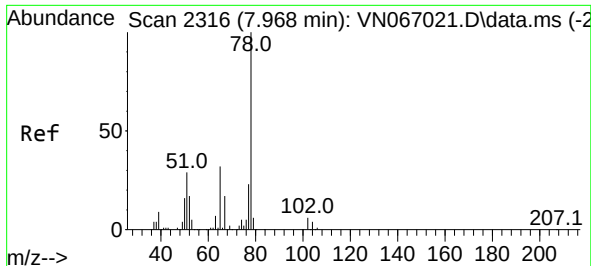


#31
2,2-Dichloropropane
Concen: 22.92 ug/l
RT: 6.742 min Scan# 1859
Delta R.T. 0.005 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

Tgt Ion: 77 Resp: 174936

Ion	Ratio	Lower	Upper
77	100		
97	0.0	17.4	26.2

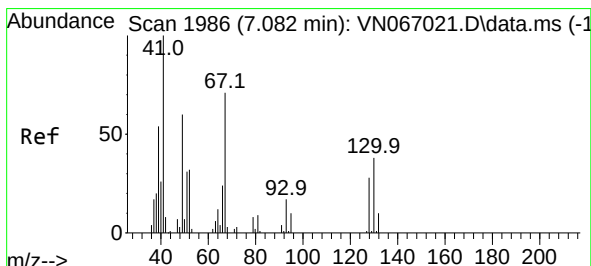
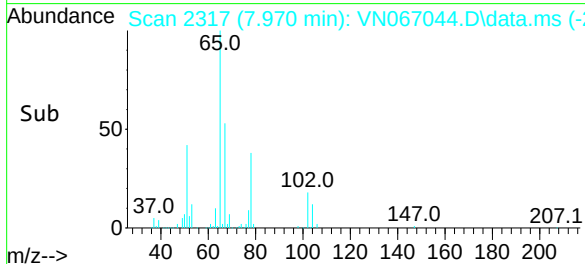
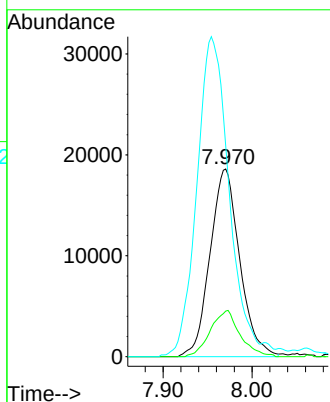
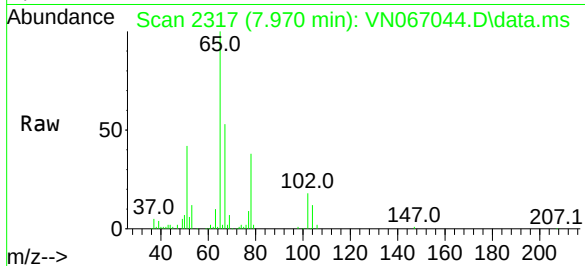




#34
Benzene
Concen: 2.10 ug/l
RT: 7.970 min Scan# 2317
Delta R.T. 0.003 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

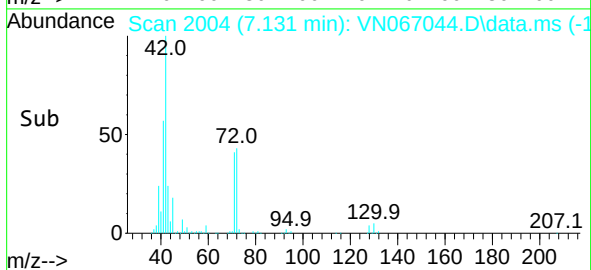
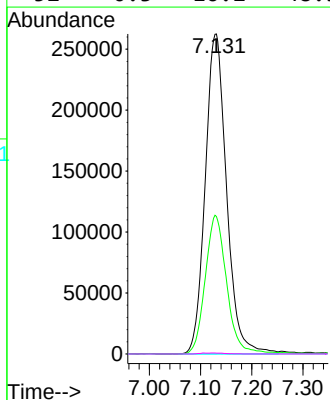
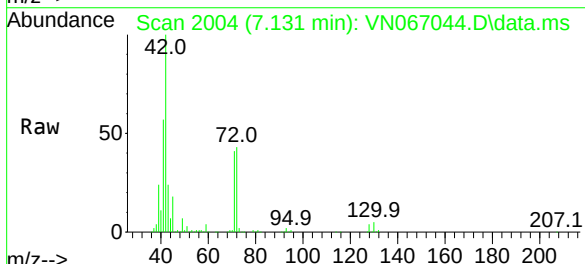
Instrument :
MSVOA_N
ClientSampleId :
210505078-02-VOA

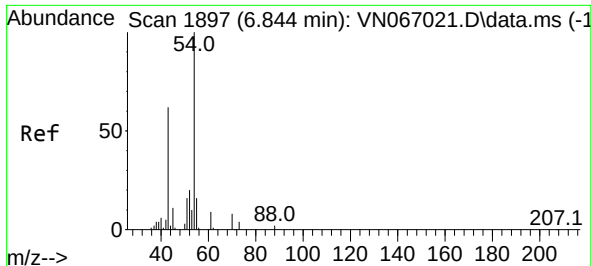
Tgt Ion: 78 Resp: 43075
Ion Ratio Lower Upper
78 100
77 24.3 18.6 27.8
51 107.9 23.4 35.0#



#35
Methacrylonitrile
Concen: 268.18 ug/l
RT: 7.131 min Scan# 2004
Delta R.T. 0.048 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

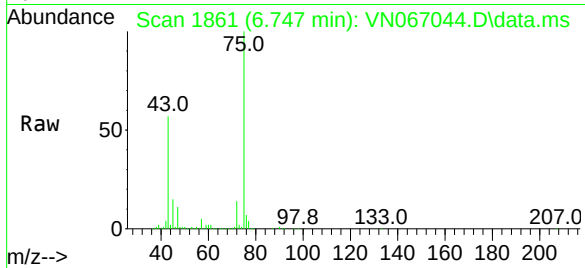
Tgt Ion: 41 Resp: 760556
Ion Ratio Lower Upper
41 100
39 42.9 27.6 82.8
67 0.0 35.5 106.5#
52 0.3 16.2 48.5#



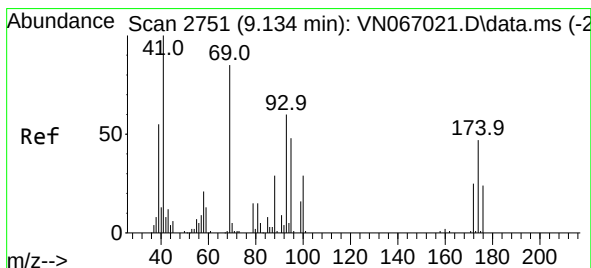
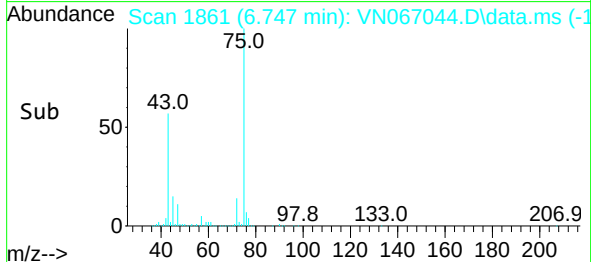
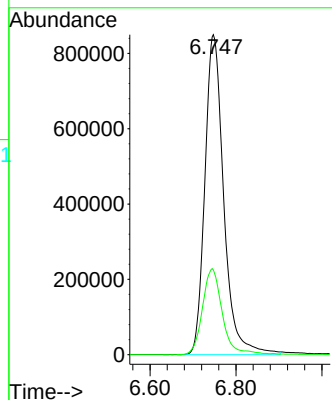


#43
Ethyl Acetate
Concen: 362.69 ug/l
RT: 6.747 min Scan# 1861
Delta R.T. -0.096 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

Instrument :
MSVOA_N
ClientSampleId :
210505078-02-VOA

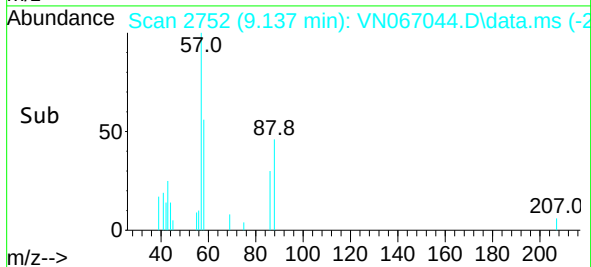
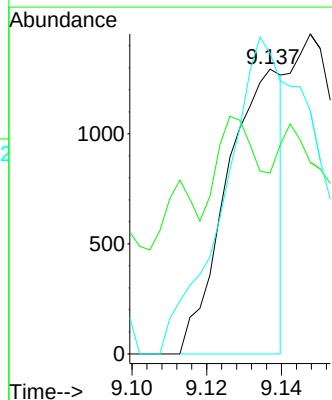
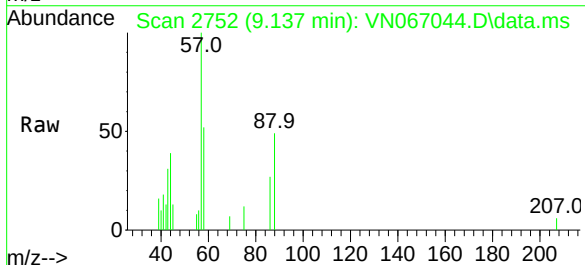


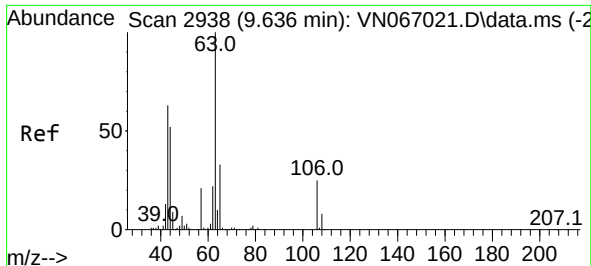
Tgt Ion: 43 Resp: 2591322
Ion Ratio Lower Upper
43 100
45 27.4 9.9 14.9#



#45
1,4-Dioxane
Concen: 19.08 ug/l
RT: 9.137 min Scan# 2752
Delta R.T. 0.003 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

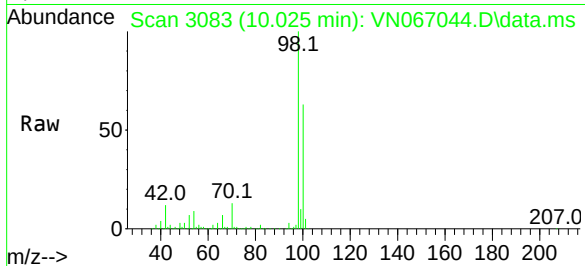
Tgt Ion: 88 Resp: 1323
Ion Ratio Lower Upper
88 100
43 17.5 28.0 42.0#
58 128.4 62.8 94.2#



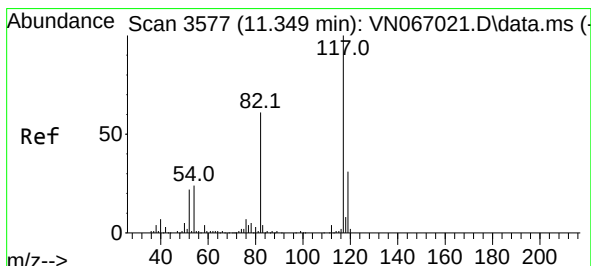
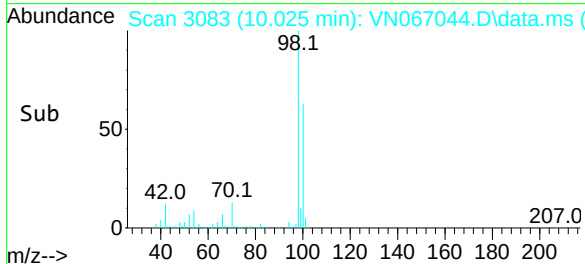
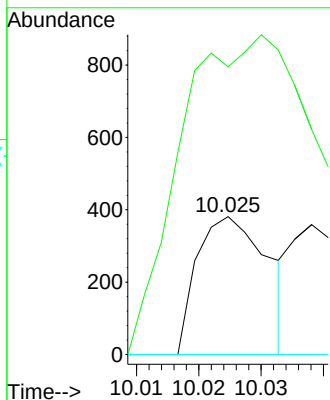


#55
2-Chloroethyl vinyl ether
Concen: 0.25 ug/l
RT: 10.025 min Scan# 3083
Delta R.T. 0.389 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

Instrument :
MSVOA_N
ClientSampleId :
210505078-02-VOA

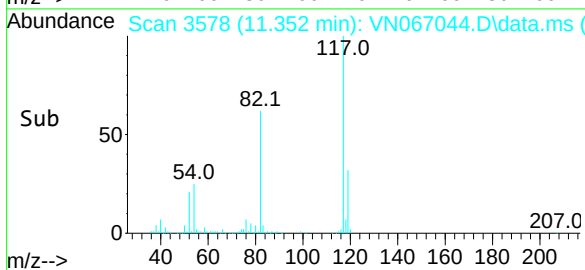
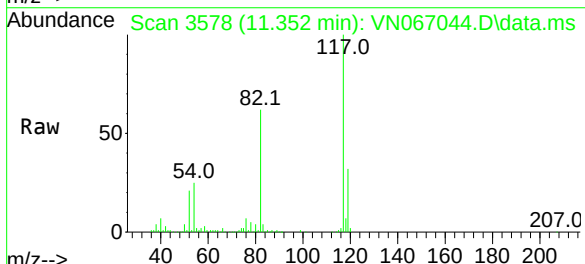
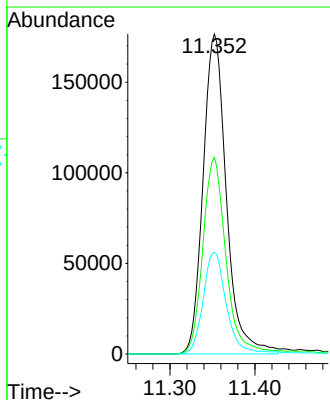


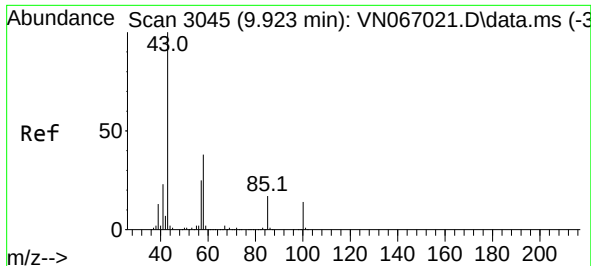
Tgt Ion: 63 Resp: 300
Ion Ratio Lower Upper
63 100
65 184.7 25.4 38.2#
106 0.0 18.9 28.3#



#57
Chlorobenzene-d5
Concen: 30.00 ug/l
RT: 11.352 min Scan# 3578
Delta R.T. 0.003 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

Tgt Ion: 117 Resp: 336467
Ion Ratio Lower Upper
117 100
82 61.2 49.3 73.9
119 31.1 25.5 38.3

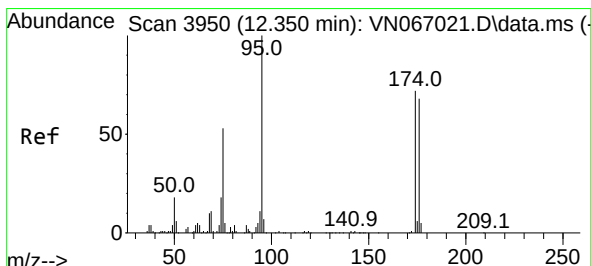
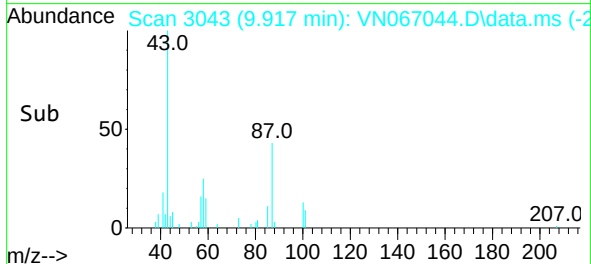
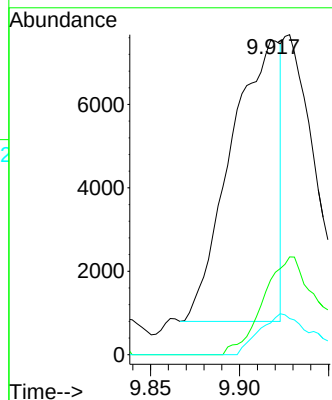
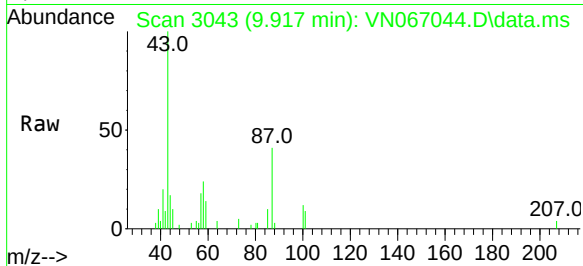




#58
4-Methyl-2-Pentanone
Concen: 2.06 ug/l
RT: 9.917 min Scan# 3043
Delta R.T. -0.005 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

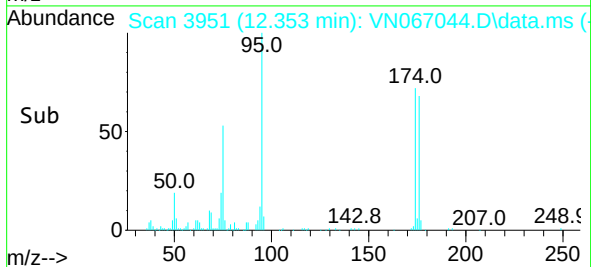
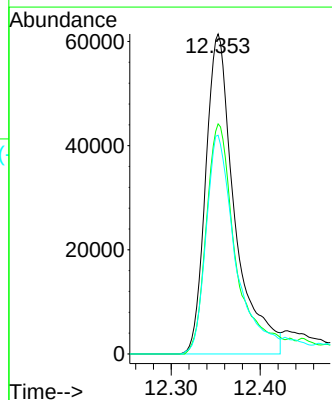
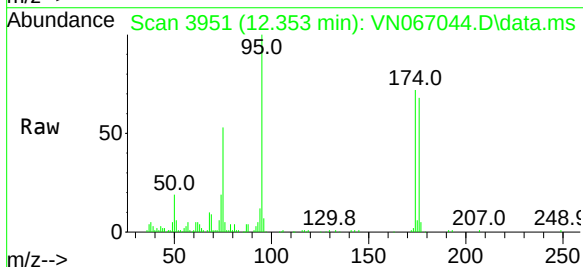
Instrument :
MSVOA_N
ClientSampleId :
210505078-02-VOA

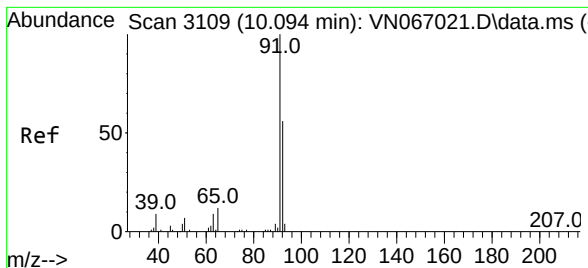
Tgt Ion: 43 Resp: 12967
Ion Ratio Lower Upper
43 100
58 42.4 30.4 45.6
85 12.2 13.4 20.0#



#60
4-Bromofluorobenzene
Concen: 24.84 ug/l
RT: 12.353 min Scan# 3951
Delta R.T. 0.003 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

Tgt Ion: 95 Resp: 139051
Ion Ratio Lower Upper
95 100
174 73.3 57.2 85.8
176 69.6 54.5 81.7





#62

Toluene

Concen: 2.27 ug/l

RT: 10.097 min Scan# 3110

Delta R.T. 0.003 min

Lab File: VN067044.D

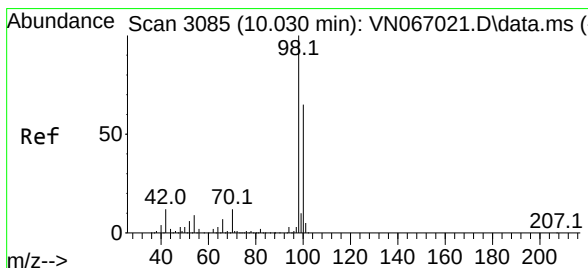
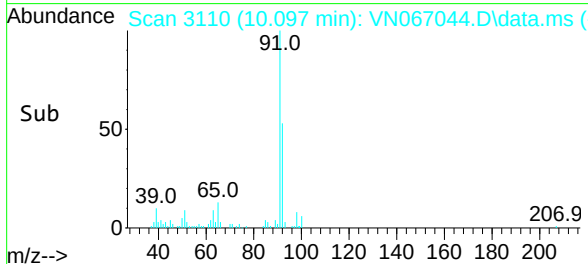
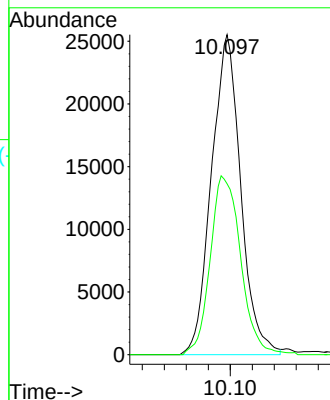
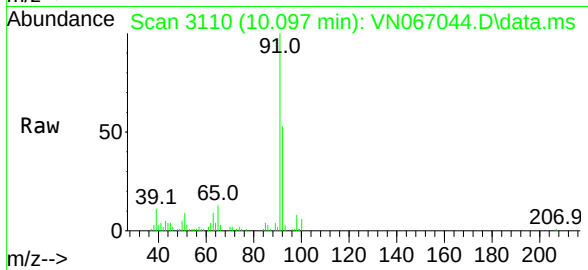
Acq: 7 May 2021 5:58

Tgt Ion: 91 Resp: 47176

Ion Ratio Lower Upper

91 100

92 58.1 46.2 69.2



#63

Toluene-d8

Concen: 29.32 ug/l

RT: 10.030 min Scan# 3085

Delta R.T. 0.000 min

Lab File: VN067044.D

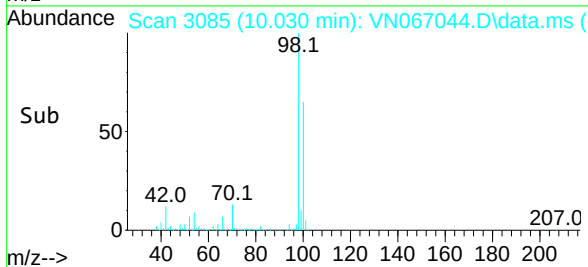
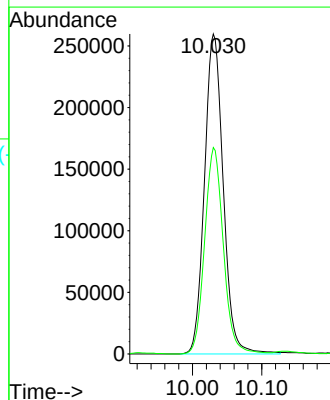
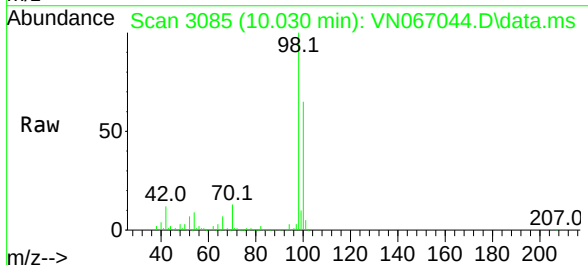
Acq: 7 May 2021 5:58

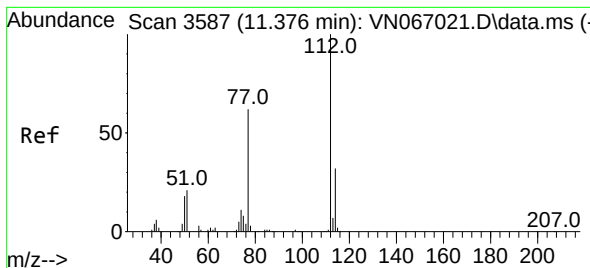
Tgt Ion: 98 Resp: 488668

Ion Ratio Lower Upper

98 100

100 64.3 51.1 76.7

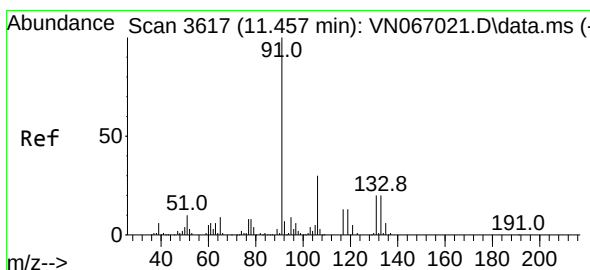
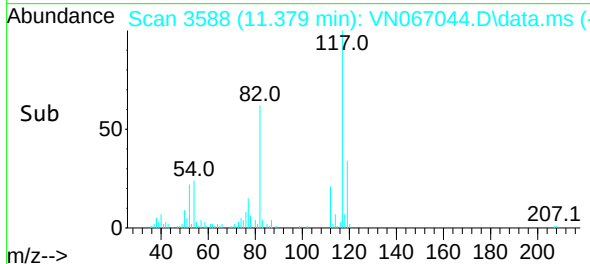
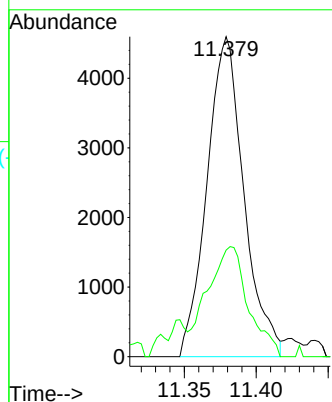
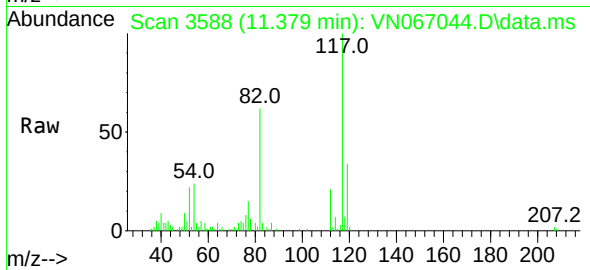




#64
Chlorobenzene
Concen: 0.68 ug/l
RT: 11.379 min Scan# 3588
Delta R.T. 0.003 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

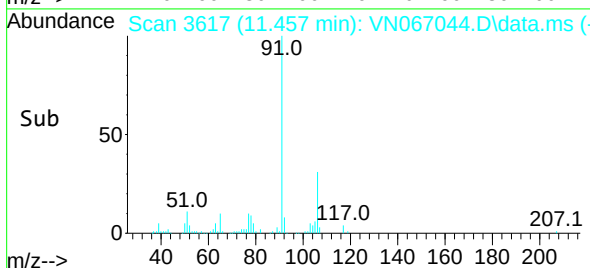
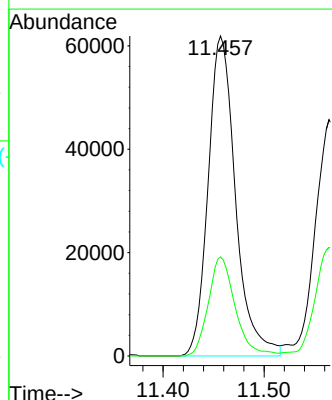
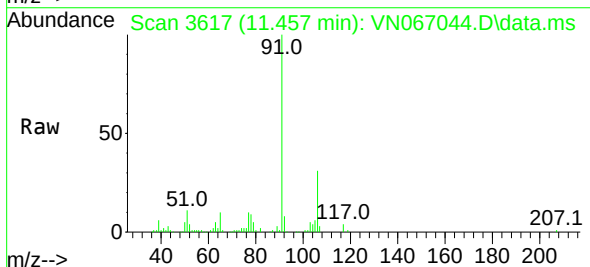
Instrument :
MSVOA_N
ClientSampleId :
210505078-02-VOA

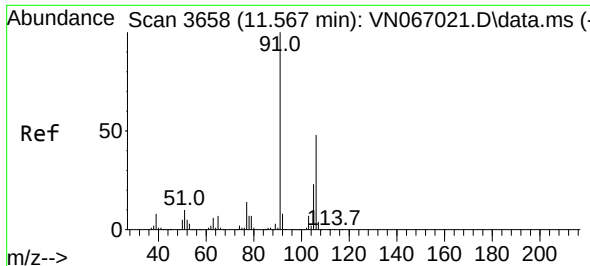
Tgt Ion:112 Resp: 8202
Ion Ratio Lower Upper
112 100
114 33.3 25.2 37.8



#66
Ethyl Benzene
Concen: 5.54 ug/l
RT: 11.457 min Scan# 3617
Delta R.T. 0.000 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

Tgt Ion: 91 Resp: 116652
Ion Ratio Lower Upper
91 100
106 31.0 24.1 36.1

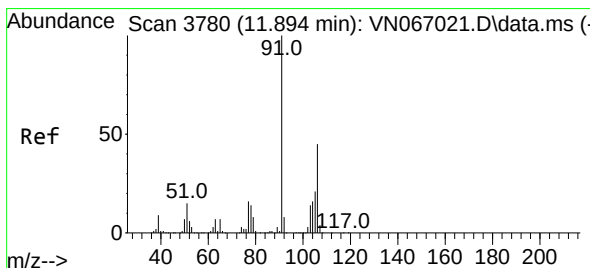
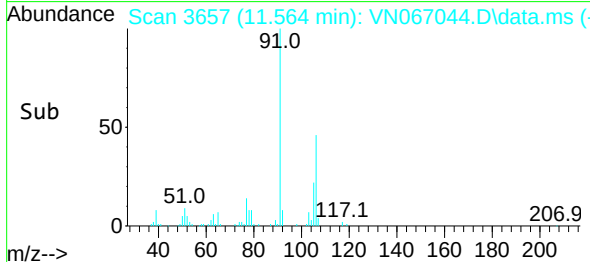
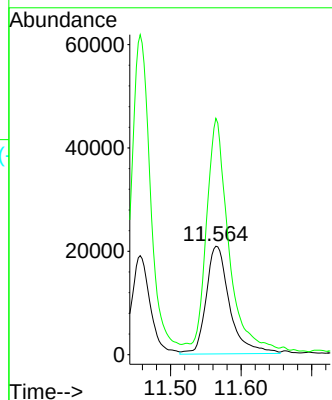
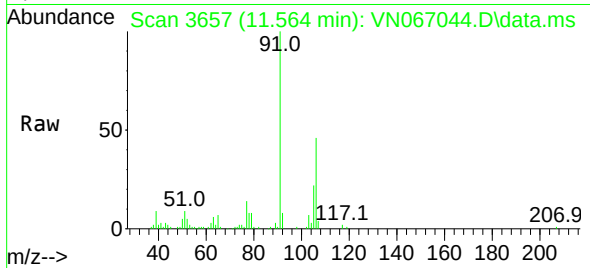




#67
m/p-Xylenes
Concen: 6.09 ug/l
RT: 11.564 min Scan# 3657
Delta R.T. -0.003 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

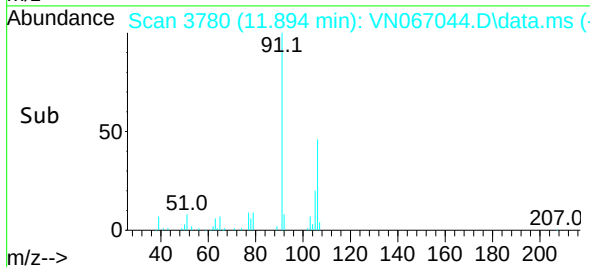
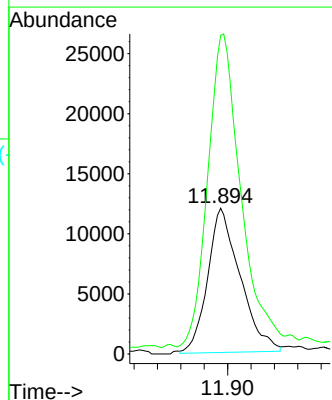
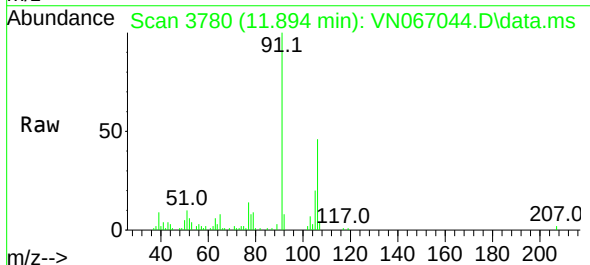
Instrument :
MSVOA_N
ClientSampleId :
210505078-02-VOA

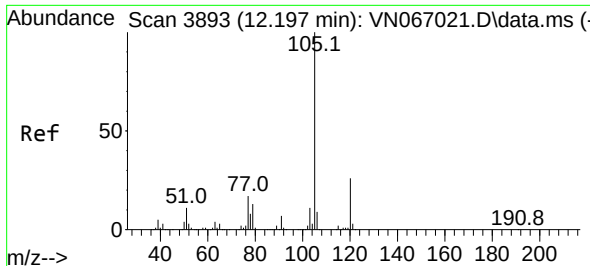
Tgt Ion:106 Resp: 48161
Ion Ratio Lower Upper
106 100
91 185.7 173.2 259.8



#68
o-Xylene
Concen: 2.98 ug/l
RT: 11.894 min Scan# 3780
Delta R.T. 0.000 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

Tgt Ion:106 Resp: 23257
Ion Ratio Lower Upper
106 100
91 219.6 113.3 339.9

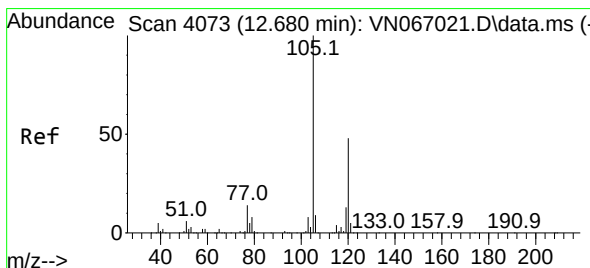
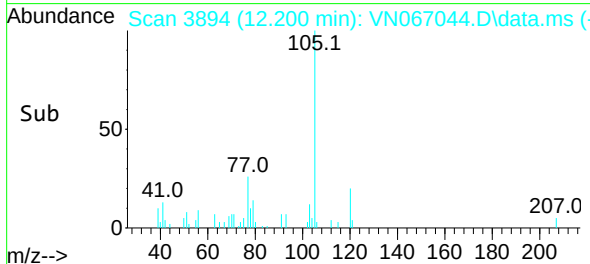
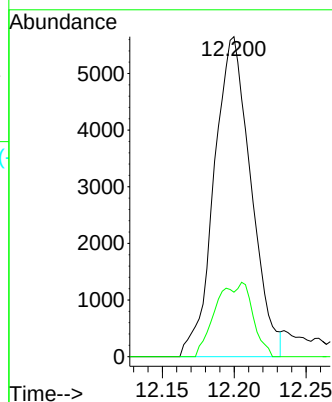
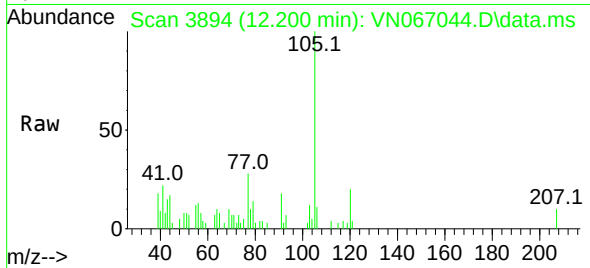




#70
Isopropylbenzene
Concen: 0.50 ug/l
RT: 12.200 min Scan# 3894
Delta R.T. 0.003 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

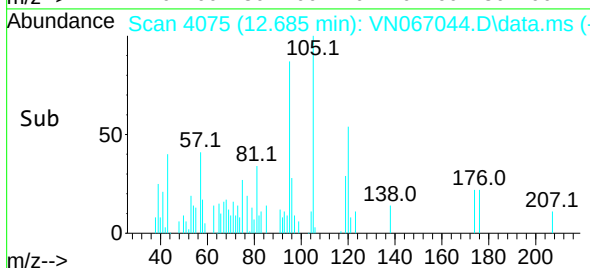
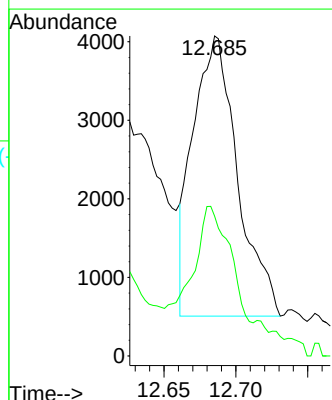
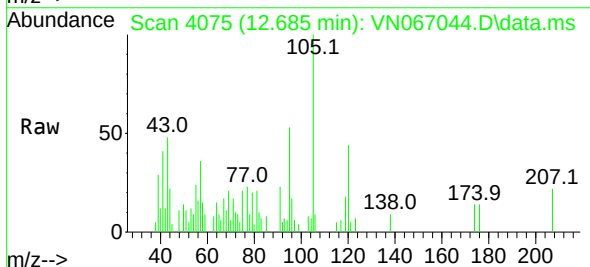
Instrument :
MSVOA_N
ClientSampleId :
210505078-02-VOA

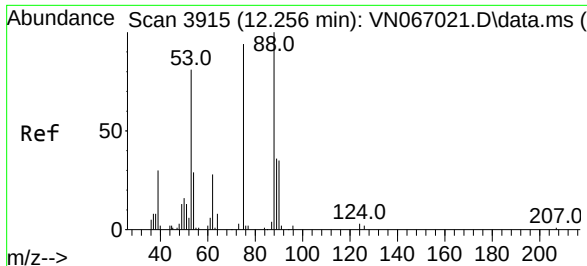
Tgt Ion:105 Resp: 10048
Ion Ratio Lower Upper
105 100
120 12.8 18.2 33.8#



#76
1,3,5-Trimethylbenzene
Concen: 0.43 ug/l
RT: 12.685 min Scan# 4075
Delta R.T. 0.005 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

Tgt Ion:105 Resp: 7687
Ion Ratio Lower Upper
105 100
120 31.5 0.0 93.4

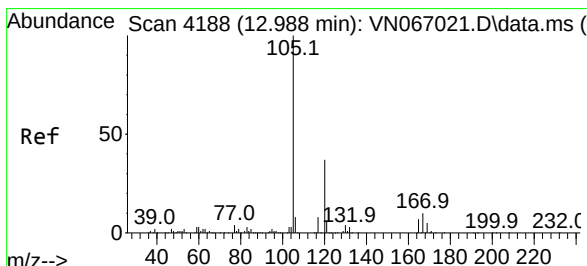
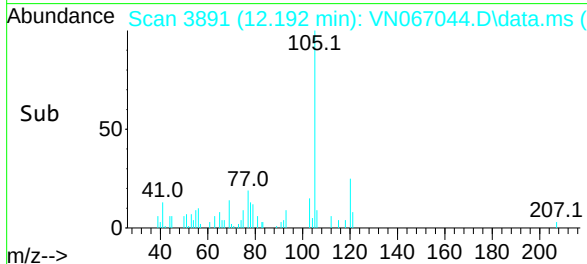
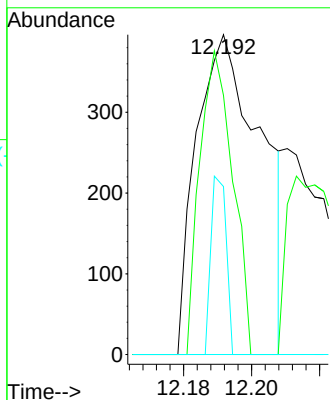
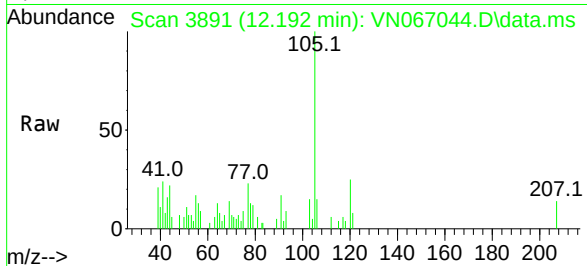




#77
t-1,4-Dichloro-2-butene
Concen: 7.57 ug/l
RT: 12.192 min Scan# 3891
Delta R.T. -0.064 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

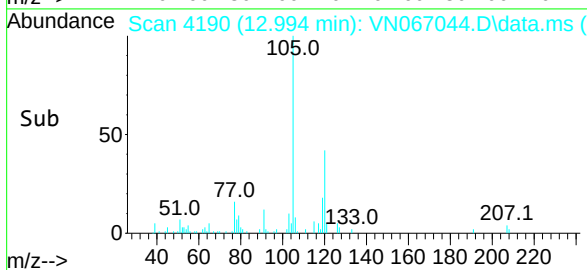
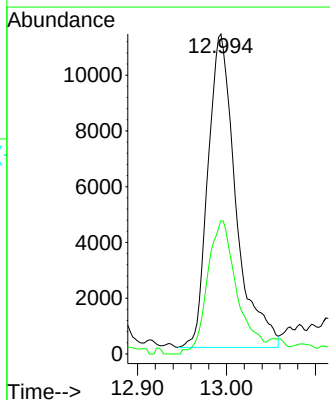
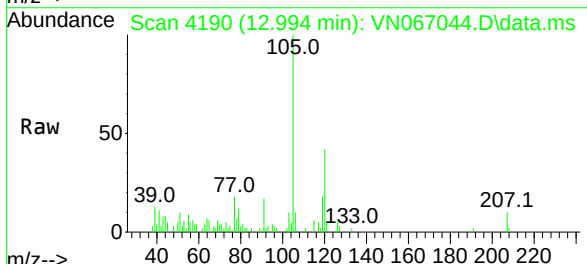
Instrument :
MSVOA_N
ClientSampleId :
210505078-02-VOA

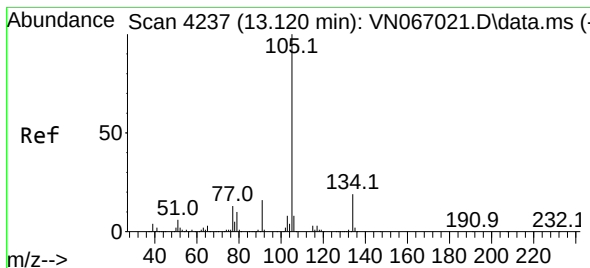
Tgt Ion:	75	Resp:	524
Ion	Ratio	Lower	Upper
75	100		
53	81.1	43.1	129.4
89	52.5	18.8	56.4



#80
1,2,4-Trimethylbenzene
Concen: 1.46 ug/l
RT: 12.994 min Scan# 4190
Delta R.T. 0.006 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

Tgt Ion:	105	Resp:	24479
Ion	Ratio	Lower	Upper
105	100		
120	42.6	0.0	88.8

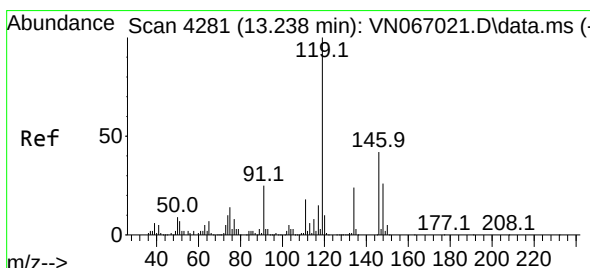
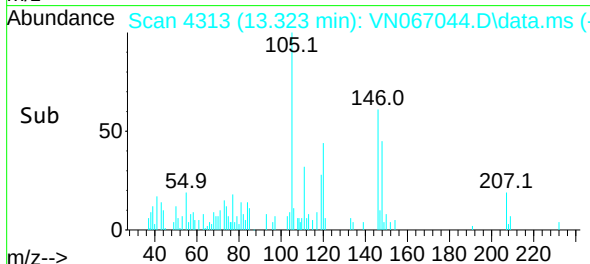
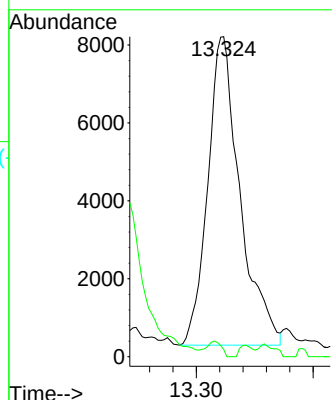
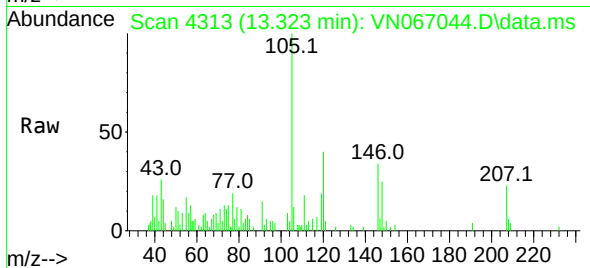




#81
 sec-Butylbenzene
 Concen: 0.76 ug/l
 RT: 13.323 min Scan# 4313
 Delta R.T. 0.204 min
 Lab File: VN067044.D
 Acq: 7 May 2021 5:58

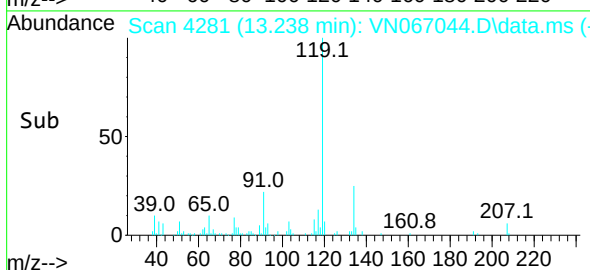
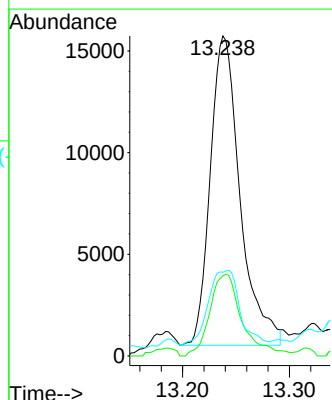
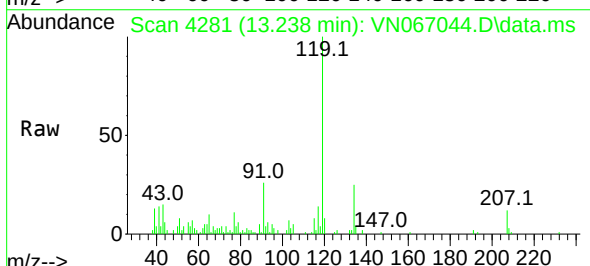
Instrument :
 MSVOA_N
 ClientSampleId :
 210505078-02-VOA

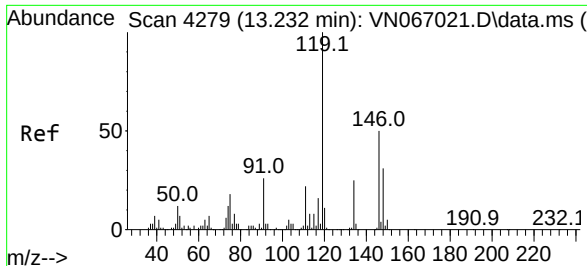
Tgt Ion:105 Resp: 15166
 Ion Ratio Lower Upper
 105 100
 134 2.2 0.0 38.8



#82
 p-Isopropyltoluene
 Concen: 1.85 ug/l
 RT: 13.238 min Scan# 4281
 Delta R.T. 0.000 min
 Lab File: VN067044.D
 Acq: 7 May 2021 5:58

Tgt Ion:119 Resp: 29537
 Ion Ratio Lower Upper
 119 100
 134 28.6 0.0 49.8
 91 12.7 0.0 49.6

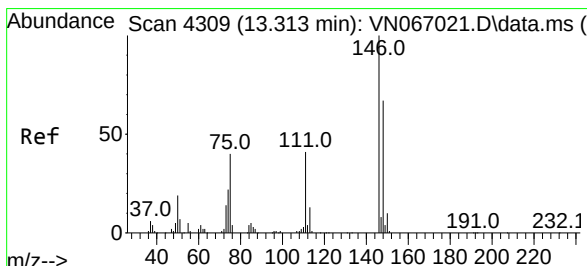
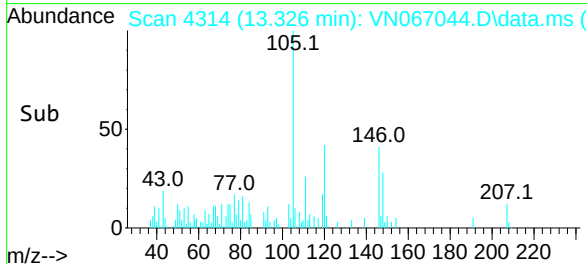
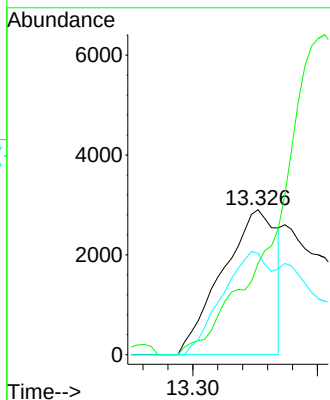
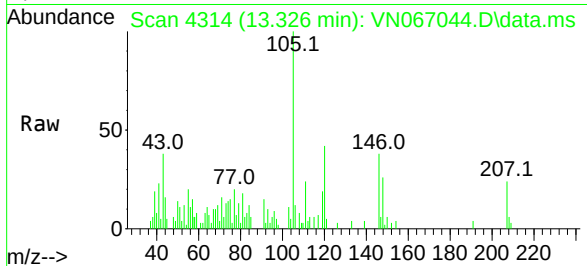




#83
1,3-Dichlorobenzene
Concen: 0.54 ug/l
RT: 13.326 min Scan# 4314
Delta R.T. 0.094 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

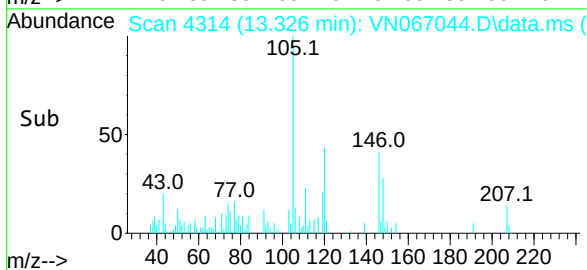
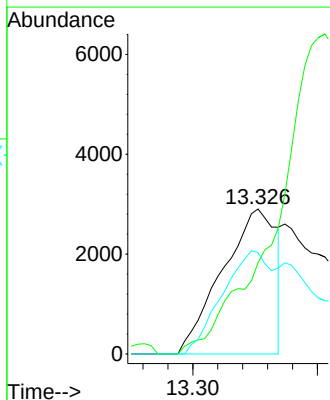
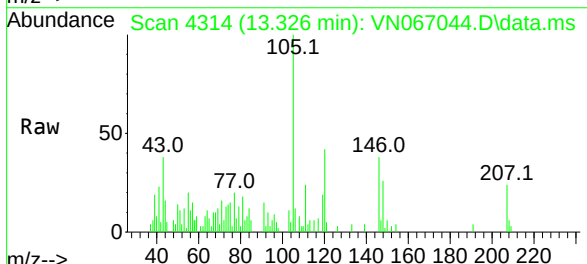
Instrument :
MSVOA_N
ClientSampleId :
210505078-02-VOA

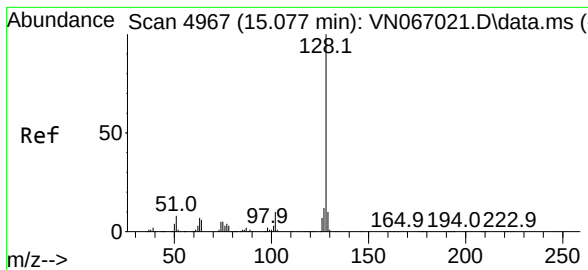
Tgt Ion:146 Resp: 4360
Ion Ratio Lower Upper
146 100
111 26.5 21.8 65.3
148 62.4 32.1 96.3



#84
1,4-Dichlorobenzene
Concen: 0.52 ug/l
RT: 13.326 min Scan# 4314
Delta R.T. 0.014 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

Tgt Ion:146 Resp: 4360
Ion Ratio Lower Upper
146 100
111 26.5 18.5 55.5
148 62.4 29.3 88.0





#91
Naphthalene
Concen: 13.89 ug/l
RT: 15.075 min Scan# 4966
Delta R.T. -0.003 min
Lab File: VN067044.D
Acq: 7 May 2021 5:58

Instrument :
MSVOA_N
ClientSampleId :
210505078-02-VOA

Tgt Ion:128 Resp: 161748
Ion Ratio Lower Upper
128 100
127 11.8 9.8 14.6
129 10.5 7.8 11.8

