

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL100521\
 Data File : VL037790.D
 Acq On : 6 Oct 2021 1:49
 Operator : SY/AP
 Sample : M4012-15
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 C0P26

Manual Integrations
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 10/11/2021 7:36:43 PM

Quant Time: Oct 06 06:34:12 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL100421AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Oct 0
 QLast Update : Mon Oct 04 17:43:54 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1237884	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.15	114	3594885	10.00	ppbv	-0.03
55) Chlorobenzene-d5	12.06	117	3148061	10.00	ppbv	-0.03

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.38	95	2238960	10.17	ppbv	-0.03
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.70%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.03	85	36150	0.183	ppbv #	86
3) Chlorodifluoromethane	2.97	51	64363	0.271	ppbv #	84
4) Chloromethane	3.13	50	17494m	0.201	ppbv	
9) Propene	3.01	41	33759	0.386	ppbv	99
11) Trichlorofluoromethane	3.93	101	46179m	0.262	ppbv	
13) Ethanol	3.59	45	1043522	145.801	ppbv	81
15) Acetone	3.83	43	1363245	12.268	ppbv	99
17) tert-Butyl alcohol	4.28	59	45974m	0.402	ppbv	
19) Isopropyl Alcohol	3.95	45	366541	5.302	ppbv #	87
20) Methylene Chloride	4.33	84	462078	8.230	ppbv	90
26) Hexane	5.66	57	296014	1.928	ppbv #	48
29) Chloroform	5.73	83	69221	0.315	ppbv #	78
34) 2-Butanone	5.22	43	86580	0.597	ppbv #	79
35) Carbon Tetrachloride	6.99	117	25427m	0.125	ppbv	
36) Benzene	6.87	78	70963m	0.231	ppbv	
44) 2,2,4-Trimethylpentane	7.84	57	43325	0.084	ppbv #	72
50) 4-Methyl-2-Pentanone	8.72	43	99226m	0.525	ppbv	
52) Tetrachloroethene	11.19	164	255591	2.140	ppbv	92
53) Toluene	9.78	91	535508	1.574	ppbv	98
58) Ethyl Benzene	12.68	91	133790	0.316	ppbv	89
59) m/p-Xylene	12.94	91	331580m	0.914	ppbv	
60) o-Xylene	13.66	91	104813	0.301	ppbv	97
61) Styrene	13.50	104	52616	0.313	ppbv	95
73) 1,3,5-Trimethylbenzene	15.96	105	34654m	0.097	ppbv	
74) 1,2,4-Trimethylbenzene	16.73	105	132927m	0.353	ppbv	
79) Naphthalene	22.17	128	61437m	0.266	ppbv	
80) Naphthalene,2-methyl-	24.94	142	8787	0.142	ppbv #	76

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

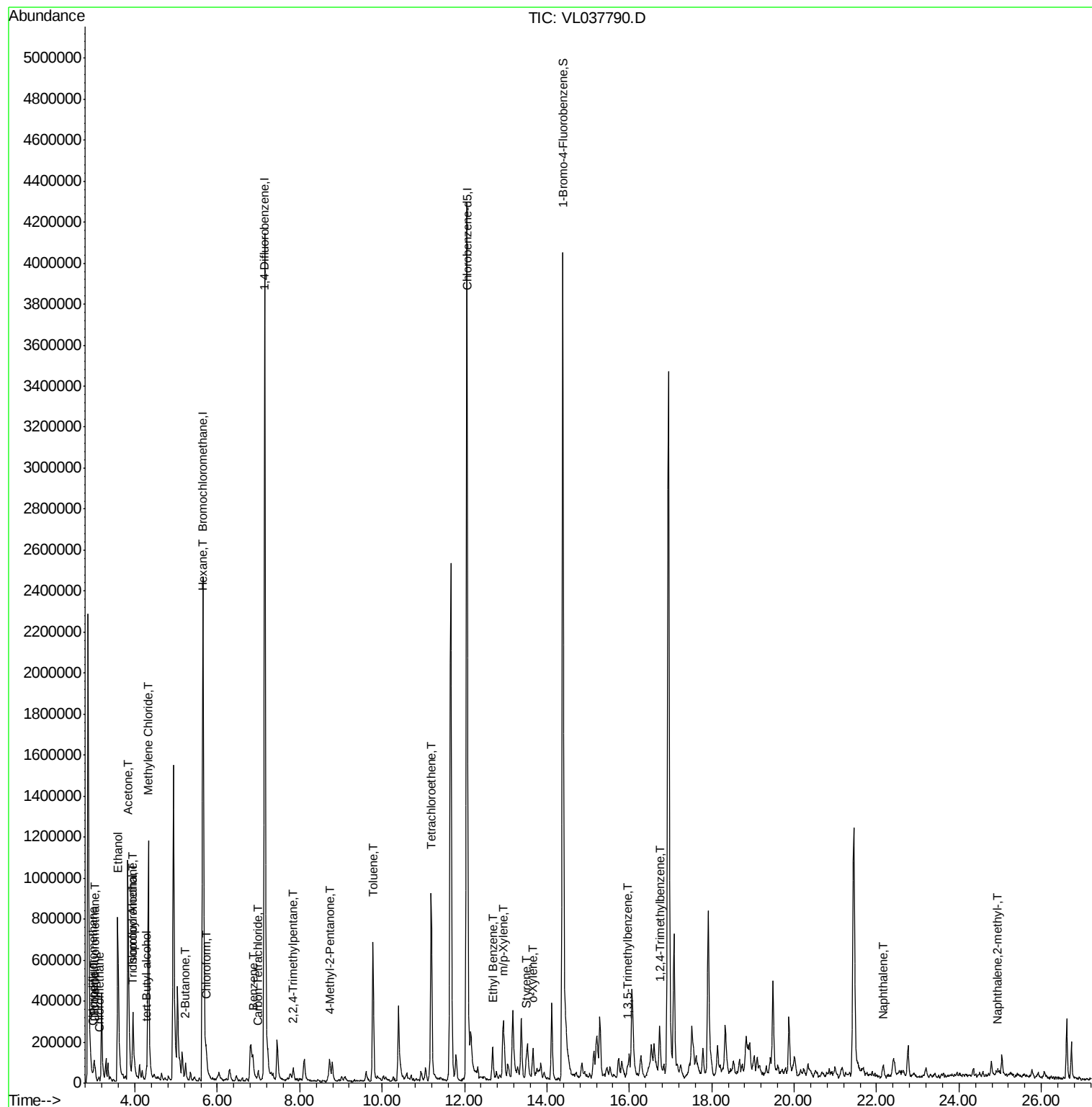
Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL100521\
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Acq On : 6 Oct 2021 1:49
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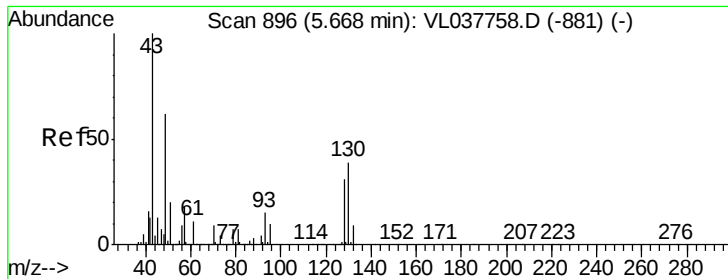
Instrument :
MSVOA_L
ClientSampleId :
C0P26

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Quant Time: Oct 06 06:34:12 2021
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL100421AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Oct
QLast Update : Mon Oct 04 17:43:54 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 889

Delta R.T. -0.02 min

Lab File: VL037790.D

Acq: 6 Oct 2021 1:49

Instrument :

MSVOA_L

ClientSampled :

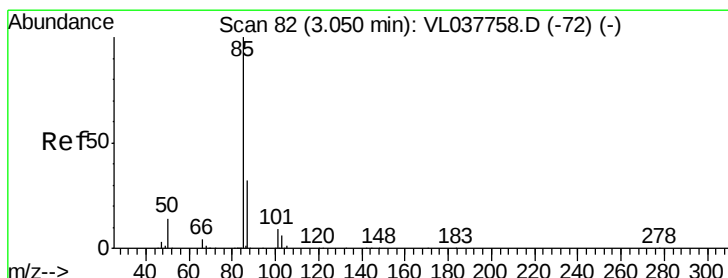
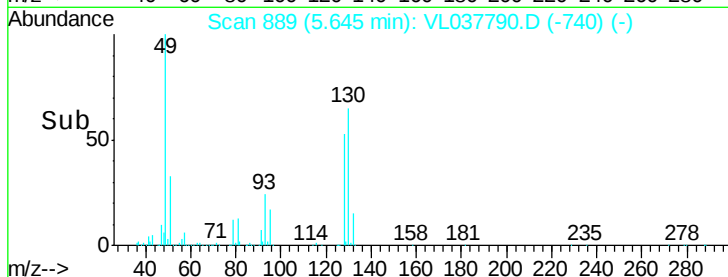
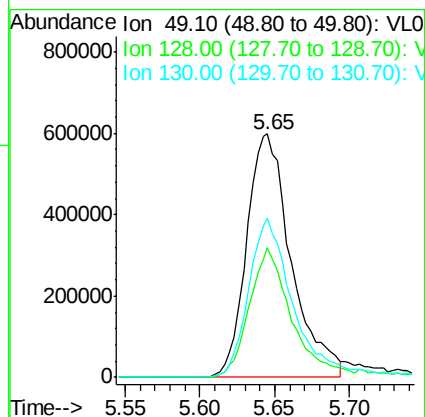
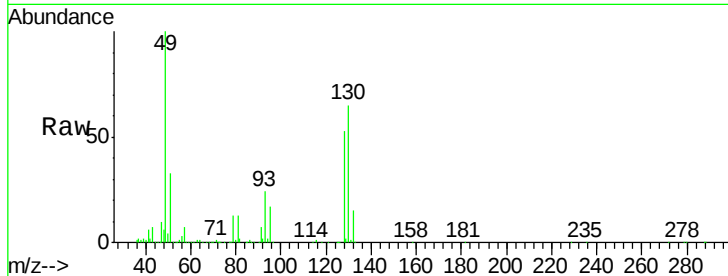
C0P26

Tgt Ion: 49 Resp: 1237884

Ion	Ratio	Lower	Upper
49	100		
128	53.2	27.1	81.3
130	68.7	33.2	99.6

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#2

Dichlorodifluoromethane

Concen: 0.183 ppbv

RT: 3.03 min Scan# 77

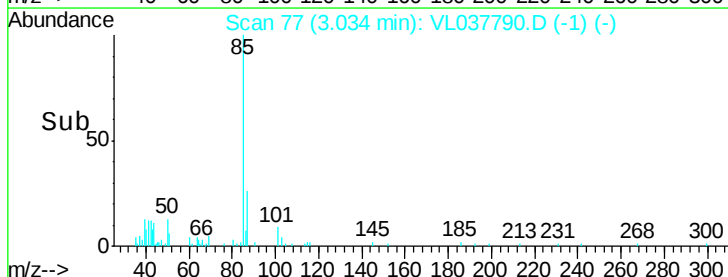
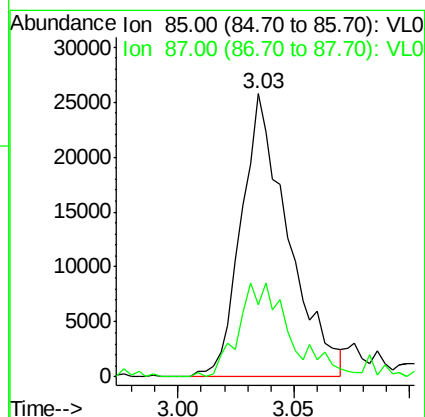
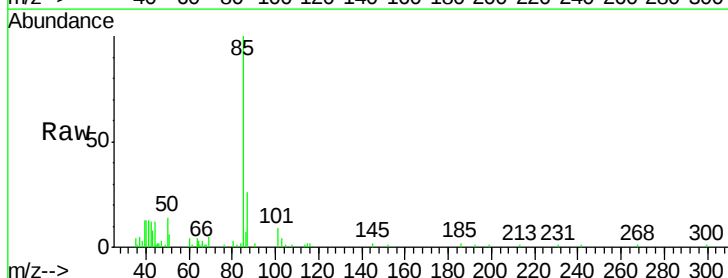
Delta R.T. -0.02 min

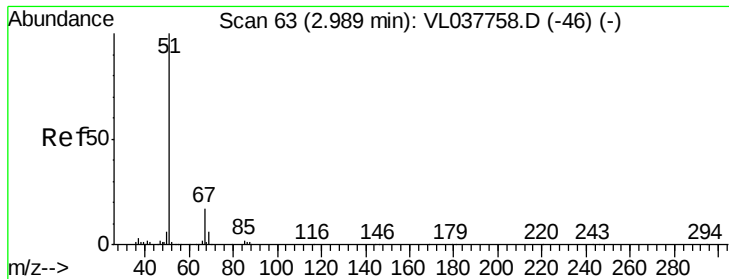
Lab File: VL037790.D

Acq: 6 Oct 2021 1:49

Tgt Ion: 85 Resp: 36150

Ion	Ratio	Lower	Upper
85	100		
87	24.2	25.7	38.5#





#3

Chlorodifluoromethane

Concen: 0.271 ppbv

RT: 2.97 min Scan# 58

Delta R.T. -0.02 min

Lab File: VL037790.D

Acq: 6 Oct 2021 1:49

Instrument :

MSVOA_L

ClientSampleId :

C0P26

Tgt Ion: 51 Resp: 64363

Ion Ratio Lower Upper

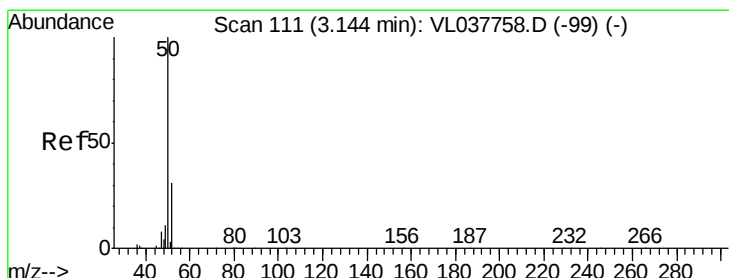
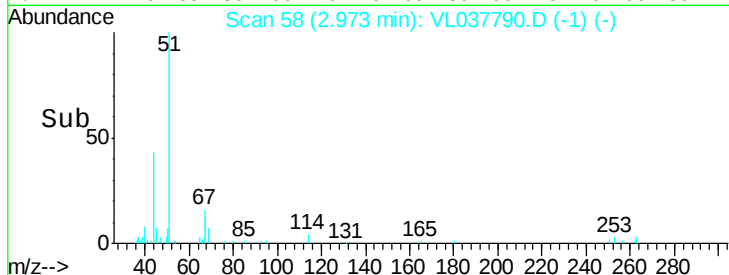
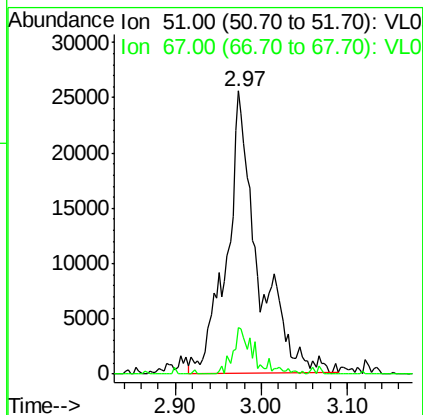
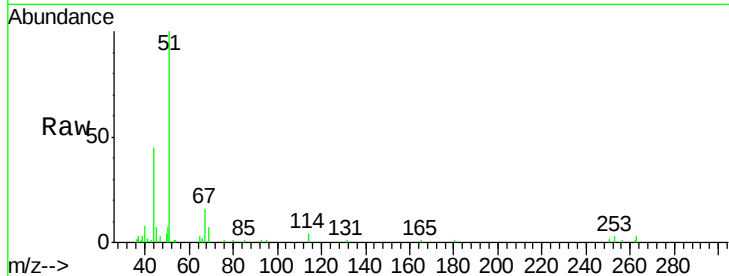
51 100

67 10.1 13.5 20.3#

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#4

Chloromethane

Concen: 0.201 ppbv m

RT: 3.13 min Scan# 107

Delta R.T. -0.01 min

Lab File: VL037790.D

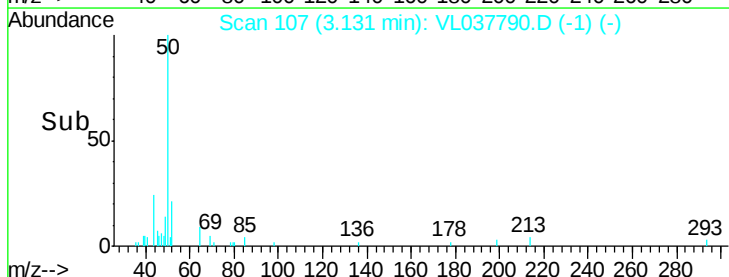
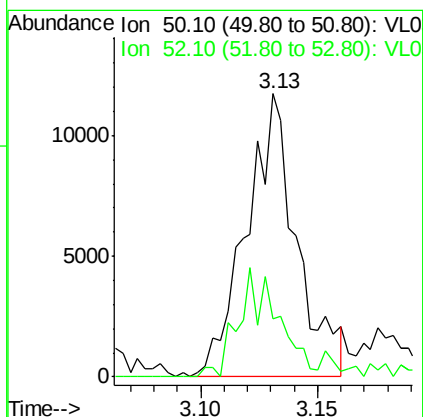
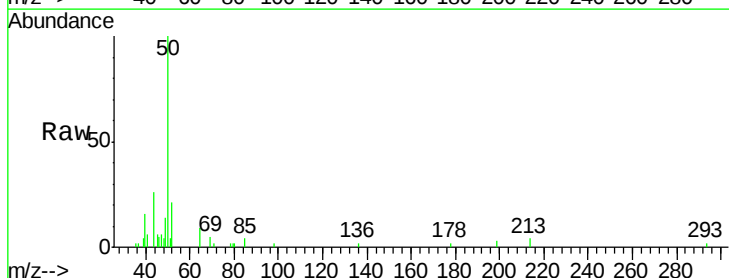
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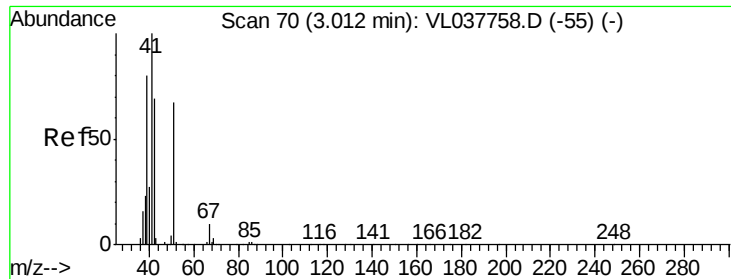
Tgt Ion: 50 Resp: 17494

Ion Ratio Lower Upper

50 100

52 20.7 24.4 36.6#





#9

Propene

Concen: 0.386 ppbv

RT: 3.01 min Scan# 68

Delta R.T. -0.01 min

Lab File: VL037790.D

Acq: 6 Oct 2021 1:49

Instrument :

MSVOA_L

ClientSampled :

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Tgt Ion: 41 Resp: 33759

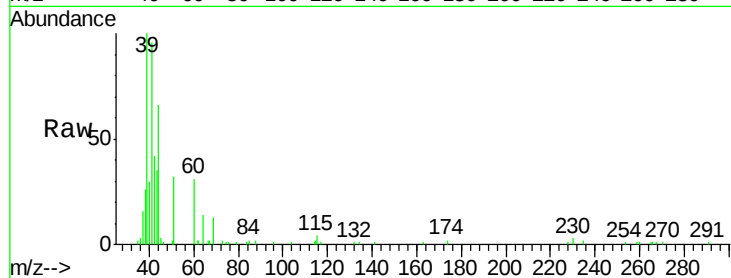
Ion Ratio Lower Upper

41 100

42 68.4 54.2 81.2

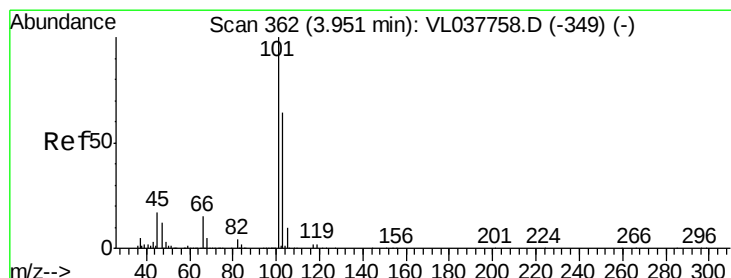
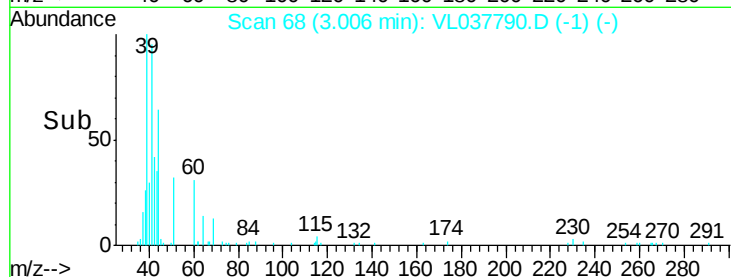
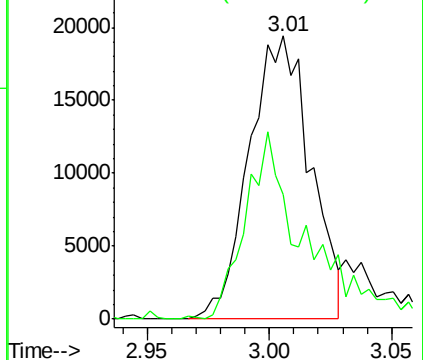
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Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0



#11

Trichlorofluoromethane

Concen: 0.262 ppbv m

RT: 3.93 min Scan# 356

Delta R.T. -0.02 min

Lab File: VL037790.D

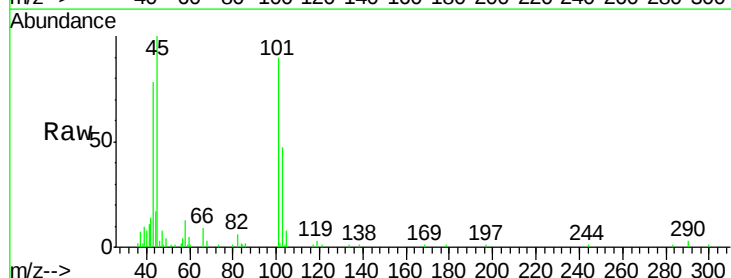
Acq: 6 Oct 2021 1:49

Tgt Ion: 101 Resp: 46179

Ion Ratio Lower Upper

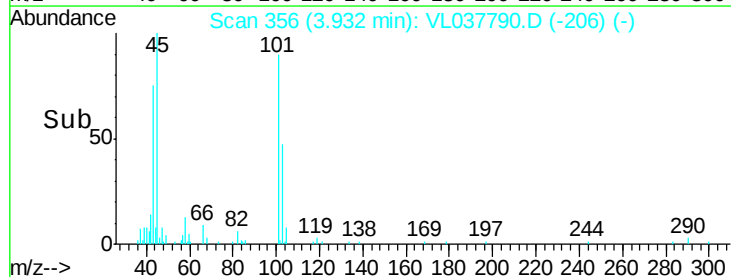
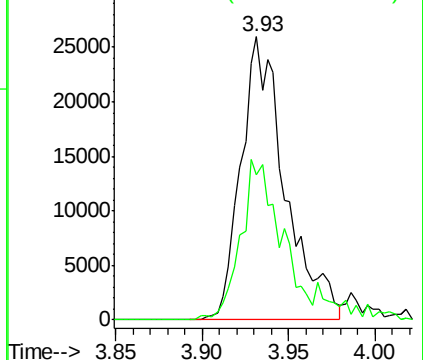
101 100

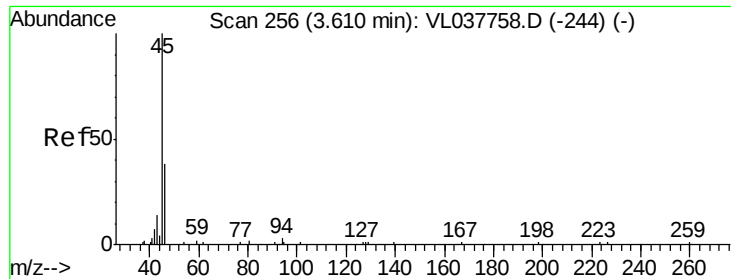
103 51.4 51.5 77.3#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V





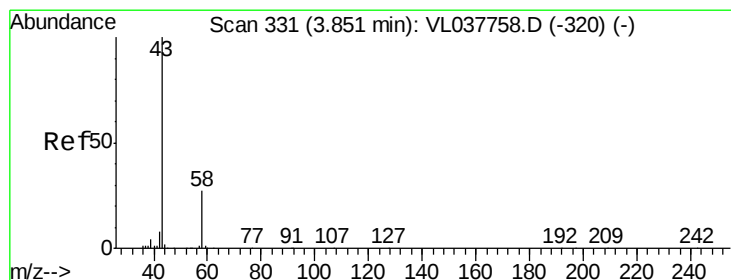
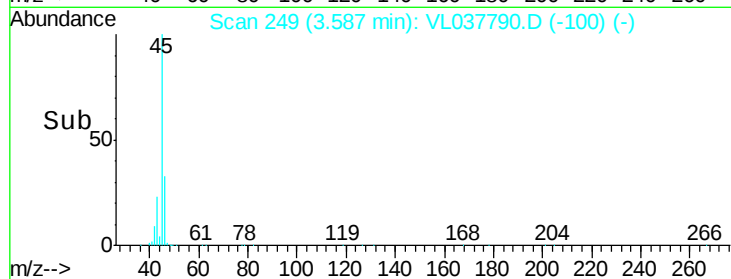
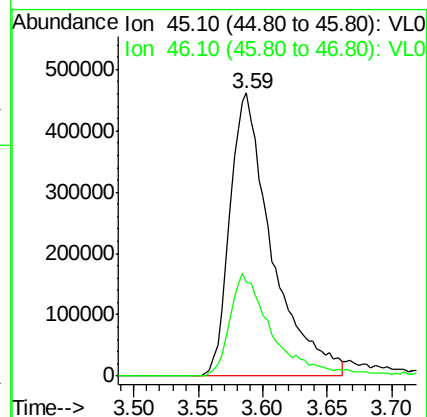
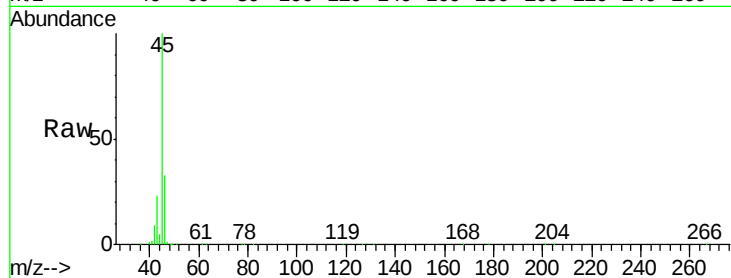
#13
Ethanol
Concen: 145.801 ppbv
RT: 3.59 min Scan# 249
Delta R.T. -0.02 min
Lab File: VL037790.D
Acq: 6 Oct 2021 1:49

Instrument :
MSVOA_L
ClientSampled :
C0P26

Tgt Ion: 45 Resp: 1043522
Ion Ratio Lower Upper
45 100
46 37.6 20.2 81.0

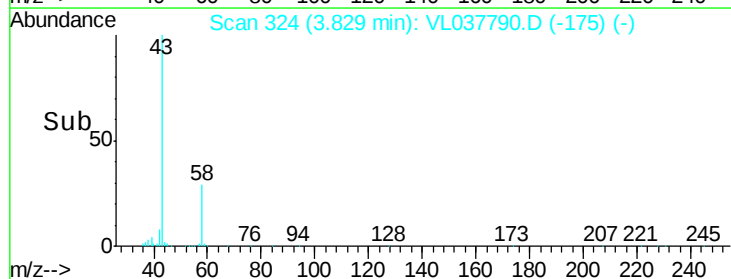
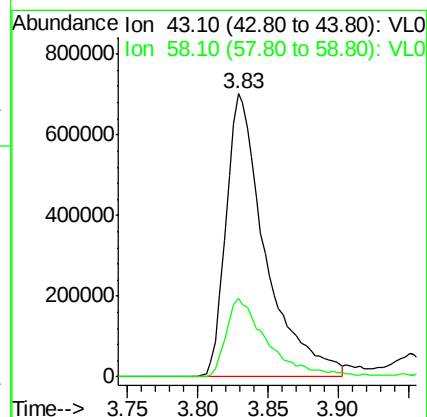
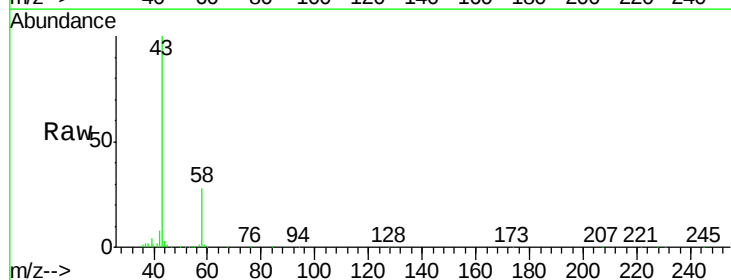
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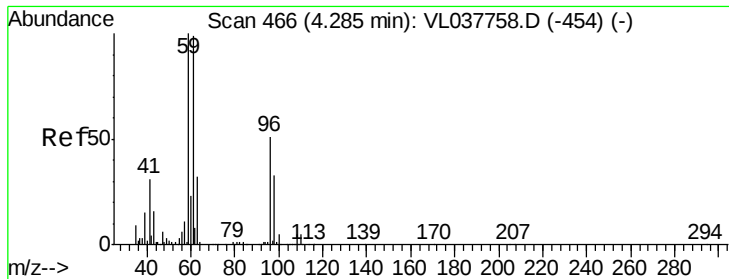
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#15
Acetone
Concen: 12.268 ppbv
RT: 3.83 min Scan# 324
Delta R.T. -0.02 min
Lab File: VL037790.D
Acq: 6 Oct 2021 1:49

Tgt Ion: 43 Resp: 1363245
Ion Ratio Lower Upper
43 100
58 29.5 23.0 34.6





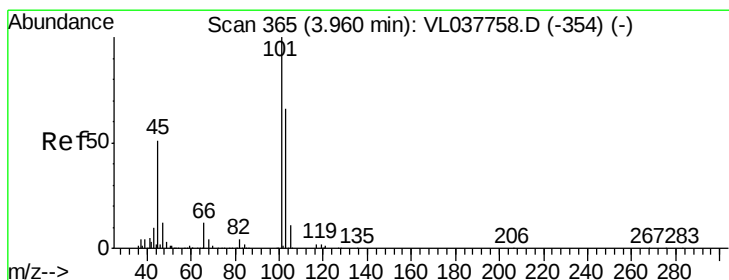
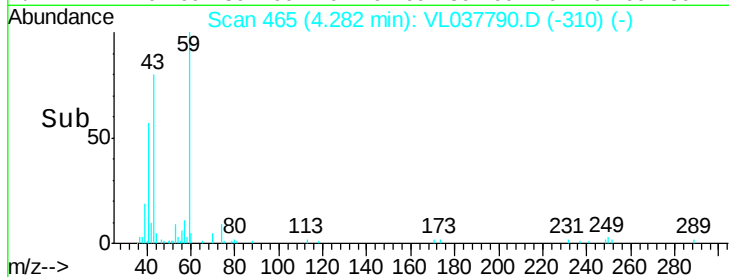
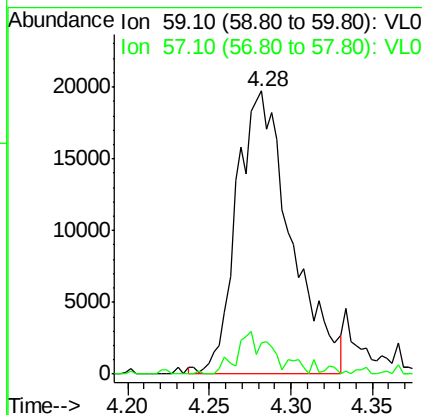
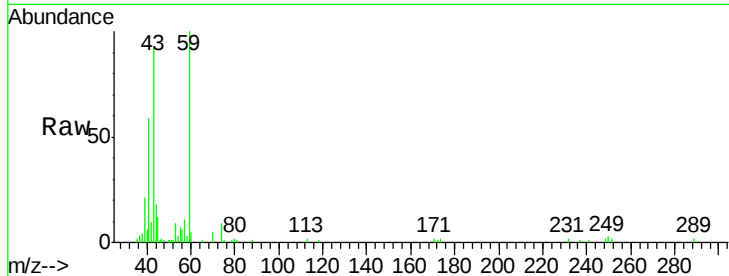
#17
 tert-Butyl alcohol
 Concen: 0.402 ppbv
 RT: 4.28 min Scan# 465
 Delta R.T. -0.00 min
 Lab File: VL037790.D
 Acq: 6 Oct 2021 1:49

Instrument :
 MSVOA_L
 ClientSampled :
 C0P26

Tgt Ion: 59 Resp: 45974
 Ion Ratio Lower Upper
 59 100
 57 0.0 8.6 13.0#

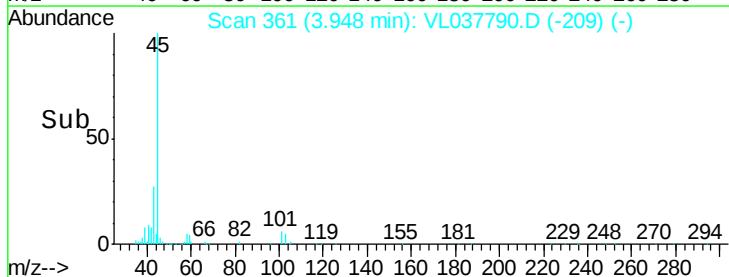
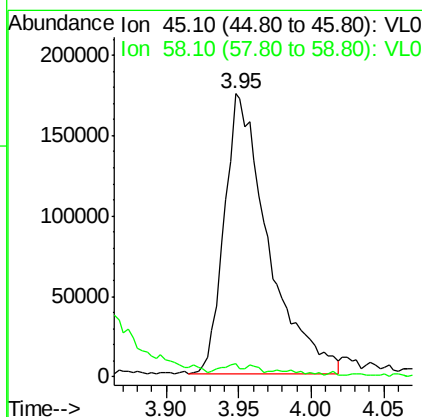
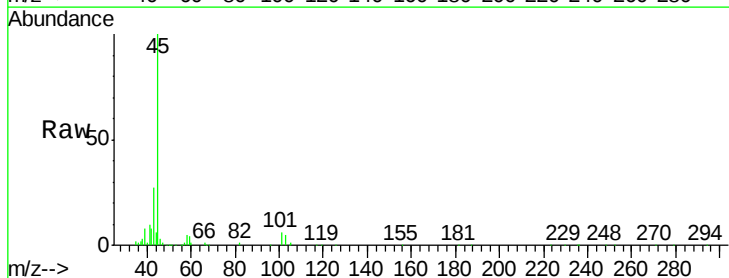
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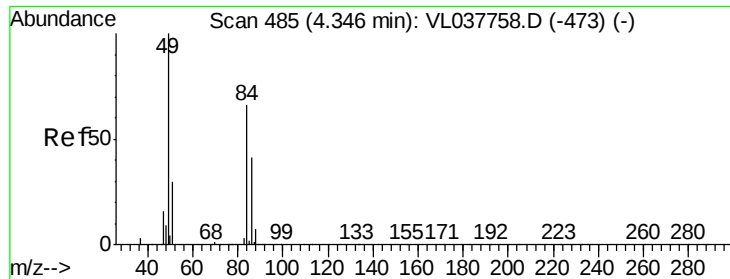
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#19
 Isopropyl Alcohol
 Concen: 5.302 ppbv
 RT: 3.95 min Scan# 361
 Delta R.T. -0.01 min
 Lab File: VL037790.D
 Acq: 6 Oct 2021 1:49

Tgt Ion: 45 Resp: 366541
 Ion Ratio Lower Upper
 45 100
 58 6.4 1.1 1.7#





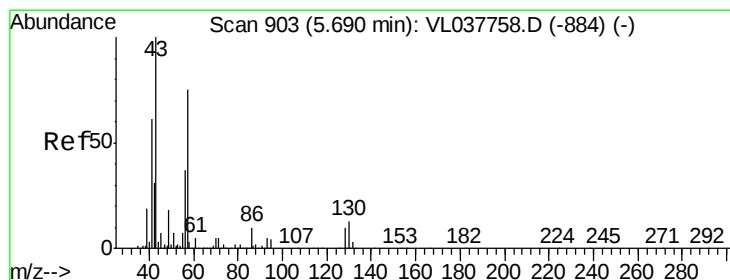
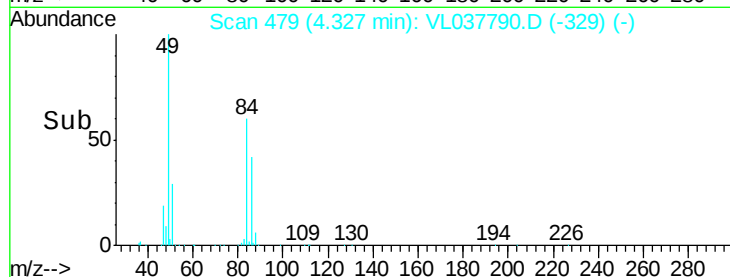
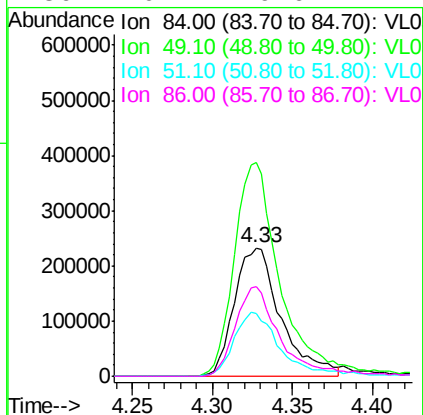
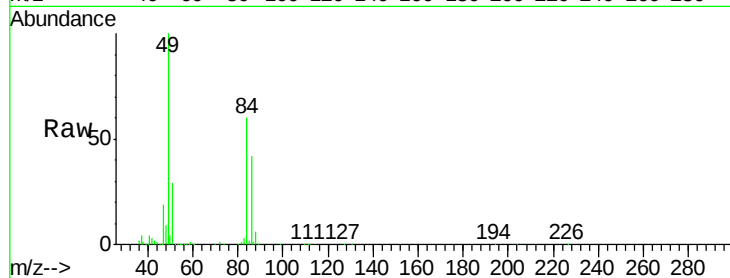
#20
Methylene Chloride
Concen: 8.230 ppbv
RT: 4.33 min Scan# 479
Delta R.T. -0.02 min
Lab File: VL037790.D
Acq: 6 Oct 2021 1:49

Instrument :
MSVOA_L
ClientSampled :
C0P26

Tgt Ion	Ratio	Lower	Upper
84	100		
49	166.0	120.7	181.1
51	48.8	36.2	54.4
86	70.2	49.6	74.4

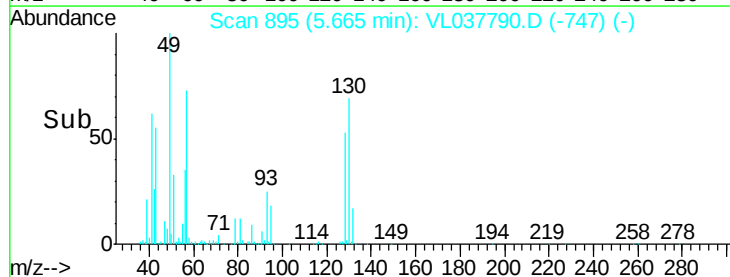
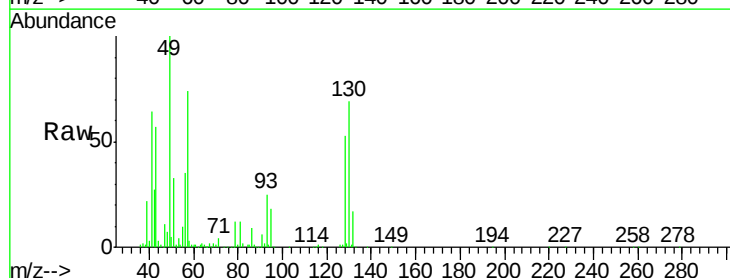
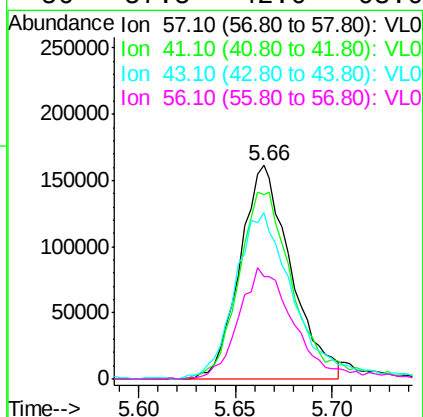
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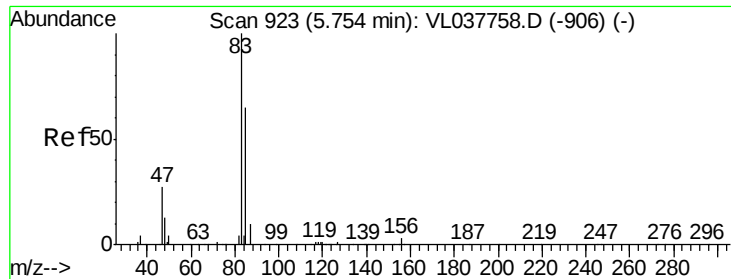
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#26
Hexane
Concen: 1.928 ppbv
RT: 5.66 min Scan# 895
Delta R.T. -0.03 min
Lab File: VL037790.D
Acq: 6 Oct 2021 1:49

Tgt Ion	Ratio	Lower	Upper
57	100		
41	96.5	69.6	104.4
43	88.9	171.4	257.0#
56	57.5	42.0	63.0





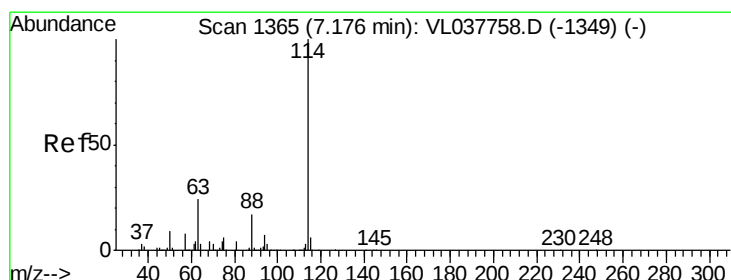
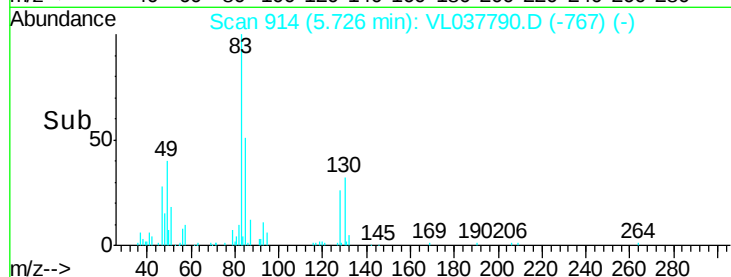
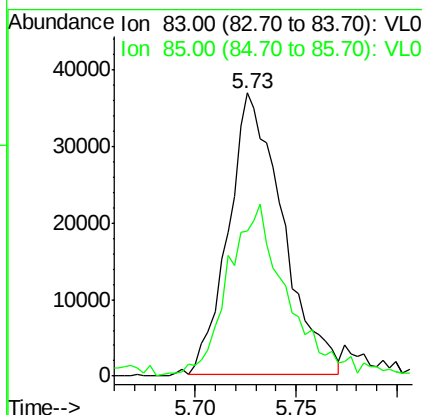
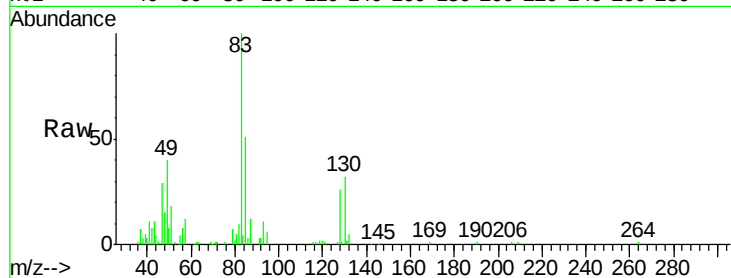
#29
Chloroform
Concen: 0.315 ppbv
RT: 5.73 min Scan# 914
Delta R.T. -0.03 min
Lab File: VL037790.D
Acq: 6 Oct 2021 1:49

Instrument :
MSVOA_L
ClientSampleId :
C0P26

Tgt Ion: 83 Resp: 69221
Ion Ratio Lower Upper
83 100
85 47.4 51.8 77.8#

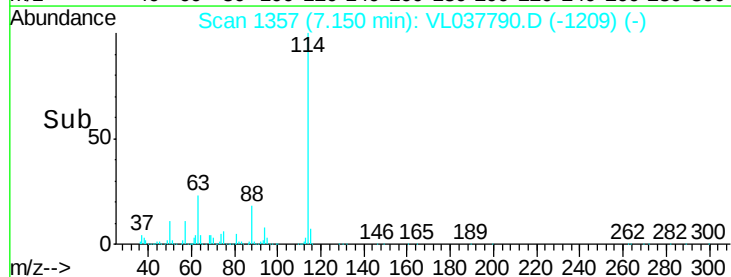
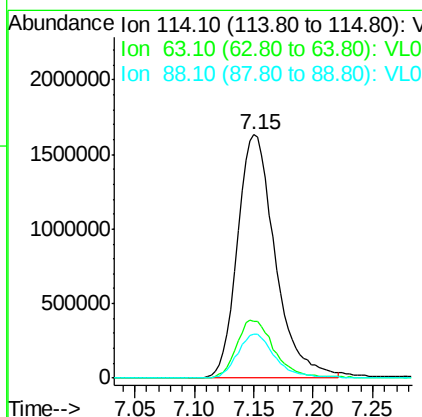
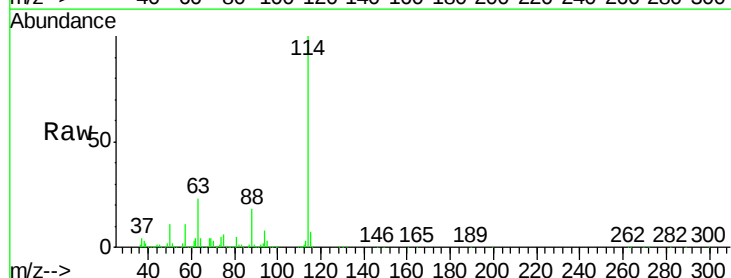
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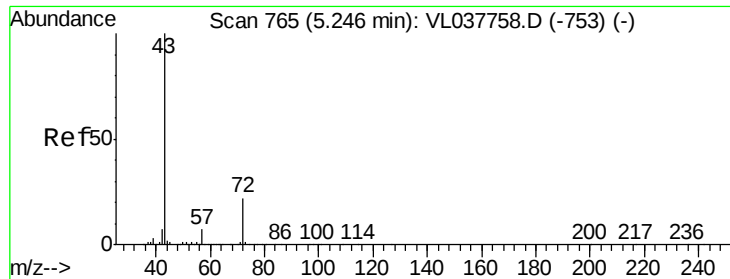
MMDadoda
10/11/2021 7:36:43 PM



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.15 min Scan# 1357
Delta R.T. -0.03 min
Lab File: VL037790.D
Acq: 6 Oct 2021 1:49

Tgt Ion: 114 Resp: 3594885
Ion Ratio Lower Upper
114 100
63 24.5 19.4 29.2
88 18.4 14.4 21.6





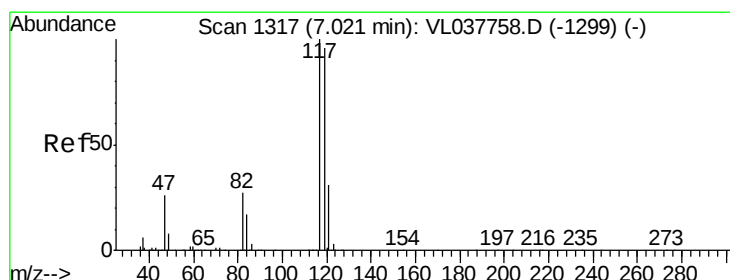
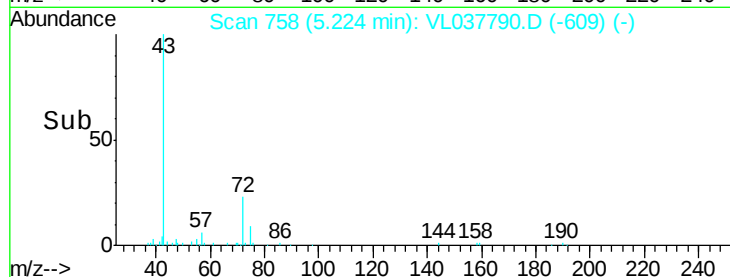
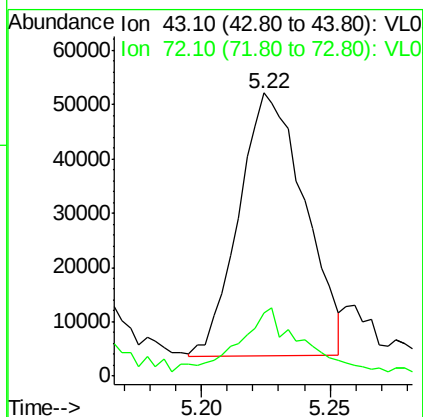
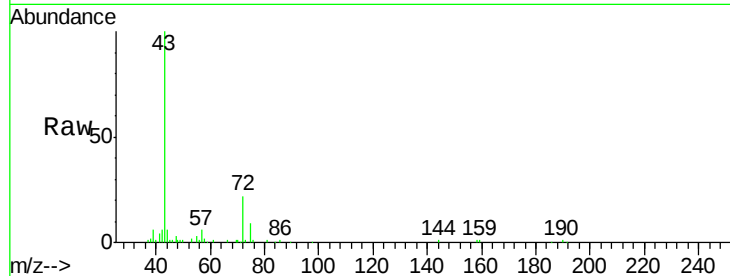
#34
2-Butanone
Concen: 0.597 ppbv
RT: 5.22 min Scan# 758
Delta R.T. -0.02 min
Lab File: VL037790.D
Acq: 6 Oct 2021 1:49

Instrument :
MSVOA_L
ClientSampled :
C0P26

Tgt Ion: 43 Resp: 86580
Ion Ratio Lower Upper
43 100
72 33.0 18.2 27.2#

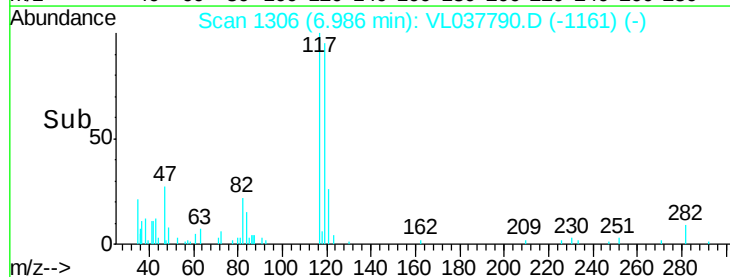
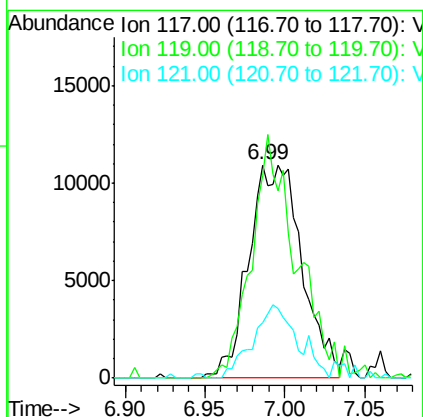
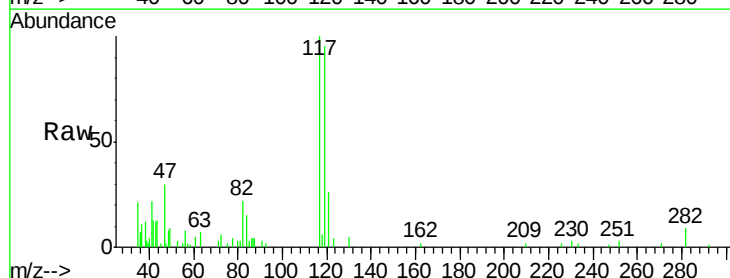
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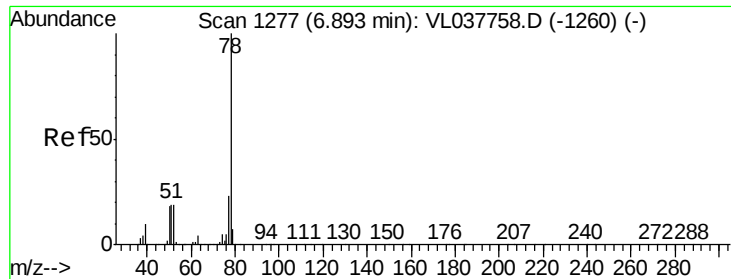
MMDadoda
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#35
Carbon Tetrachloride
Concen: 0.125 ppbv m
RT: 6.99 min Scan# 1306
Delta R.T. -0.04 min
Lab File: VL037790.D
Acq: 6 Oct 2021 1:49

Tgt Ion: 117 Resp: 25427
Ion Ratio Lower Upper
117 100
119 94.9 76.5 114.7
121 25.8 24.9 37.3





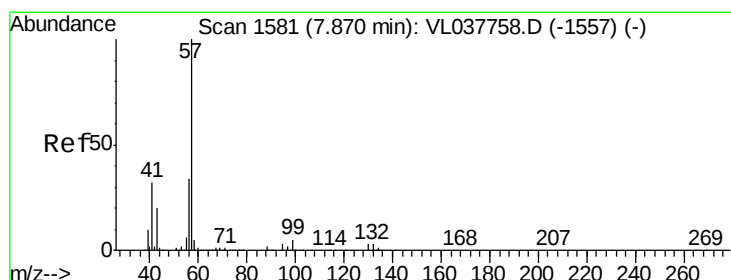
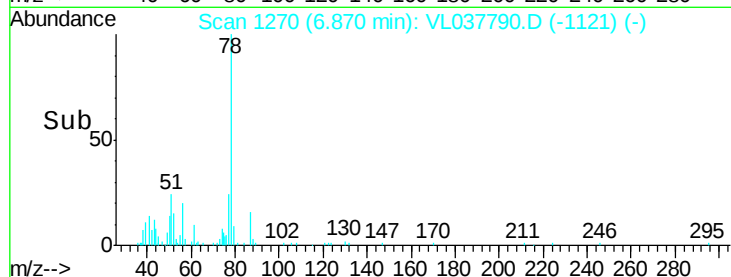
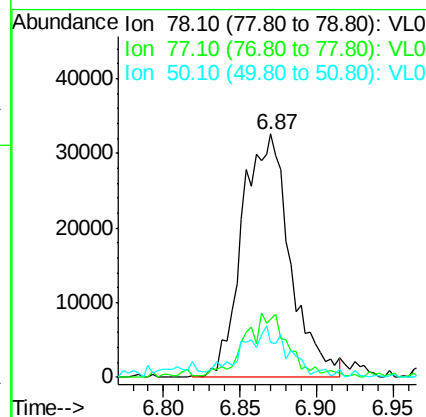
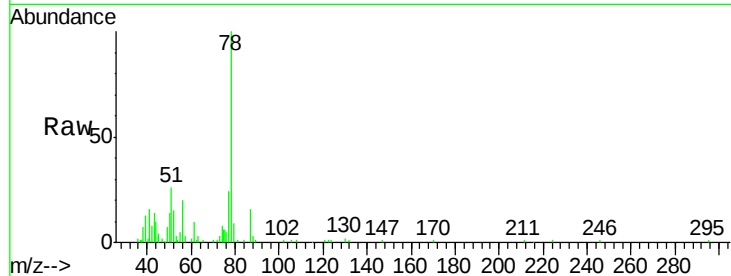
#36
Benzene
Concen: 0.231 ppbv m
RT: 6.87 min Scan# 1270
Delta R.T. -0.02 min
Lab File: VL037790.D
Acq: 6 Oct 2021 1:49

Instrument :
MSVOA_L
ClientSampleId :
C0P26

Tgt Ion	Ratio	Lower	Upper
78	100		
77	23.6	18.8	28.2
50	14.4	14.7	22.1#

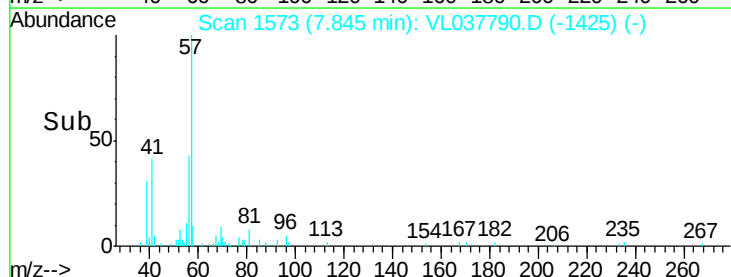
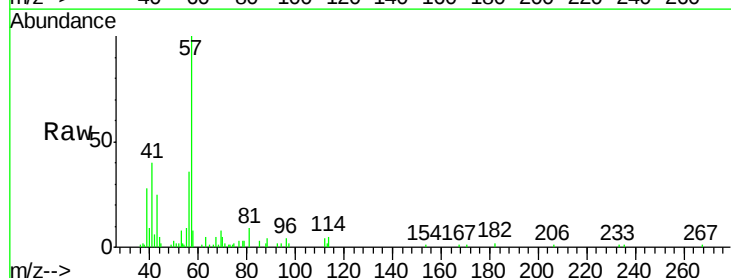
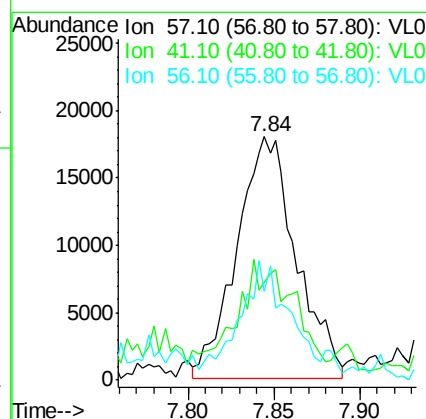
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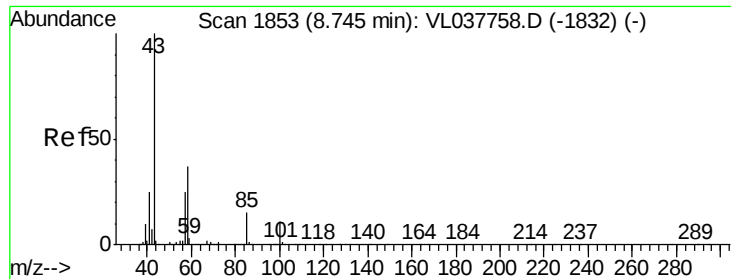
MMDadoda
10/11/2021 7:36:43 PM



#44
2,2,4-Trimethylpentane
Concen: 0.084 ppbv
RT: 7.84 min Scan# 1573
Delta R.T. -0.03 min
Lab File: VL037790.D
Acq: 6 Oct 2021 1:49

Tgt Ion	Ratio	Lower	Upper
57	100		
41	49.6	25.6	38.4#
56	45.7	25.5	38.3#





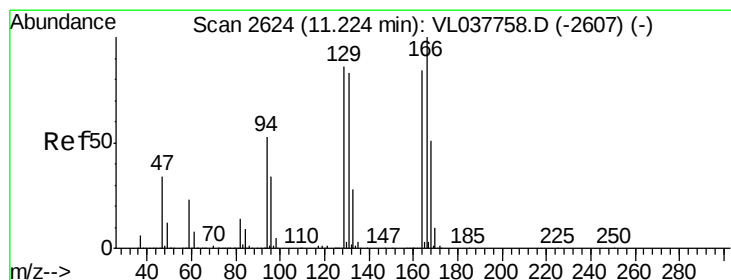
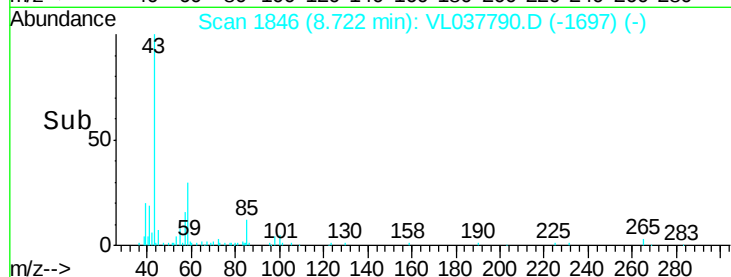
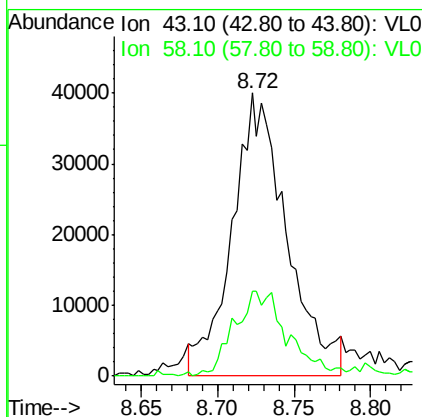
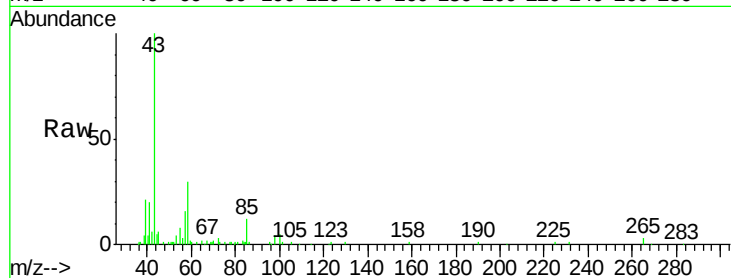
#50
4-Methyl-2-Pentanone
Concen: 0.525 ppbv m
RT: 8.72 min Scan# 1846
Delta R.T. -0.02 min
Lab File: VL037790.D
Acq: 6 Oct 2021 1:49

Instrument :
MSVOA_L
ClientSampleId :
C0P26

Tgt Ion: 43 Resp: 99226
Ion Ratio Lower Upper
43 100
58 30.5 29.4 44.0

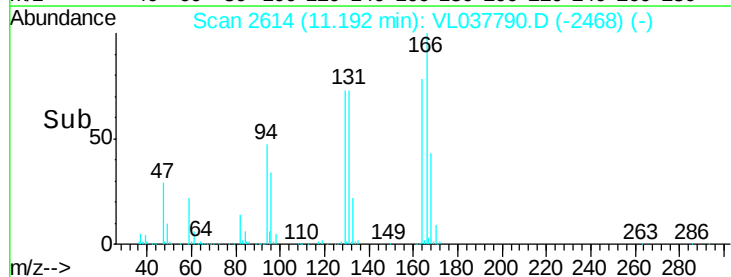
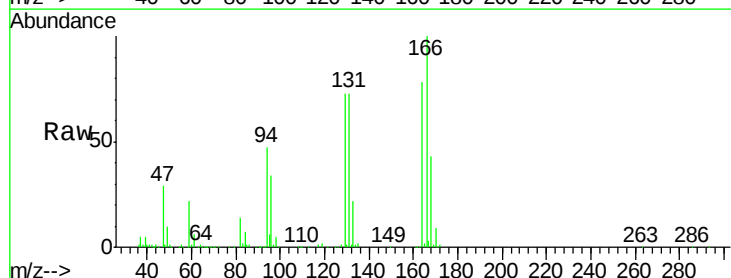
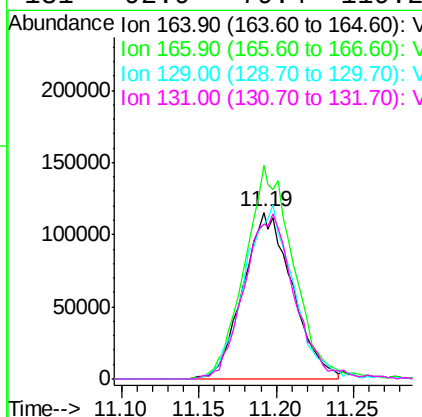
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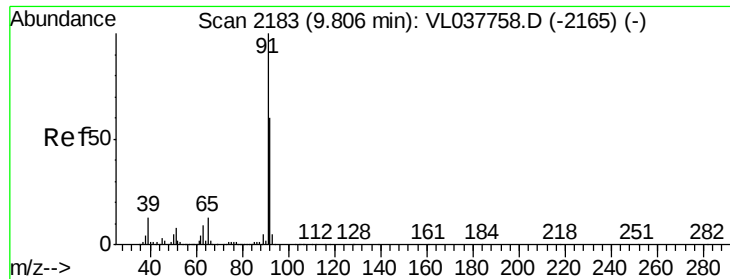
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#52
Tetrachloroethene
Concen: 2.140 ppbv
RT: 11.19 min Scan# 2614
Delta R.T. -0.03 min
Lab File: VL037790.D
Acq: 6 Oct 2021 1:49

Tgt Ion: 164 Resp: 255591
Ion Ratio Lower Upper
164 100
166 127.9 95.4 143.2
129 93.0 82.2 123.4
131 92.9 79.4 119.2





#53

Toluene

Concen: 1.574 ppbv

RT: 9.78 min Scan# 2174

Delta R.T. -0.03 min

Lab File: VL037790.D

Acq: 6 Oct 2021 1:49

Instrument :

MSVOA_L

ClientSampleId :

C0P26

Tgt Ion: 91 Resp: 535508

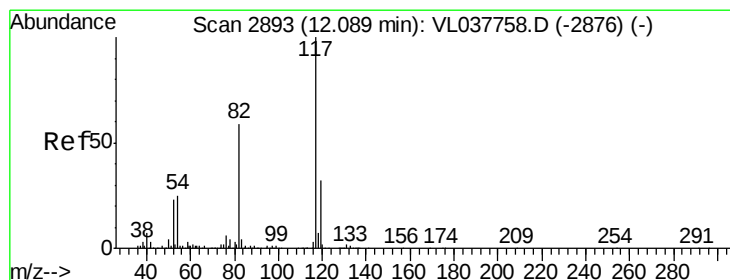
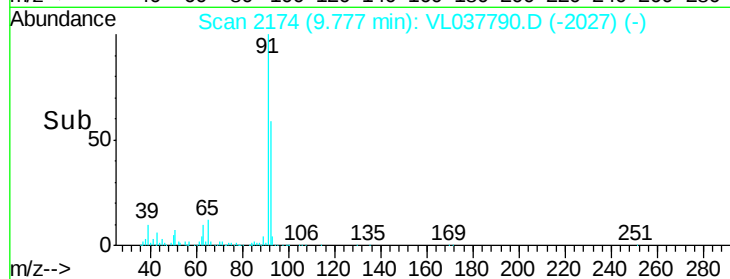
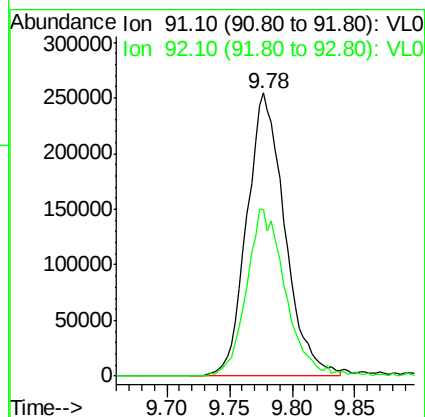
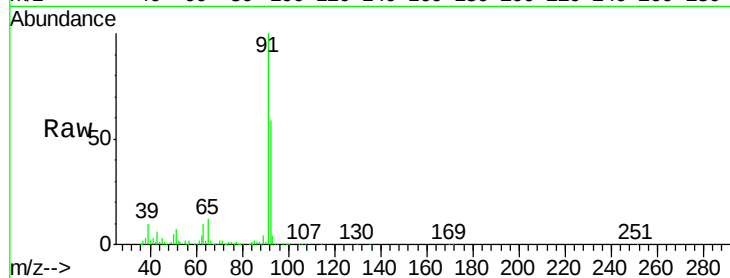
Ion Ratio Lower Upper

91 100

92 61.8 48.4 72.6

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.06 min Scan# 2883

Delta R.T. -0.03 min

Lab File: VL037790.D

Acq: 6 Oct 2021 1:49

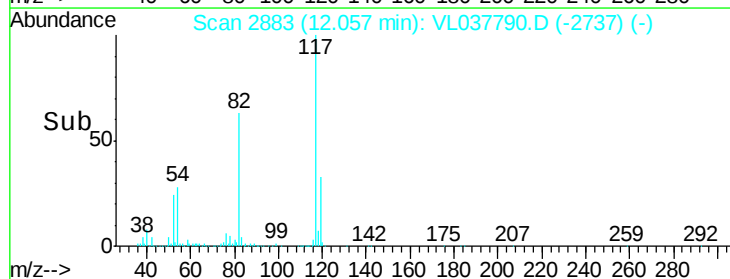
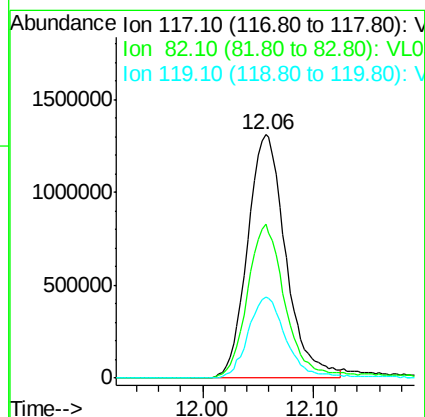
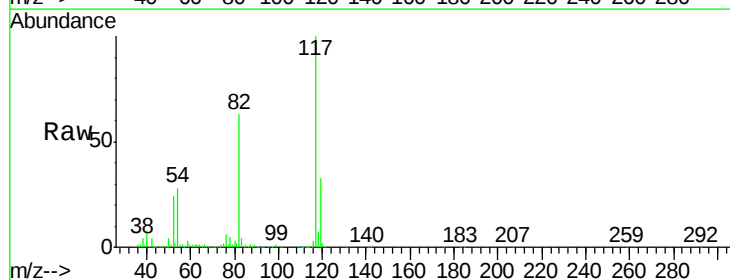
Tgt Ion: 117 Resp: 3148061

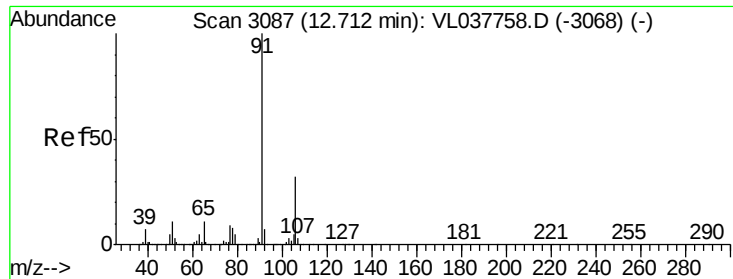
Ion Ratio Lower Upper

117 100

82 64.9 52.2 78.2

119 34.0 26.0 39.0





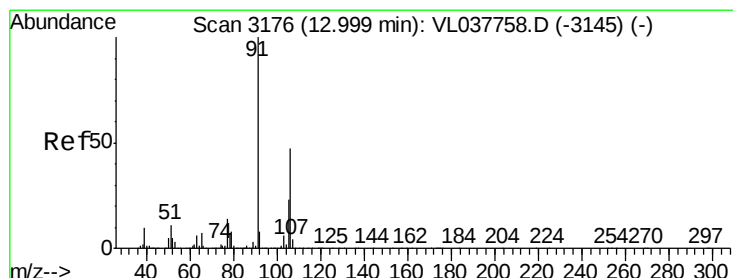
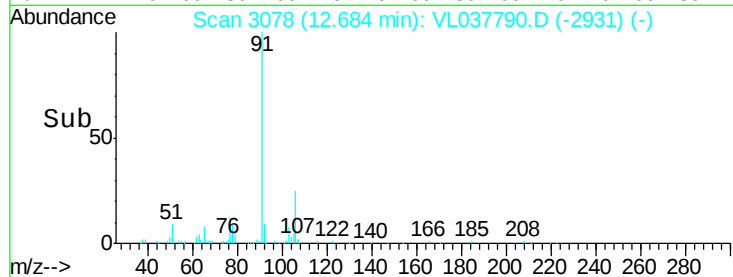
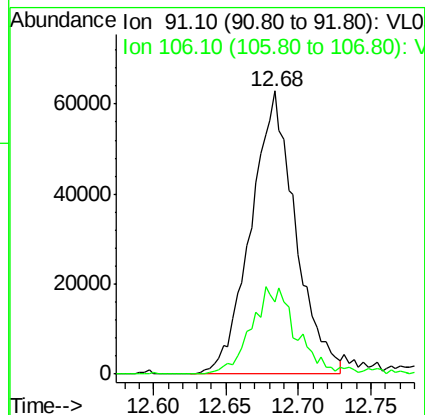
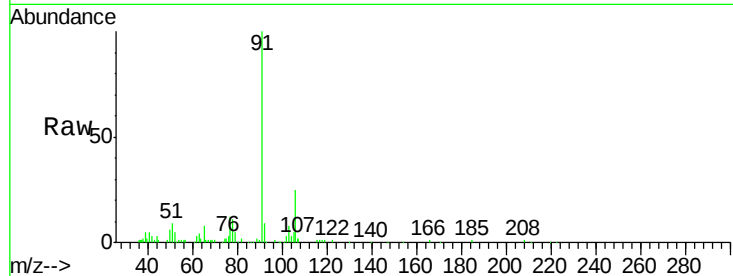
#58
Ethyl Benzene
Concen: 0.316 ppbv
RT: 12.68 min Scan# 3078
Delta R.T. -0.03 min
Lab File: VL037790.D
Acq: 6 Oct 2021 1:49

Instrument :
MSVOA_L
ClientSampled :
C0P26

Tgt Ion: 91 Resp: 133790
Ion Ratio Lower Upper
91 100
106 25.4 25.3 37.9

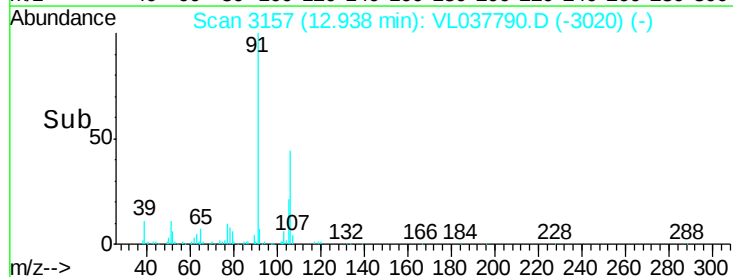
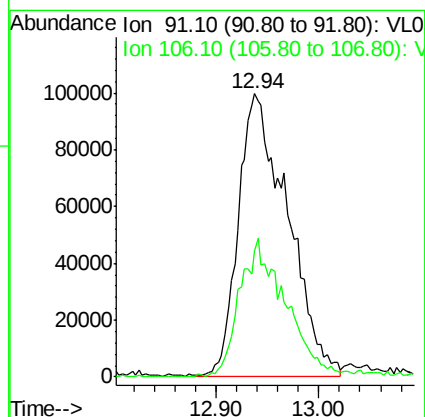
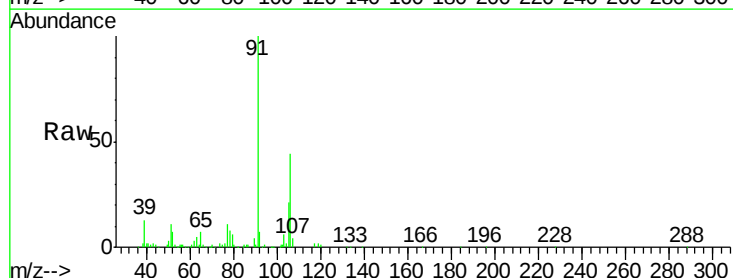
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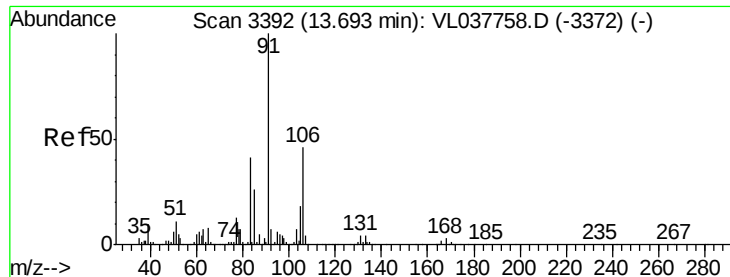
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#59
m/p-Xylene
Concen: 0.914 ppbv m
RT: 12.94 min Scan# 3157
Delta R.T. -0.06 min
Lab File: VL037790.D
Acq: 6 Oct 2021 1:49

Tgt Ion: 91 Resp: 331580
Ion Ratio Lower Upper
91 100
106 0.0 36.7 55.1#





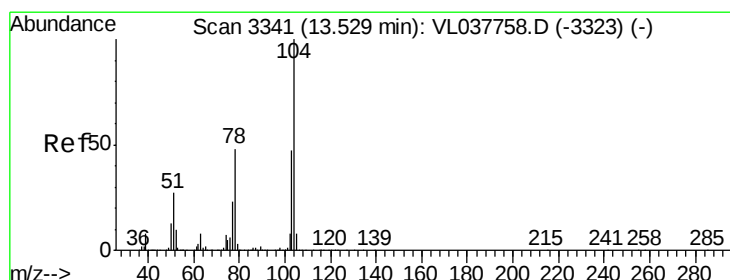
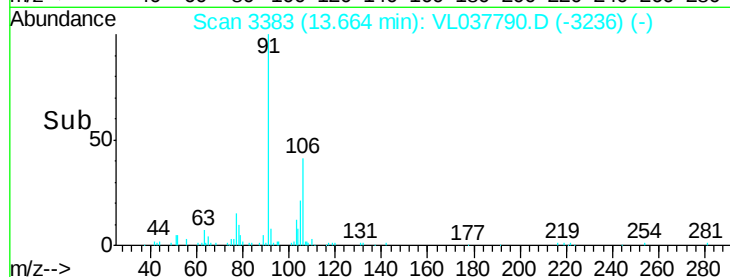
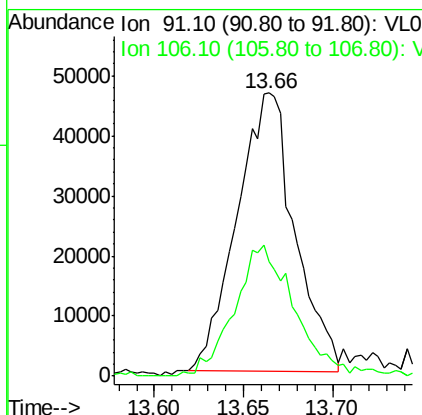
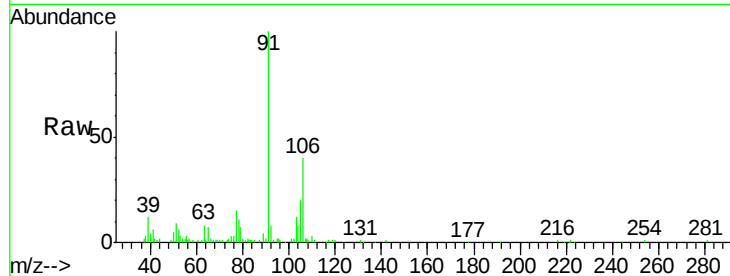
#60
o-Xylene
Concen: 0.301 ppbv
RT: 13.66 min Scan# 3383
Delta R.T. -0.03 min
Lab File: VL037790.D
Acq: 6 Oct 2021 1:49

Instrument :
MSVOA_L
ClientSampled :
C0P26

Tgt Ion: 91 Resp: 104813
Ion Ratio Lower Upper
91 100
106 49.2 23.5 70.5

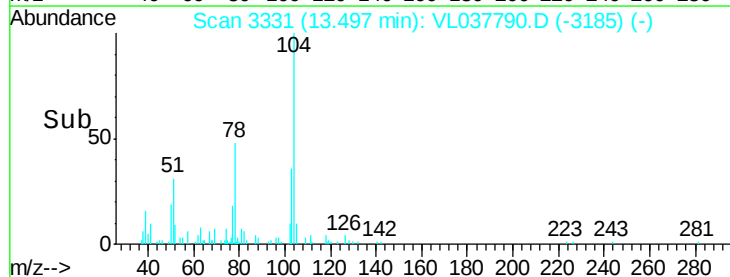
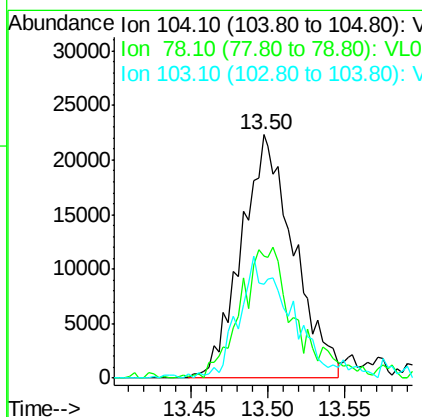
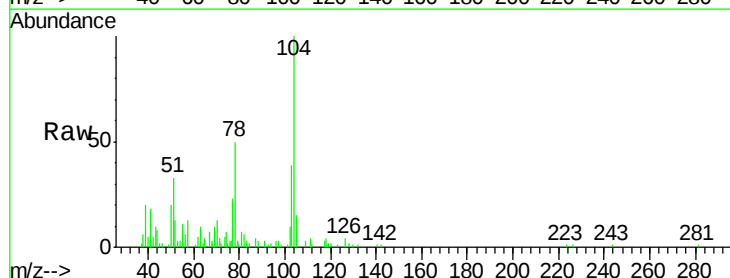
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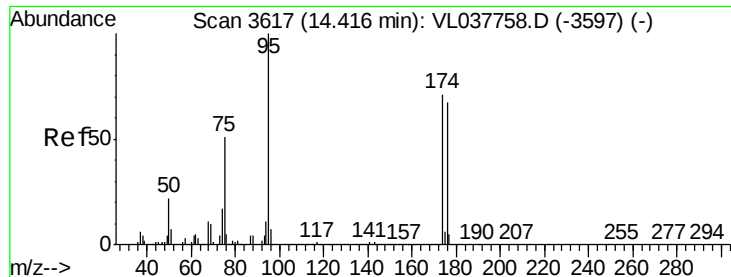
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#61
Styrene
Concen: 0.313 ppbv
RT: 13.50 min Scan# 3331
Delta R.T. -0.03 min
Lab File: VL037790.D
Acq: 6 Oct 2021 1:49

Tgt Ion: 104 Resp: 52616
Ion Ratio Lower Upper
104 100
78 56.5 40.6 61.0
103 50.3 39.6 59.4





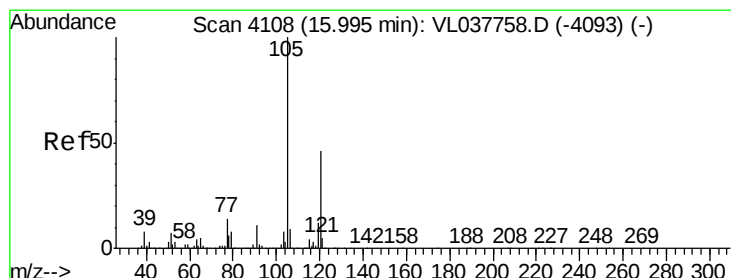
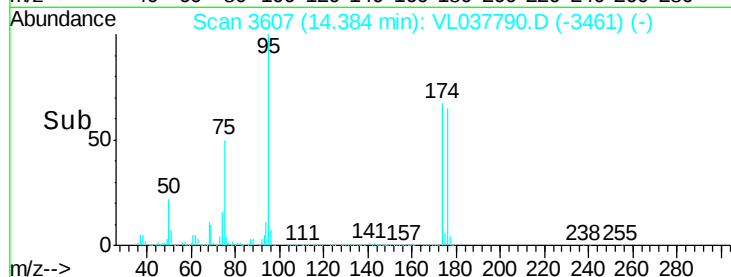
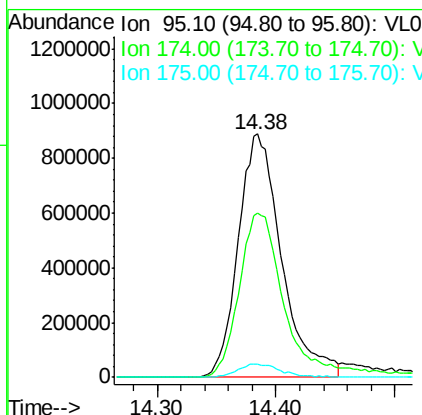
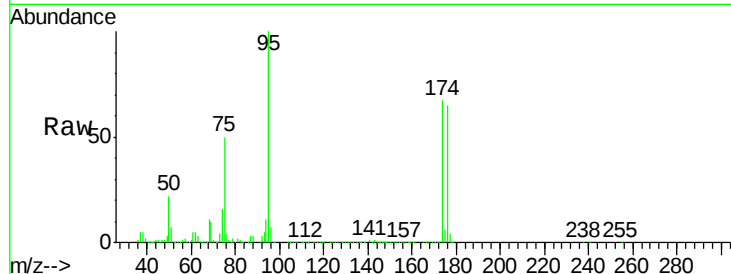
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.170 ppbv
 RT: 14.38 min Scan# 3607
 Delta R.T. -0.03 min
 Lab File: VL037790.D
 Acq: 6 Oct 2021 1:49

Instrument :
 MSVOA_L
 ClientSampleId :
 C0P26

Tgt Ion: 95 Resp: 2238960
 Ion Ratio Lower Upper
 95 100
 174 73.6 57.8 86.6
 175 5.6 4.7 7.1

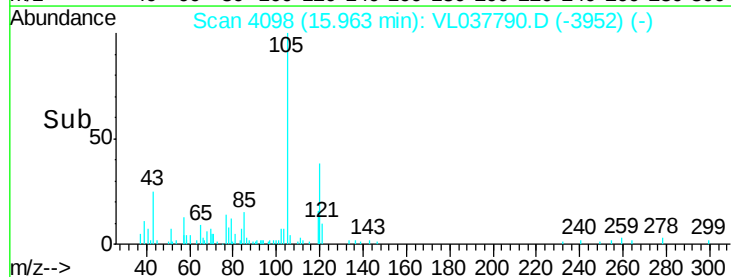
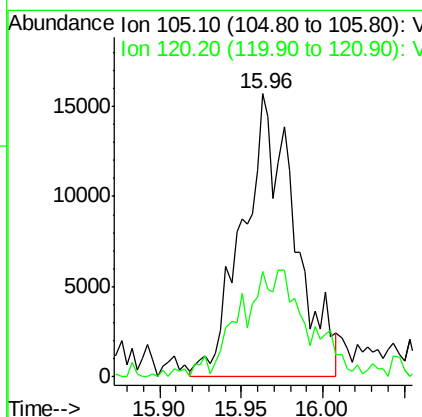
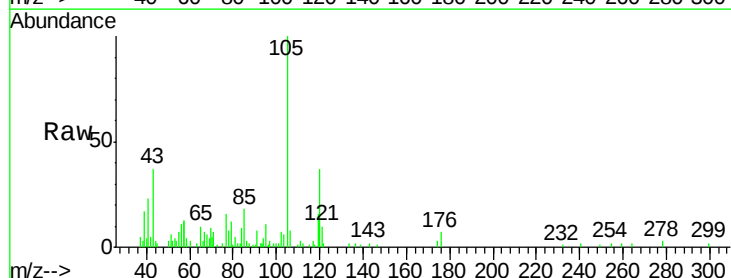
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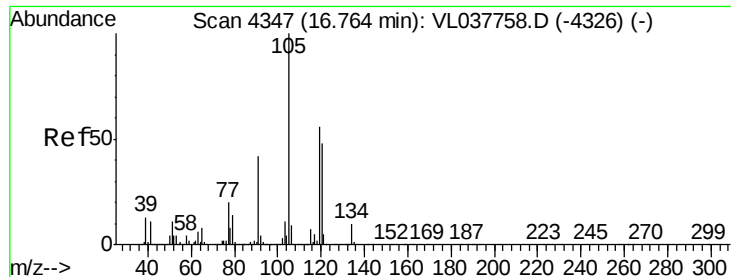
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#73
 1,3,5-Trimethylbenzene
 Concen: 0.097 ppbv m
 RT: 15.96 min Scan# 4098
 Delta R.T. -0.03 min
 Lab File: VL037790.D
 Acq: 6 Oct 2021 1:49

Tgt Ion: 105 Resp: 34654
 Ion Ratio Lower Upper
 105 100
 120 37.1 36.6 54.8





#74

1,2,4-Trimethylbenzene

Concen: 0.353 ppbv m

RT: 16.73 min Scan# 4338

Delta R.T. -0.03 min

Lab File: VL037790.D

Acq: 6 Oct 2021 1:49

Instrument :

MSVOA_L

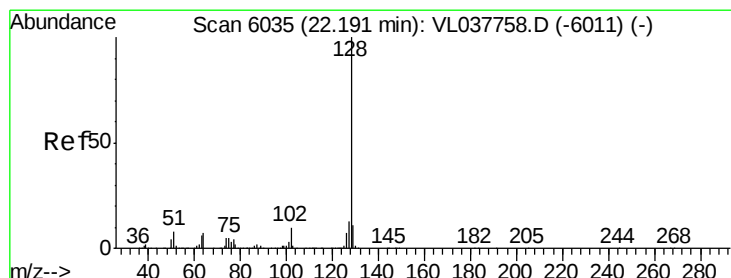
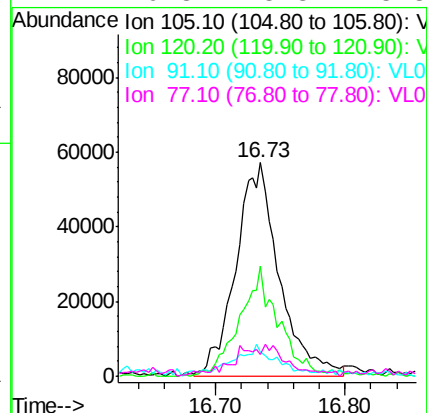
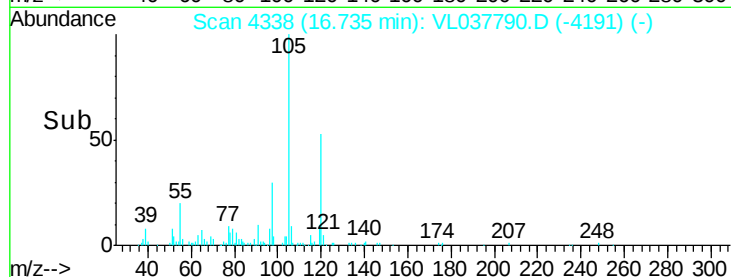
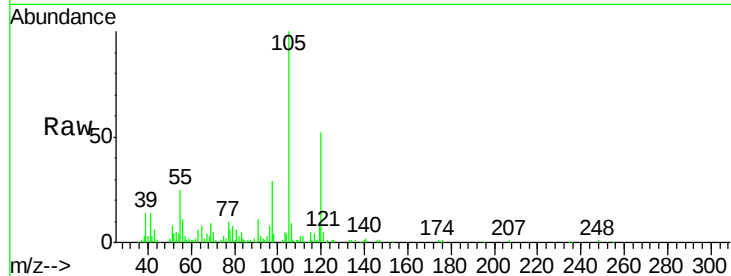
ClientSampleId :

C0P26

Tgt Ion	Ratio	Resp	Lower	Upper
105	100	132927		
120	51.8	38.4	57.6	
91	11.3	34.2	51.2#	
77	10.3	15.8	23.8#	

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#79

Naphthalene

Concen: 0.266 ppbv m

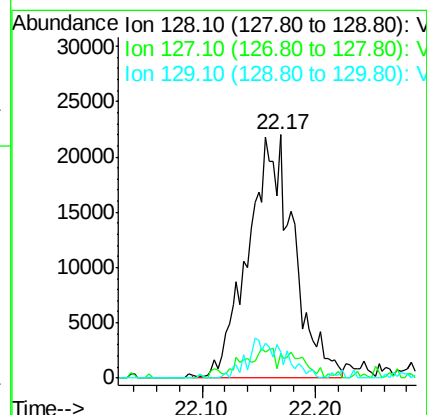
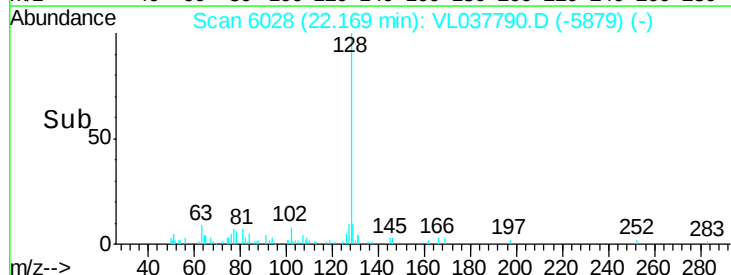
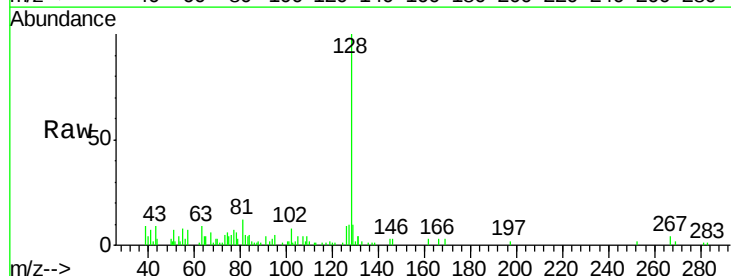
RT: 22.17 min Scan# 6028

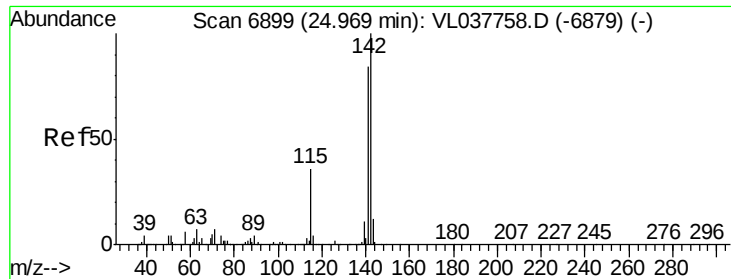
Delta R.T. -0.02 min

Lab File: VL037790.D

Acq: 6 Oct 2021 1:49

Tgt Ion	Ratio	Resp	Lower	Upper
128	100	61437		
127	10.0	10.1	15.1#	
129	10.5	9.1	13.7	





#80
 Naphthalene, 2-methyl-
 Concen: 0.142 ppbv
 RT: 24.94 min Scan# 6891
 Delta R.T. -0.03 min
 Lab File: VL037790.D
 Acq: 6 Oct 2021 1:49

Instrument :
 MSVOA_L
 ClientSampleId :
 C0P26

Tgt Ion	Ratio	Lower	Upper
142	100		
141	109.3	68.6	102.8#
115	25.4	29.0	43.6#

Manual Integrations
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 10/11/2021 7:36:43 PM

