

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL110221\
 Data File : VL037967.D
 Acq On : 2 Nov 2021 14:32
 Operator : SY/AP
 Sample : M4447-01
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-1

Quant Time: Nov 03 03:49:08 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL110121AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Nov 02 05:54:07 2021
 QLast Update : Tue Nov 02 05:54:07 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1294673	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.16	114	3759855	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.07	117	3214027	10.00	ppbv	-0.01

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.40	95	2354850	10.08	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.80%

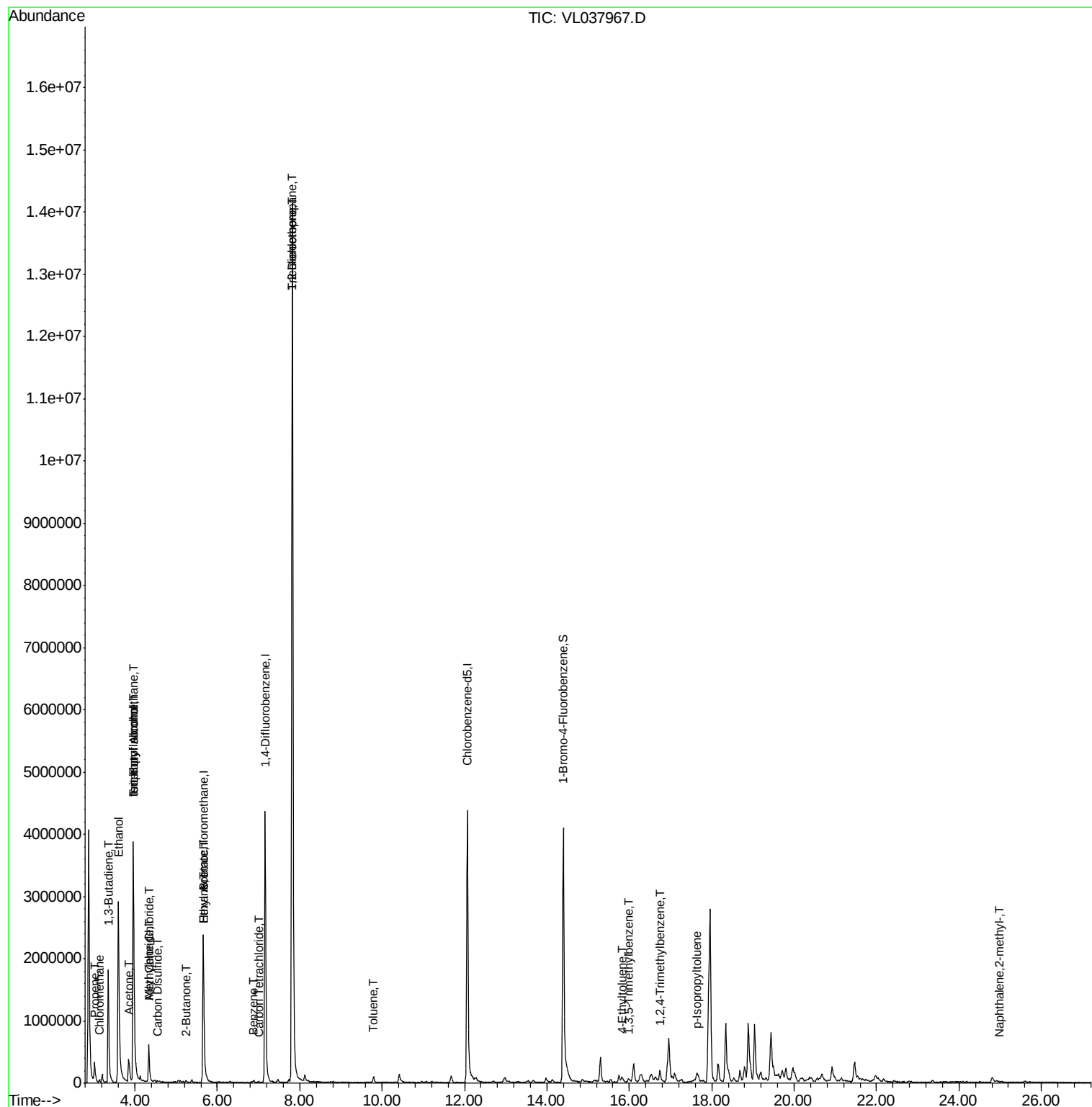
Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
4) Chloromethane	3.14	50	42392	0.463	ppbv	95
9) Propene	3.02	41	84896	0.982	ppbv #	71
11) Trichlorofluoromethane	3.95	101	21285	0.117	ppbv	96
13) Ethanol	3.60	45	4040299	463.460	ppbv	90
15) Acetone	3.85	43	458180	4.283	ppbv	98
16) 1,3-Butadiene	3.36	39	251869	2.988	ppbv #	14
17) tert-Butyl alcohol	3.96	59	183702	1.651	ppbv	99
19) Isopropyl Alcohol	3.96	45	5164864	75.495	ppbv #	91
20) Methylene Chloride	4.34	84	226691	3.860	ppbv	97
21) Allyl Chloride	4.34	41	9192	0.093	ppbv #	1
25) Ethyl Acetate	5.68	43	84403	0.266	ppbv #	90
26) Hexane	5.68	57	61926	0.411	ppbv #	53
27) Carbon Disulfide	4.55	76	16804	0.113	ppbv #	51
34) 2-Butanone	5.24	43	21144	0.152	ppbv #	60
35) Carbon Tetrachloride	7.01	117	7326	0.032	ppbv #	87
36) Benzene	6.88	78	11166	0.036	ppbv #	83
38) Trichloroethene	7.82	130	5731745	45.102	ppbv	97
39) 1,2-Dichloropropane	7.81	63	8867	0.077	ppbv #	1
53) Toluene	9.79	91	35382	0.108	ppbv #	5
69) p-Isopropyltoluene	17.64	119	81956	0.180	ppbv #	82
72) 4-Ethyltoluene	15.81	105	27287	0.072	ppbv #	49
73) 1,3,5-Trimethylbenzene	15.98	105	21514	0.061	ppbv #	83
74) 1,2,4-Trimethylbenzene	16.74	105	75379	0.204	ppbv #	69
80) Naphthalene,2-methyl-	24.98	142	2381	0.057	ppbv #	89

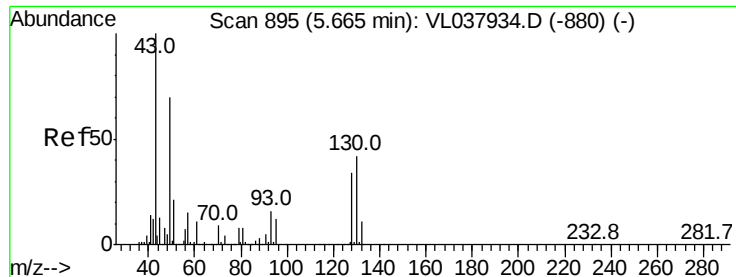
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Tue Nov 02 05:54:07 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: A-1

Acq: 2 Nov 2021 14:32

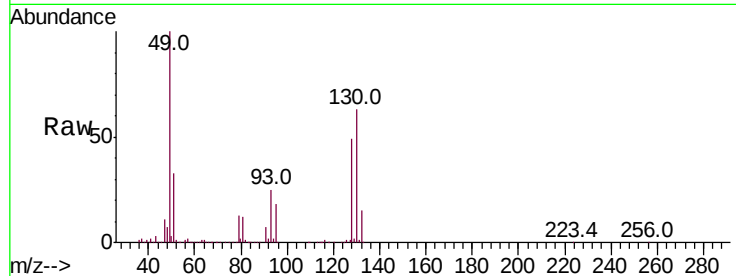
Tot Ion: 49 Resp: 1294673

Ion Ratio Lower Upper

49 100

128 53.4 27.0 81.0

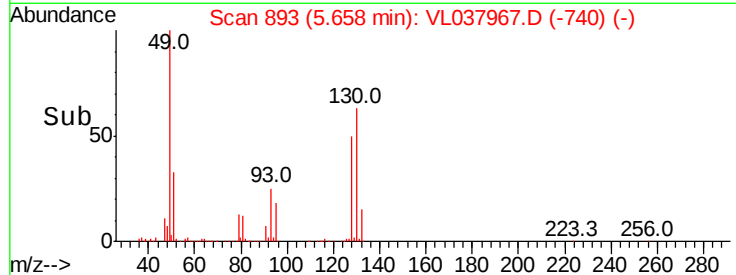
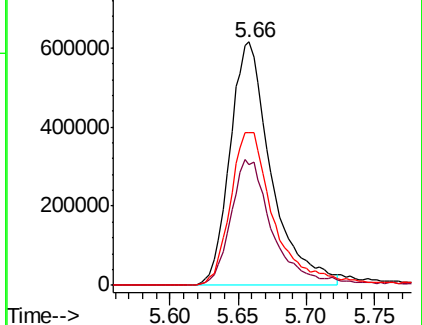
130 67.6 33.4 100.2



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#4

Chloromethane

Concen: 0.463 ppbv

RT: 3.14 min Scan# 110

Delta R.T. -0.00 min

Lab File: VL037967.D

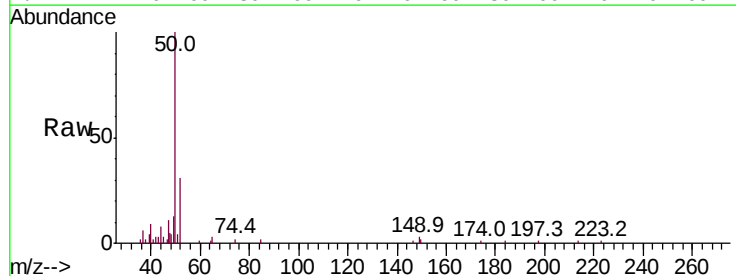
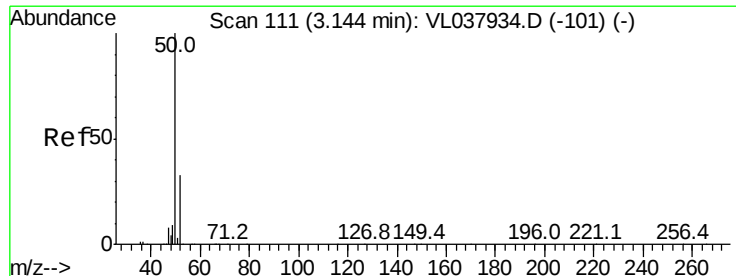
Acq: 2 Nov 2021 14:32

Tgt Ion: 50 Resp: 42392

Ion Ratio Lower Upper

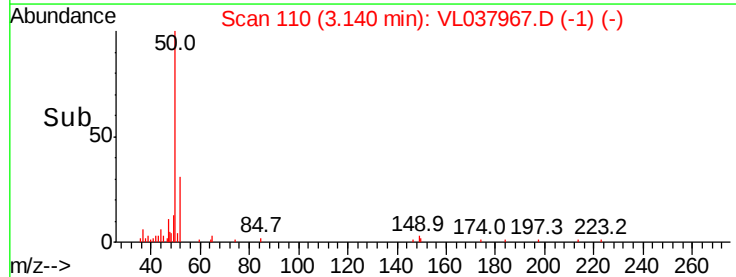
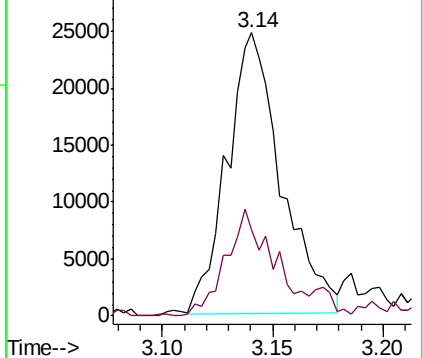
50 100

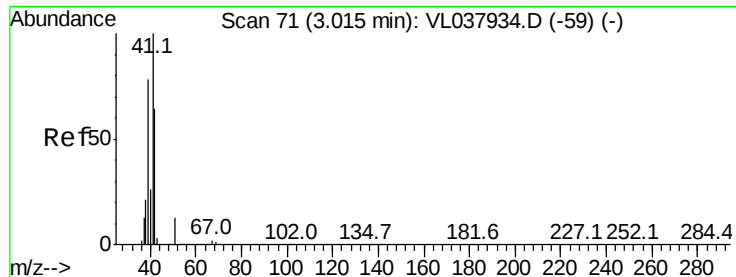
52 30.3 26.3 39.5



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 0.982 ppbv

RT: 3.02 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: A-1

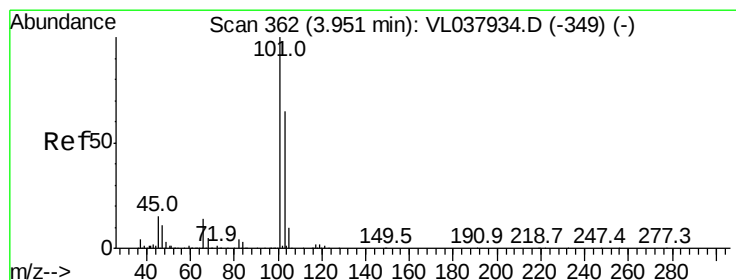
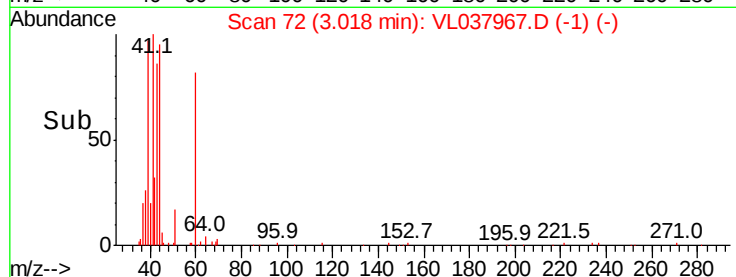
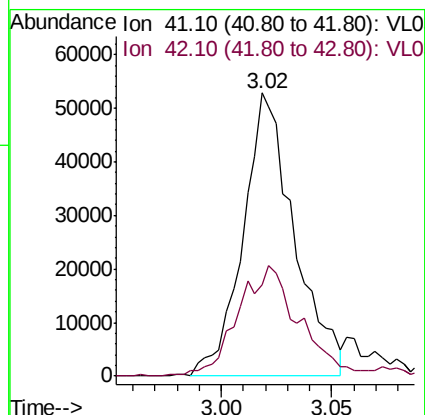
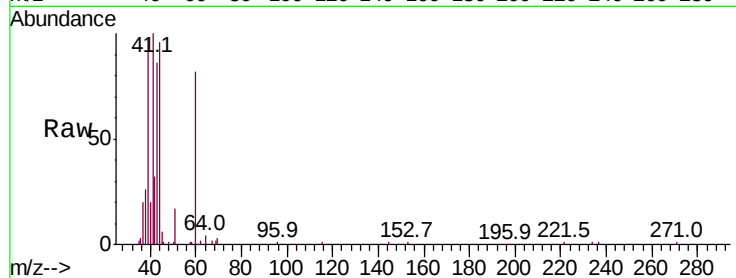
Acq: 2 Nov 2021 14:32

Tot Ion: 41 Resp: 84896

Ion Ratio Lower Upper

41 100

42 47.5 57.6 86.4#



#11

Trichlorofluoromethane

Concen: 0.117 ppbv

RT: 3.95 min Scan# 361

Delta R.T. -0.00 min

Lab File: VL037967.D

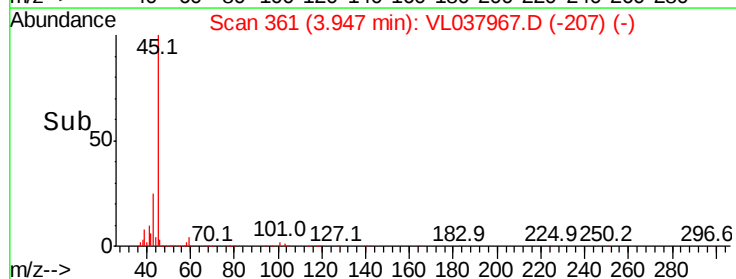
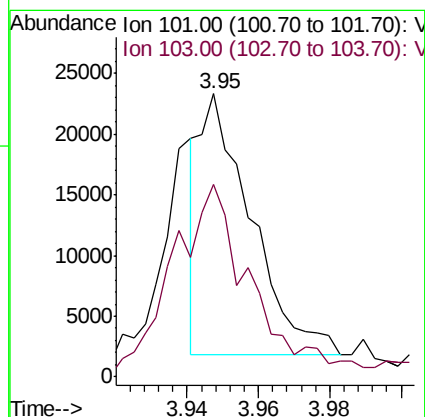
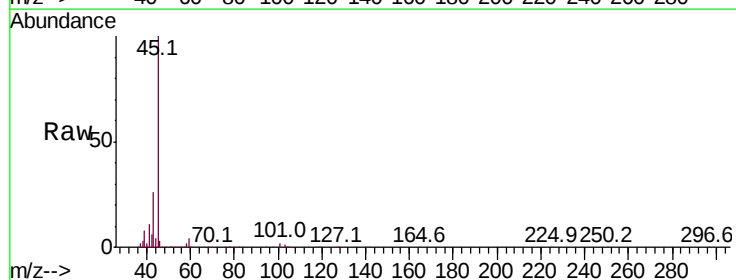
Acq: 2 Nov 2021 14:32

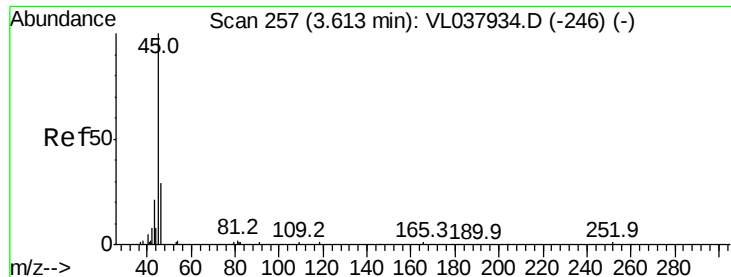
Tgt Ion: 101 Resp: 21285

Ion Ratio Lower Upper

101 100

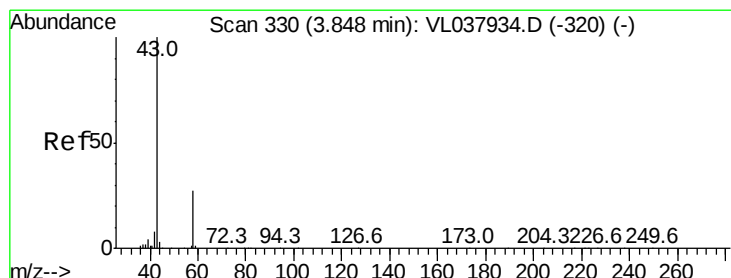
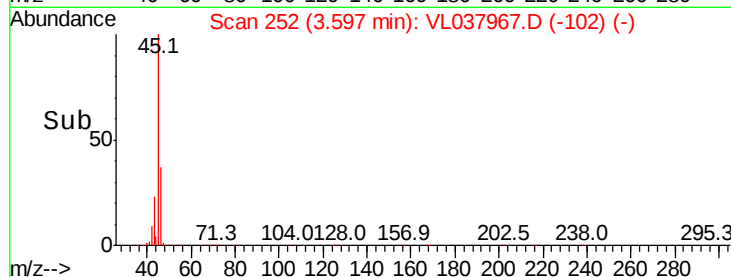
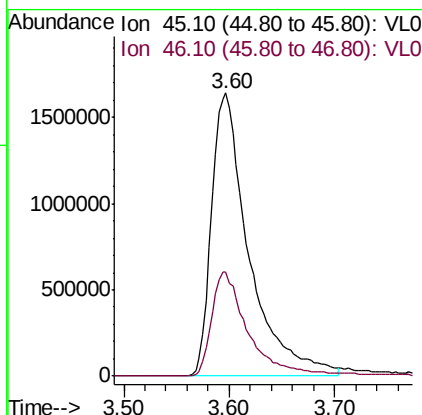
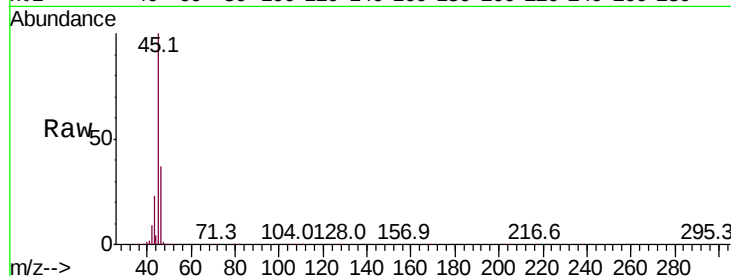
103 68.1 52.0 78.0





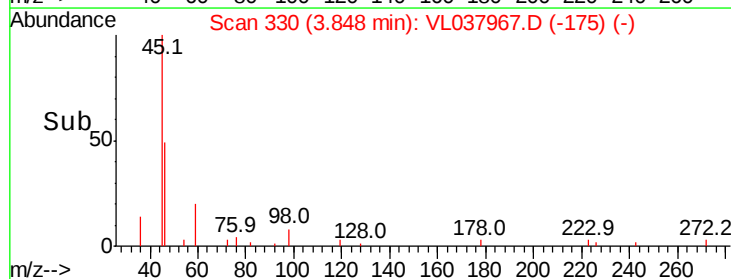
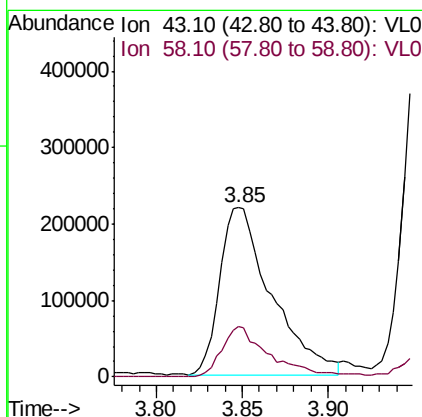
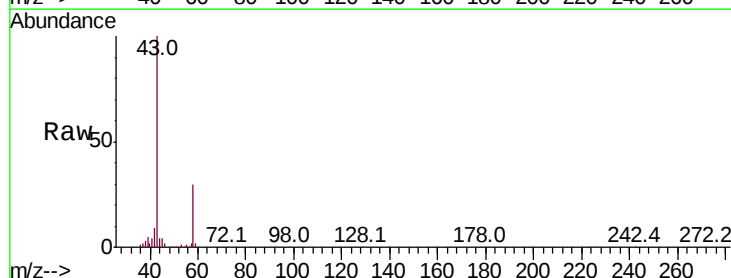
#13
 Ethanol
 Concen: 463.460 ppbv
 RT: 3.60
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 2 Nov 2021 14:32

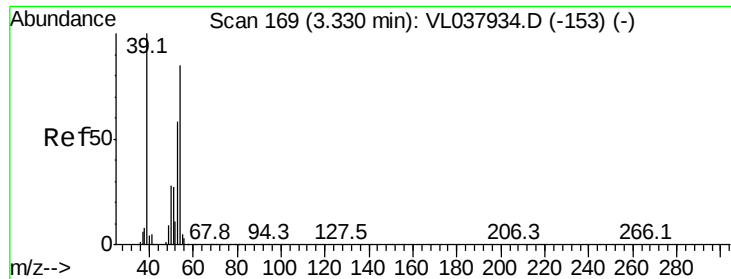
Tot Ion: 45 Resp: 4040299
 Ion Ratio Lower Upper
 45 100
 46 37.4 17.4 69.8



#15
 Acetone
 Concen: 4.283 ppbv
 RT: 3.85 min Scan# 330
 Delta R.T. -0.00 min
 Lab File: VL037967.D
 Acq: 2 Nov 2021 14:32

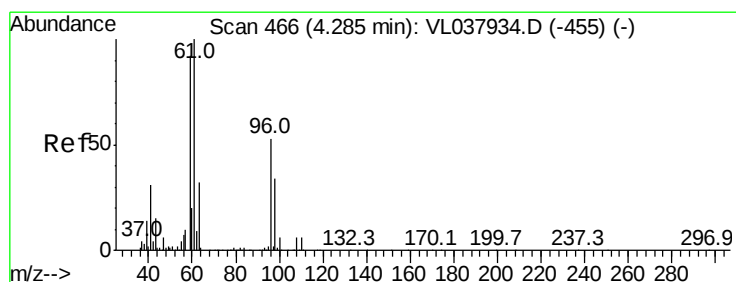
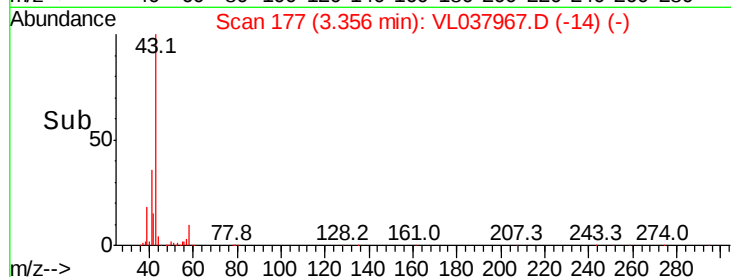
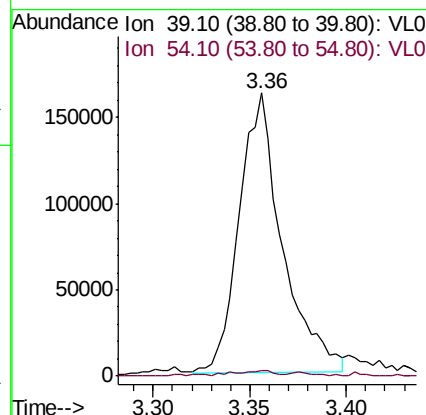
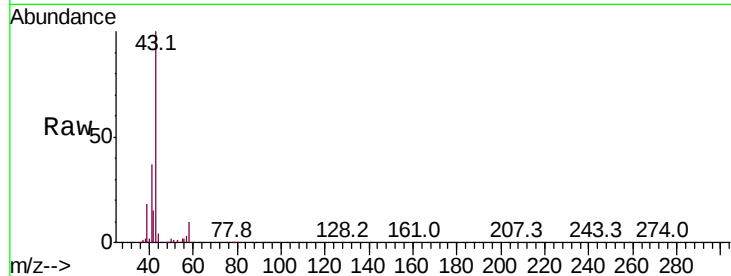
Tgt Ion: 43 Resp: 458180
 Ion Ratio Lower Upper
 43 100
 58 28.2 23.3 34.9





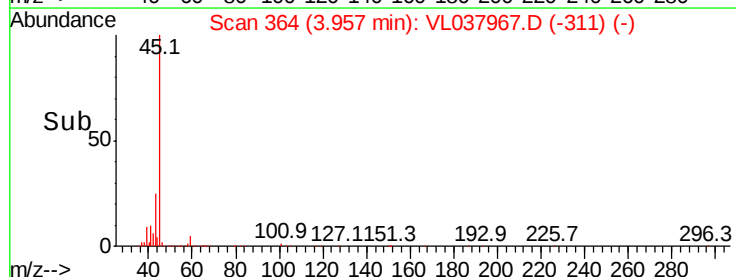
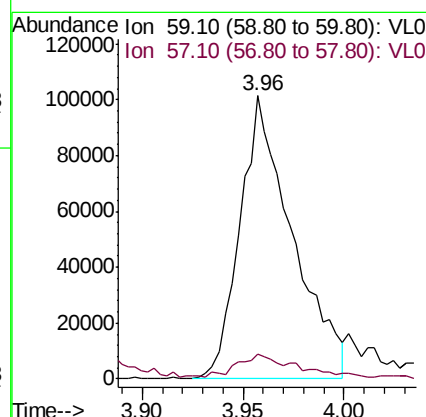
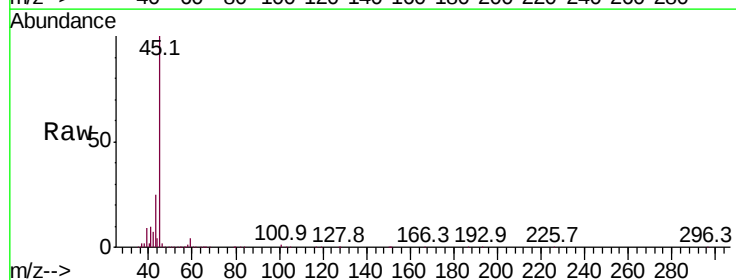
#16
 1,3-Butadiene
 Concen: 2.988 ppbv
 RT: 3.36
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 2 Nov 2021 14:32

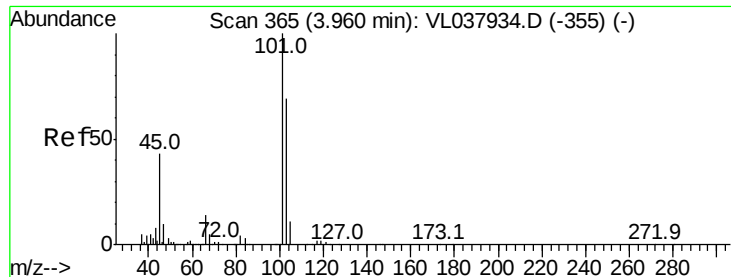
Tot Ion: 39 Resp: 251869
 Ion Ratio Lower Upper
 39 100
 54 3.6 62.6 93.8#



#17
 tert-Butyl alcohol
 Concen: 1.651 ppbv
 RT: 3.96 min Scan# 364
 Delta R.T. -0.33 min
 Lab File: VL037967.D
 Acq: 2 Nov 2021 14:32

Tgt Ion: 59 Resp: 183702
 Ion Ratio Lower Upper
 59 100
 57 11.4 8.9 13.3





#19

Isopropyl Alcohol

Concen: 75.495 ppbv

RT: 3.96

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

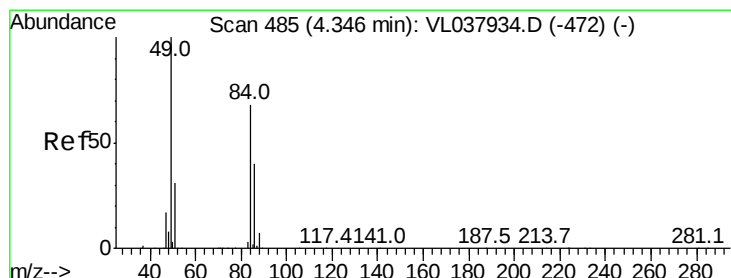
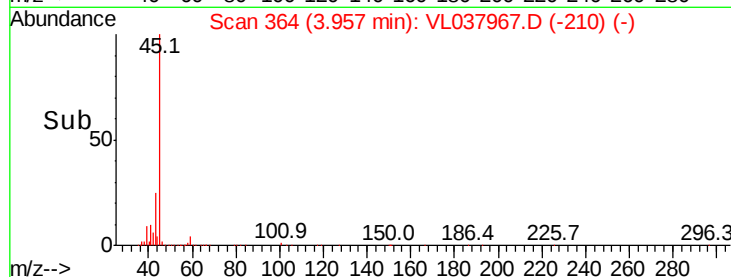
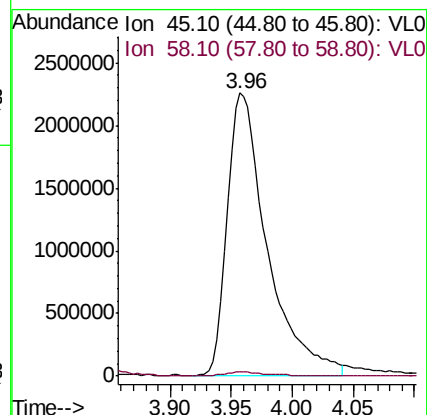
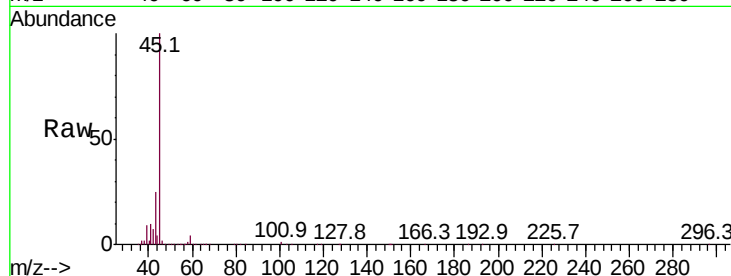
Acq: 2 Nov 2021 14:32

Tot Ion: 45 Resp: 5164864

Ion Ratio Lower Upper

45 100

58 1.9 4.0 6.0#



#20

Methylene Chloride

Concen: 3.860 ppbv

RT: 4.34 min Scan# 482

Delta R.T. -0.01 min

Lab File: VL037967.D

Acq: 2 Nov 2021 14:32

Tgt Ion: 84 Resp: 226691

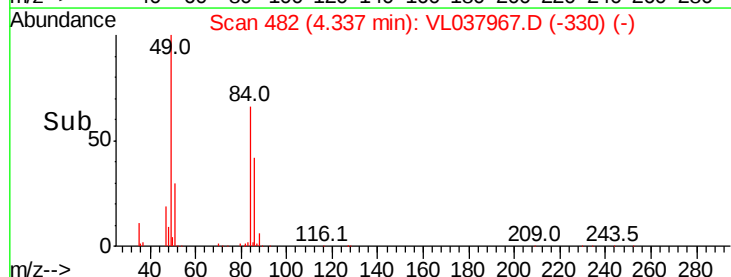
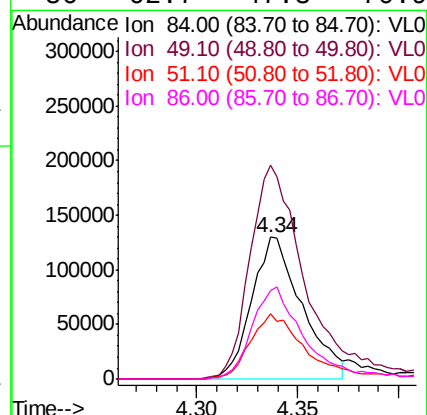
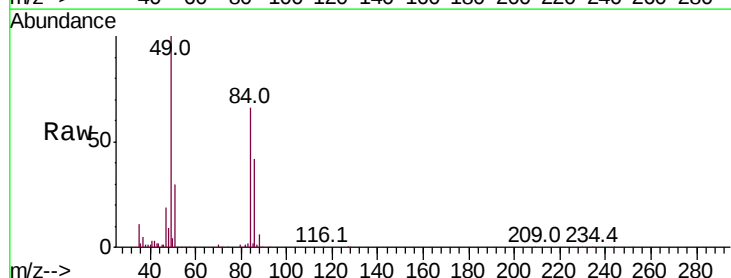
Ion Ratio Lower Upper

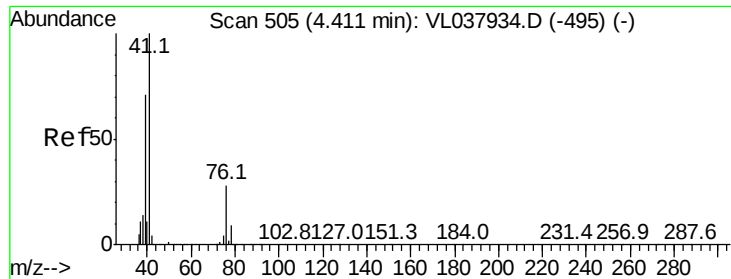
84 100

49 150.7 117.5 176.3

51 45.6 35.9 53.9

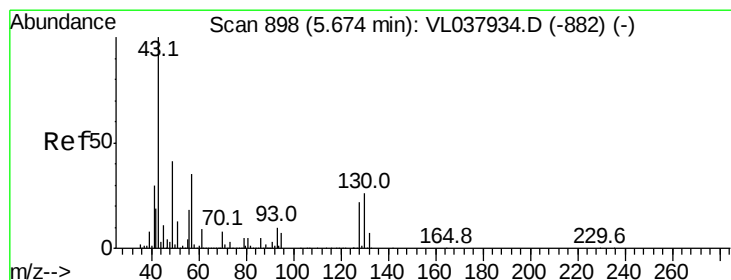
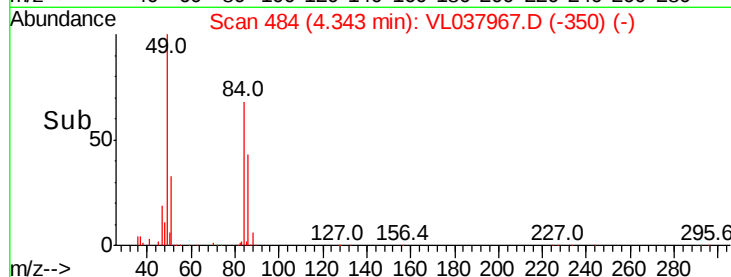
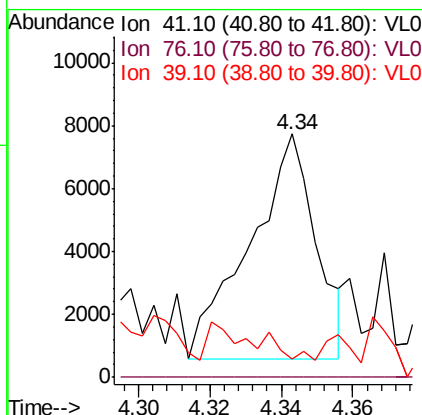
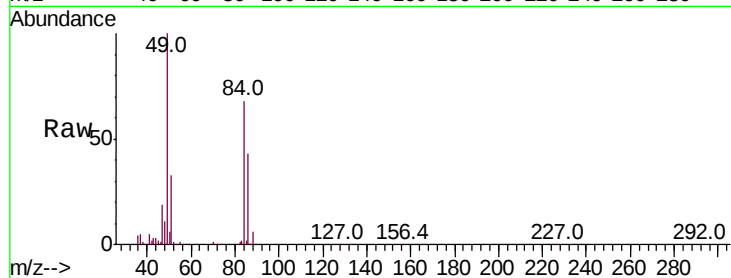
86 62.7 47.3 70.9





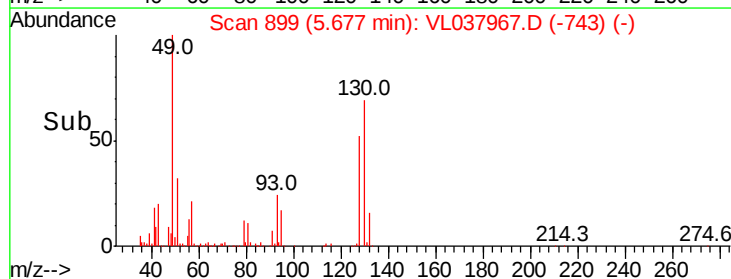
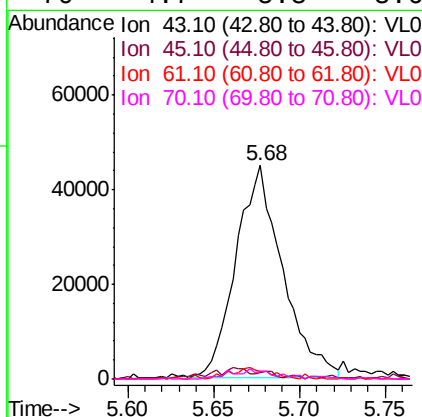
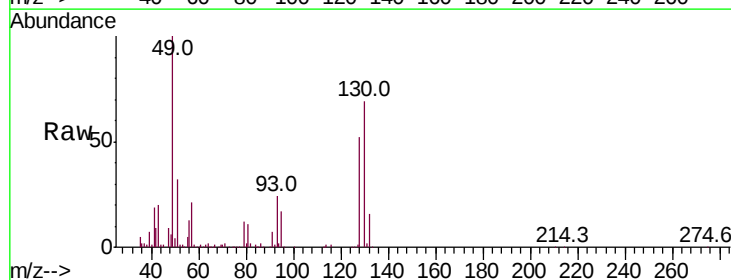
#21
Allvl Chloride
Concen: 0.093 ppbv
RT: 4.34
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 2 Nov 2021 14:32

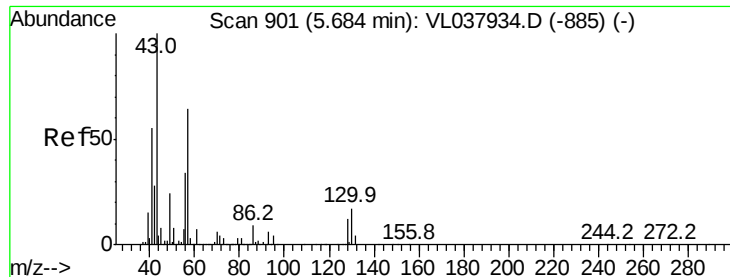
Tot Ion: 41 Resp: 9192
Ion Ratio Lower Upper
41 100
76 222.7 23.6 35.4#
39 0.0 59.7 89.5#



#25
Ethyl Acetate
Concen: 0.266 ppbv
RT: 5.68 min Scan# 899
Delta R.T. 0.00 min
Lab File: VL037967.D
Acq: 2 Nov 2021 14:32

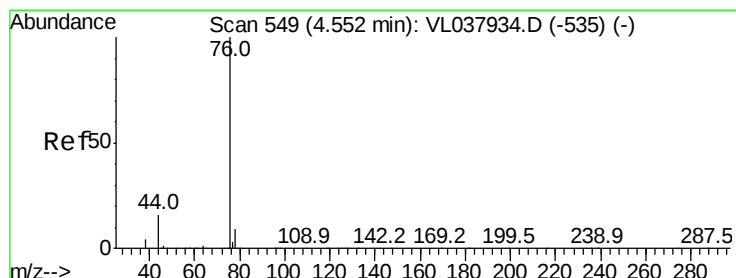
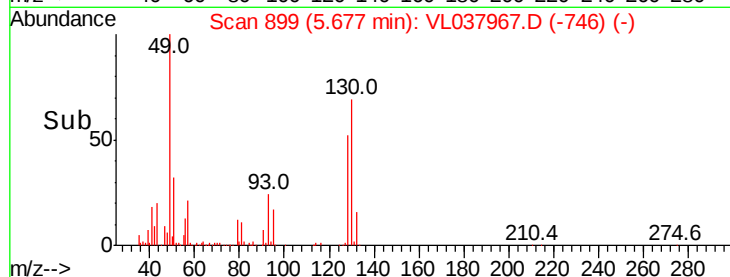
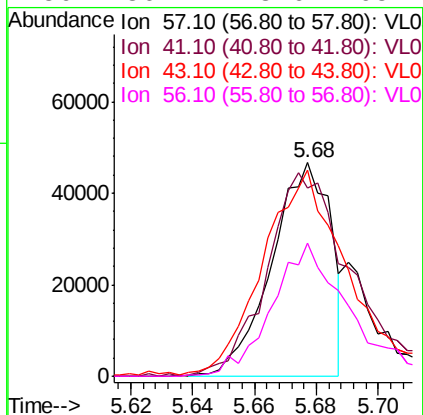
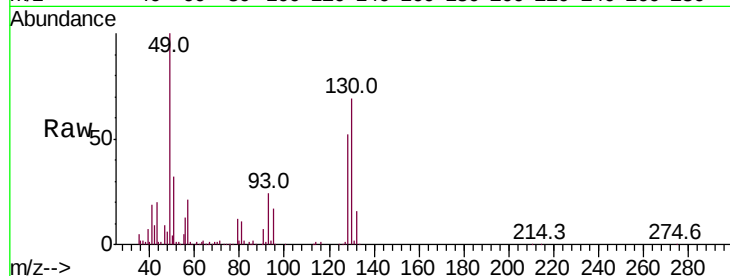
Tgt Ion: 43 Resp: 84403
Ion Ratio Lower Upper
43 100
45 6.7 8.1 12.1#
61 5.0 8.1 12.1#
70 4.7 5.8 8.6#





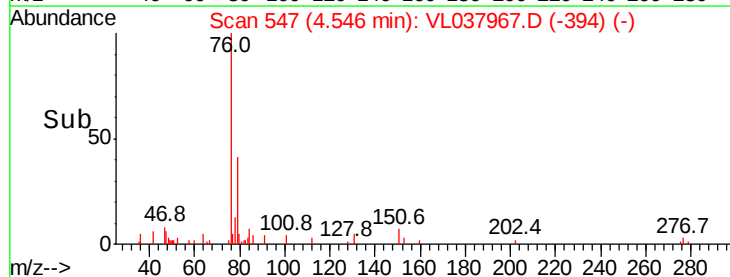
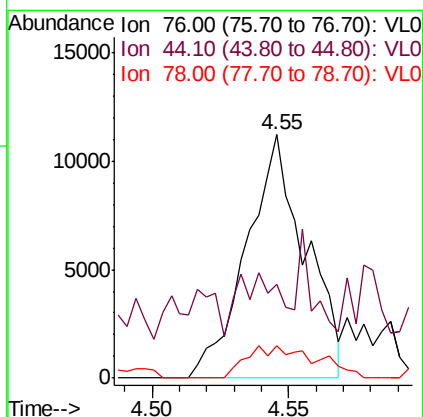
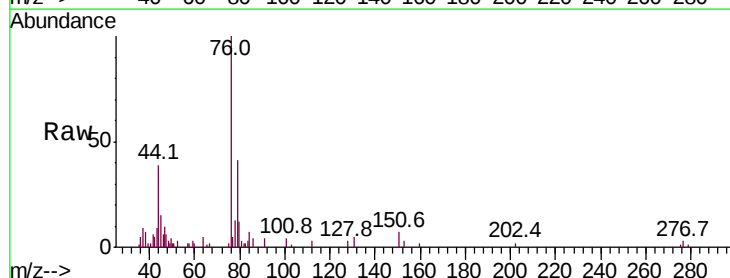
#26
Hexane
Concen: 0.411 ppbv
RT: 5.68
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 2 Nov 2021 14:32

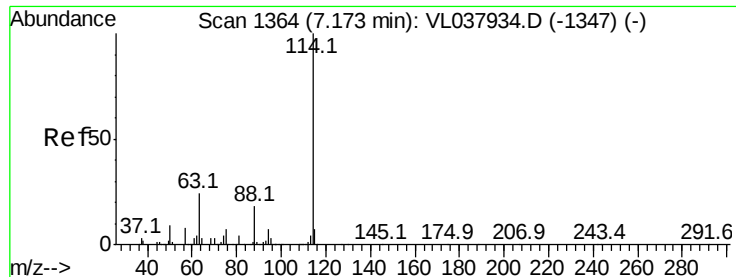
Tot Ion:	57	Resp:	61926
Ion	Ratio	Lower	Upper
57	100		
41	144.2	71.0	106.6#
43	149.3	173.0	259.6#
56	86.4	43.6	65.4#



#27
Carbon Disulfide
Concen: 0.113 ppbv
RT: 4.55 min Scan# 547
Delta R.T. -0.01 min
Lab File: VL037967.D
Acq: 2 Nov 2021 14:32

Tgt Ion:	76	Resp:	16804
Ion	Ratio	Lower	Upper
76	100		
44	44.4	13.2	19.8#
78	15.6	7.2	10.8#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.16 Instrument: MSVOA_1

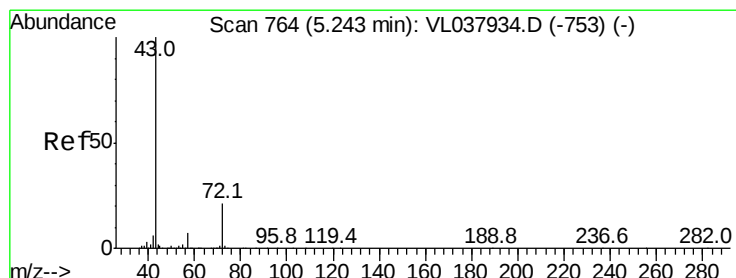
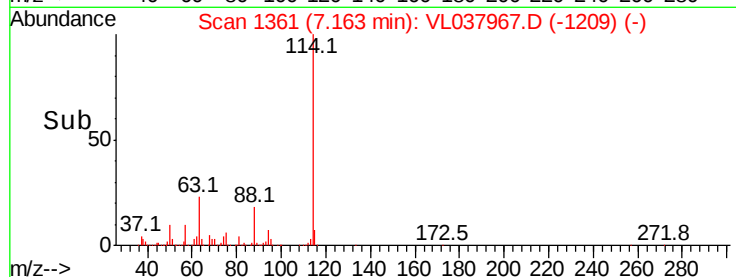
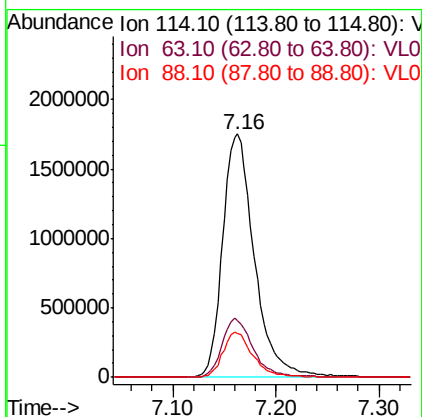
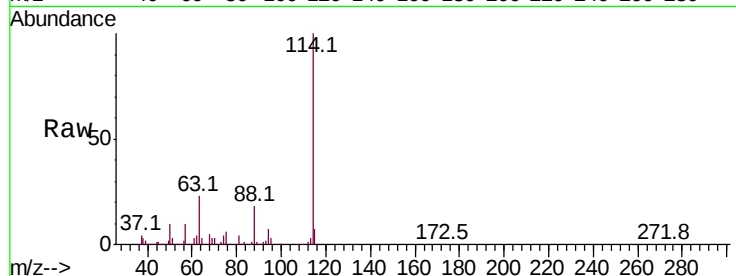
Delta R.T. ClientSampleId:

Lab File: IA-1

Acq: 2 Nov 2021 14:32

Tot Ion:114 Resp: 3759855

Ion	Ratio	Lower	Upper
114	100		
63	24.0	19.4	29.0
88	17.8	14.2	21.4



#34

2-Butanone

Concen: 0.152 ppbv

RT: 5.24 min Scan# 764

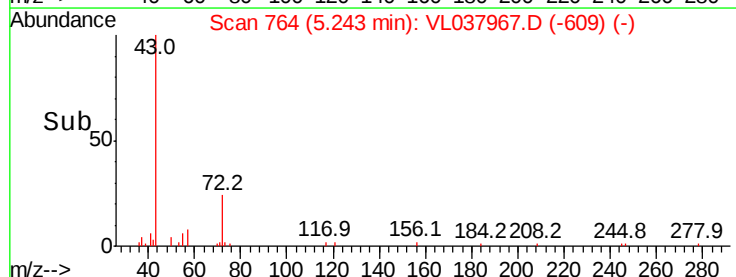
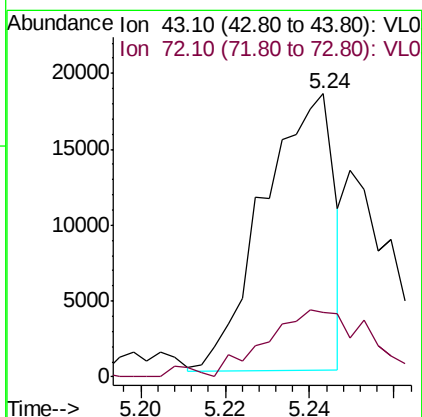
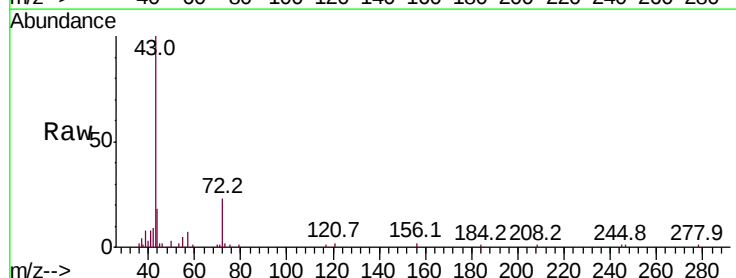
Delta R.T. -0.00 min

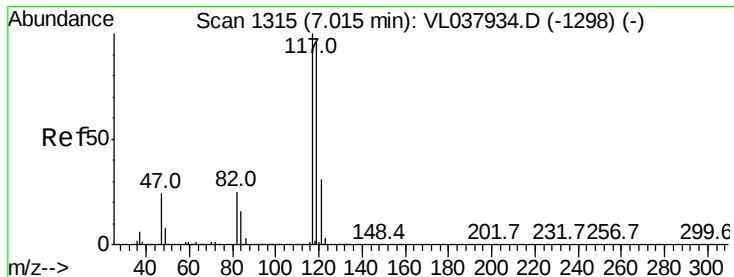
Lab File: VL037967.D

Acq: 2 Nov 2021 14:32

Tgt Ion: 43 Resp: 21144

Ion	Ratio	Lower	Upper
43	100		
72	42.2	18.3	27.5#





#35

Carbon Tetrachloride

Concen: 0.032 ppbv

RT: 7.01 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

Acq: 2 Nov 2021 14:32

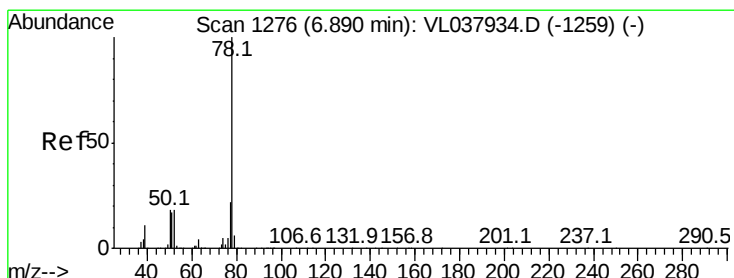
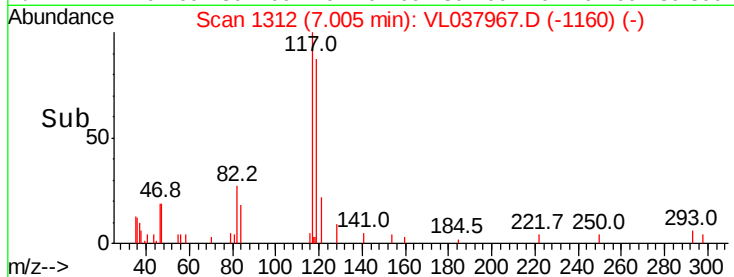
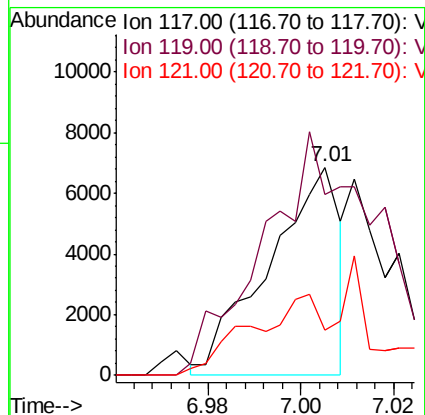
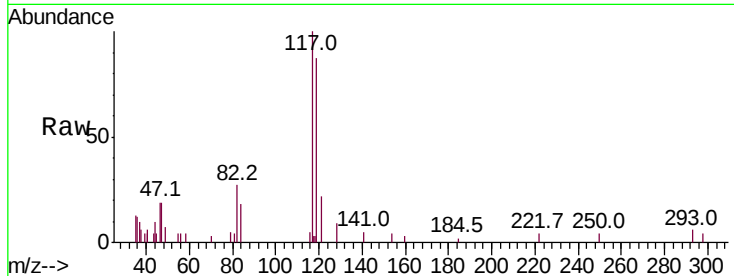
Tot Ion:117 Resp: 7326

Ion Ratio Lower Upper

117 100

119 85.6 76.6 114.8

121 19.8 25.1 37.7#



#36

Benzene

Concen: 0.036 ppbv

RT: 6.88 min Scan# 1273

Delta R.T. -0.01 min

Lab File: VL037967.D

Acq: 2 Nov 2021 14:32

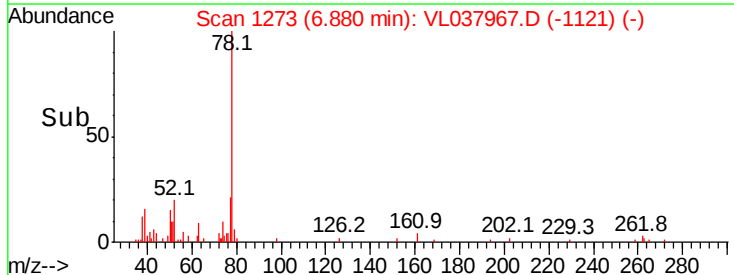
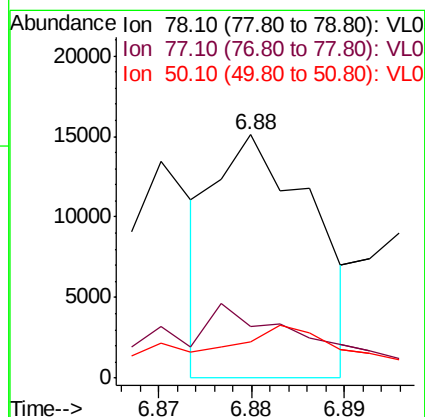
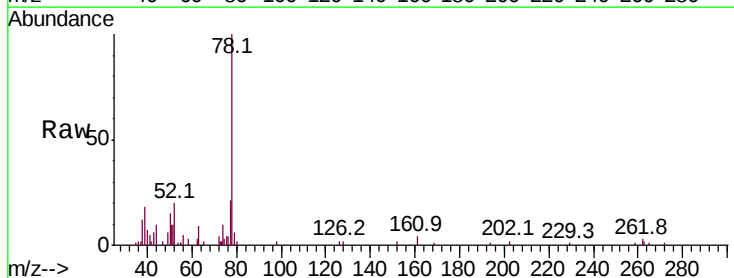
Tgt Ion: 78 Resp: 11166

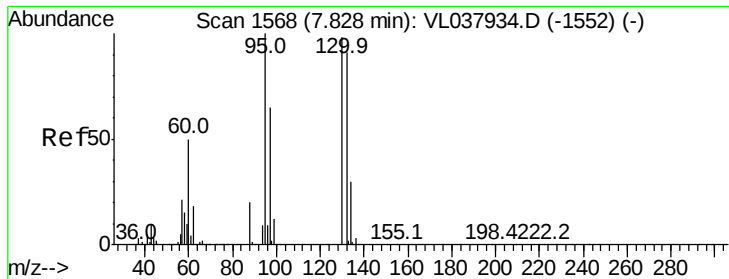
Ion Ratio Lower Upper

78 100

77 16.1 17.9 26.9#

50 8.2 14.4 21.6#





#38

Trichloroethene

Concen: 45.102 ppbv

RT: 7.82

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 2 Nov 2021 14:32

Tot Ion:130 Resp: 5731745

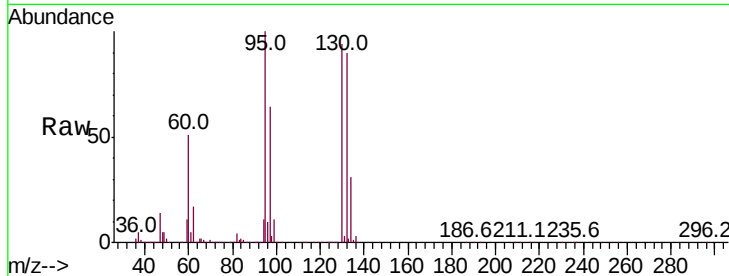
Ion Ratio Lower Upper

130 100

95 106.6 81.8 122.8

132 95.5 74.2 111.2

97 68.6 53.4 80.2

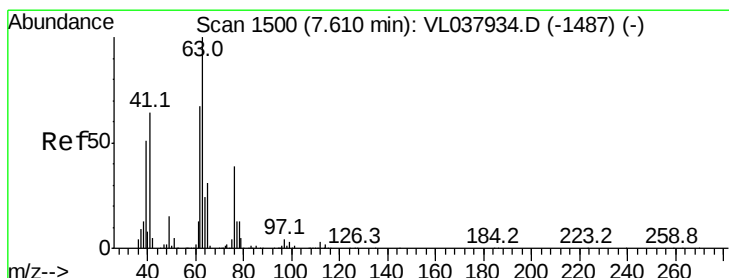
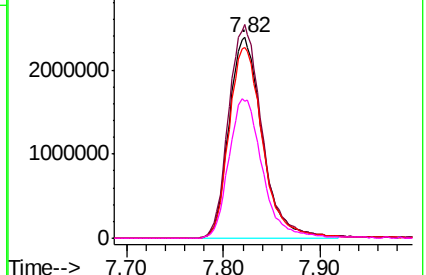
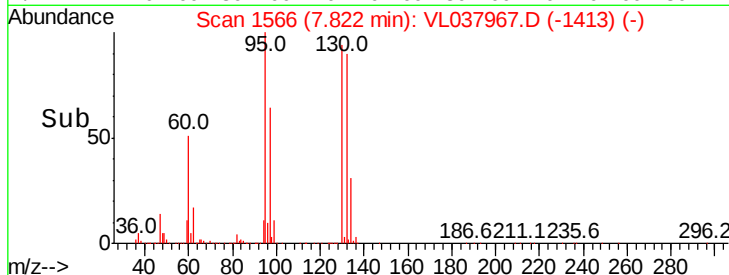


Abundance Ion 130.00 (129.70 to 130.70): V

Ion 95.00 (94.70 to 95.70): VL0

Ion 132.00 (131.70 to 132.70): V

Ion 97.00 (96.70 to 97.70): VL0



#39

1,2-Dichloropropane

Concen: 0.077 ppbv

RT: 7.81 min Scan# 1563

Delta R.T. 0.20 min

Lab File: VL037967.D

Acq: 2 Nov 2021 14:32

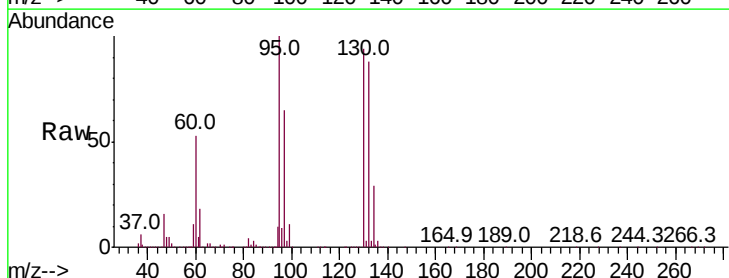
Tgt Ion: 63 Resp: 8867

Ion Ratio Lower Upper

63 100

41 16.2 51.6 77.4#

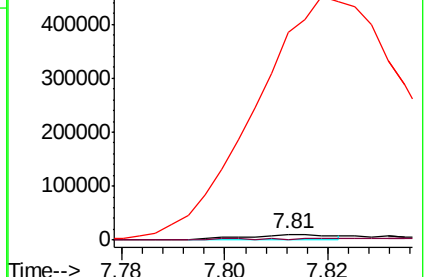
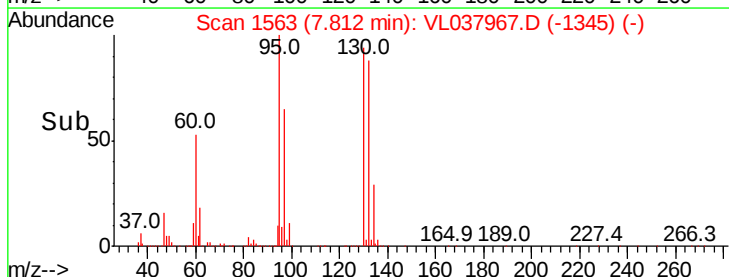
62 3867.1 53.5 80.3#

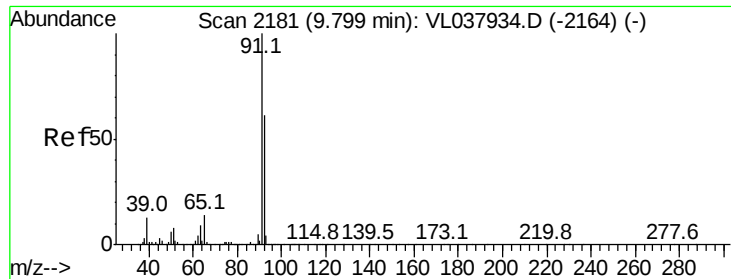


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0





#53

Toluene

Concen: 0.108 ppbv

RT: 9.79 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: A-1

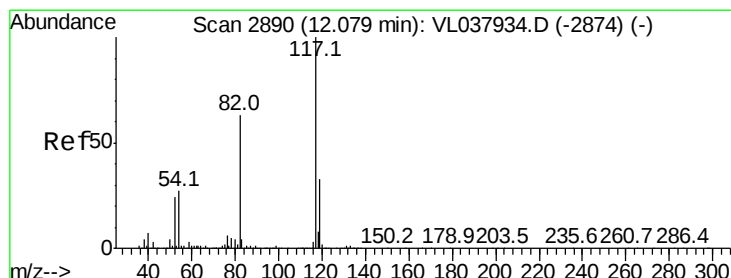
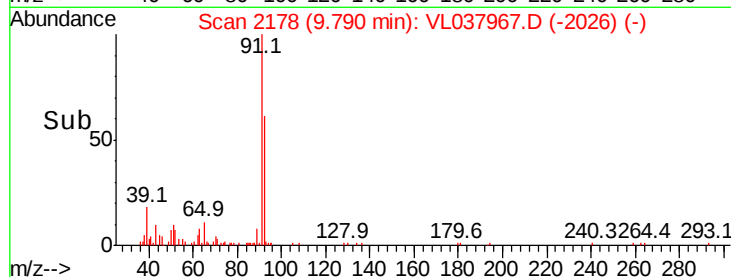
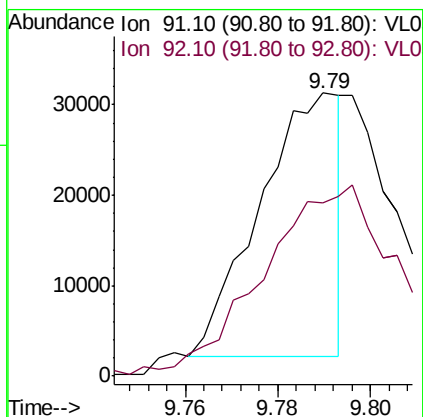
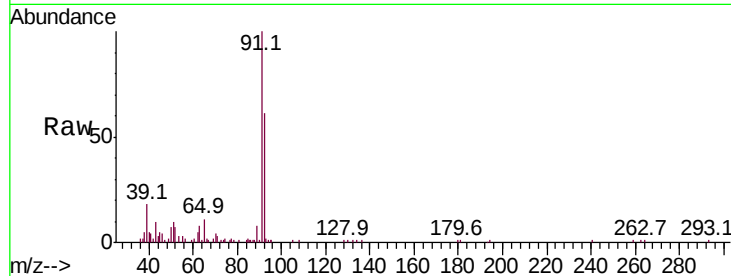
Acq: 2 Nov 2021 14:32

Tot Ion: 91 Resp: 35382

Ion Ratio Lower Upper

91 100

92 132.0 48.2 72.4#



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.07 min Scan# 2886

Delta R.T. -0.01 min

Lab File: VL037967.D

Acq: 2 Nov 2021 14:32

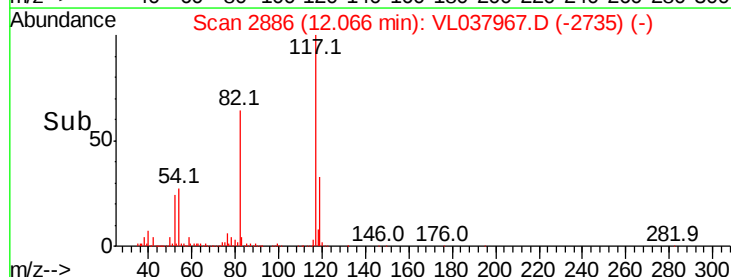
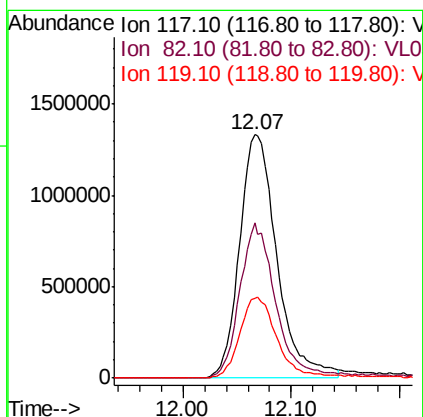
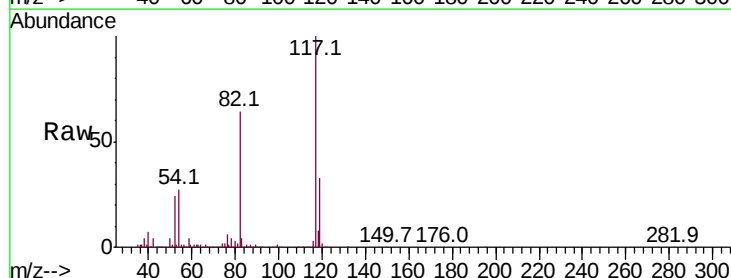
Tgt Ion: 117 Resp: 3214027

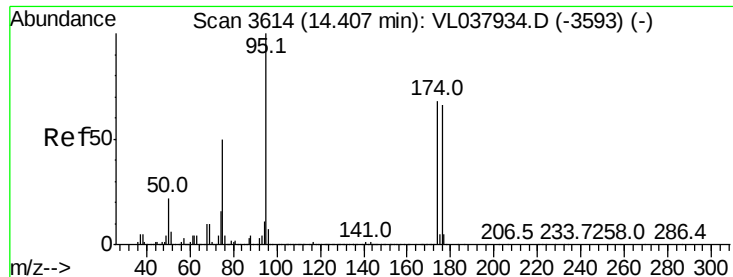
Ion Ratio Lower Upper

117 100

82 63.7 51.0 76.6

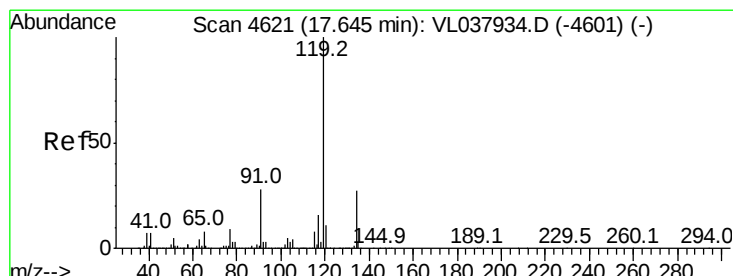
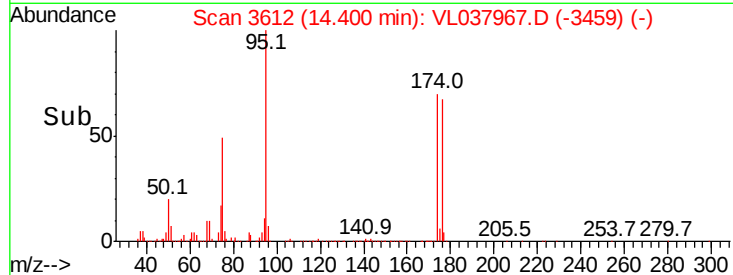
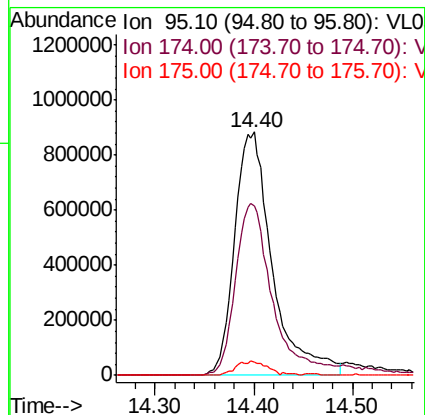
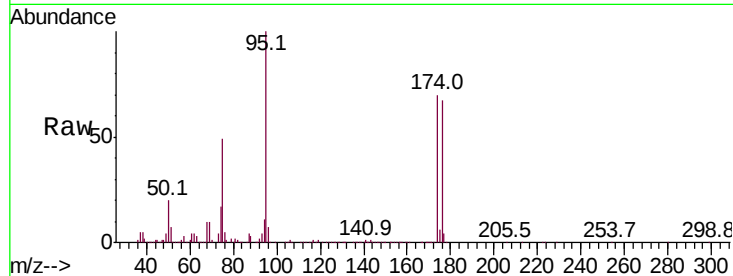
119 34.3 26.9 40.3





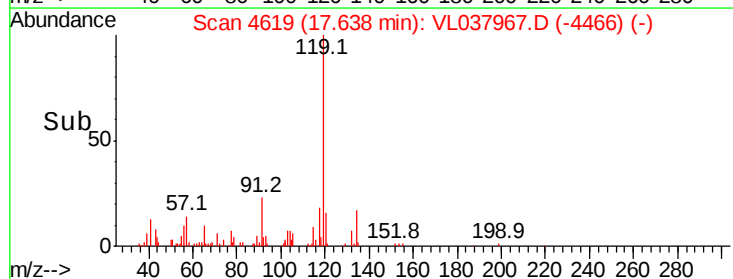
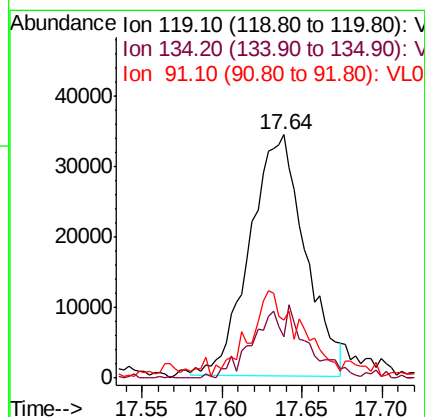
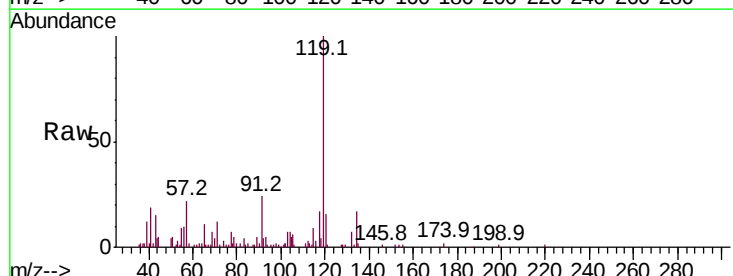
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.080 ppbv
 RT: 14.40 min
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 2 Nov 2021 14:32

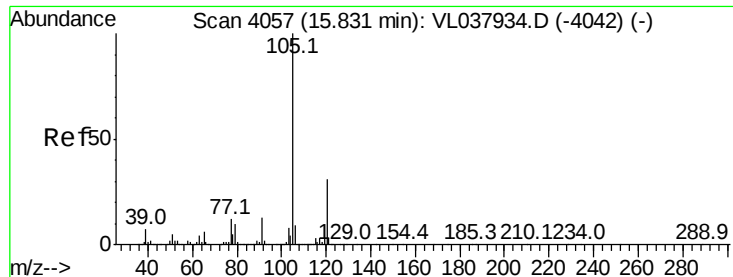
Tot Ion:	95	Resp:	2354850
Ion	Ratio	Lower	Upper
95	100		
174	74.0	58.3	87.5
175	5.5	4.6	6.8



#69
 p-Isopropyltoluene
 Concen: 0.180 ppbv
 RT: 17.64 min Scan# 4619
 Delta R.T. -0.01 min
 Lab File: VL037967.D
 Acq: 2 Nov 2021 14:32

Tgt Ion:	119	Resp:	81956
Ion	Ratio	Lower	Upper
119	100		
134	28.7	21.0	31.4
91	43.5	21.8	32.8#





#72

4-Ethyltoluene

Concen: 0.072 ppbv

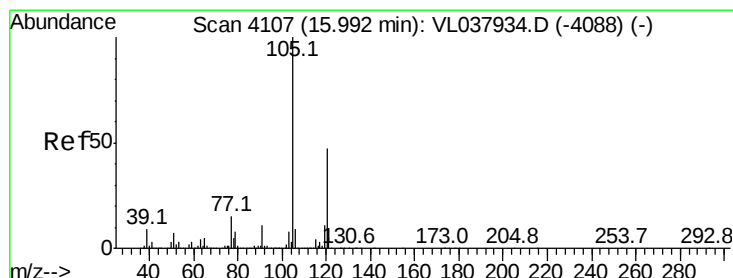
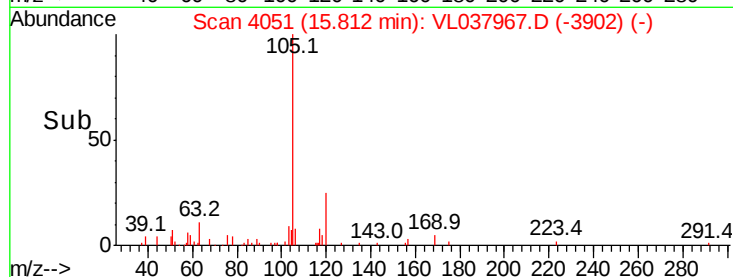
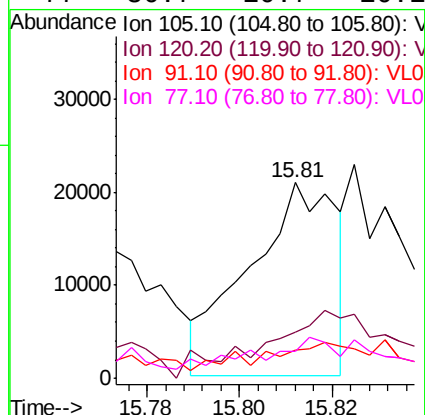
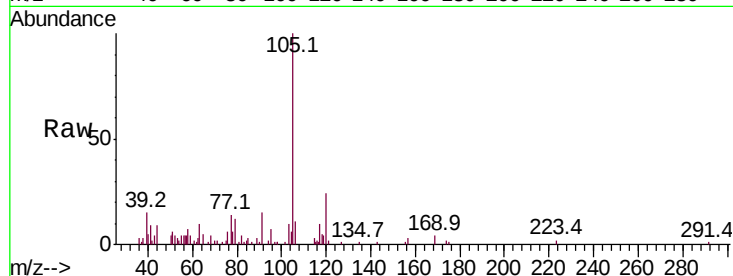
RT: 15.81 min

Delta R.T. MSVOA_1

Lab File: ClientSampleId :

Acq: 2 Nov 2021 14:32

Tot Ion:	105	Resp:	27287
Ion	Ratio	Lower	Upper
105	100		
120	62.0	25.3	37.9#
91	0.0	9.9	14.9#
77	36.7	10.7	16.1#



#73

1,3,5-Trimethylbenzene

Concen: 0.061 ppbv

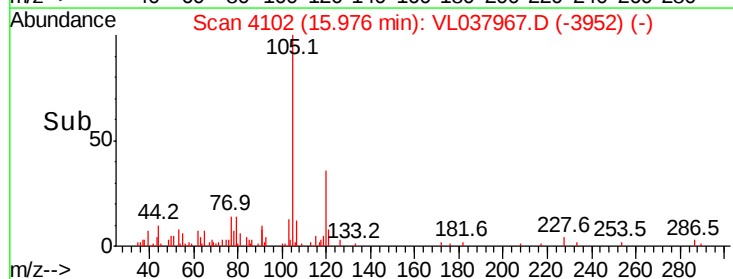
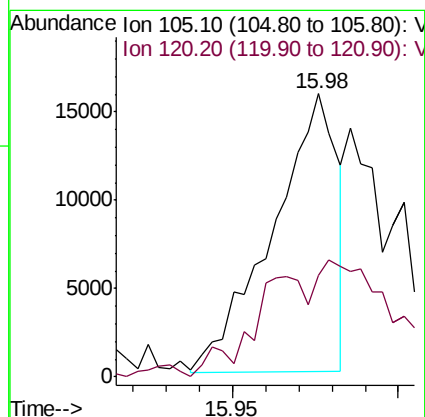
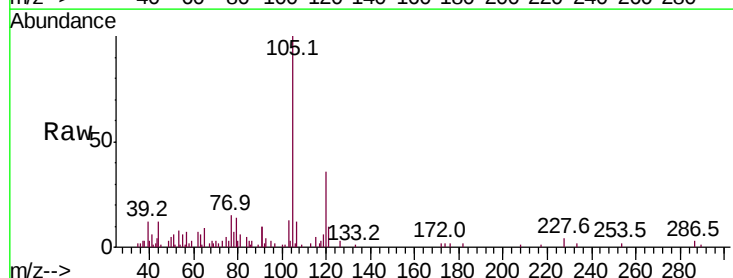
RT: 15.98 min Scan# 4102

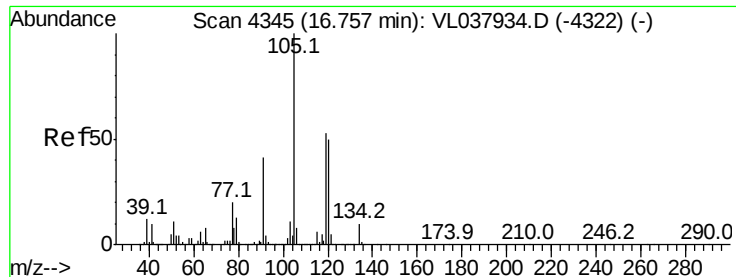
Delta R.T. -0.02 min

Lab File: VL037967.D

Acq: 2 Nov 2021 14:32

Tgt Ion:	105	Resp:	21514
Ion	Ratio	Lower	Upper
105	100		
120	36.1	37.9	56.9#





#74

1,2,4-Trimethylbenzene

Concen: 0.204 ppbv

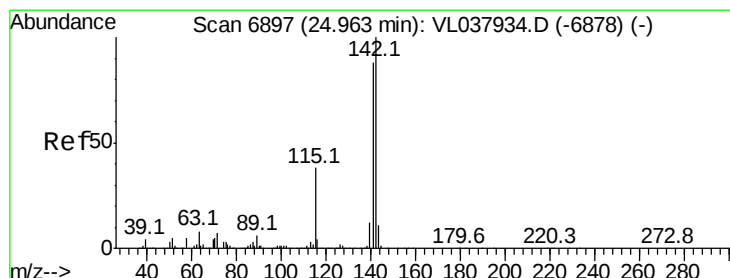
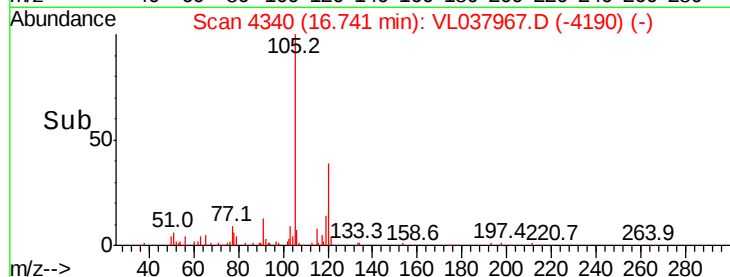
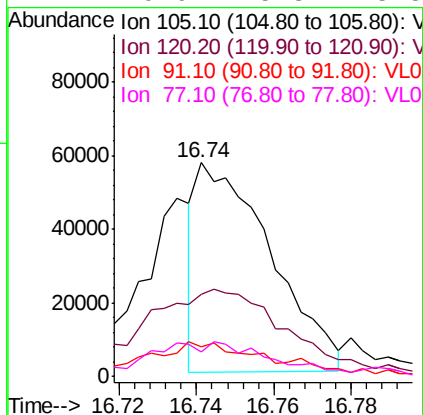
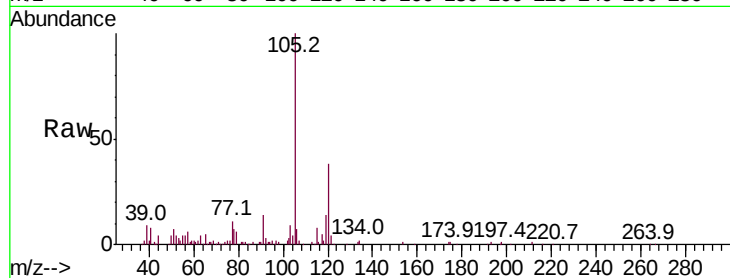
RT: 16.74 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

Acq: 2 Nov 2021 14:32

Tot Ion:	105	Resp:	75379
Ion	Ratio	Lower	Upper
105	100		
120	35.3	40.0	60.0#
91	11.8	32.6	49.0#
77	9.9	15.8	23.8#



#80

Naphthalene, 2-methyl-

Concen: 0.057 ppbv

RT: 24.98 min Scan# 6901

Delta R.T. 0.01 min

Lab File: VL037967.D

Acq: 2 Nov 2021 14:32

Tgt Ion:	142	Resp:	2381
Ion	Ratio	Lower	Upper
142	100		
141	75.9	66.4	99.6
115	26.4	29.0	43.4#

