

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040722\
 Data File : VL038866.D
 Acq On : 8 Apr 2022 9:08
 Operator : SY/AP
 Sample : N2274-03DL 10X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 1161-8-01-SG-3DL

Quant Time: Apr 09 14:36:44 2022
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL040522AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Apr 06 06:12:53 2022
 QLast Update : Wed Apr 06 06:12:53 2022
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.69	49	1023585	10.00	ppbv	0.03
33) 1,4-Difluorobenzene	7.20	114	2565084	10.00	ppbv	0.03
55) Chlorobenzene-d5	12.10	117	2297314	10.00	ppbv	0.03

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.44	95	1888363	10.84	ppbv	0.03
Spiked Amount	10.000	Range	65 - 135	Recovery	=	108.40%

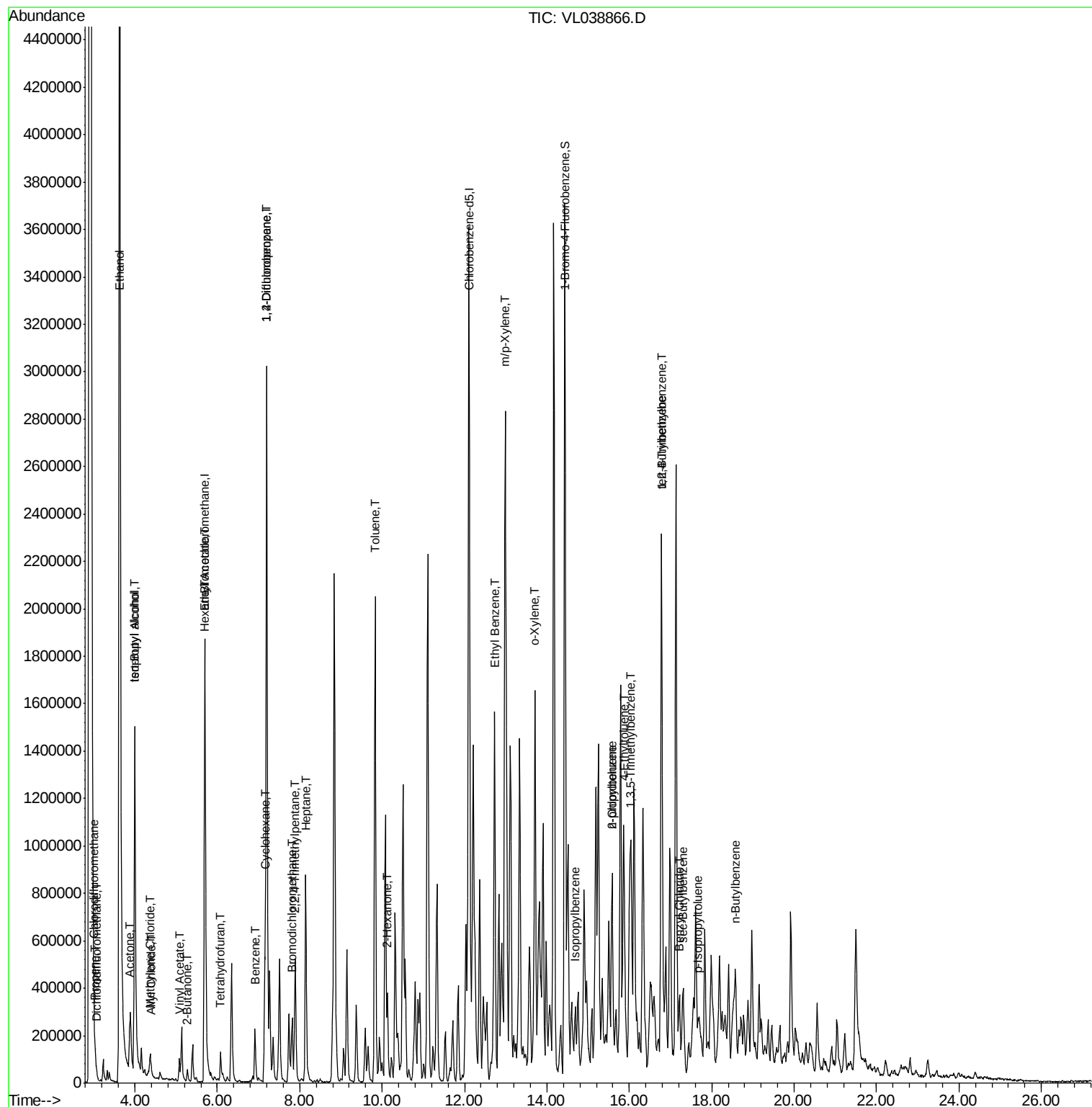
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.07	85	5269	0.04	ppbv	91
3) Chlorodifluoromethane	3.01	51	7970	0.06	ppbv	94
9) Propene	3.04	41	16344	0.25	ppbv #	80
10) Heptane	8.14	43	439835	2.64	ppbv	100
13) Ethanol	3.63	45	8661005	2156.34	ppbv #	100
15) Acetone	3.87	43	287841	2.82	ppbv	92
17) tert-Butyl alcohol	4.00	59	67410	0.74	ppbv	99
19) Isopropyl Alcohol	3.99	45	2055203	39.46	ppbv #	100
20) Methylene Chloride	4.37	84	33756	0.91	ppbv #	94
21) Allyl Chloride	4.39	41	3054	0.04	ppbv #	1
23) Vinyl Acetate	5.09	43	15597	0.16	ppbv #	1
25) Ethyl Acetate	5.71	43	186200	0.72	ppbv #	87
26) Hexane	5.71	57	213320	1.81	ppbv #	48
30) Cyclohexane	7.16	84	74522	0.72	ppbv #	1
34) 2-Butanone	5.27	43	26439	0.26	ppbv #	55
36) Benzene	6.91	78	208601	0.89	ppbv	98
39) 1,2-Dichloropropane	7.20	63	656555	7.36	ppbv #	26
41) Tetrahydrofuran	6.08	42	76178	0.79	ppbv	98
42) Bromodichloromethane	7.82	83	20833	0.12	ppbv #	24
44) 2,2,4-Trimethylpentane	7.89	57	248588	0.63	ppbv #	20
51) 2-Hexanone	10.13	43	201787	1.17	ppbv #	26
53) Toluene	9.83	91	1714213	6.36	ppbv	98
58) Ethyl Benzene	12.73	91	1371650	4.00	ppbv	96
59) m/p-Xylene	12.99	91	2873426	9.96	ppbv	100
60) o-Xylene	13.71	91	1321103	4.90	ppbv	93
62) Isopropylbenzene	14.69	105	208123	0.51	ppbv	95
64) n-propylbenzene	15.58	120	76283	0.73	ppbv #	1
65) tert-Butylbenzene	16.78	119	161049	0.45	ppbv #	55
66) Benzyl Chloride	17.23	91	37020	0.51	ppbv #	65
67) sec-Butylbenzene	17.31	105	154266	0.31	ppbv	98
69) p-Isopropyltoluene	17.67	119	63931	0.15	ppbv	94
70) n-Butylbenzene	18.57	91	93002	0.22	ppbv #	1
71) 2-Chlorotoluene	15.58	91	702200	2.31	ppbv #	43
72) 4-Ethyltoluene	15.86	105	632512	1.96	ppbv	98
73) 1,3,5-Trimethylbenzene	16.02	105	501422	1.73	ppbv	91
74) 1,2,4-Trimethylbenzene	16.78	105	1514886	4.95	ppbv #	71

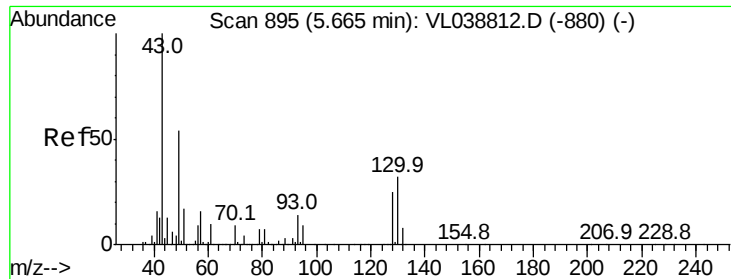
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040722\
Data File : VL038866.D
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Instrument :
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ClientSampleId :
1161-8-01-SG-3DL

Quant Time: Apr 09 14:36:44 2022
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL040522AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Apr 06 06:12:53 2022
QLast Update : Wed Apr 06 06:12:53 2022
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 5.69 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 8 Apr 2022 9:08 1161-8-01-SG-3DL

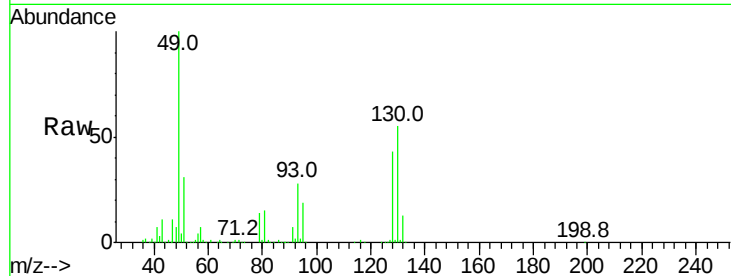
Tgt Ion: 49 Resp: 1023585

Ion Ratio Lower Upper

49 100

128 45.5 24.1 72.3

130 60.0 30.9 92.8



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0

5.69

600000

500000

400000

300000

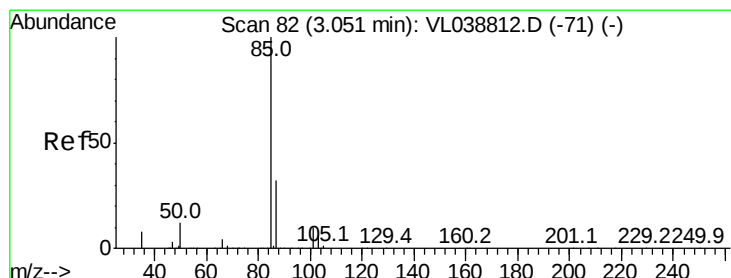
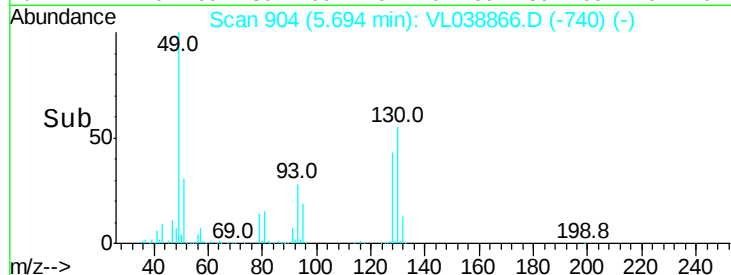
200000

100000

0

5.60 5.65 5.70 5.75 5.80

Time-->



#2

Dichlorodifluoromethane

Concen: 0.04 ppbv

RT: 3.07 min Scan# 87

Delta R.T. 0.02 min

Lab File: VL038866.D

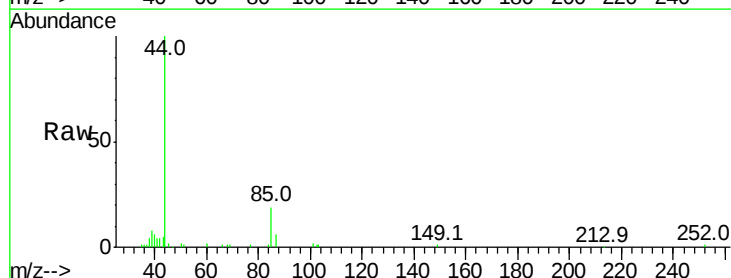
Acq: 8 Apr 2022 9:08

Tgt Ion: 85 Resp: 5269

Ion Ratio Lower Upper

85 100

87 27.4 25.9 38.9



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

8000

6000

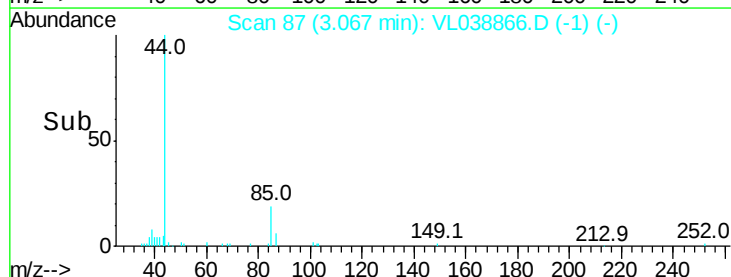
4000

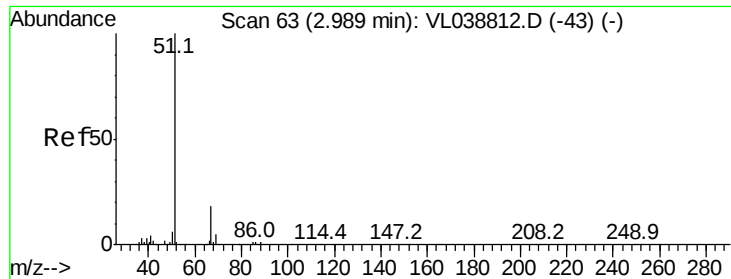
2000

0

3.04 3.05 3.06 3.07

Time-->





#3

Chlorodifluoromethane

Concen: 0.06 ppbv

RT: 3.01 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

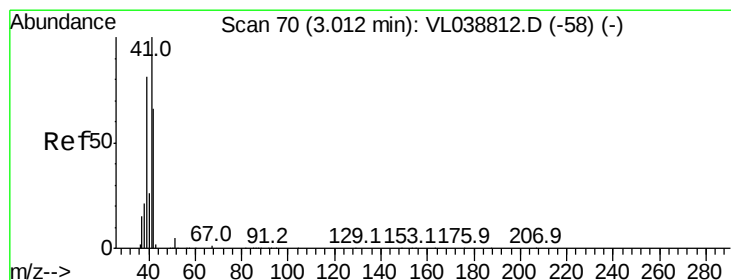
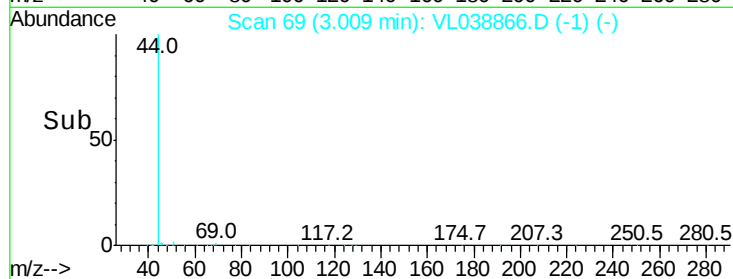
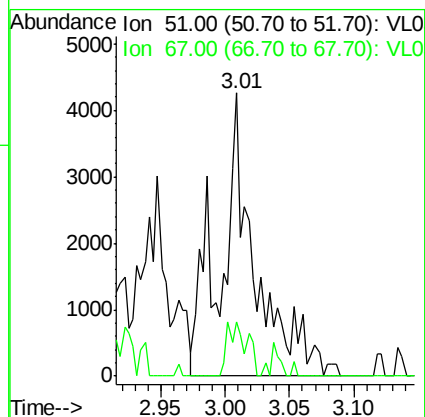
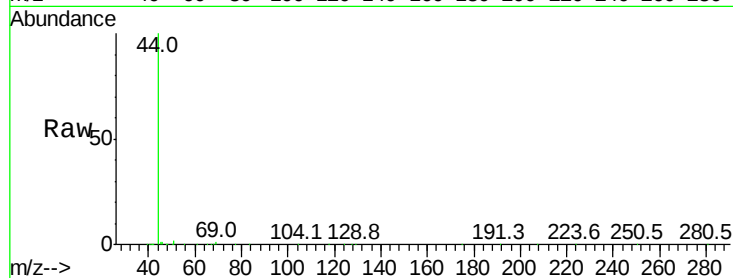
Acq: 8 Apr 2022 9:08

Tgt Ion: 51 Resp: 7970

Ion Ratio Lower Upper

51 100

67 14.3 13.4 20.0



#9

Propene

Concen: 0.25 ppbv

RT: 3.04 min Scan# 78

Delta R.T. 0.03 min

Lab File: VL038866.D

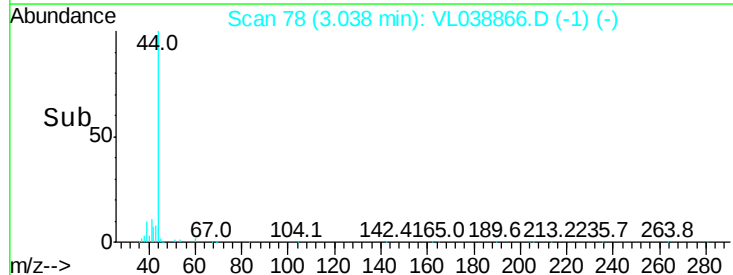
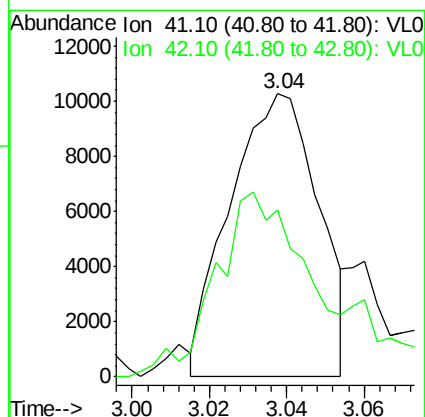
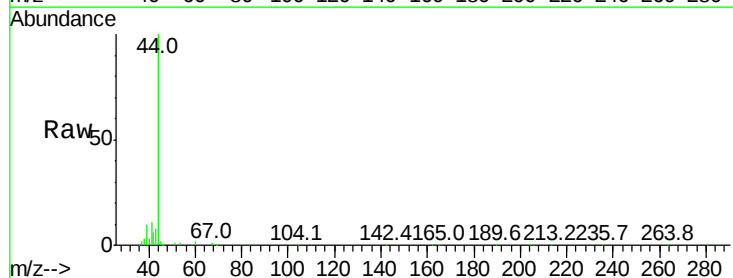
Acq: 8 Apr 2022 9:08

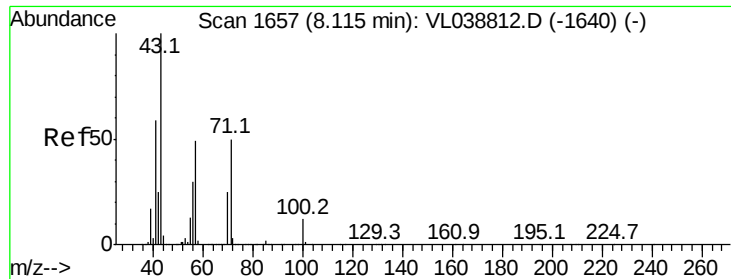
Tgt Ion: 41 Resp: 16344

Ion Ratio Lower Upper

41 100

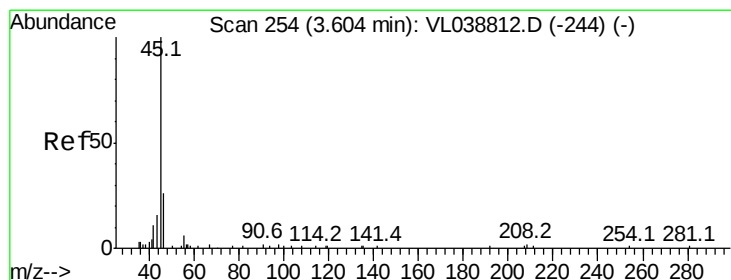
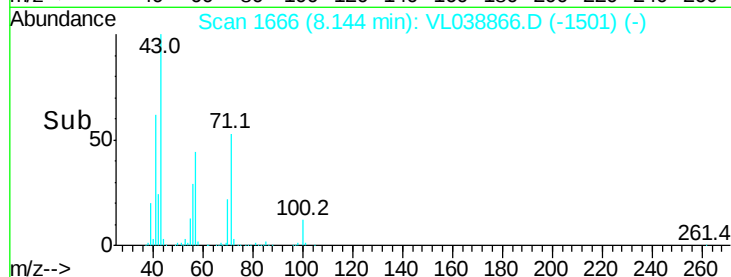
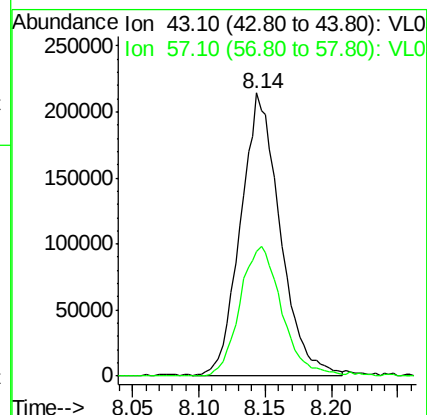
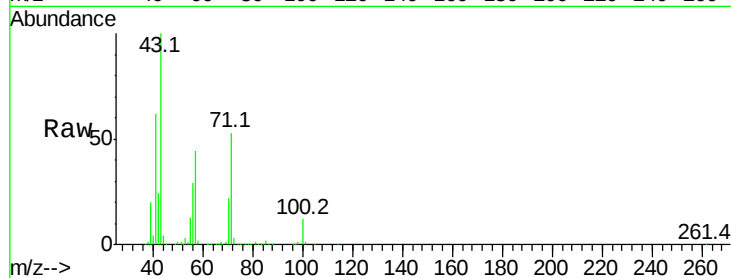
42 83.6 54.2 81.4#





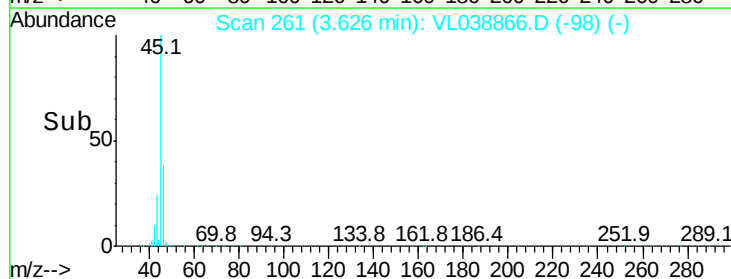
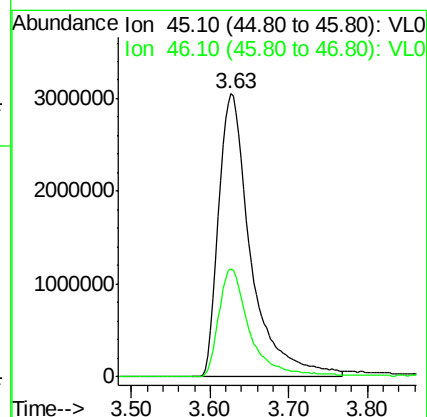
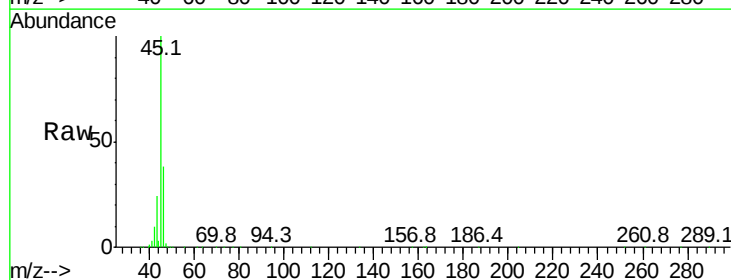
#10
 Heptane
 Concen: 2.64 ppbv
 RT: 8.14
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 8 Apr 2022 9:08

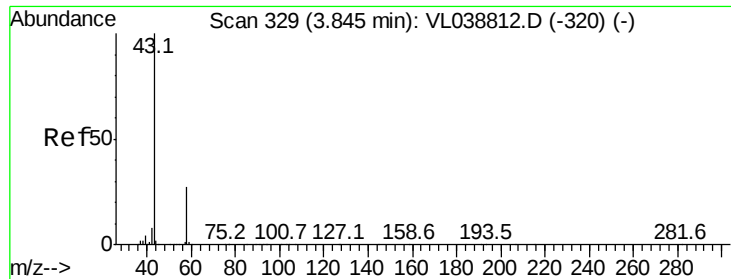
Tgt Ion: 43 Resp: 439835
 Ion Ratio Lower Upper
 43 100
 57 48.9 39.3 58.9



#13
 Ethanol
 Concen: 2156.34 ppbv
 RT: 3.63 min Scan# 261
 Delta R.T. 0.02 min
 Lab File: VL038866.D
 Acq: 8 Apr 2022 9:08

Tgt Ion: 45 Resp: 8661005
 Ion Ratio Lower Upper
 45 100
 46 37.3 0.0 0.0#





#15

Acetone

Concen: 2.82 ppbv

RT: 3.87 Instrument: MSVOA_1

Delta R.T.

Lab File: ClientSampleId:

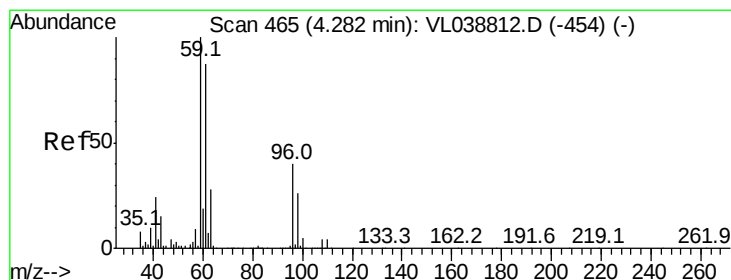
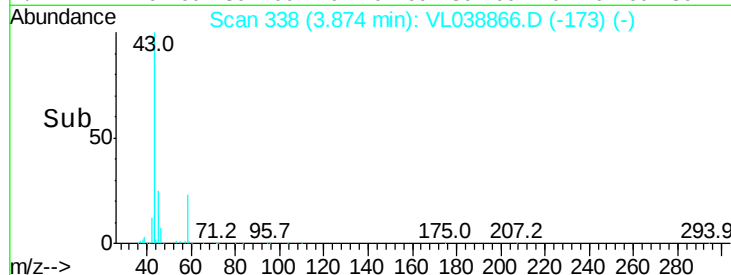
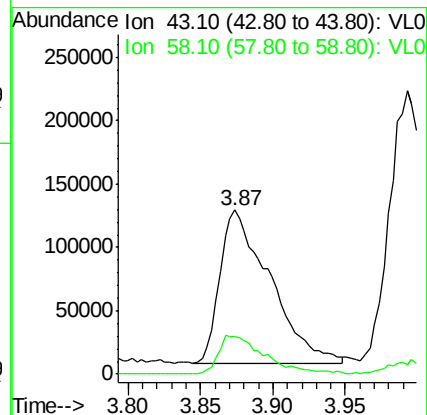
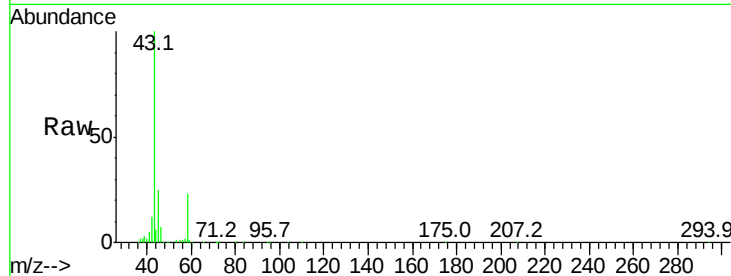
Acq: 8 Apr 2022 9:08

Tgt Ion: 43 Resp: 287841

Ion Ratio Lower Upper

43 100

58 23.8 22.5 33.7



#17

tert-Butyl alcohol

Concen: 0.74 ppbv

RT: 4.00 min Scan# 376

Delta R.T. -0.29 min

Lab File: VL038866.D

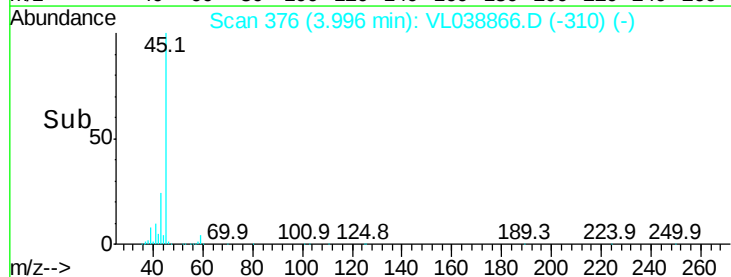
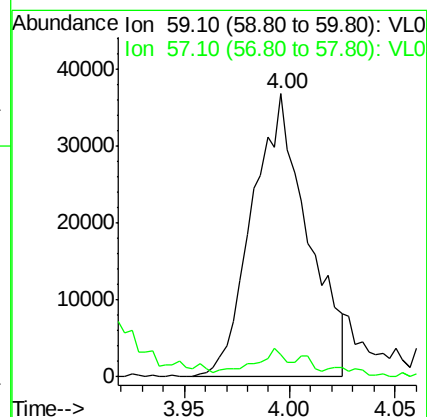
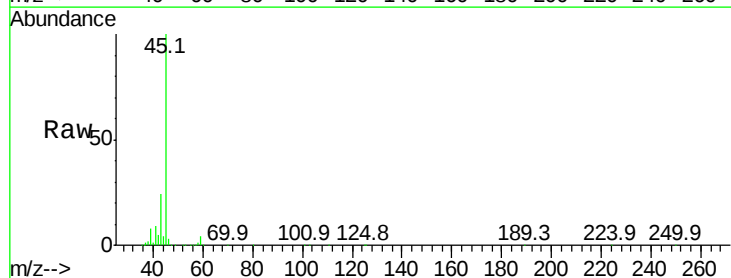
Acq: 8 Apr 2022 9:08

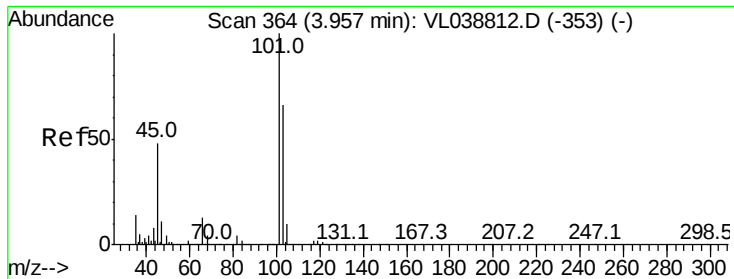
Tgt Ion: 59 Resp: 67410

Ion Ratio Lower Upper

59 100

57 10.8 8.5 12.7





#19

Isopropyl Alcohol

Concen: 39.46 ppbv

RT: 3.99 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

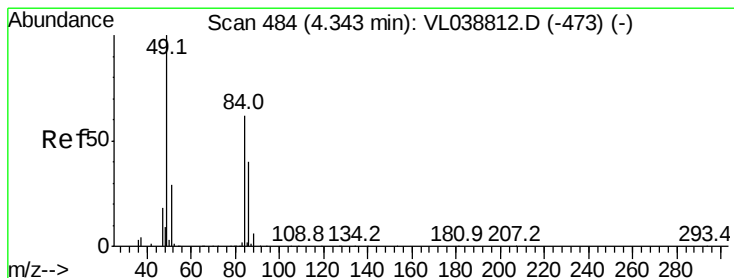
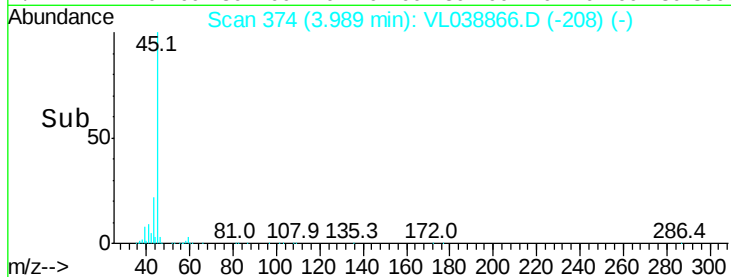
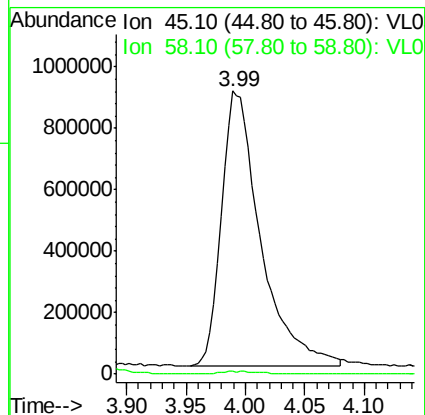
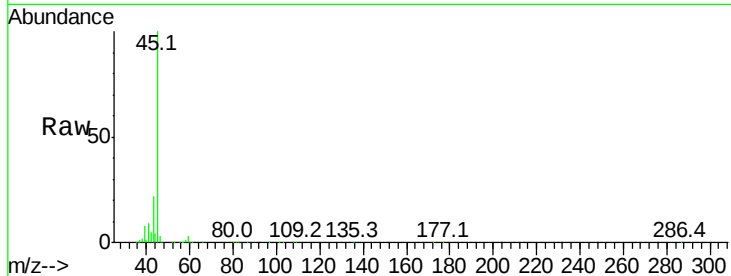
Acq: 8 Apr 2022 9:08

Tgt Ion: 45 Resp: 2055203

Ion Ratio Lower Upper

45 100

58 1.2 0.0 0.0#



#20

Methylene Chloride

Concen: 0.91 ppbv

RT: 4.37 min Scan# 492

Delta R.T. 0.03 min

Lab File: VL038866.D

Acq: 8 Apr 2022 9:08

Tgt Ion: 84 Resp: 33756

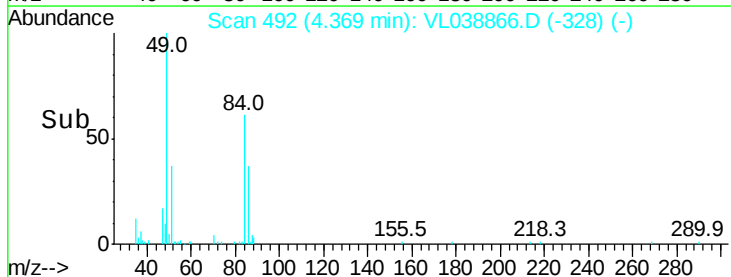
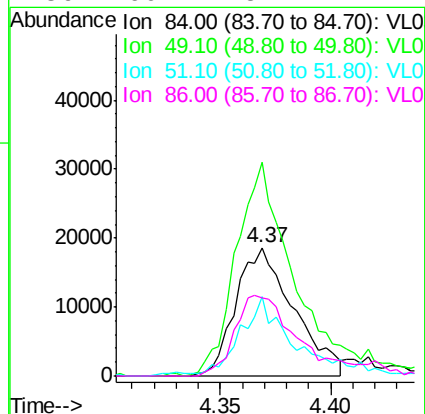
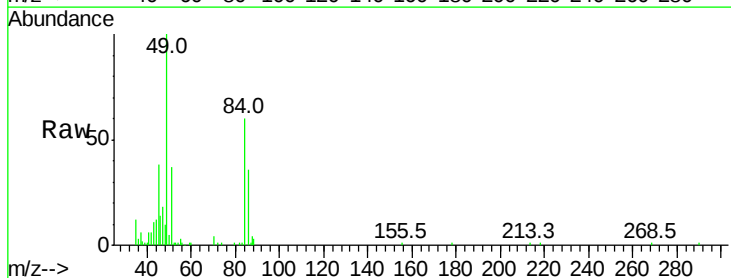
Ion Ratio Lower Upper

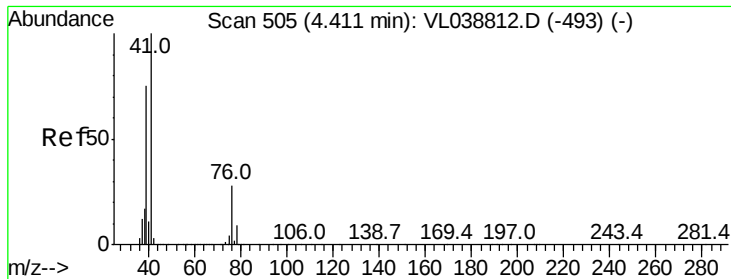
84 100

49 164.7 129.4 194.0

51 59.9 37.4 56.2#

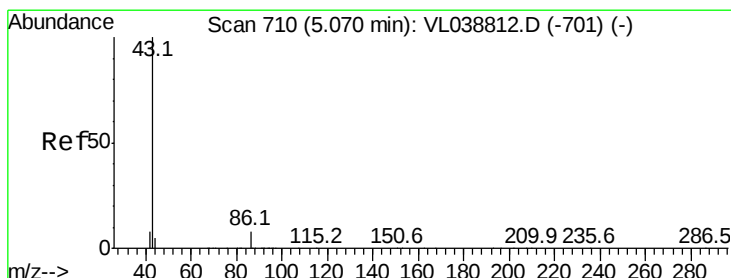
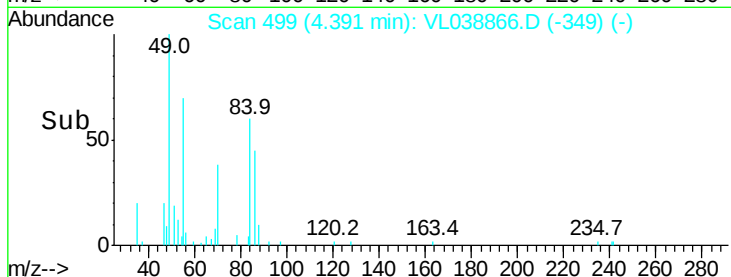
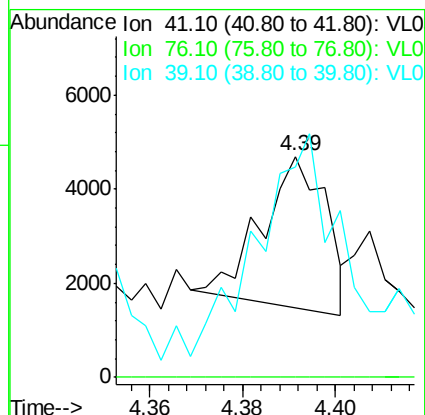
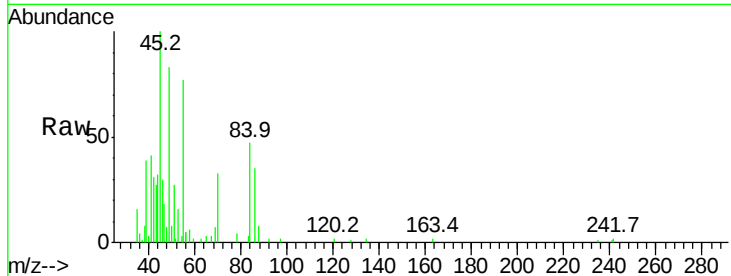
86 60.4 51.4 77.2





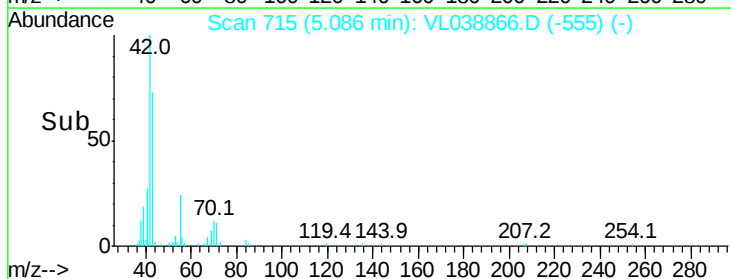
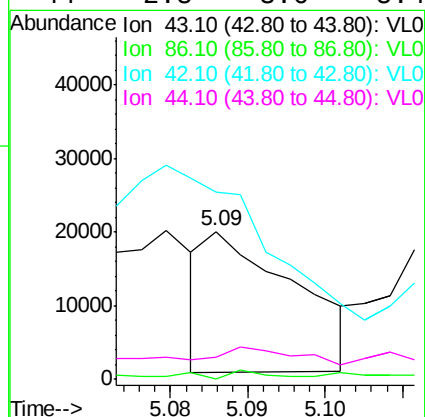
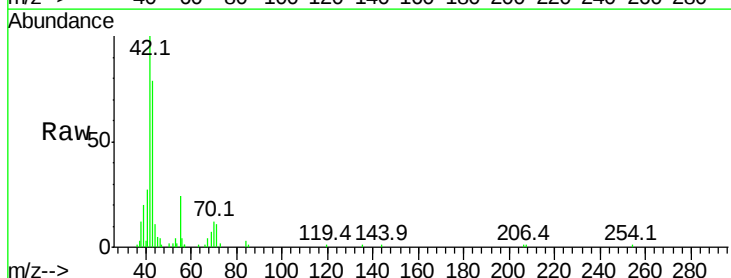
#21
 Allyl Chloride
 Concen: 0.04 ppbv
 RT: 4.39
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId:
 Acq: 8 Apr 2022 9:08

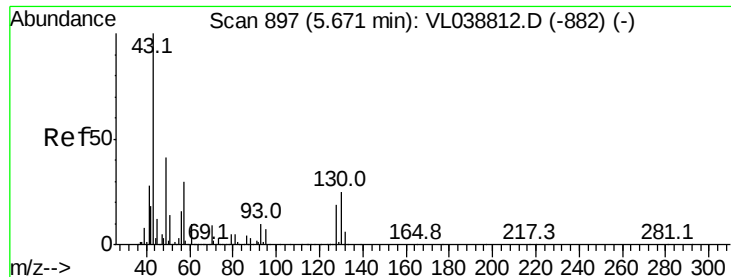
Tgt Ion: 41 Resp: 3054
 Ion Ratio Lower Upper
 41 100
 76 0.0 23.7 35.5#
 39 243.2 62.0 93.0#



#23
 Vinyl Acetate
 Concen: 0.16 ppbv
 RT: 5.09 min Scan# 715
 Delta R.T. 0.02 min
 Lab File: VL038866.D
 Acq: 8 Apr 2022 9:08

Tgt Ion: 43 Resp: 15597
 Ion Ratio Lower Upper
 43 100
 86 0.0 5.8 8.6#
 42 148.2 7.8 11.6#
 44 2.8 3.6 5.4#





#25

Ethyl Acetate

Concen: 0.72 ppbv

RT: 5.71 min

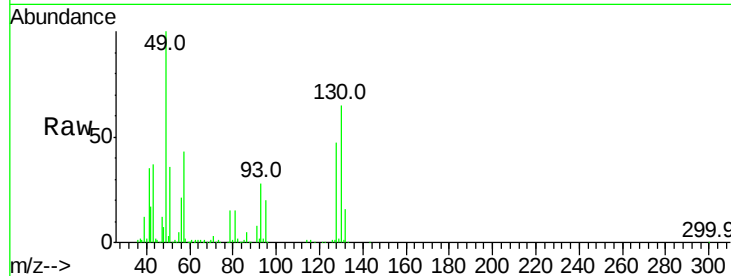
Delta R.T. 0.03 min

Lab File: VL038866.D

Acq: 8 Apr 2022 9:08

Tgt Ion: 43 Resp: 186200

Ion	Ratio	Lower	Upper
43	100		
45	5.5	8.4	12.6#
61	3.8	7.9	11.9#
70	4.0	5.6	8.4#



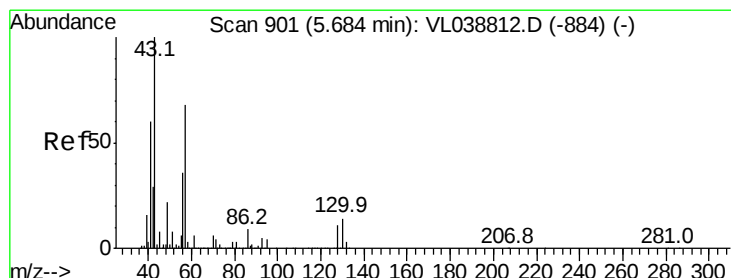
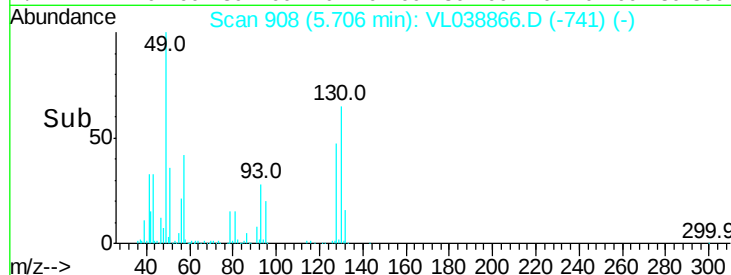
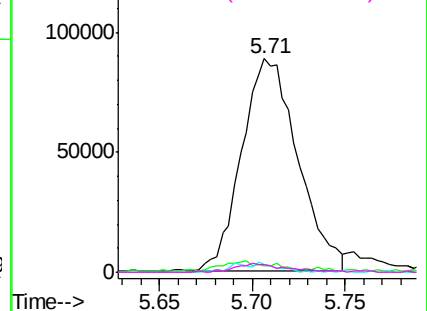
Abundance

Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 70.10 (69.80 to 70.80): VL0



#26

Hexane

Concen: 1.81 ppbv

RT: 5.71 min Scan# 909

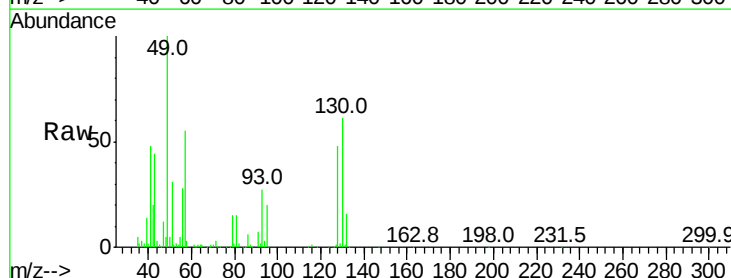
Delta R.T. 0.03 min

Lab File: VL038866.D

Acq: 8 Apr 2022 9:08

Tgt Ion: 57 Resp: 213320

Ion	Ratio	Lower	Upper
57	100		
41	91.6	72.0	108.0
43	94.4	186.6	280.0#
56	54.8	42.8	64.2



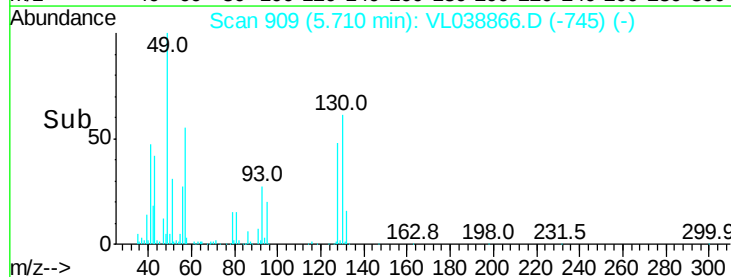
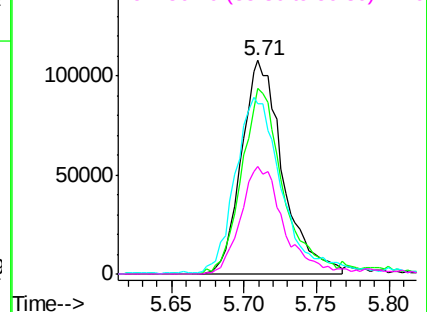
Abundance

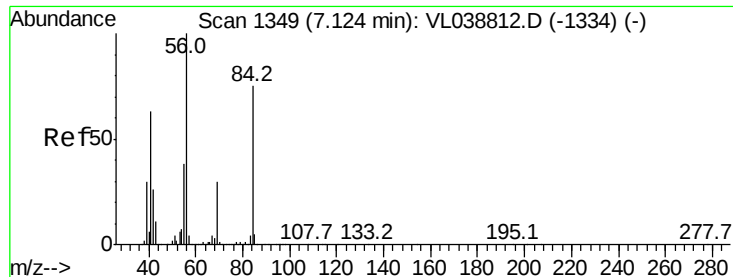
Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 43.10 (42.80 to 43.80): VL0

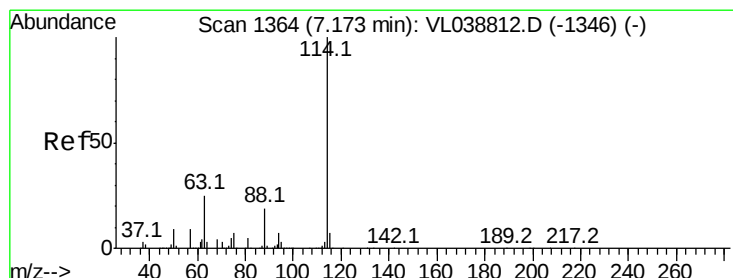
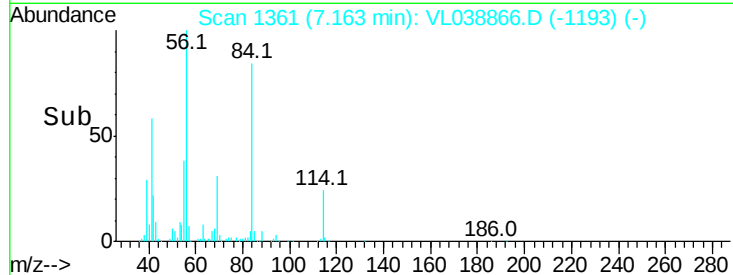
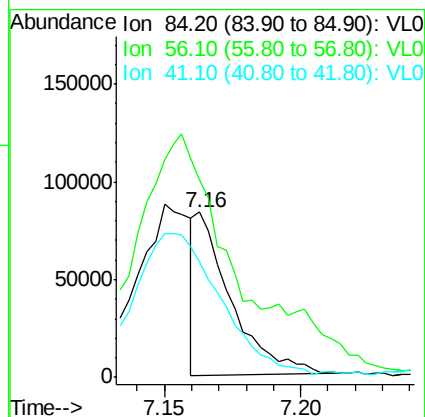
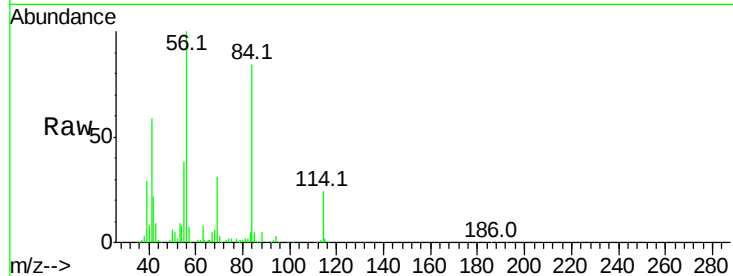
Ion 56.10 (55.80 to 56.80): VL0





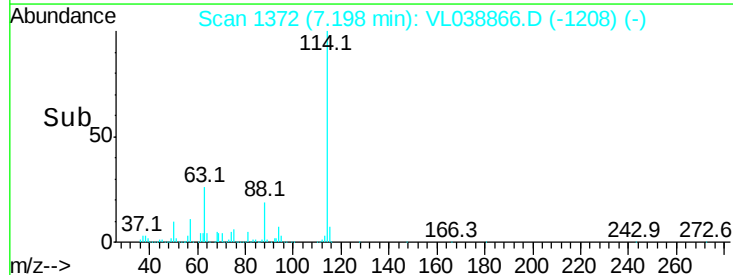
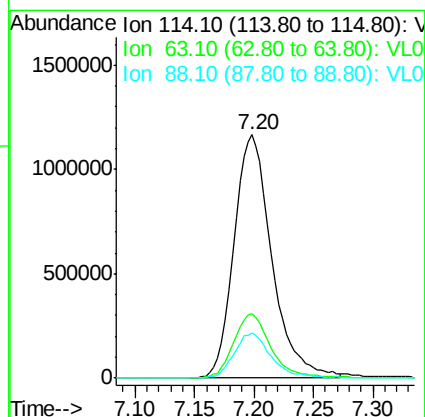
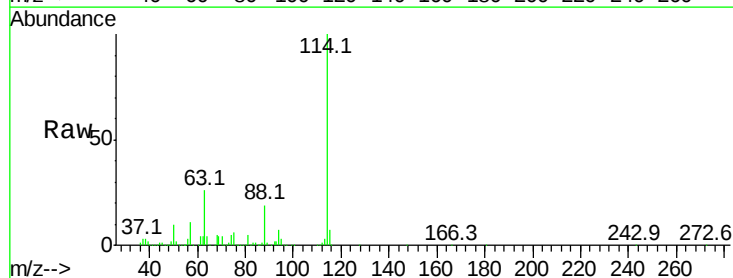
#30
Cyclohexane
Concen: 0.72 ppbv
RT: 7.16
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 8 Apr 2022 9:08

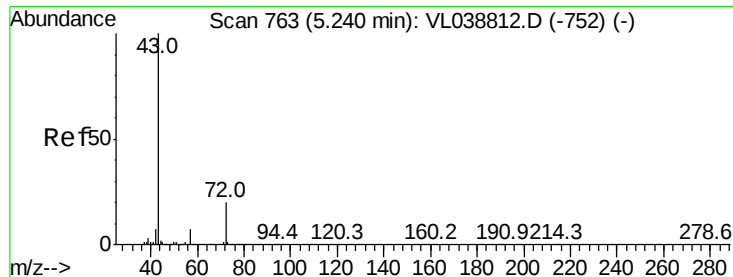
Tgt Ion: 84 Resp: 74522
Ion Ratio Lower Upper
84 100
56 439.5 114.4 171.6#
41 0.0 69.0 103.4#



#33
1,4-Difluorobenzene
Concen: 10.00 ppbv
RT: 7.20 min Scan# 1372
Delta R.T. 0.03 min
Lab File: VL038866.D
Acq: 8 Apr 2022 9:08

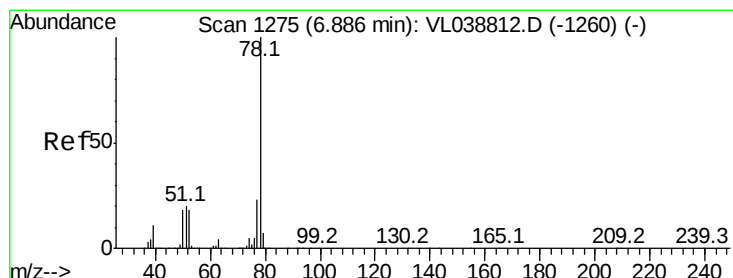
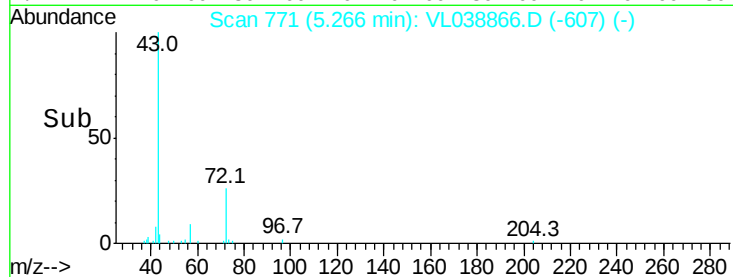
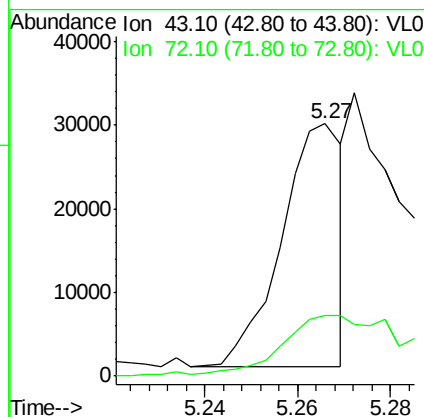
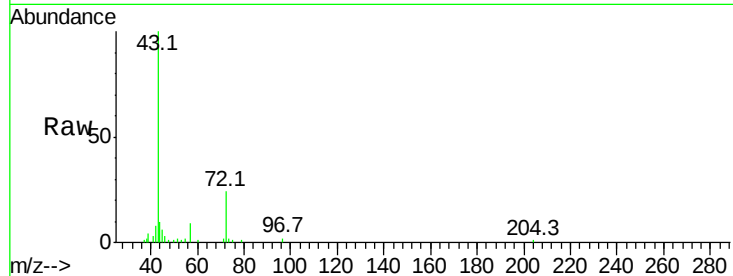
Tgt Ion: 114 Resp: 2565084
Ion Ratio Lower Upper
114 100
63 26.5 19.8 29.8
88 18.4 14.2 21.4





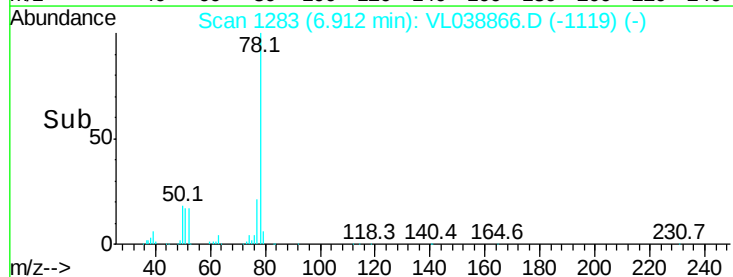
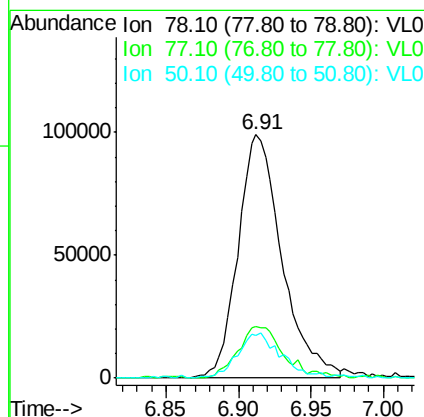
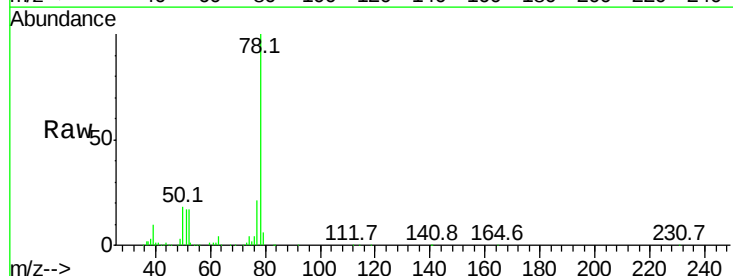
#34
 2-Butanone
 Concen: 0.26 ppbv
 RT: 5.27
 Delta R.T. MSVOA_L
 Lab File: ClientSampled :
 Acq: 8 Apr 2022 9:08

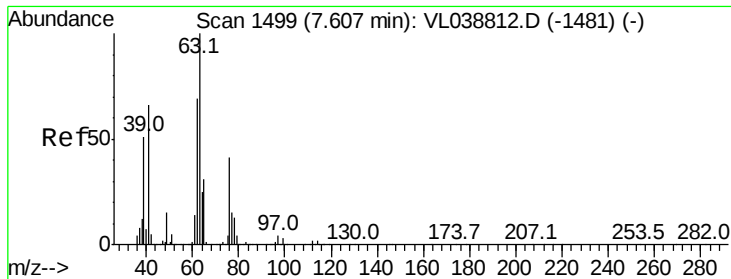
Tgt Ion: 43 Resp: 26439
 Ion Ratio Lower Upper
 43 100
 72 0.0 16.9 25.3#



#36
 Benzene
 Concen: 0.89 ppbv
 RT: 6.91 min Scan# 1283
 Delta R.T. 0.03 min
 Lab File: VL038866.D
 Acq: 8 Apr 2022 9:08

Tgt Ion: 78 Resp: 208601
 Ion Ratio Lower Upper
 78 100
 77 21.5 18.2 27.2
 50 17.6 14.0 21.0





#39

1,2-Dichloropropane

Concen: 7.36 ppbv

RT: 7.20 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

Acq: 8 Apr 2022 9:08

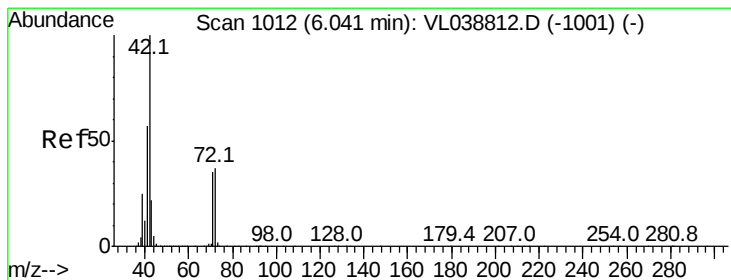
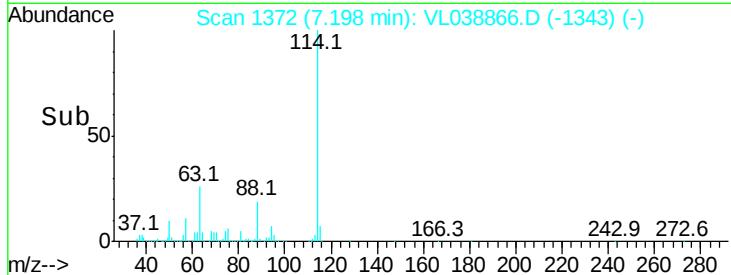
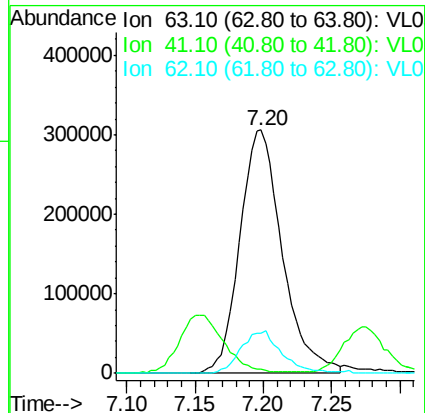
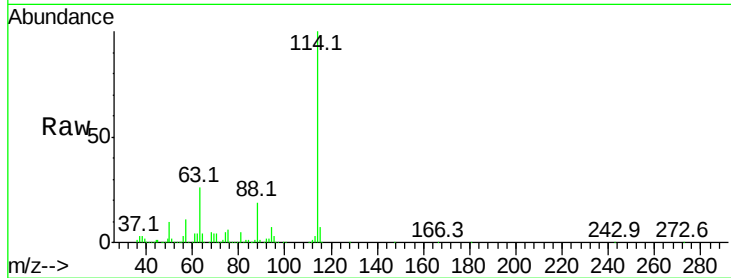
Tgt Ion: 63 Resp: 656555

Ion Ratio Lower Upper

63 100

41 0.0 53.0 79.6#

62 16.5 55.0 82.4#



#41

Tetrahydrofuran

Concen: 0.79 ppbv

RT: 6.08 min Scan# 1024

Delta R.T. 0.04 min

Lab File: VL038866.D

Acq: 8 Apr 2022 9:08

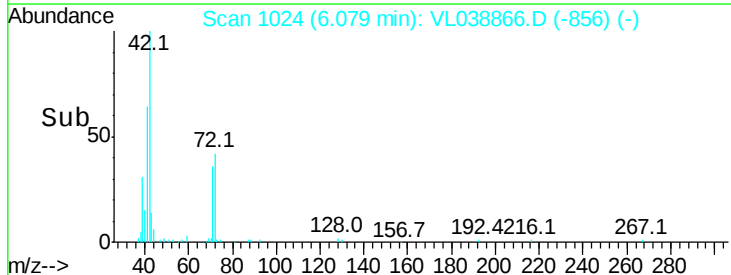
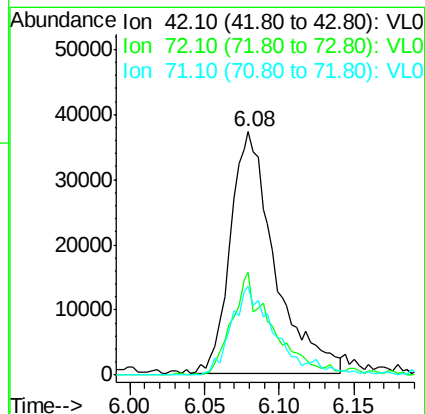
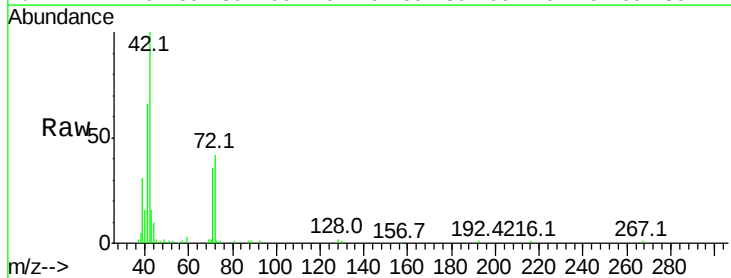
Tgt Ion: 42 Resp: 76178

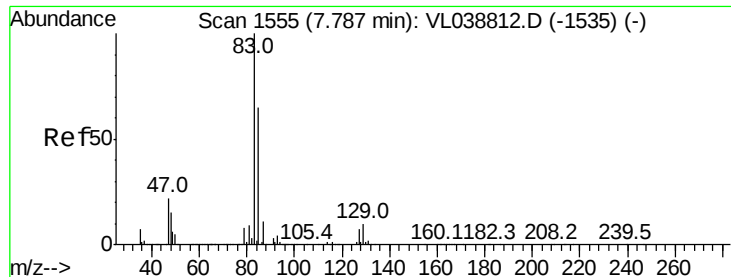
Ion Ratio Lower Upper

42 100

72 40.6 31.4 47.0

71 37.3 30.2 45.4





#42

Bromodichloromethane

Concen: 0.12 ppbv

RT: 7.82 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

Acq: 8 Apr 2022 9:08

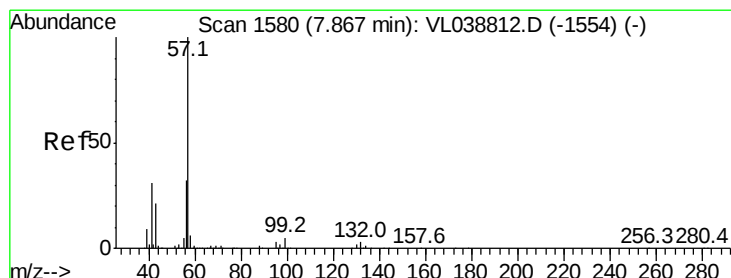
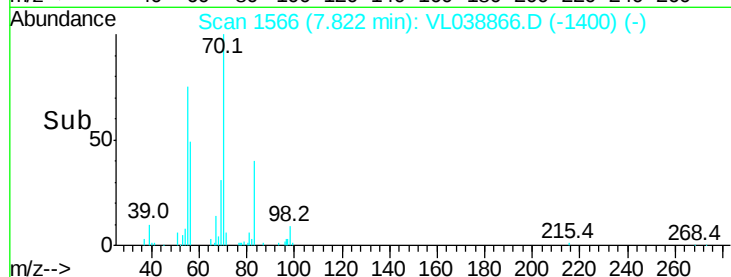
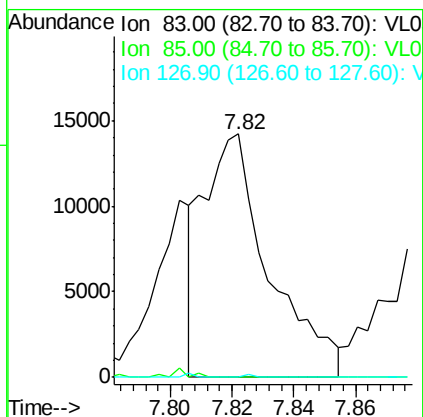
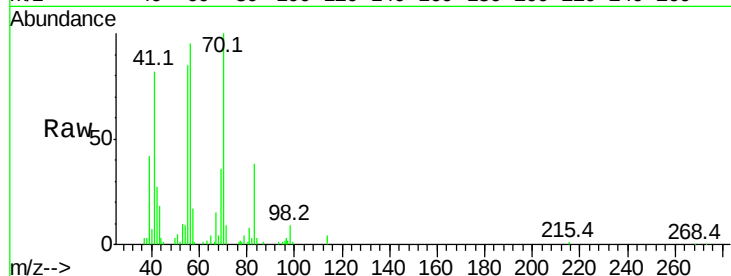
Tgt Ion: 83 Resp: 20833

Ion Ratio Lower Upper

83 100

85 0.0 51.7 77.5#

127 0.0 5.9 8.9#



#44

2,2,4-Trimethylpentane

Concen: 0.63 ppbv

RT: 7.89 min Scan# 1587

Delta R.T. 0.02 min

Lab File: VL038866.D

Acq: 8 Apr 2022 9:08

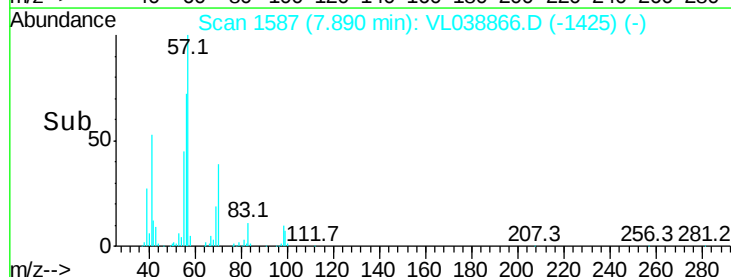
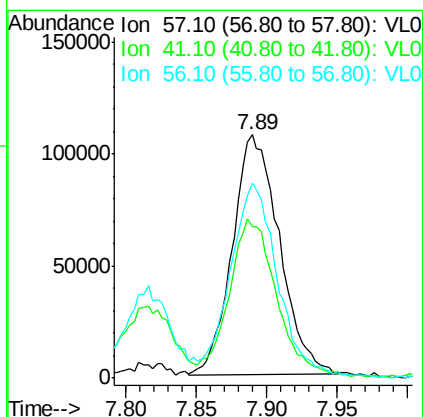
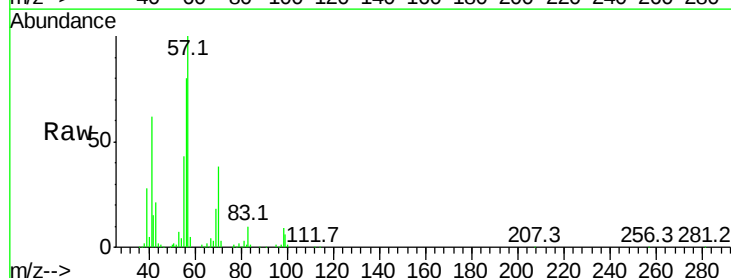
Tgt Ion: 57 Resp: 248588

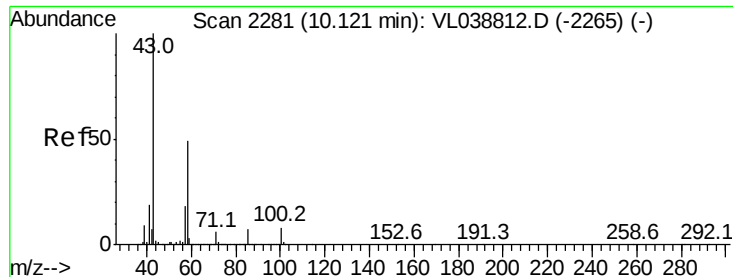
Ion Ratio Lower Upper

57 100

41 68.2 25.0 37.4#

56 83.3 25.3 37.9#





#51

2-Hexanone

Concen: 1.17 ppbv

RT: 10.13

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 8 Apr 2022 9:08

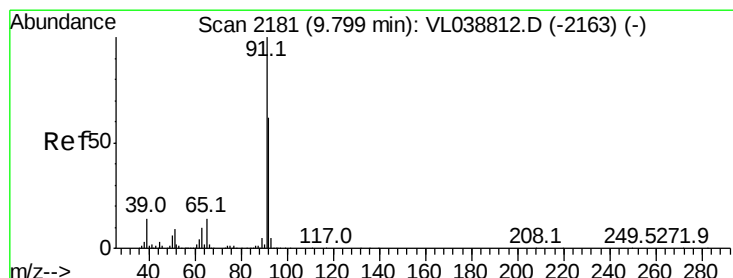
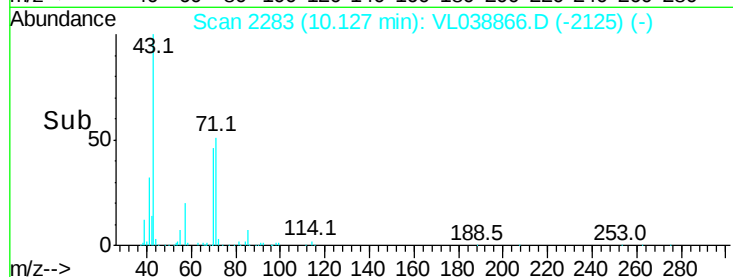
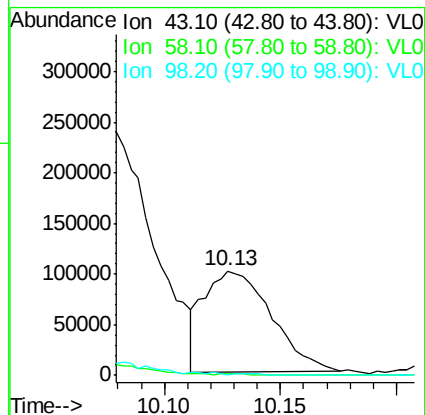
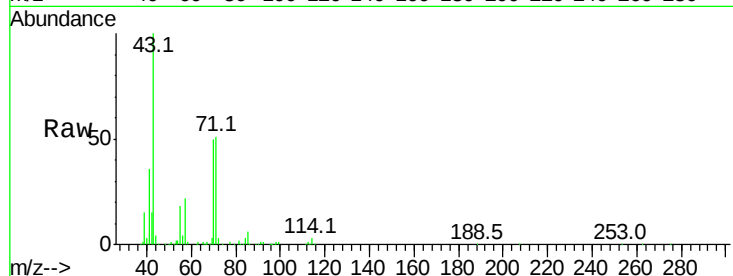
Tgt Ion: 43 Resp: 201787

Ion Ratio Lower Upper

43 100

58 0.0 41.4 62.0#

98 0.0 0.1 0.1#



#53

Toluene

Concen: 6.36 ppbv

RT: 9.83 min Scan# 2190

Delta R.T. 0.03 min

Lab File: VL038866.D

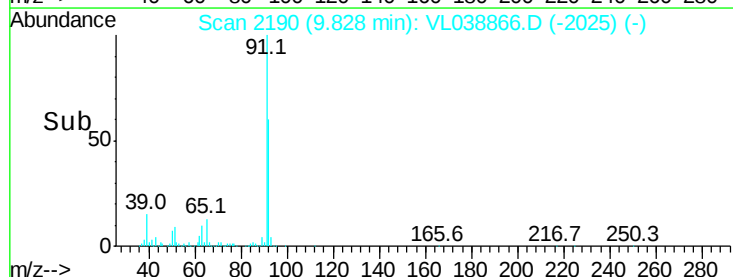
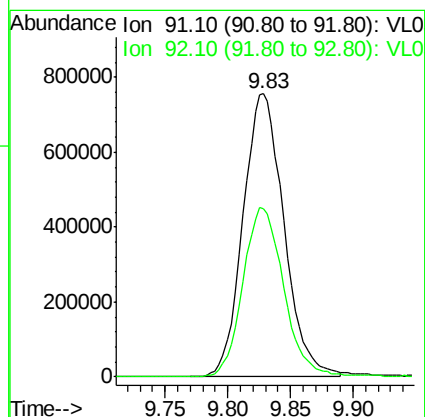
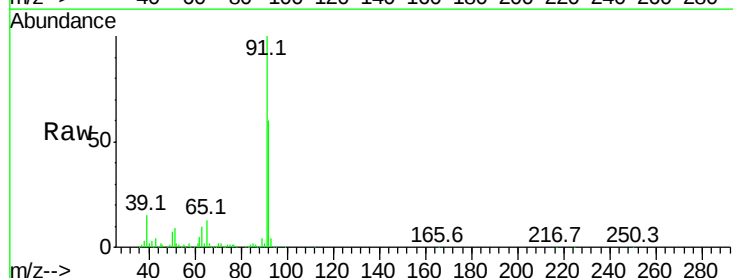
Acq: 8 Apr 2022 9:08

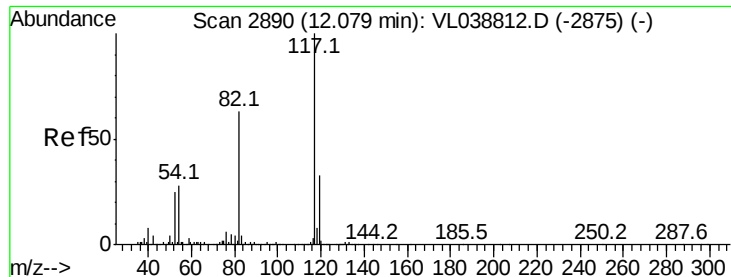
Tgt Ion: 91 Resp: 1714213

Ion Ratio Lower Upper

91 100

92 60.0 49.2 73.8

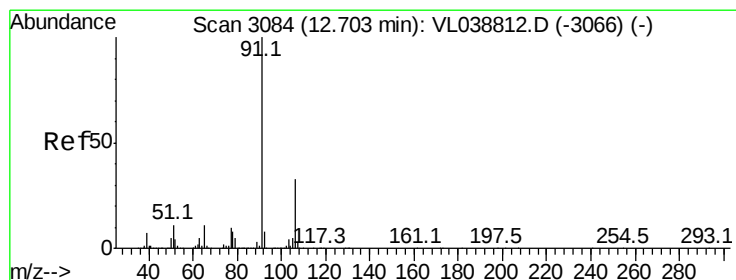
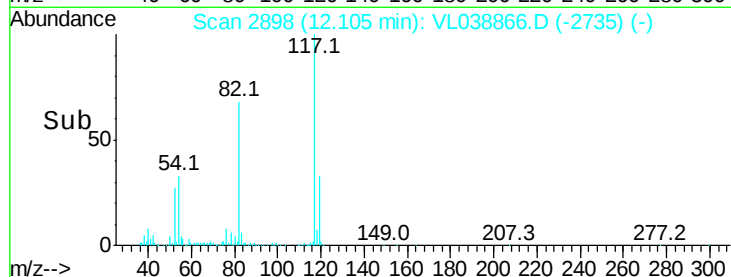
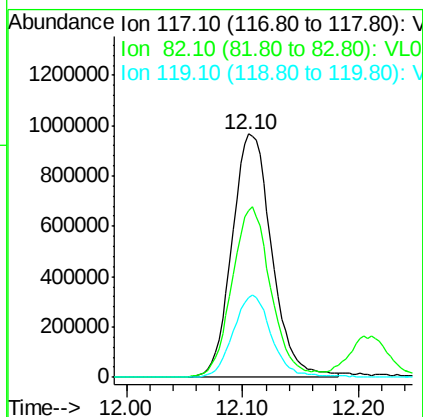
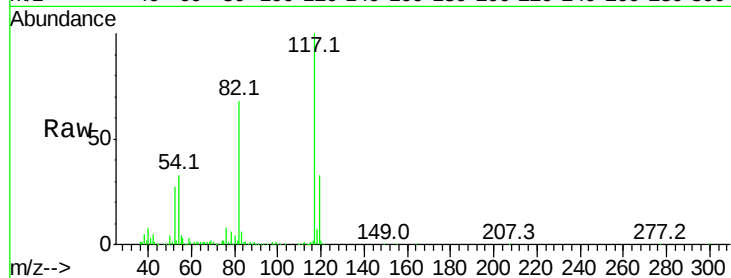




#55
Chlorobenzene-d5
Concen: 10.00 ppbv
RT: 12.10 min
Instrument: MSVOA_1
Delta R.T.: 0.03 min
Lab File: VL038866.D
ClientSampleId: 1161-8-01-SG-3DL
Acq: 8 Apr 2022 9:08

Tgt Ion: 117 Resp: 2297314

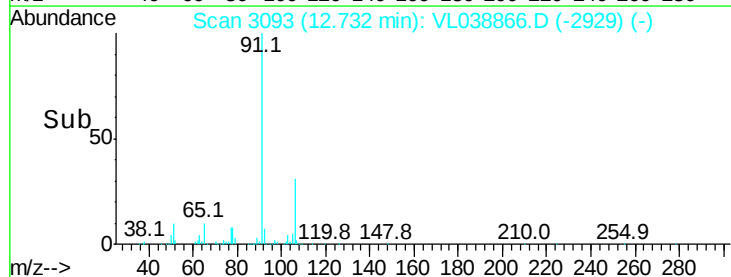
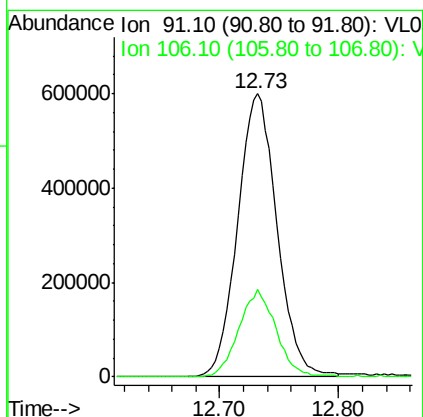
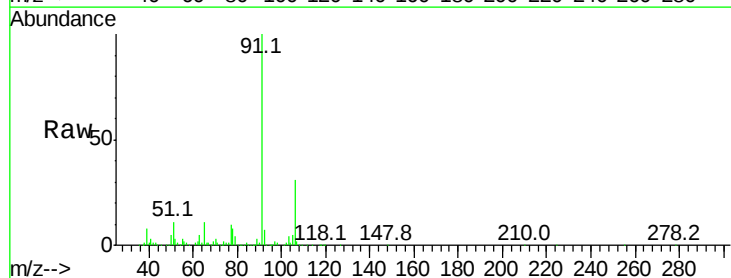
Ion	Ratio	Lower	Upper
117	100		
82	69.3	53.0	79.6
119	33.3	24.9	37.3

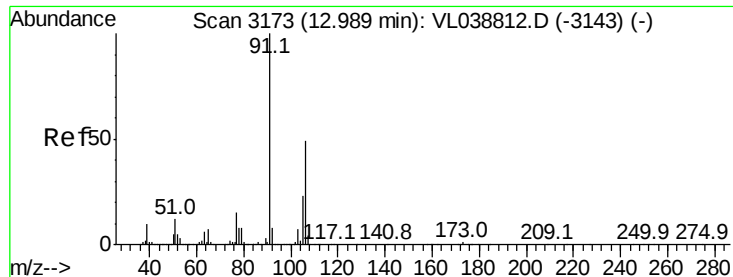


#58
Ethyl Benzene
Concen: 4.00 ppbv
RT: 12.73 min Scan# 3093
Delta R.T.: 0.03 min
Lab File: VL038866.D
Acq: 8 Apr 2022 9:08

Tgt Ion: 91 Resp: 1371650

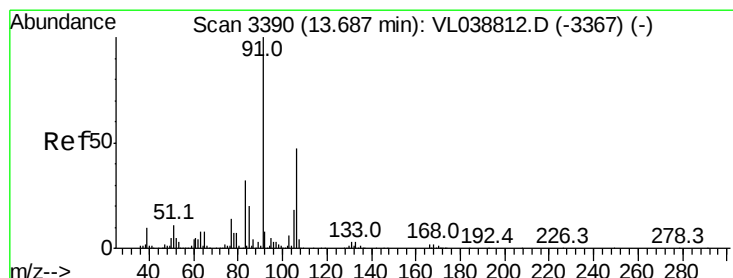
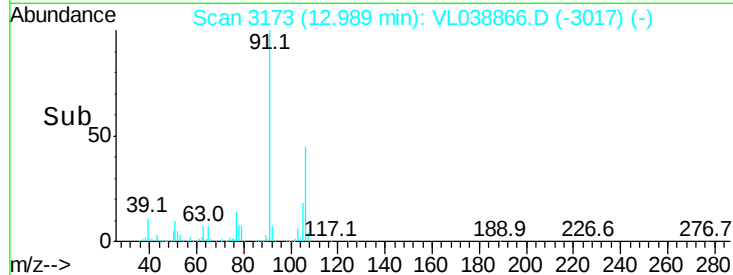
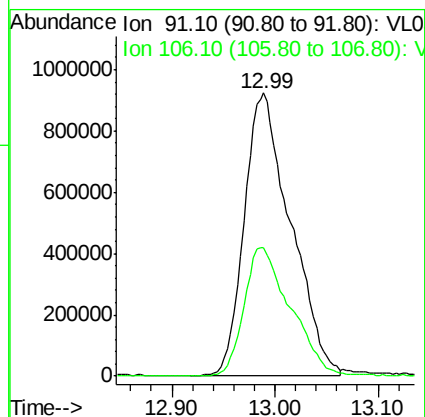
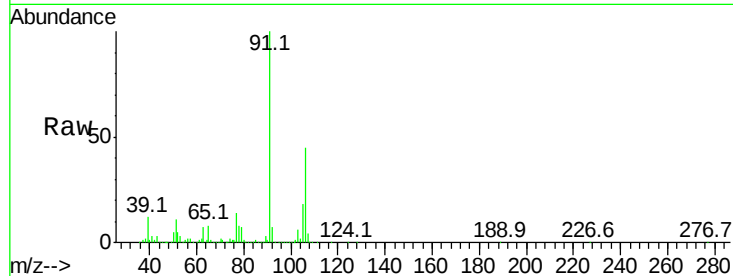
Ion	Ratio	Lower	Upper
91	100		
106	31.0	26.7	40.1





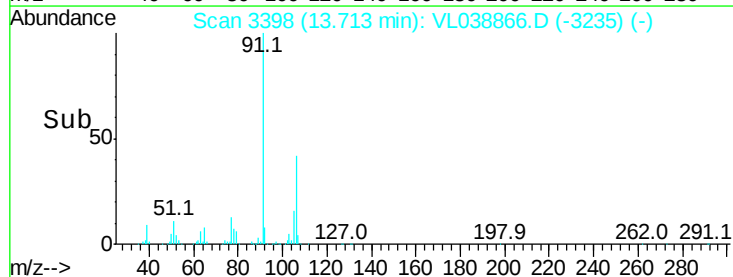
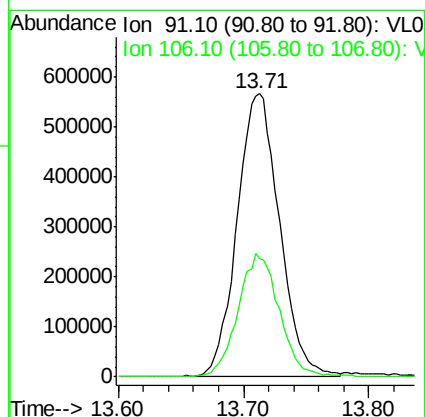
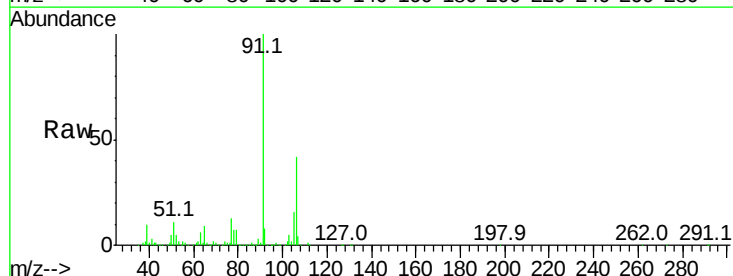
#59
m/p-Xylene
Concen: 9.96 ppbv
RT: 12.99 min
Delta R.T. 0.03 min
Lab File: VL038866.D
Acq: 8 Apr 2022 9:08

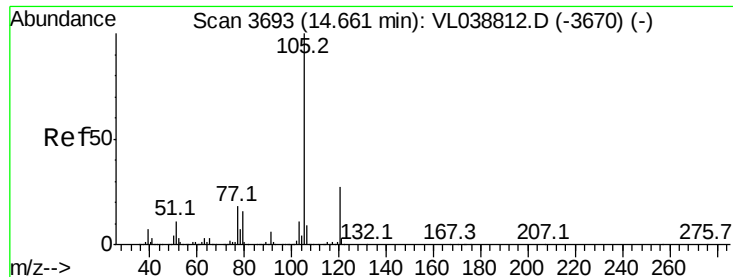
Tgt Ion: 91 Resp: 2873426
Ion Ratio Lower Upper
91 100
106 46.2 37.1 55.7



#60
o-Xylene
Concen: 4.90 ppbv
RT: 13.71 min Scan# 3398
Delta R.T. 0.03 min
Lab File: VL038866.D
Acq: 8 Apr 2022 9:08

Tgt Ion: 91 Resp: 1321103
Ion Ratio Lower Upper
91 100
106 43.0 23.8 71.4





#62

Isopropylbenzene

Concen: 0.51 ppbv

RT: 14.69

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

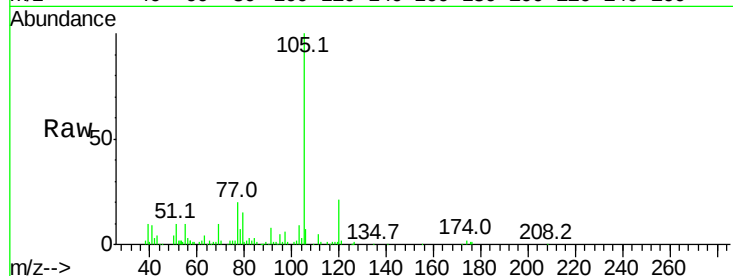
Acq: 8 Apr 2022 9:08

Tgt Ion:105 Resp: 208123

Ion Ratio Lower Upper

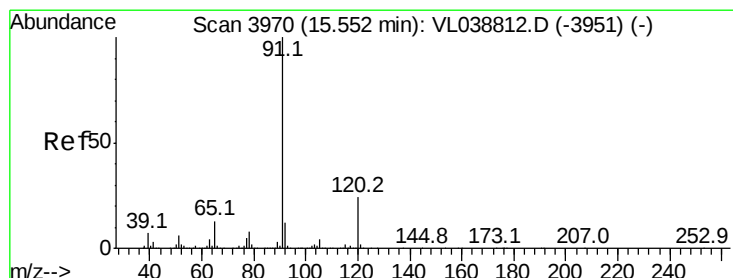
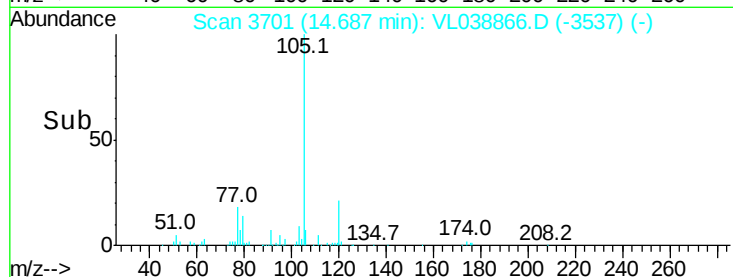
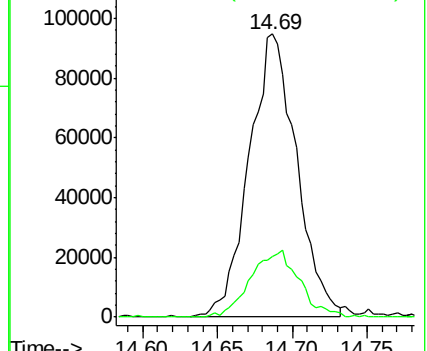
105 100

120 24.5 21.8 32.8



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#64

n-propylbenzene

Concen: 0.73 ppbv

RT: 15.58 min Scan# 3979

Delta R.T. 0.03 min

Lab File: VL038866.D

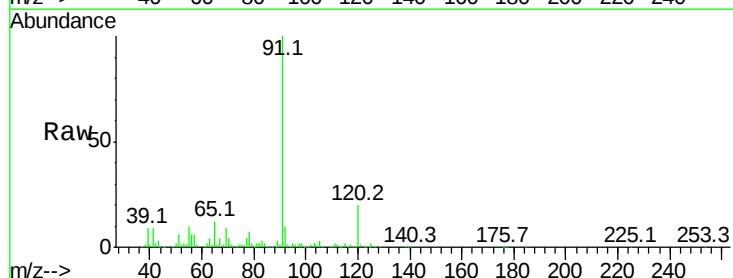
Acq: 8 Apr 2022 9:08

Tgt Ion:120 Resp: 76283

Ion Ratio Lower Upper

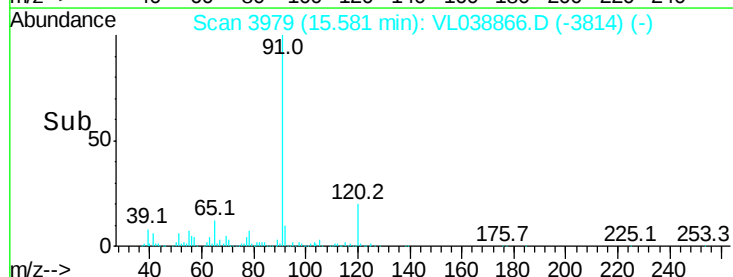
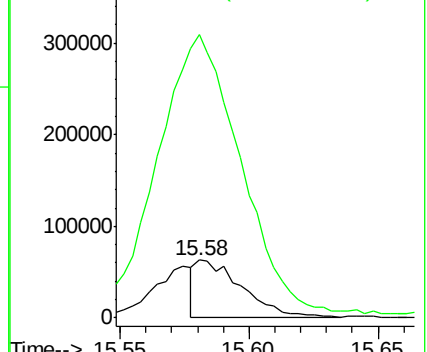
120 100

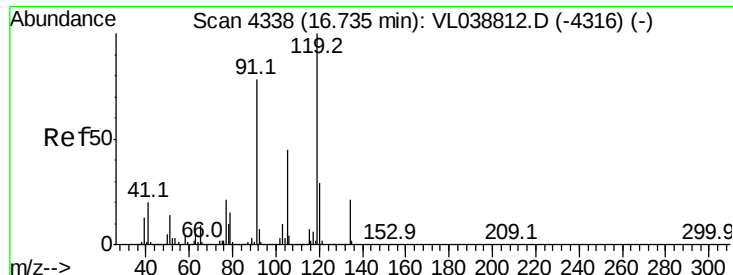
91 941.8 360.6 540.8#



Abundance Ion 120.20 (119.90 to 120.90): V

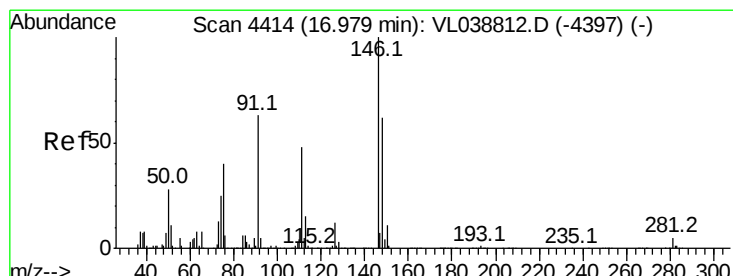
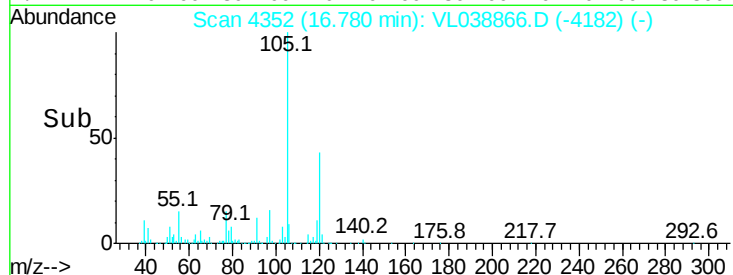
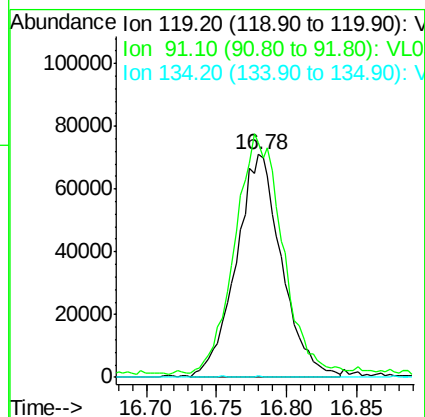
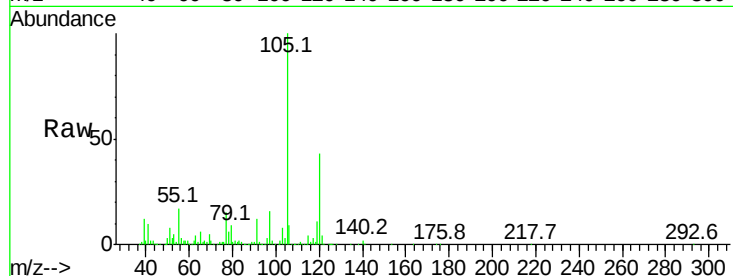
Ion 91.10 (90.80 to 91.80): VL0





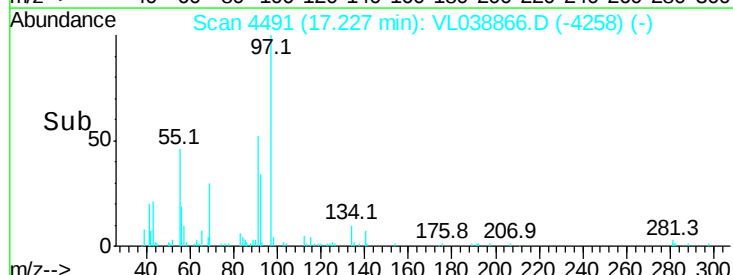
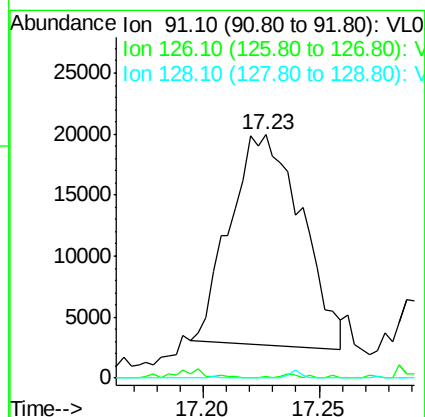
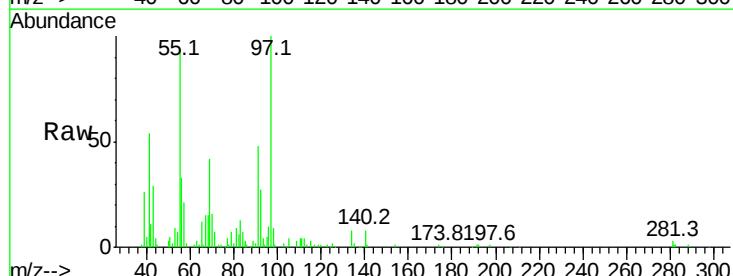
#65
 tert-Butylbenzene
 Concen: 0.45 ppbv
 RT: 16.78 min
 Delta R.T. 0.25 min
 Lab File: VL038866.D
 Acq: 8 Apr 2022 9:08

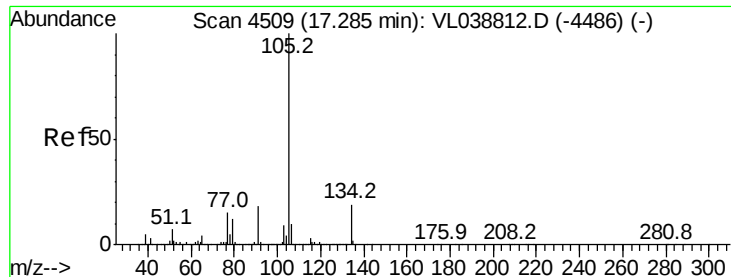
Tgt Ion: 119 Resp: 161049
 Ion Ratio Lower Upper
 119 100
 91 117.8 62.8 94.2#
 134 0.3 16.2 24.4#



#66
 Benzyl Chloride
 Concen: 0.51 ppbv
 RT: 17.23 min Scan# 4491
 Delta R.T. 0.25 min
 Lab File: VL038866.D
 Acq: 8 Apr 2022 9:08

Tgt Ion: 91 Resp: 37020
 Ion Ratio Lower Upper
 91 100
 126 0.7 15.4 23.0#
 128 0.6 4.7 7.1#





#67

sec-Butylbenzene

Concen: 0.31 ppbv

RT: 17.31

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

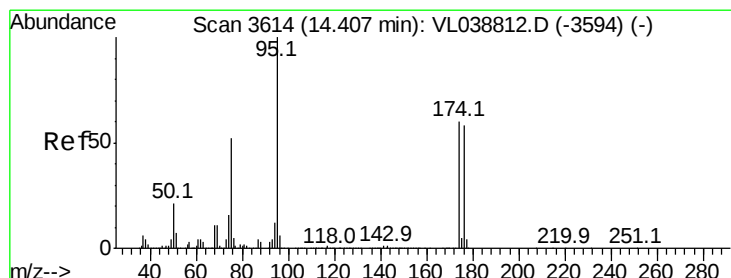
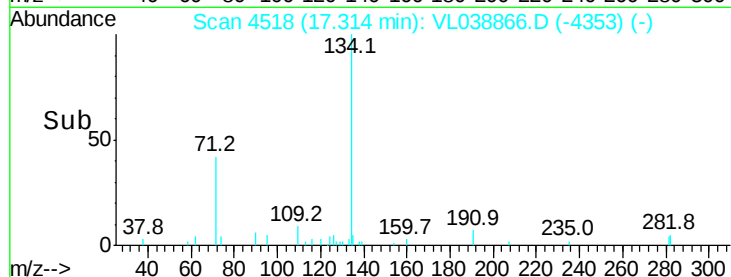
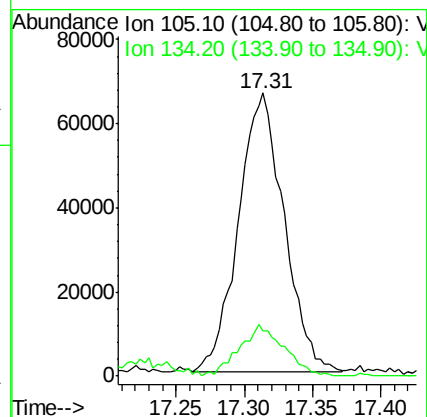
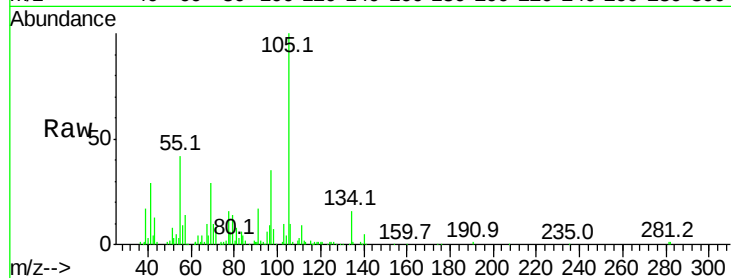
Acq: 8 Apr 2022 9:08

Tgt Ion: 105 Resp: 154266

Ion Ratio Lower Upper

105 100

134 18.0 15.1 22.7



#68

1-Bromo-4-Fluorobenzene

Concen: 10.84 ppbv

RT: 14.44 min Scan# 3623

Delta R.T. 0.03 min

Lab File: VL038866.D

Acq: 8 Apr 2022 9:08

Tgt Ion: 95 Resp: 1888363

Ion Ratio Lower Upper

95 100

174 59.3 52.0 78.0

175 4.3 4.0 6.0

