

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL040722\
 Data File : VL038855.D
 Acq On : 8 Apr 2022 00:06
 Operator : SY/AP
 Sample : N2273-06DL 10X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA L
 ClientSampleId :
 1160-1-SG-3DL

Quant Time: Apr 11 05:17:36 2022
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL040522AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Apr 06 06:12:53 2022
 QLast Update : Wed Apr 06 06:12:53 2022
 Response via : Initial Calibration

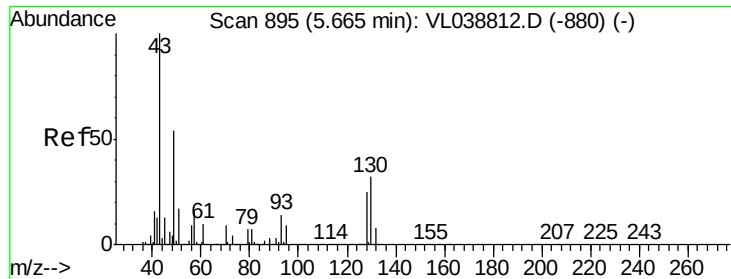
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.70	49	1194702	10.00	ppbv	0.04
33) 1,4-Difluorobenzene	7.21	114	3007706	10.00	ppbv	0.04
55) Chlorobenzene-d5	12.12	117	2700531	10.00	ppbv	0.04

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.45	95	2130049	10.40	ppbv	0.04
Spiked Amount	10.000	Range	65 - 135	Recovery	=	104.00%

Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.07	85	5992	0.035 ppbv	94
3) Chlorodifluoromethane	3.02	51	7875	0.054 ppbv #	92
9) Propene	3.23	41	104946	1.360 ppbv	98
10) Heptane	8.16	43	141996	0.731 ppbv	96
13) Ethanol	3.63	45	221912	47.336 ppbv #	100
15) Acetone	3.87	43	19549676	164.361 ppbv #	82
16) 1,3-Butadiene	3.38	39	1347414	19.816 ppbv #	11
17) tert-Butyl alcohol	3.87	59	331608	3.109 ppbv #	1
19) Isopropyl Alcohol	3.99	45	206859	3.403 ppbv #	100
20) Methylene Chloride	4.37	84	13094	0.304 ppbv #	60
25) Ethyl Acetate	5.71	43	57412	0.190 ppbv	99
26) Hexane	5.72	57	41117	0.299 ppbv #	73
30) Cyclohexane	7.17	84	23213	0.192 ppbv #	1
34) 2-Butanone	5.28	43	51843	0.436 ppbv	95
36) Benzene	6.93	78	15855	0.058 ppbv #	89
39) 1,2-Dichloropropane	7.21	63	744371	7.113 ppbv #	26
44) 2,2,4-Trimethylpentane	7.91	57	64328	0.139 ppbv #	43
50) 4-Methyl-2-Pentanone	8.78	43	166891	0.624 ppbv	93
51) 2-Hexanone	9.83	43	3896206	19.343 ppbv #	27
53) Toluene	9.84	91	249324	0.789 ppbv	99
58) Ethyl Benzene	12.74	91	468273	1.160 ppbv #	87
59) m/p-Xylene	13.00	91	1493985	4.407 ppbv	100
60) o-Xylene	13.72	91	498827	1.572 ppbv	94
61) Styrene	13.56	104	10154	0.053 ppbv #	53
64) n-propylbenzene	15.60	120	10443	0.084 ppbv #	1
65) tert-Butylbenzene	16.79	119	21478	0.051 ppbv #	1
71) 2-Chlorotoluene	15.59	91	100979	0.282 ppbv #	42
72) 4-Ethyltoluene	15.86	105	128323	0.339 ppbv	97
73) 1,3,5-Trimethylbenzene	16.03	105	113901	0.335 ppbv	92
74) 1,2,4-Trimethylbenzene	16.79	105	204123	0.567 ppbv #	71

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.70 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 8 Apr 2022 00:00

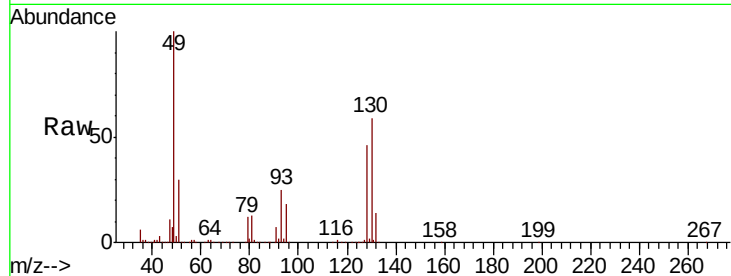
Tot Ion: 49 Resp: 1194702

Ion Ratio Lower Upper

49 100

128 46.8 24.1 72.3

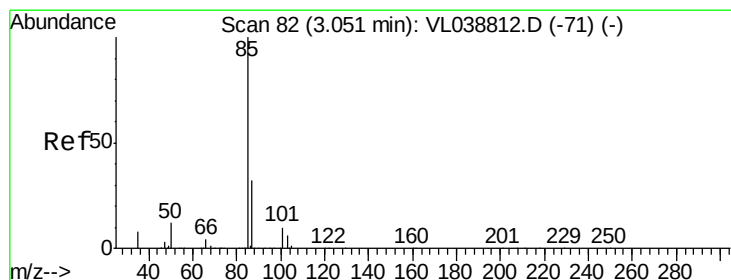
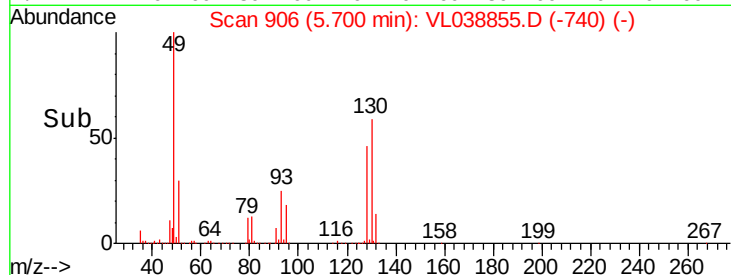
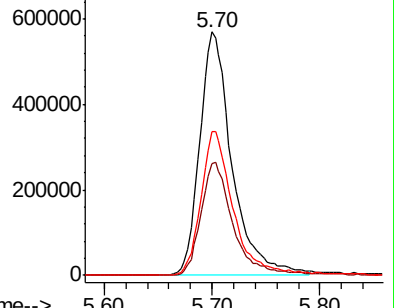
130 58.7 30.9 92.8



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



#2

Dichlorodifluoromethane

Concen: 0.035 ppbv

RT: 3.07 min Scan# 89

Delta R.T. 0.02 min

Lab File: VL038855.D

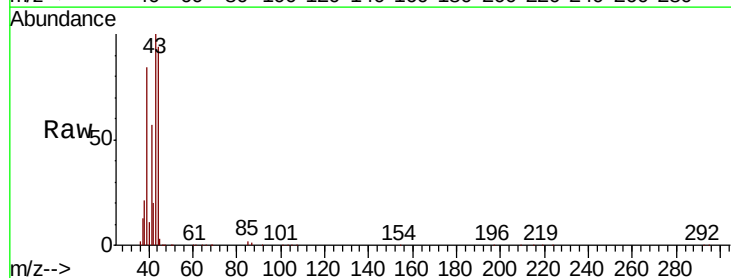
Acq: 8 Apr 2022 00:06

Tgt Ion: 85 Resp: 5992

Ion Ratio Lower Upper

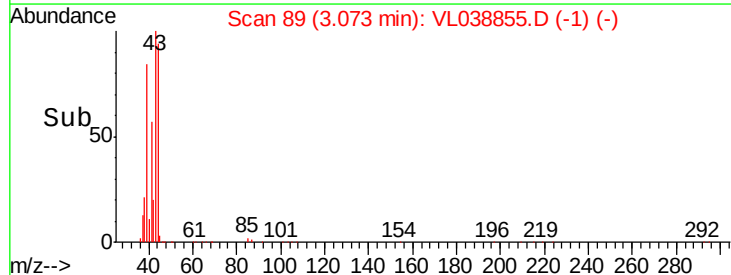
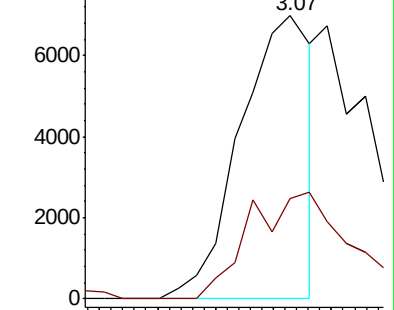
85 100

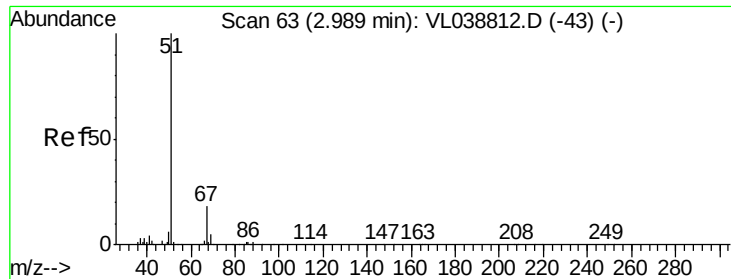
87 35.6 25.9 38.9



Abundance Ion 85.00 (84.70 to 85.70): VL0

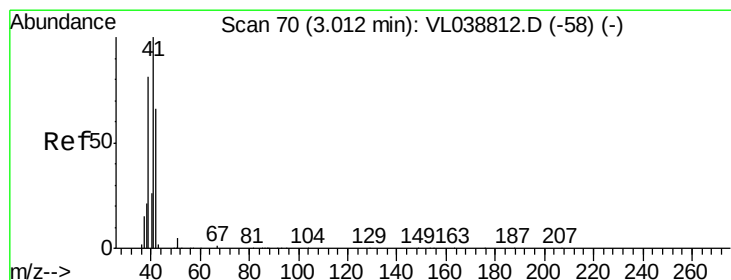
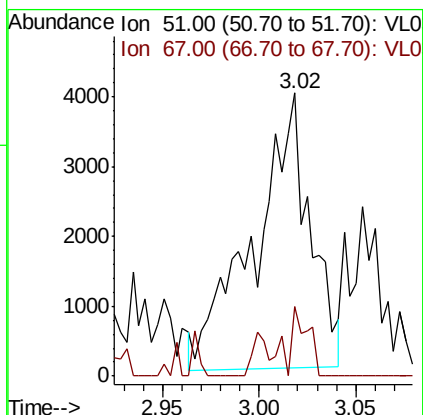
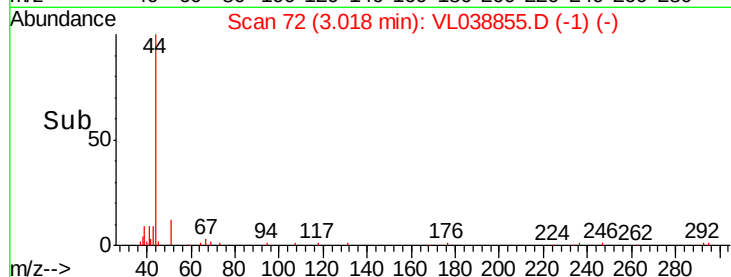
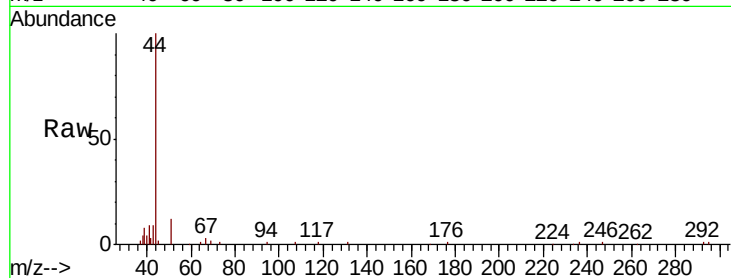
Ion 87.00 (86.70 to 87.70): VL0





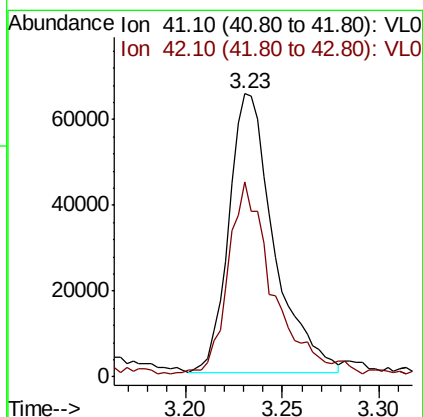
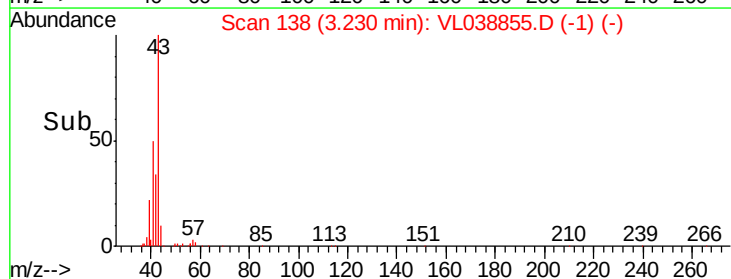
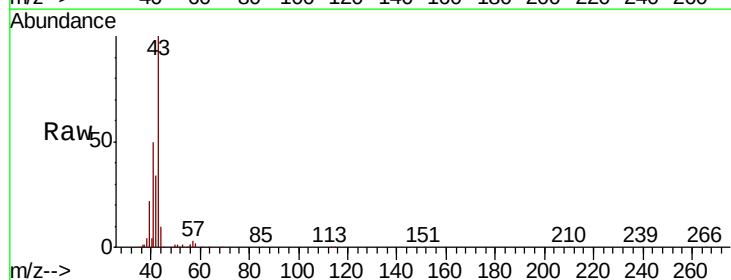
#3
 Chlorodifluoromethane
 Concen: 0.054 ppbv
 RT: 3.02
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 8 Apr 2022 00:00

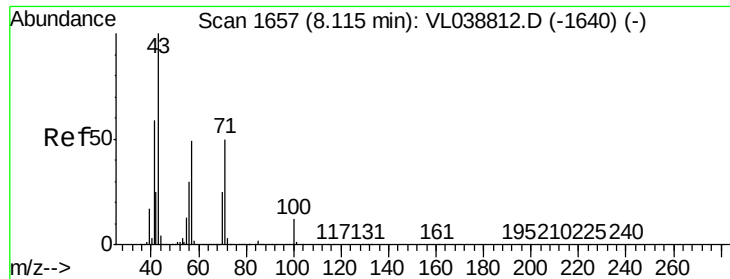
Tot Ion: 51 Resp: 7875
 Ion Ratio Lower Upper
 51 100
 67 13.3 13.4 20.0#



#9
 Propene
 Concen: 1.360 ppbv
 RT: 3.23 min Scan# 138
 Delta R.T. 0.22 min
 Lab File: VL038855.D
 Acq: 8 Apr 2022 00:06

Tgt Ion: 41 Resp: 104946
 Ion Ratio Lower Upper
 41 100
 42 69.3 54.2 81.4





#10

Heptane

Concen: 0.731 ppbv

RT: 8.16 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

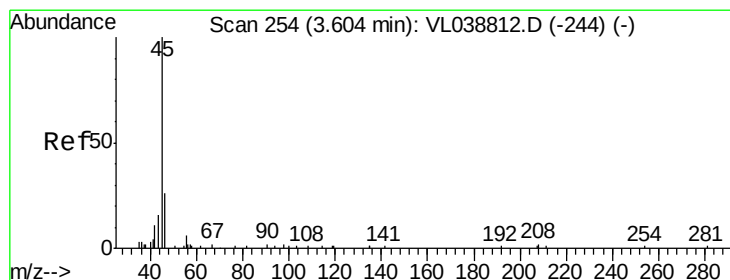
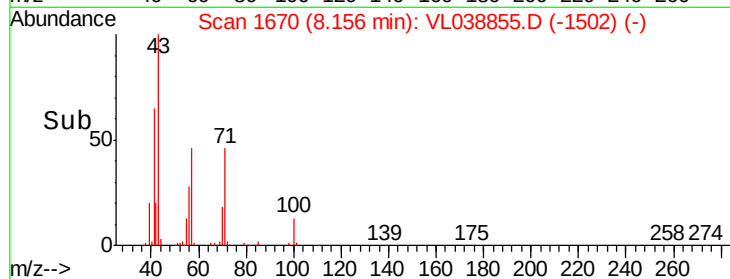
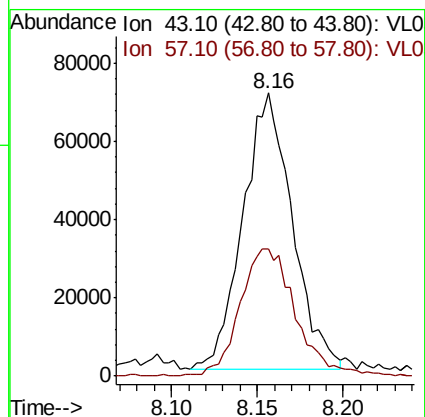
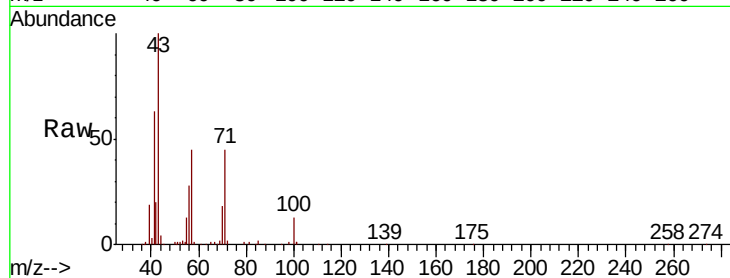
Acq: 8 Apr 2022 00:00 1160-1-SG-3DL

Tot Ion: 43 Resp: 141996

Ion Ratio Lower Upper

43 100

57 51.9 39.3 58.9



#13

Ethanol

Concen: 47.336 ppbv

RT: 3.63 min Scan# 262

Delta R.T. 0.03 min

Lab File: VL038855.D

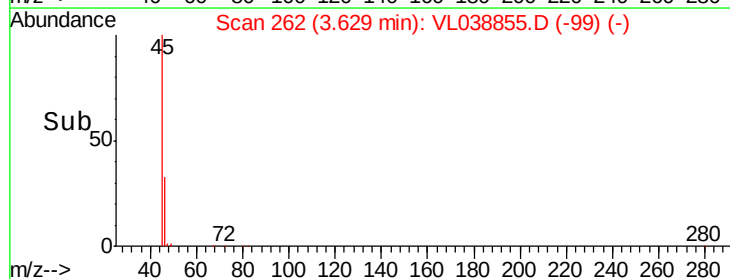
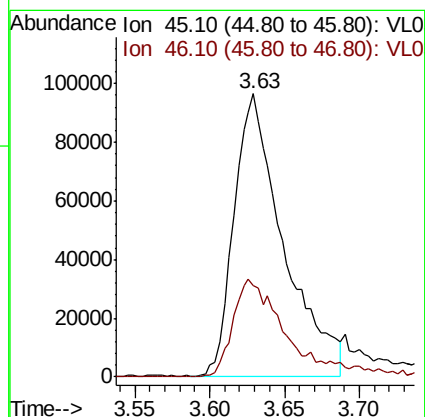
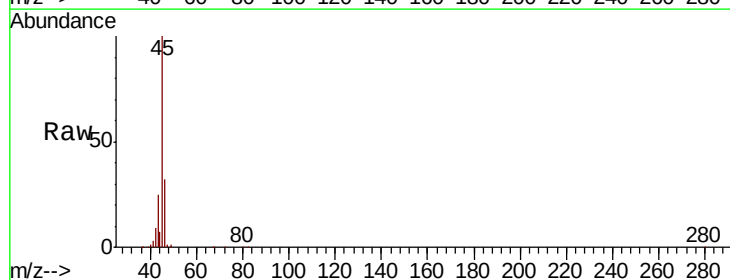
Acq: 8 Apr 2022 00:06

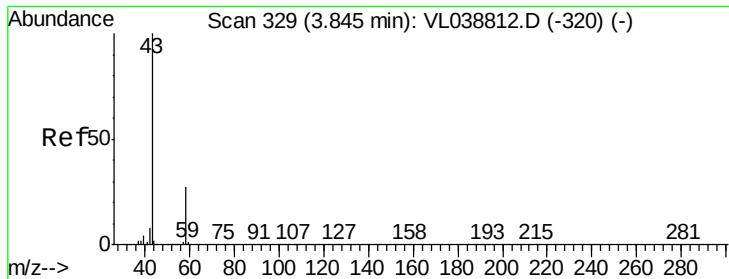
Tgt Ion: 45 Resp: 221912

Ion Ratio Lower Upper

45 100

46 37.9 0.0 0.0#





#15

Acetone

Concen: 164.361 ppbv

RT: 3.87 Instrument :

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

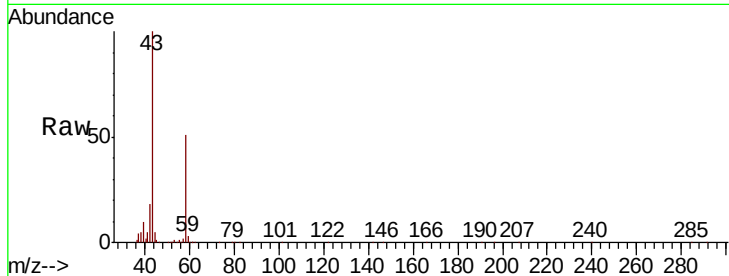
Acq: 8 Apr 2022 00:00

Tot Ion: 43 Resp:19549676

Ion Ratio Lower Upper

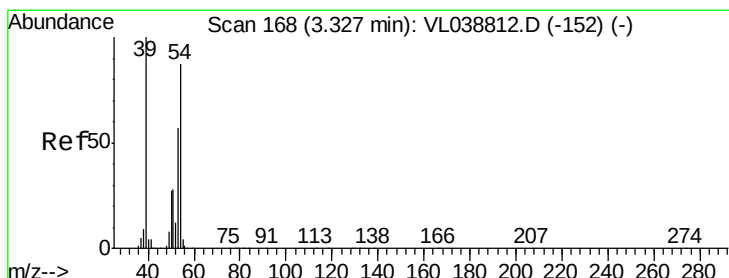
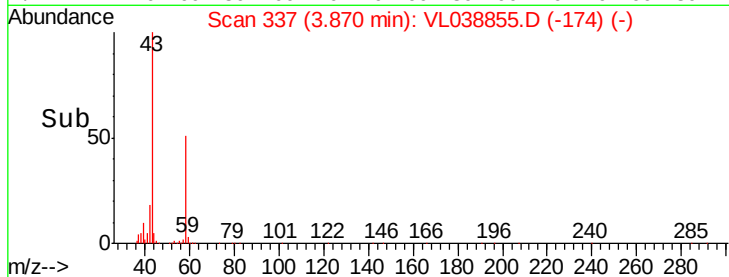
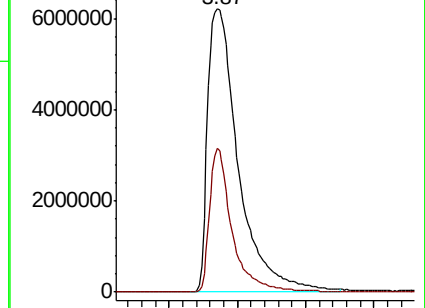
43 100

58 37.7 22.5 33.7#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#16

1,3-Butadiene

Concen: 19.816 ppbv

RT: 3.38 min Scan# 185

Delta R.T. 0.05 min

Lab File: VL038855.D

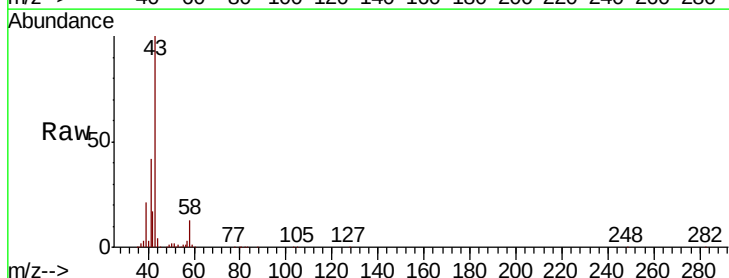
Acq: 8 Apr 2022 00:06

Tgt Ion: 39 Resp: 1347414

Ion Ratio Lower Upper

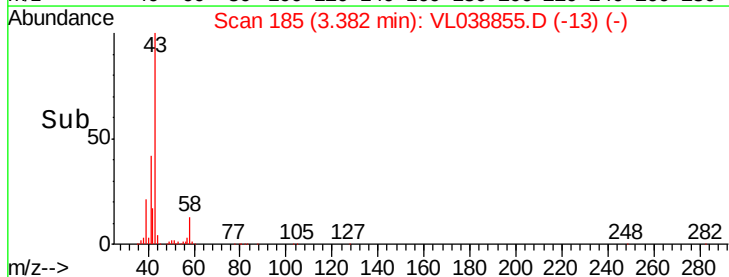
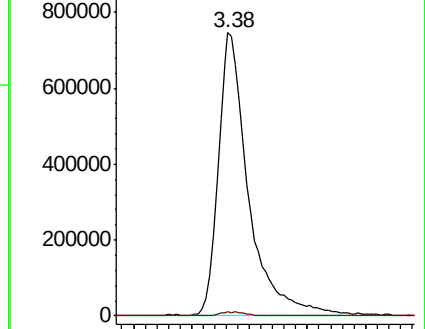
39 100

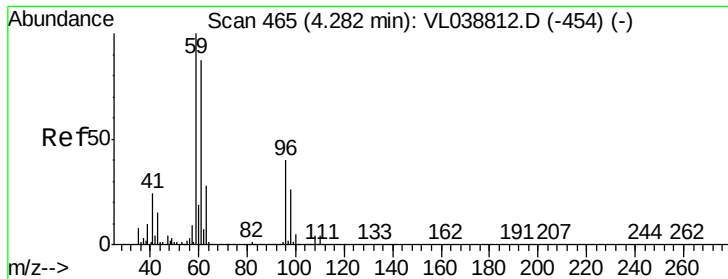
54 1.5 64.8 97.2#



Abundance Ion 39.10 (38.80 to 39.80): VL0

Ion 54.10 (53.80 to 54.80): VL0





#17

tert-Butyl alcohol

Concen: 3.109 ppbv

RT: 3.87 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

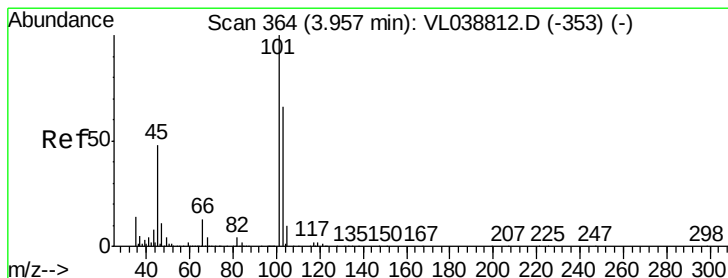
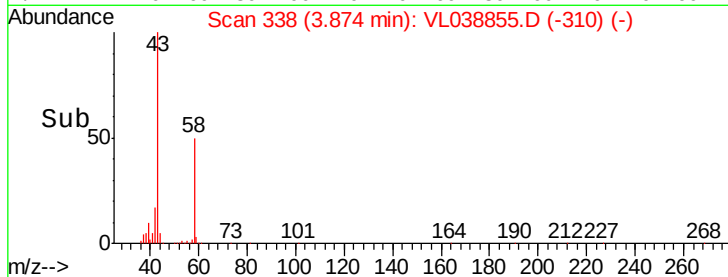
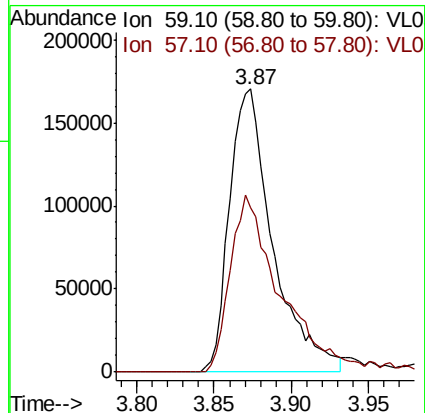
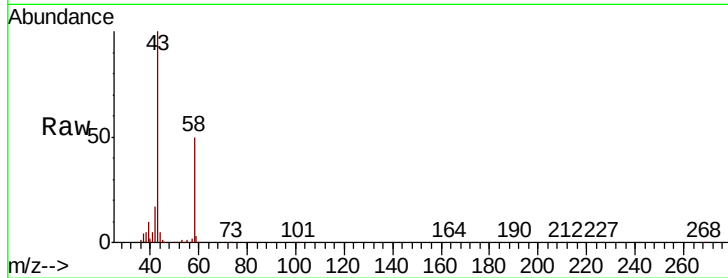
Acq: 8 Apr 2022 00:00

Tot Ion: 59 Resp: 331608

Ion Ratio Lower Upper

59 100

57 75.2 8.5 12.7#



#19

Isopropyl Alcohol

Concen: 3.403 ppbv

RT: 3.99 min Scan# 375

Delta R.T. 0.04 min

Lab File: VL038855.D

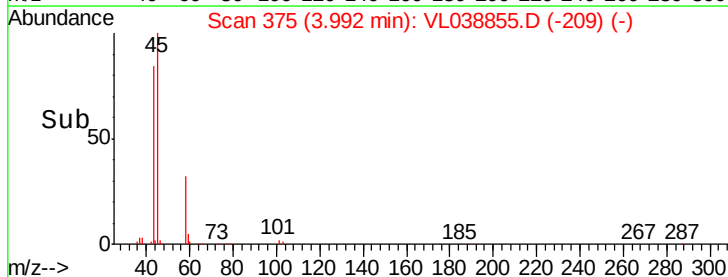
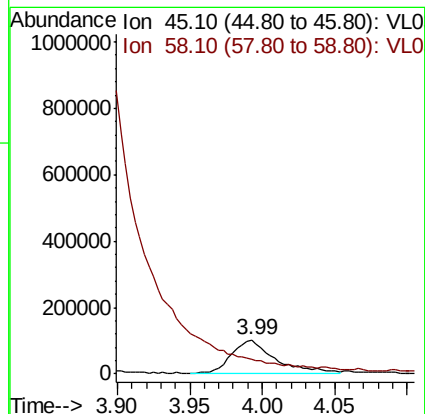
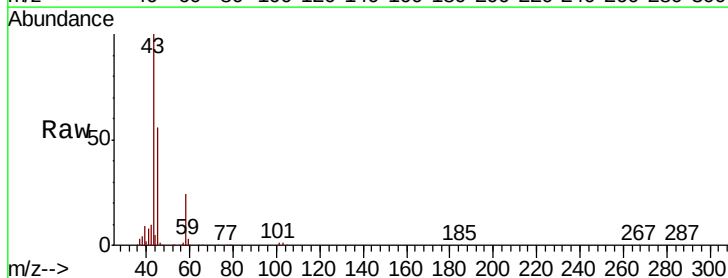
Acq: 8 Apr 2022 00:06

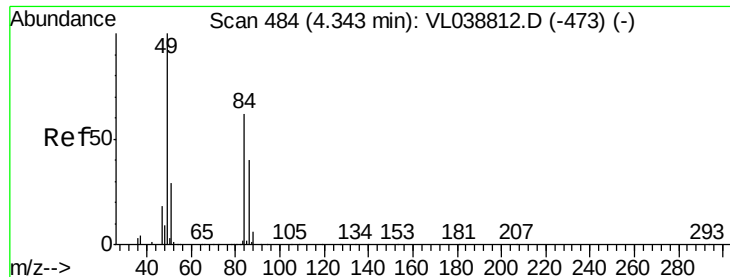
Tgt Ion: 45 Resp: 206859

Ion Ratio Lower Upper

45 100

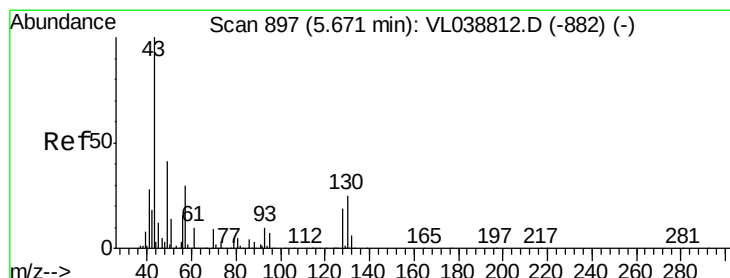
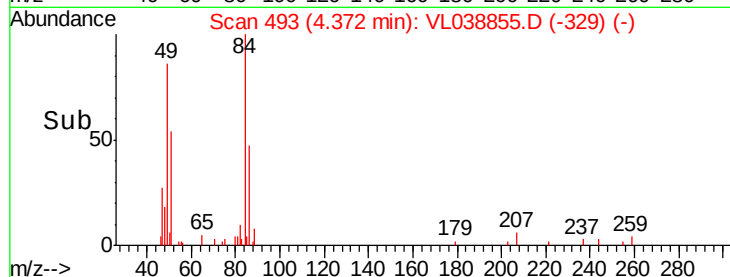
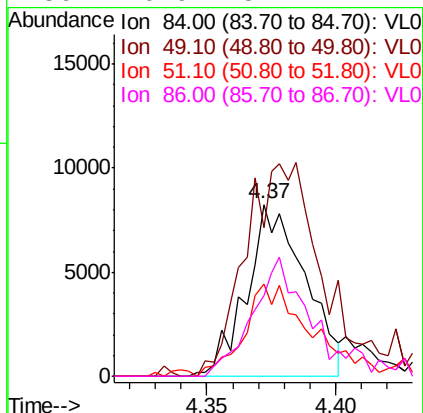
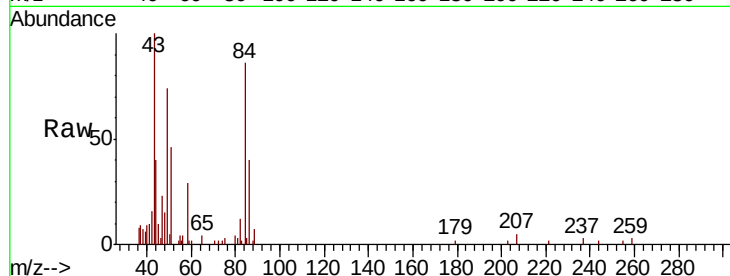
58 0.0 0.0 0.0





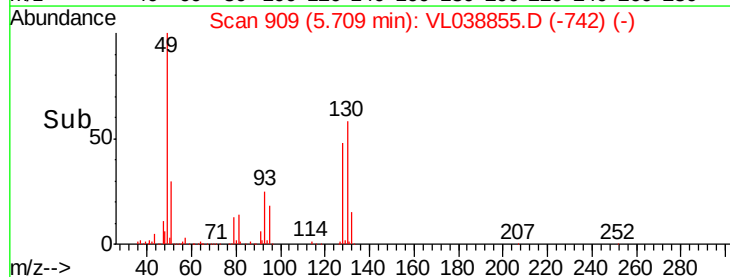
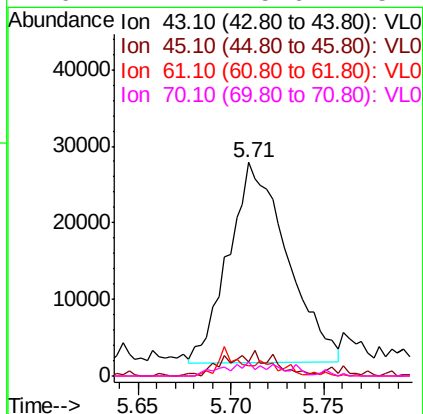
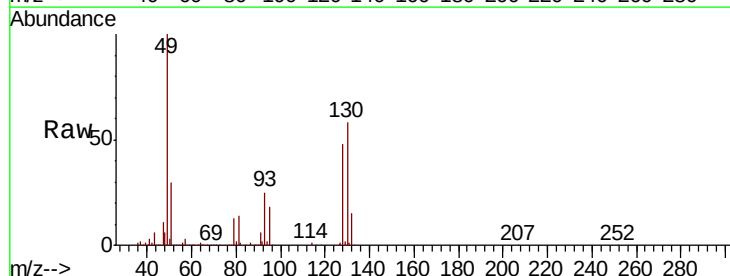
#20
Methylene Chloride
Concen: 0.304 ppbv
RT: 4.37
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 8 Apr 2022 00:00

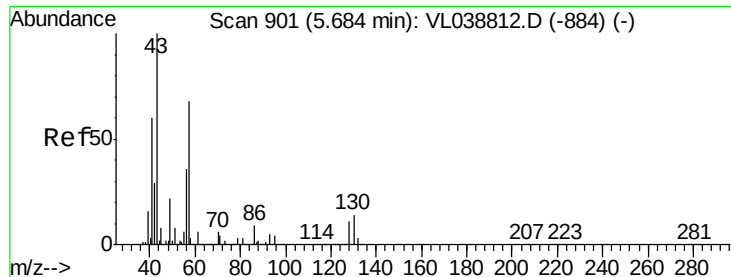
Tot Ion:	84	Resp:	13094
Ion	Ratio	Lower	Upper
84	100		
49	86.0	129.4	194.0#
51	50.7	37.4	56.2
86	46.9	51.4	77.2#



#25
Ethyl Acetate
Concen: 0.190 ppbv
RT: 5.71 min Scan# 909
Delta R.T. 0.04 min
Lab File: VL038855.D
Acq: 8 Apr 2022 00:06

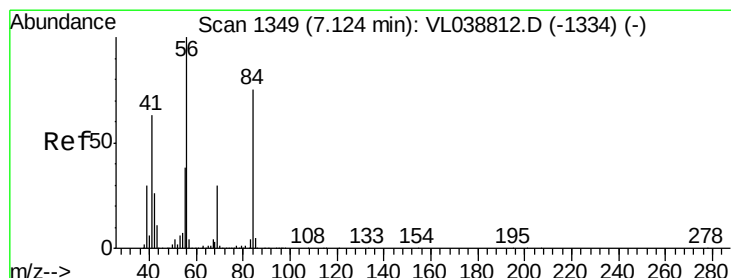
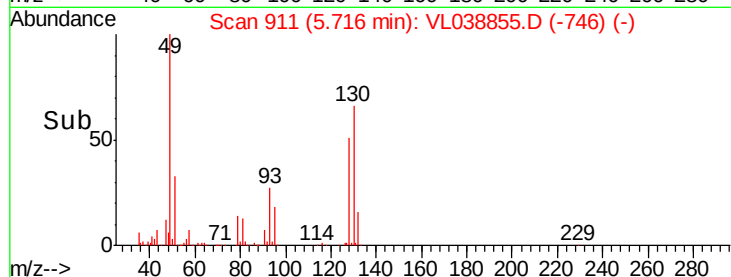
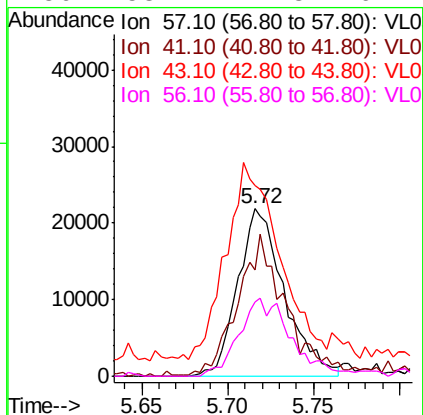
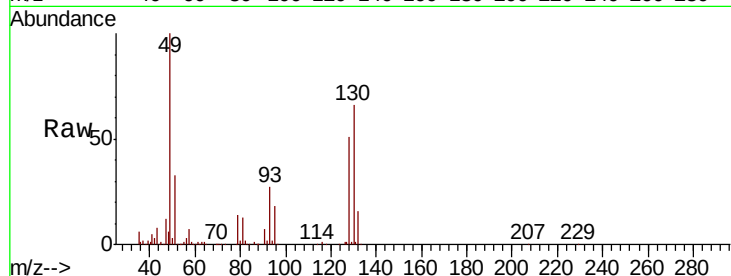
Tgt Ion:	43	Resp:	57412
Ion	Ratio	Lower	Upper
43	100		
45	10.2	8.4	12.6
61	8.8	7.9	11.9
70	7.1	5.6	8.4





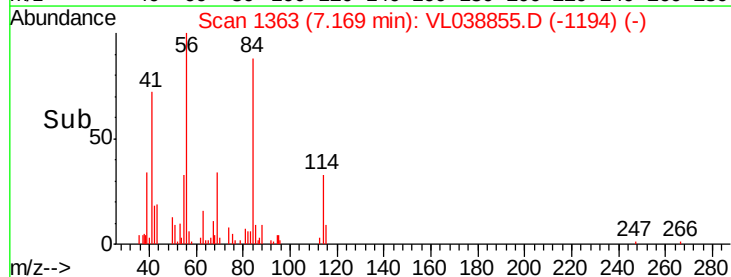
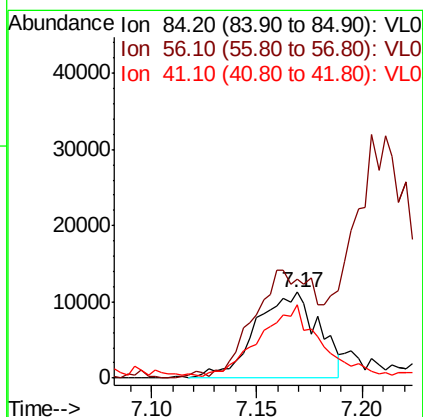
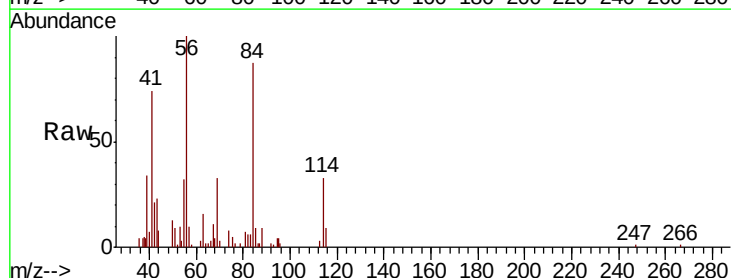
#26
Hexane
Concen: 0.299 ppbv
RT: 5.72
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 8 Apr 2022 00:00

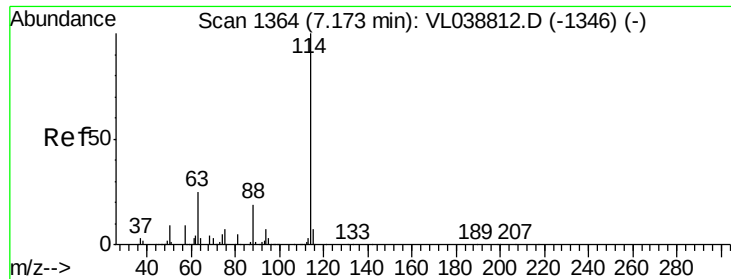
Tot Ion:	57	Resp:	41117
Ion	Ratio	Lower	Upper
57	100		
41	92.8	72.0	108.0
43	161.4	186.6	280.0#
56	53.4	42.8	64.2



#30
Cyclohexane
Concen: 0.192 ppbv
RT: 7.17 min Scan# 1363
Delta R.T. 0.04 min
Lab File: VL038855.D
Acq: 8 Apr 2022 00:06

Tgt Ion:	84	Resp:	23213
Ion	Ratio	Lower	Upper
84	100		
56	0.0	114.4	171.6#
41	0.0	69.0	103.4#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.21 Instrument: MSVOA_L

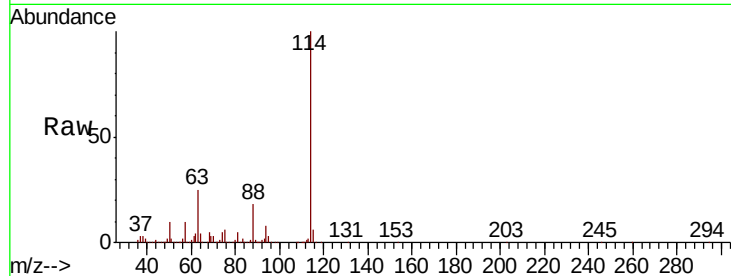
Delta R.T. ClientSampleId:

Lab File: 1160-1-SG-3DL

Acq: 8 Apr 2022 00:00

Tot Ion:114 Resp: 3007706

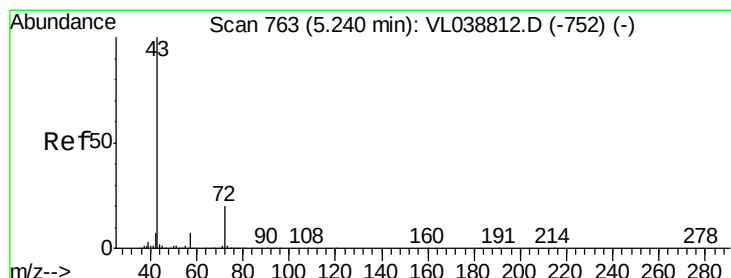
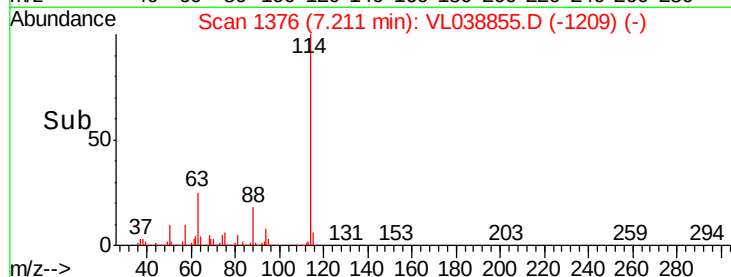
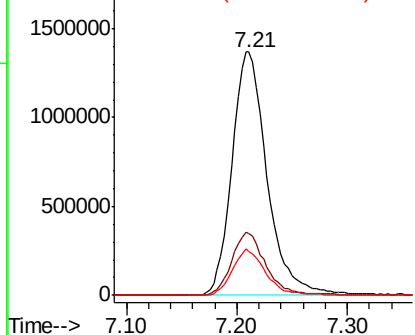
Ion	Ratio	Lower	Upper
114	100		
63	25.4	19.8	29.8
88	18.3	14.2	21.4



Abundance Ion 114.10 (113.80 to 114.80): VL0

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0



#34

2-Butanone

Concen: 0.436 ppbv

RT: 5.28 min Scan# 775

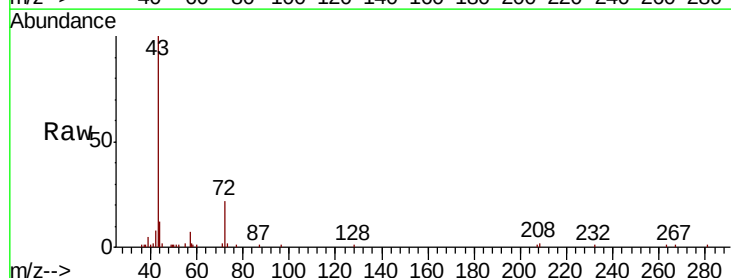
Delta R.T. 0.04 min

Lab File: VL038855.D

Acq: 8 Apr 2022 00:06

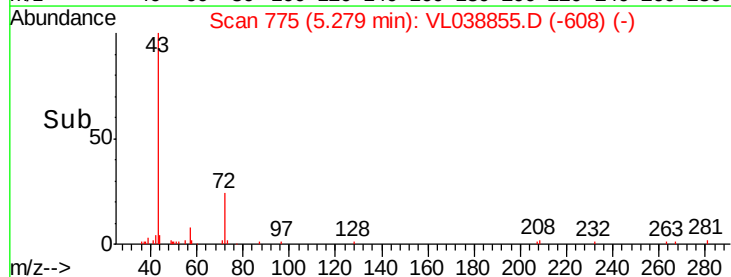
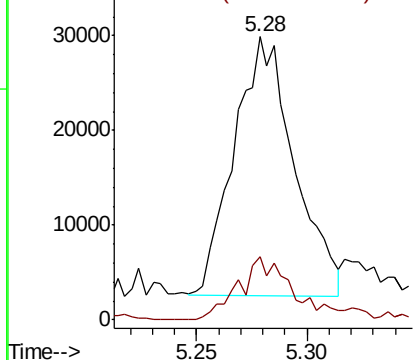
Tgt Ion: 43 Resp: 51843

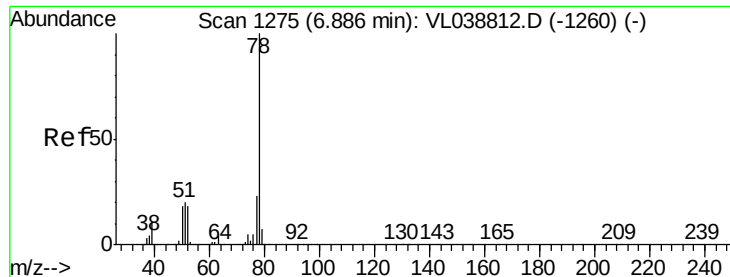
Ion	Ratio	Lower	Upper
43	100		
72	23.3	16.9	25.3



Abundance Ion 43.10 (42.80 to 43.80): VL0

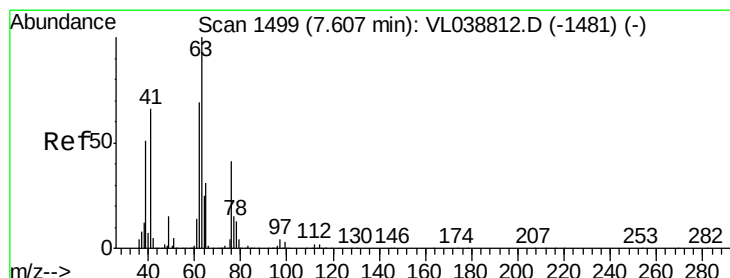
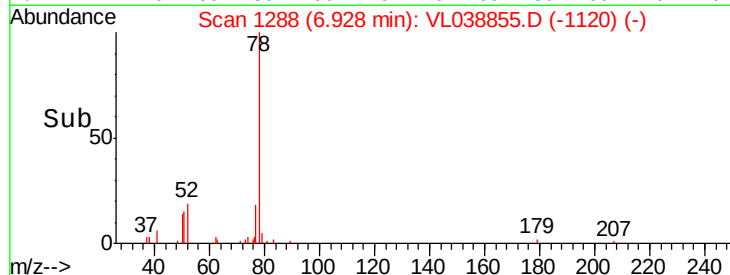
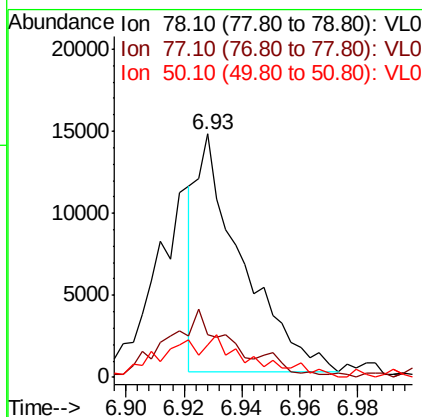
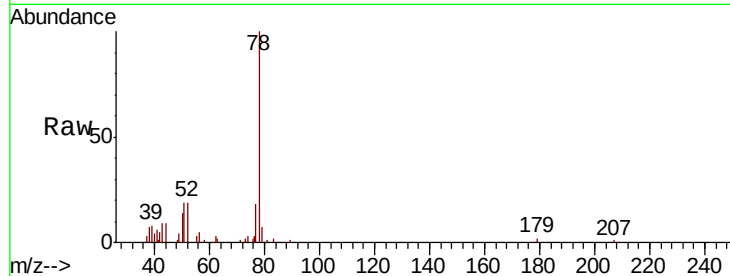
Ion 72.10 (71.80 to 72.80): VL0





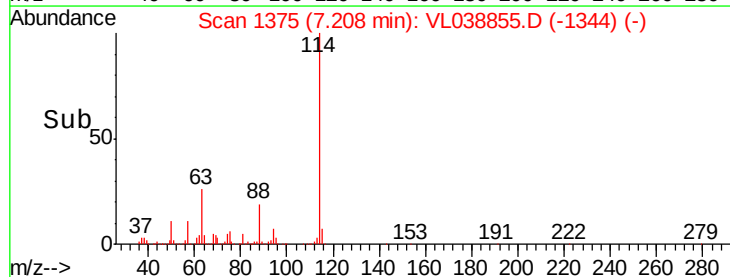
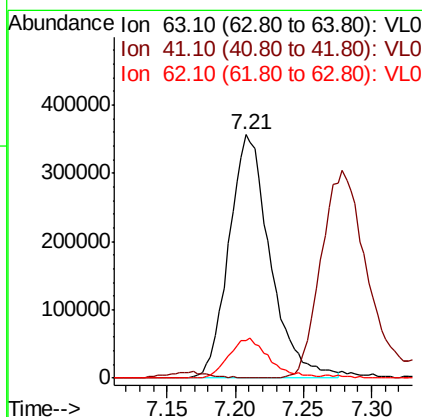
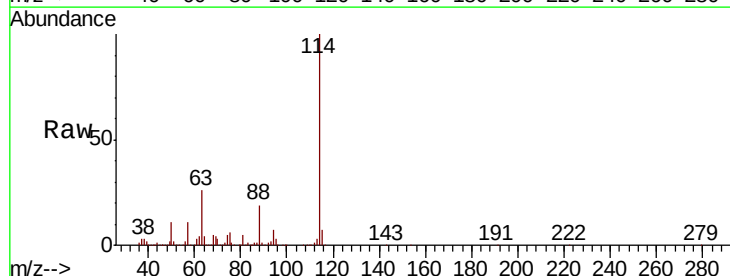
#36
Benzene
Concen: 0.058 ppbv
RT: 6.93
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 8 Apr 2022 00:00

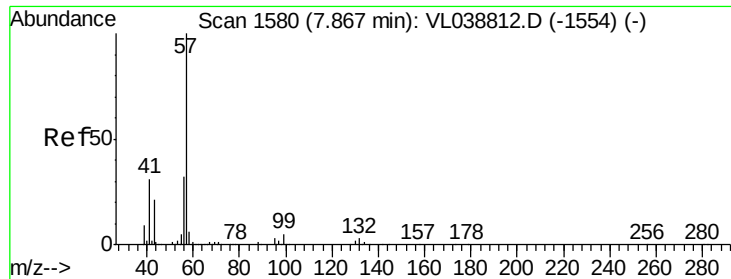
Tot Ion: 78 Resp: 15855
Ion Ratio Lower Upper
78 100
77 16.1 18.2 27.2#
50 13.9 14.0 21.0#



#39
1,2-Dichloropropane
Concen: 7.113 ppbv
RT: 7.21 min Scan# 1375
Delta R.T. -0.40 min
Lab File: VL038855.D
Acq: 8 Apr 2022 00:06

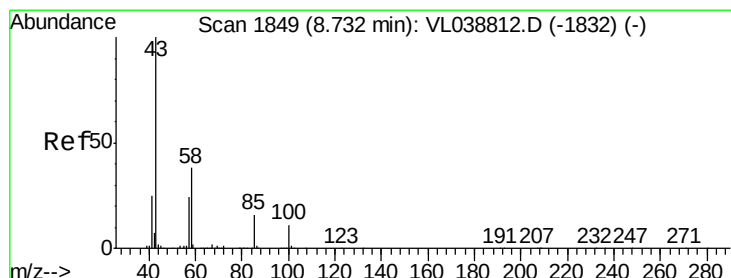
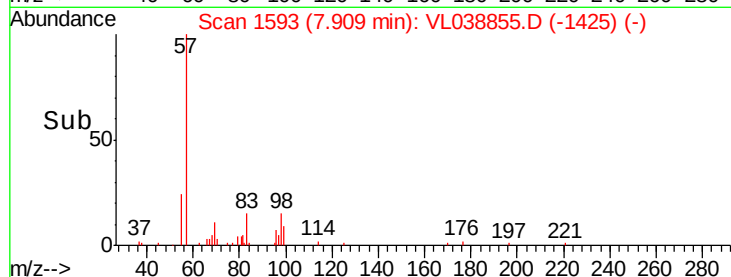
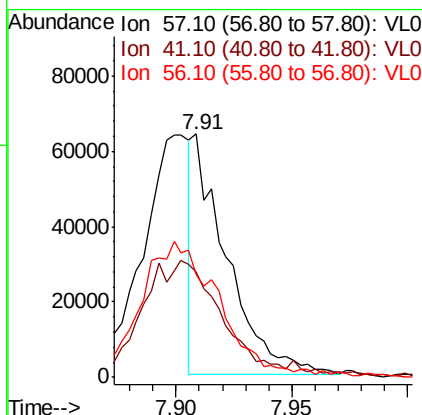
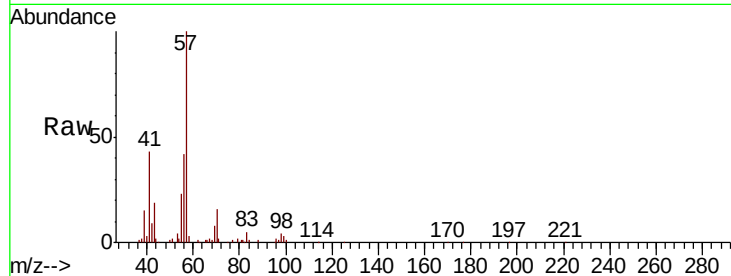
Tgt Ion: 63 Resp: 744371
Ion Ratio Lower Upper
63 100
41 0.0 53.0 79.6#
62 15.7 55.0 82.4#





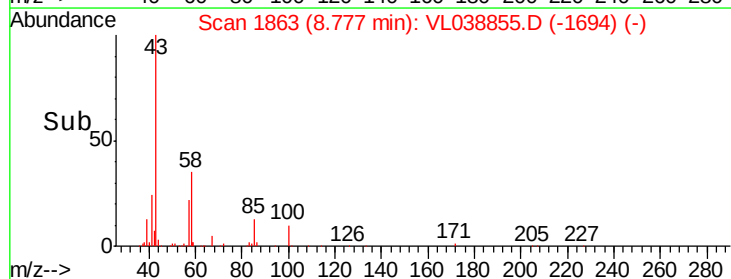
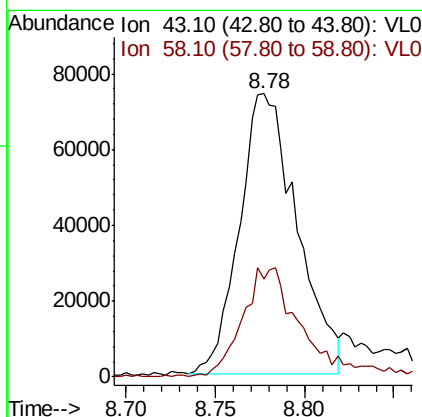
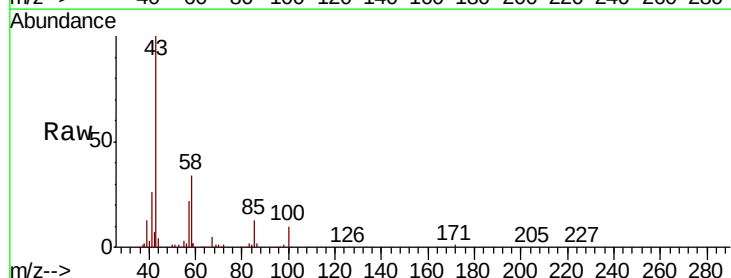
#44
 2,2,4-Trimethylpentane
 Concen: 0.139 ppbv
 RT: 7.91
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 8 Apr 2022 00:00

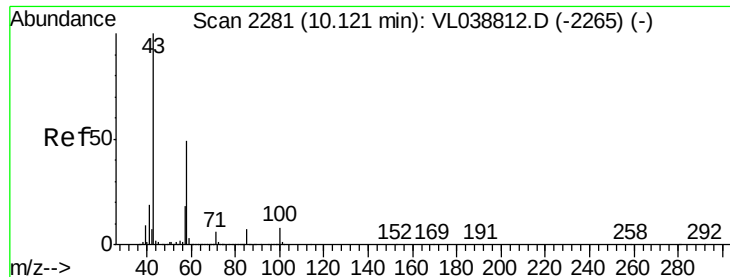
Tot Ion: 57 Resp: 64328
 Ion Ratio Lower Upper
 57 100
 41 0.0 25.0 37.4#
 56 0.0 25.3 37.9#



#50
 4-Methyl-2-Pentanone
 Concen: 0.624 ppbv
 RT: 8.78 min Scan# 1863
 Delta R.T. 0.04 min
 Lab File: VL038855.D
 Acq: 8 Apr 2022 00:06

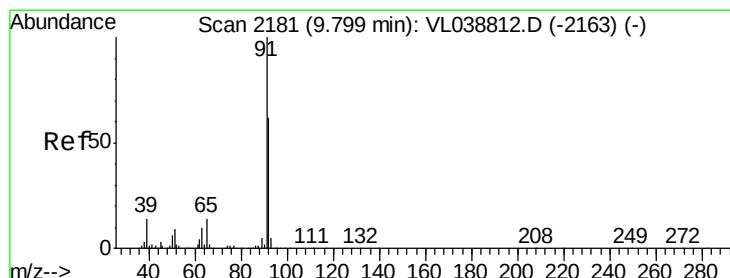
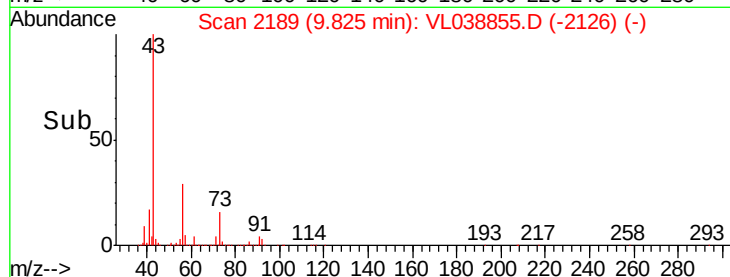
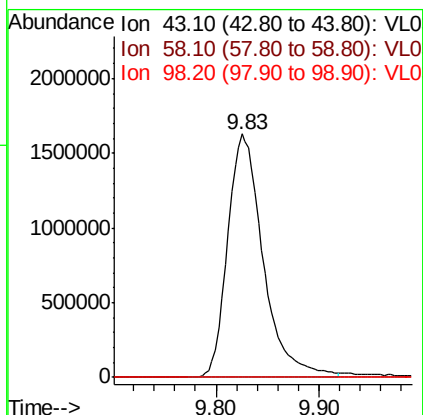
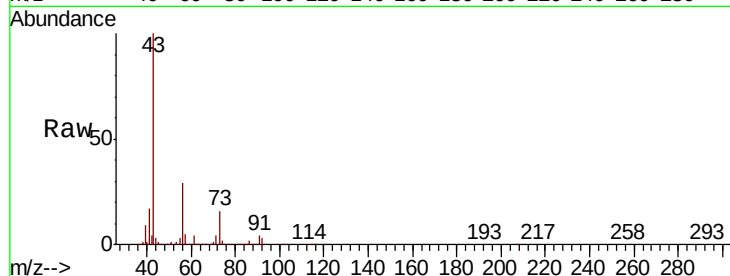
Tgt Ion: 43 Resp: 166891
 Ion Ratio Lower Upper
 43 100
 58 40.6 29.0 43.6





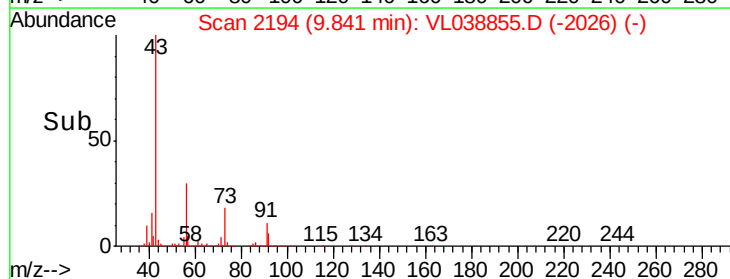
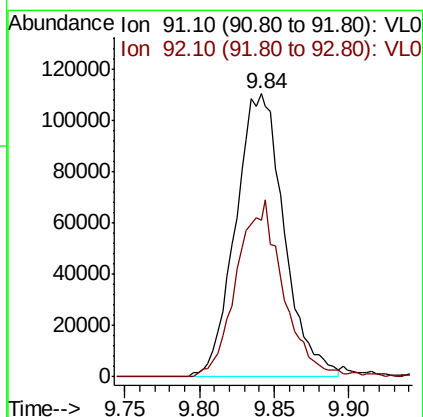
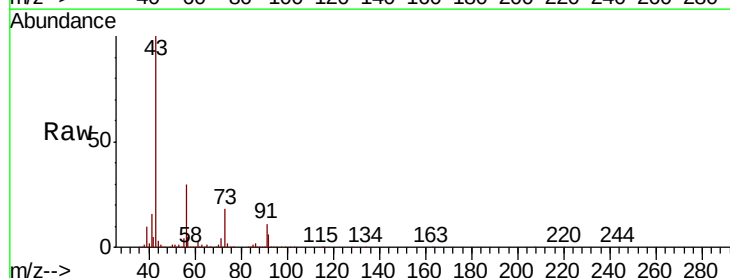
#51
2-Hexanone
Concen: 19.343 ppbv
RT: 9.83
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 8 Apr 2022 00:00

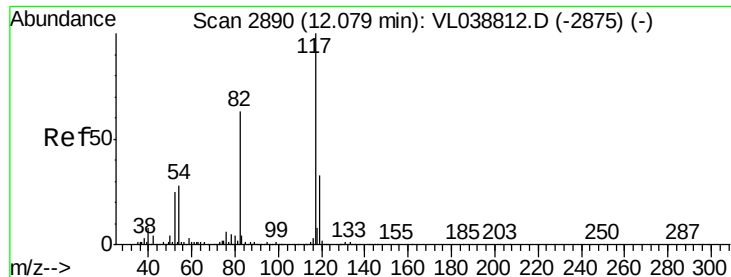
Tot Ion: 43 Resp: 3896206
Ion Ratio Lower Upper
43 100
58 0.4 41.4 62.0#
98 0.0 0.1 0.1#



#53
Toluene
Concen: 0.789 ppbv
RT: 9.84 min Scan# 2194
Delta R.T. 0.04 min
Lab File: VL038855.D
Acq: 8 Apr 2022 00:06

Tgt Ion: 91 Resp: 249324
Ion Ratio Lower Upper
91 100
92 60.4 49.2 73.8

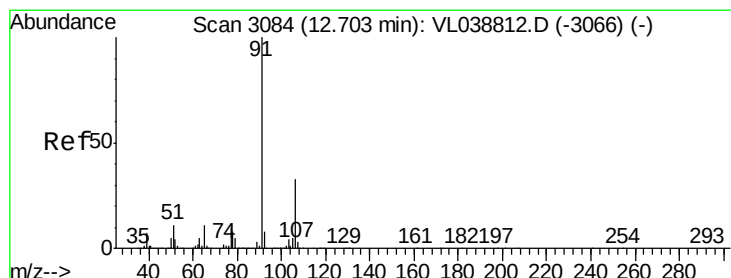
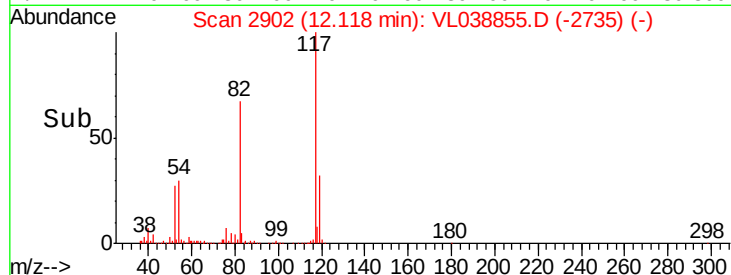
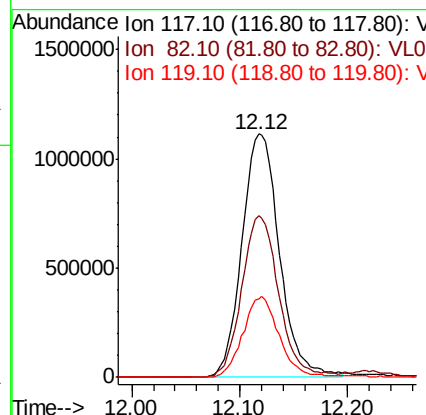
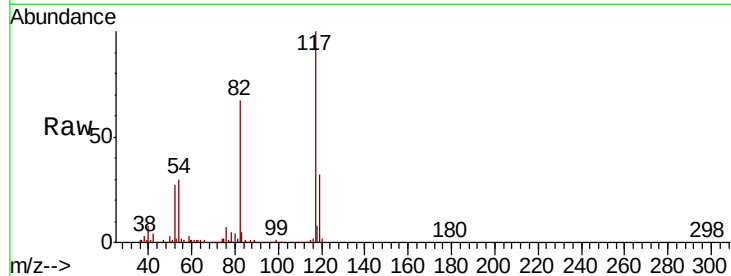




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.12 min
Instrument: MSVOA_1
Delta R.T.: 0.04 min
Lab File: ClientSampleId : 1160-1-SG-3DL
Acq: 8 Apr 2022 00:00

Tot Ion: 117 Resp: 2700531

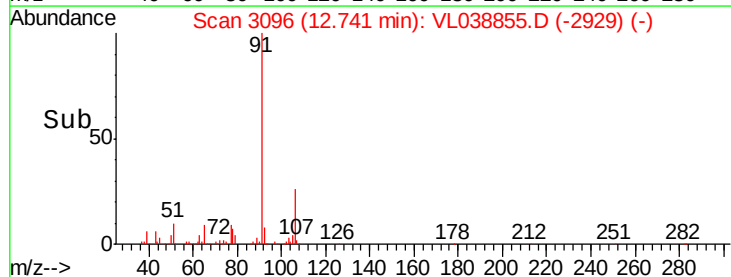
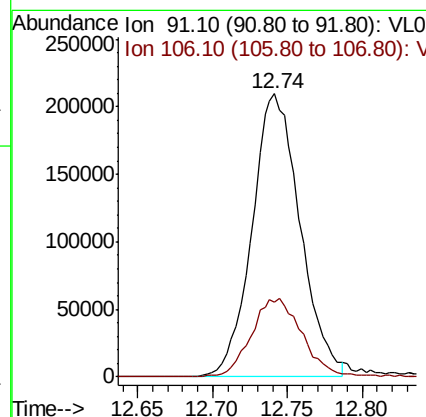
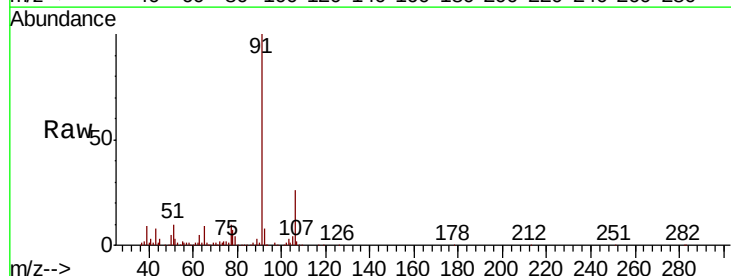
Ion	Ratio	Lower	Upper
117	100		
82	65.6	53.0	79.6
119	32.5	24.9	37.3

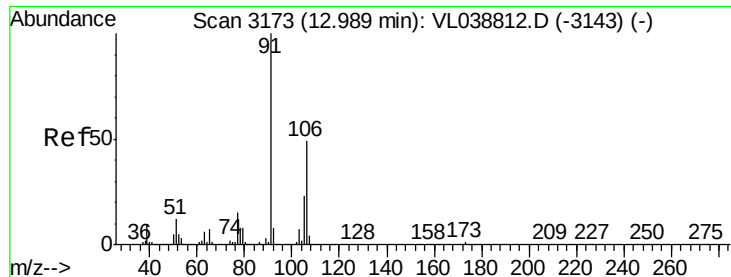


#58
Ethyl Benzene
Concen: 1.160 ppbv
RT: 12.74 min Scan# 3096
Delta R.T.: 0.04 min
Lab File: VL038855.D
Acq: 8 Apr 2022 00:06

Tgt Ion: 91 Resp: 468273

Ion	Ratio	Lower	Upper
91	100		
106	26.3	26.7	40.1#





#59

m/p-Xylene

Concen: 4.407 ppbv

RT: 13.00

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

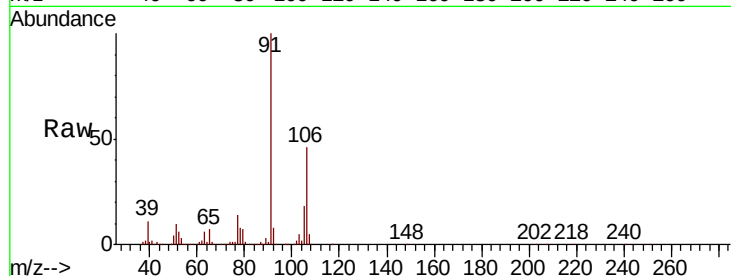
Acq: 8 Apr 2022 00:00

Tot Ion: 91 Resp: 1493985

Ion Ratio Lower Upper

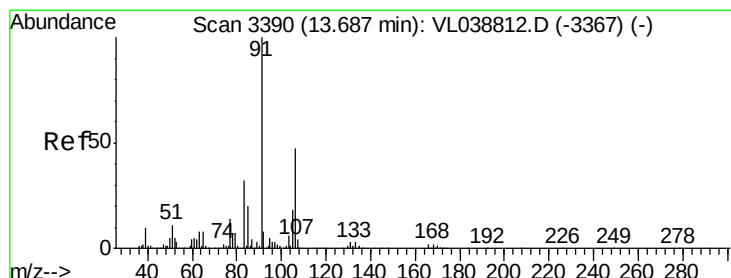
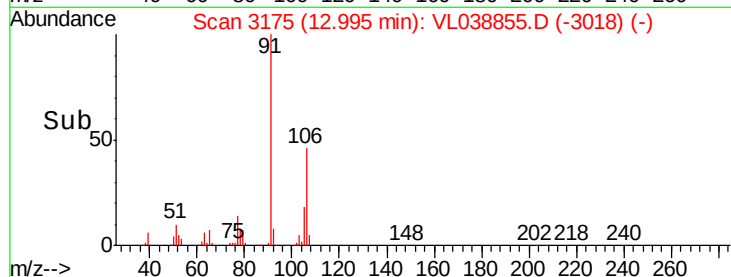
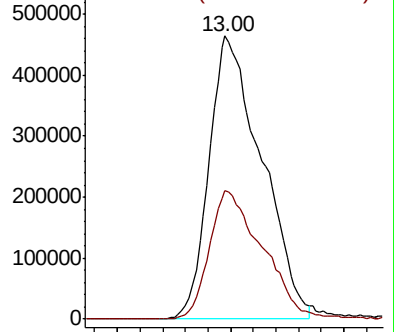
91 100

106 46.4 37.1 55.7



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



#60

o-Xylene

Concen: 1.572 ppbv

RT: 13.72 min Scan# 3401

Delta R.T. 0.04 min

Lab File: VL038855.D

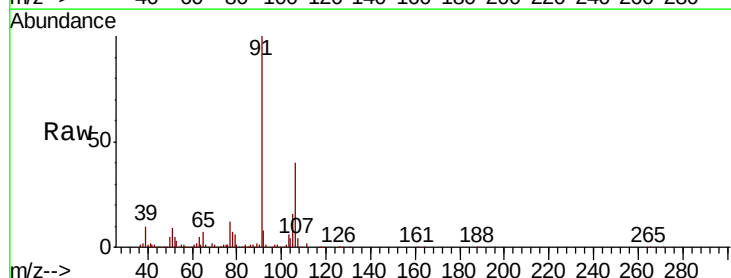
Acq: 8 Apr 2022 00:06

Tgt Ion: 91 Resp: 498827

Ion Ratio Lower Upper

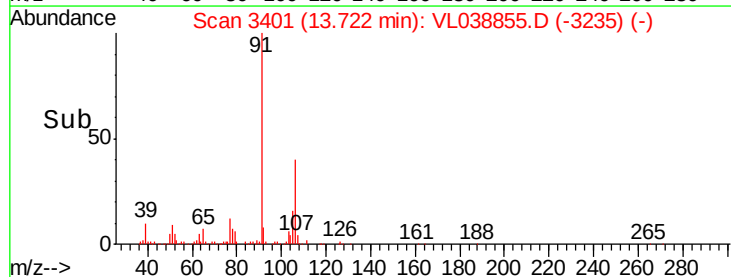
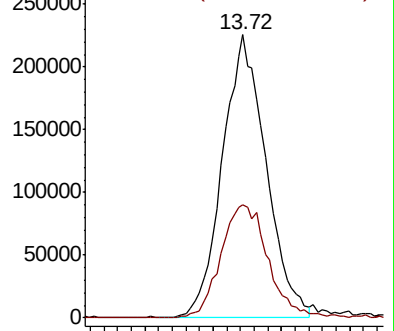
91 100

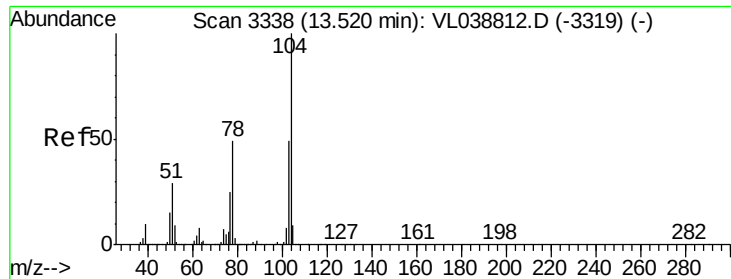
106 43.9 23.8 71.4



Abundance Ion 91.10 (90.80 to 91.80): VL0

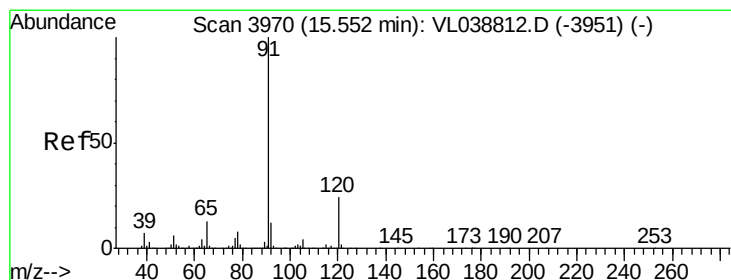
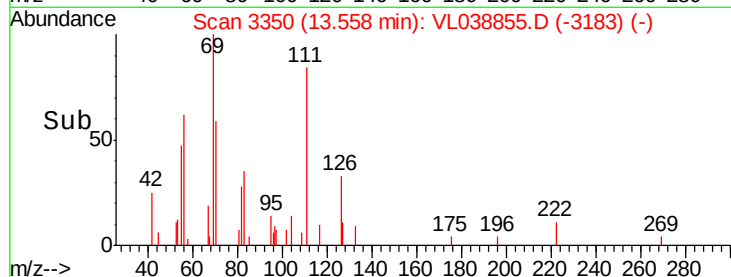
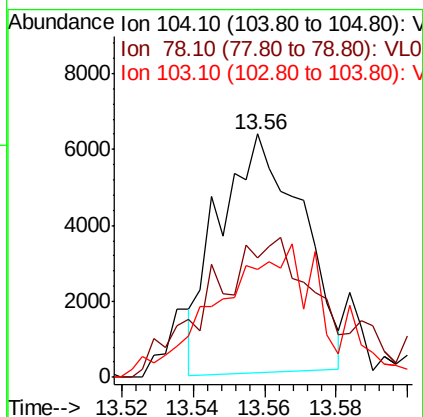
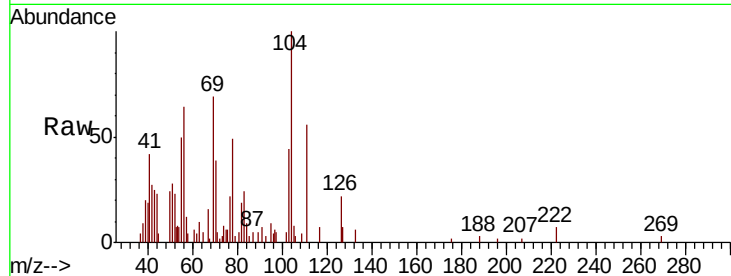
Ion 106.10 (105.80 to 106.80): V





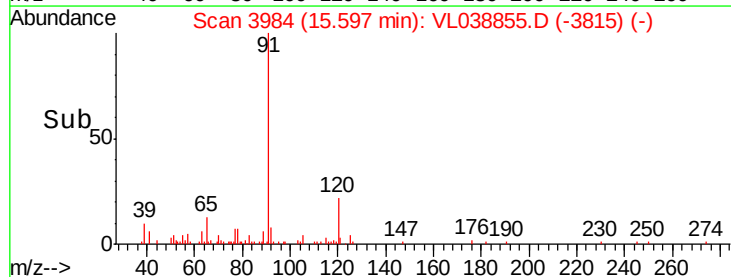
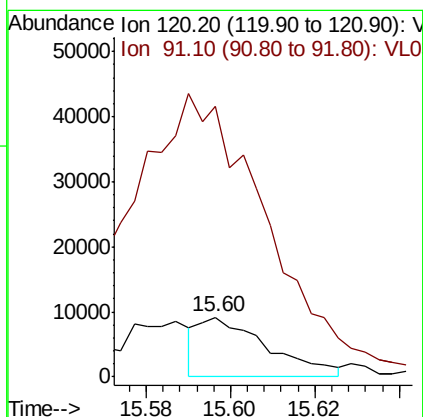
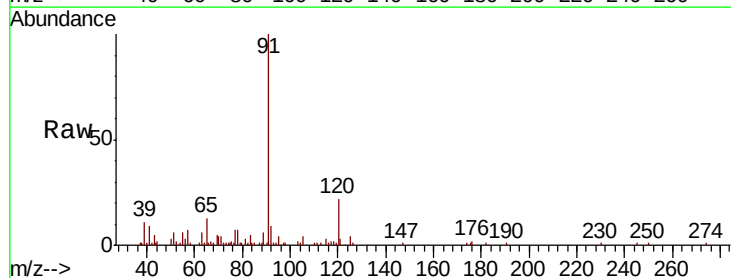
#61
Stvrene
Concen: 0.053 ppbv
RT: 13.56 min
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 8 Apr 2022 00:00

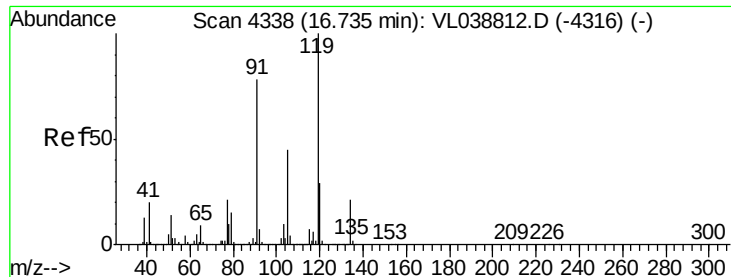
Tot Ion	Ratio	Lower	Upper
104	100		
78	90.7	40.5	60.7#
103	72.6	39.0	58.4#



#64
n-propylbenzene
Concen: 0.084 ppbv
RT: 15.60 min Scan# 3984
Delta R.T. 0.04 min
Lab File: VL038855.D
Acq: 8 Apr 2022 00:06

Tgt Ion	Ratio	Lower	Upper
120	100		
91	987.1	360.6	540.8#





#65

tert-Butylbenzene

Concen: 0.051 ppbv

RT: 16.79

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 8 Apr 2022 00:00

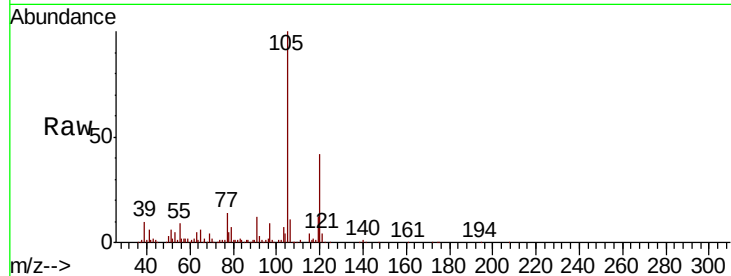
Tot Ion: 119 Resp: 21478

Ion Ratio Lower Upper

119 100

91 208.6 62.8 94.2#

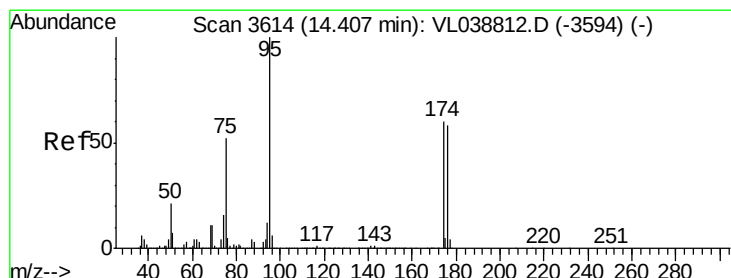
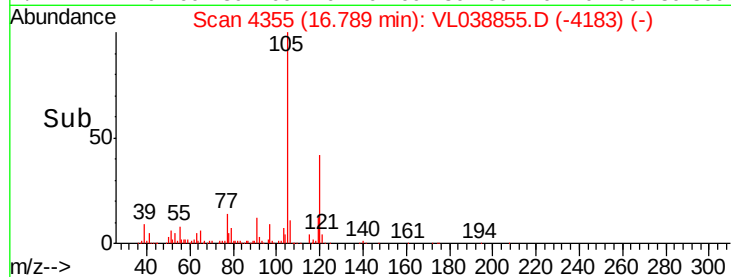
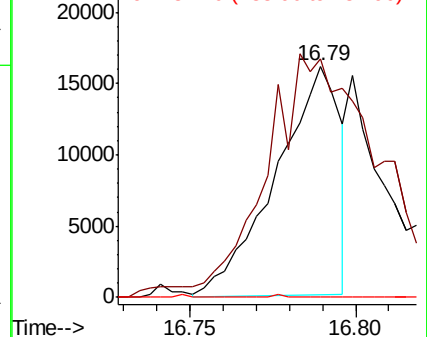
134 0.0 16.2 24.4#



Abundance Ion 119.20 (118.90 to 119.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 134.20 (133.90 to 134.90): V



#68

1-Bromo-4-Fluorobenzene

Concen: 10.398 ppbv

RT: 14.45 min Scan# 3626

Delta R.T. 0.04 min

Lab File: VL038855.D

Acq: 8 Apr 2022 00:06

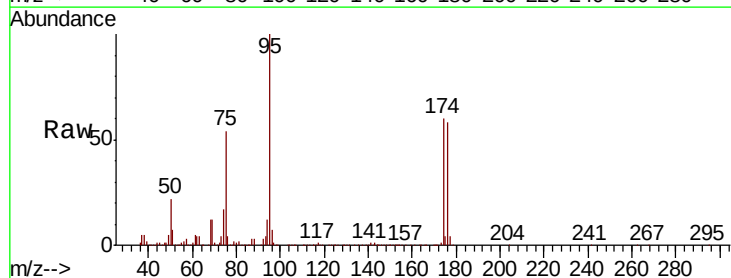
Tgt Ion: 95 Resp: 2130049

Ion Ratio Lower Upper

95 100

174 61.7 52.0 78.0

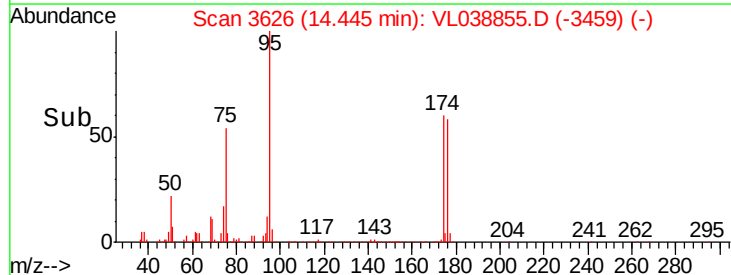
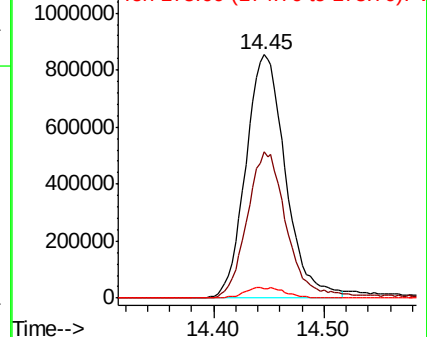
175 4.6 4.0 6.0

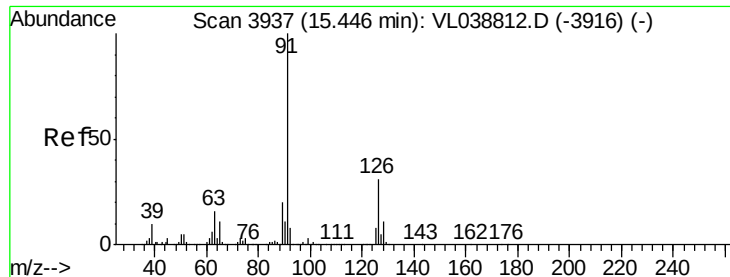


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

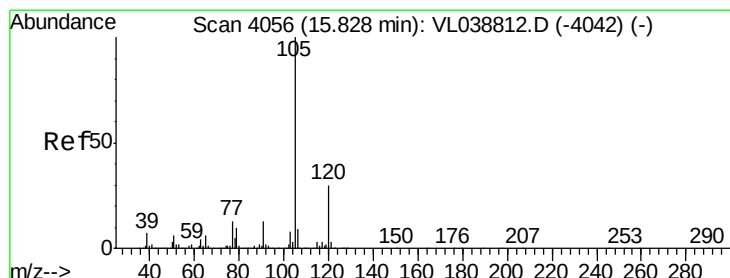
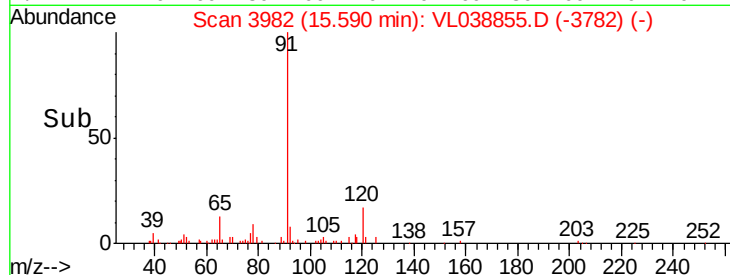
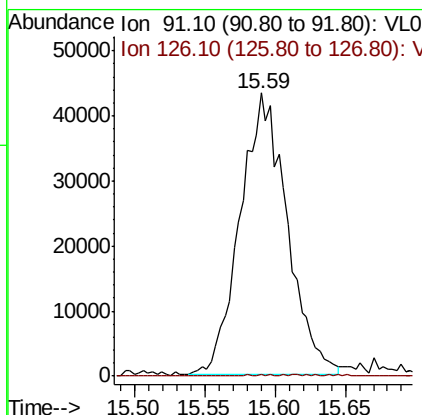
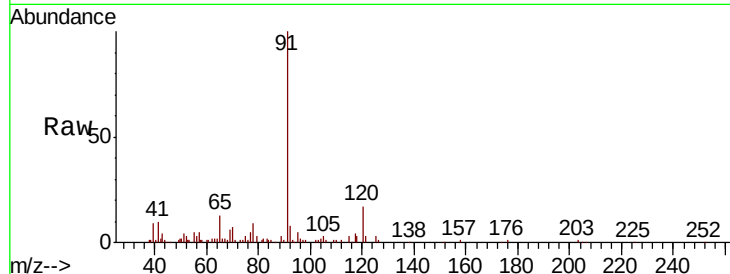
Ion 175.00 (174.70 to 175.70): V





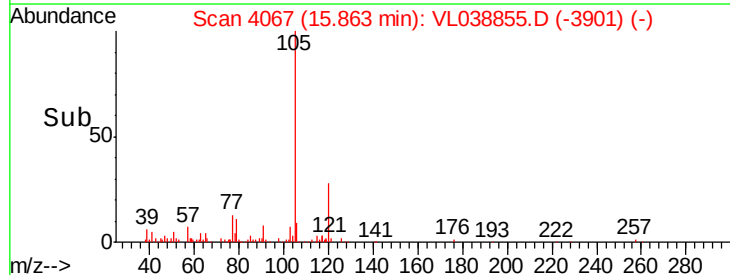
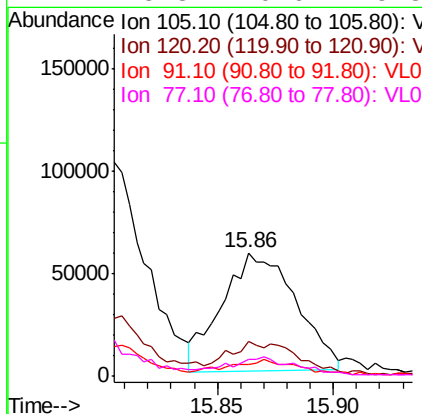
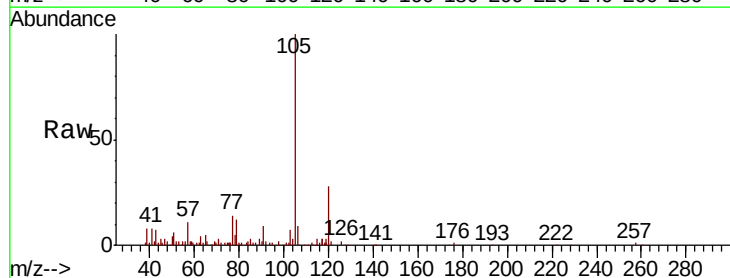
#71
 2-Chlorotoluene
 Concen: 0.282 ppbv
 RT: 15.59 min
 Instrument: MSVOA_L
 Delta R.T.: 0.04 min
 Lab File: VL038855.D
 Client Sample ID: 1160-1-SG-3DL
 Acq: 8 Apr 2022 00:00

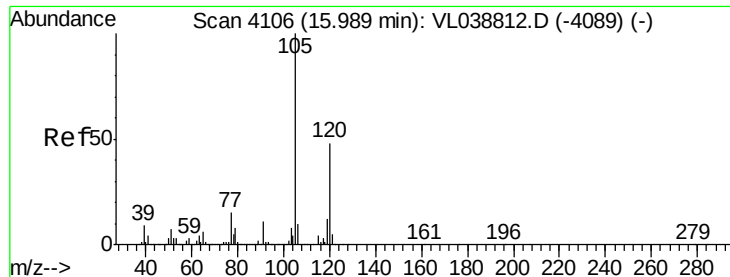
Tot Ion: 91 Resp: 100979
 Ion Ratio Lower Upper
 91 100
 126 0.0 13.0 51.8#



#72
 4-Ethyltoluene
 Concen: 0.339 ppbv
 RT: 15.86 min Scan# 4067
 Delta R.T.: 0.04 min
 Lab File: VL038855.D
 Acq: 8 Apr 2022 00:06

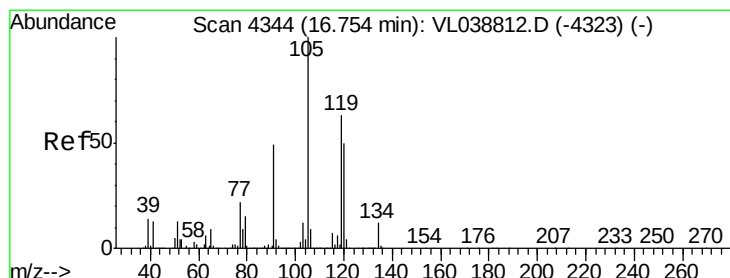
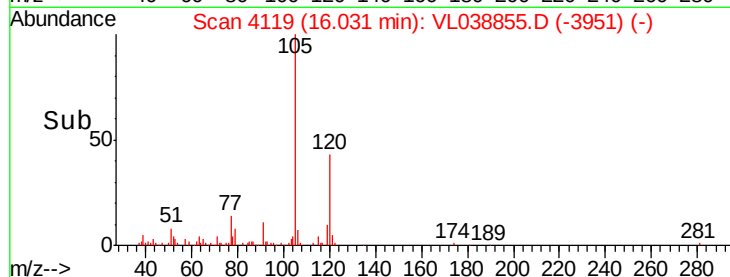
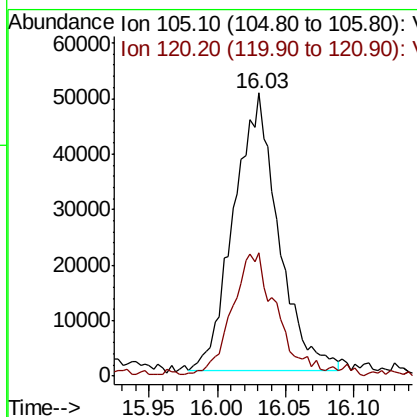
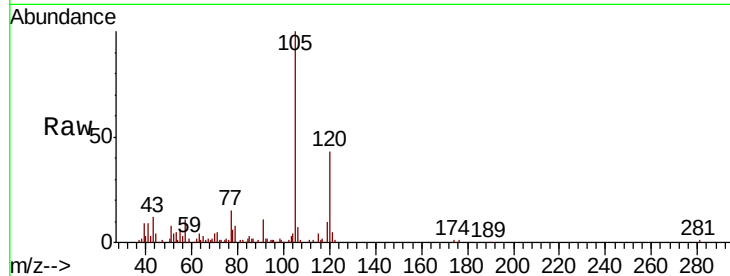
Tgt Ion: 105 Resp: 128323
 Ion Ratio Lower Upper
 105 100
 120 29.4 24.3 36.5
 91 12.5 9.4 14.2
 77 15.8 10.6 15.8





#73
 1,3,5-Trimethylbenzene
 Concen: 0.335 ppbv
 RT: 16.03 min
 Delta R.T. 0.04 min
 Lab File: VL038855.D
 Acq: 8 Apr 2022 00:00

Tot Ion: 105 Resp: 113901
 Ion Ratio Lower Upper
 105 100
 120 43.1 38.7 58.1



#74
 1,2,4-Trimethylbenzene
 Concen: 0.567 ppbv
 RT: 16.79 min Scan# 4355
 Delta R.T. 0.04 min
 Lab File: VL038855.D
 Acq: 8 Apr 2022 00:06

Tgt Ion: 105 Resp: 204123
 Ion Ratio Lower Upper
 105 100
 120 42.6 39.8 59.8
 91 11.9 39.4 59.0#
 77 14.1 17.3 25.9#

