

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL040722\
 Data File : VL038849.D
 Acq On : 7 Apr 2022 20:12
 Operator : SY/AP
 Sample : N2273-03DL 4X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 1160-1-1A-3DL

Quant Time: Apr 11 05:15:05 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	1233233	10.00	ppbv	0.03
33) 1,4-Difluorobenzene	7.20	114	2988941	10.00	ppbv	0.03
55) Chlorobenzene-d5	12.12	117	2688792	10.00	ppbv	0.04

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.44	95	2158138	10.58	ppbv	0.04
Spiked Amount	10.000	Range	65 - 135	Recovery	=	105.80%

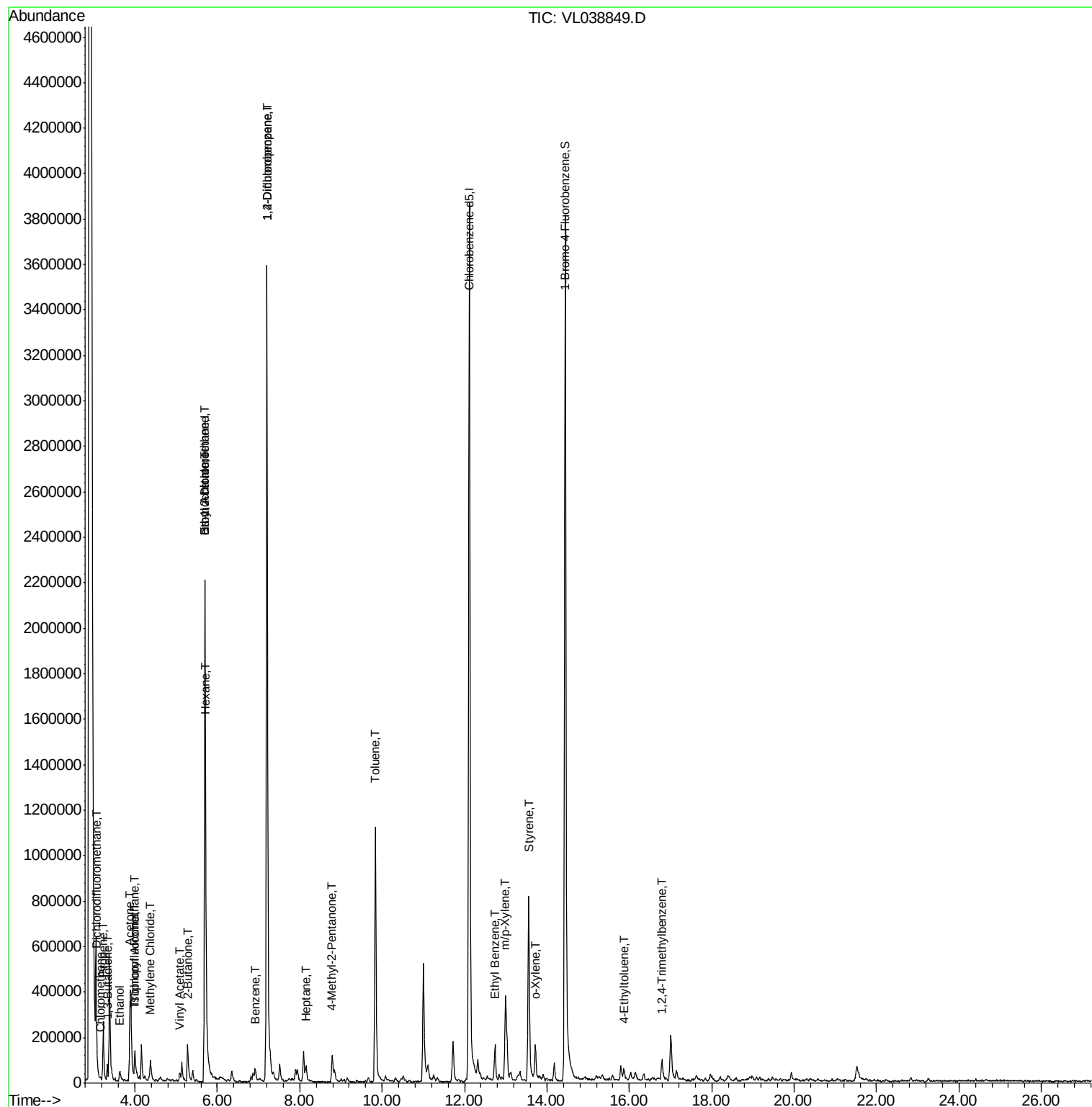
Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.07	85	13414	0.077	ppbv #	87
4) Chloromethane	3.17	50	5197	0.067	ppbv	98
9) Propene	3.23	41	91885	1.154	ppbv	94
10) Heptane	8.14	43	31842	0.159	ppbv	94
11) Trichlorofluoromethane	3.98	101	6864	0.049	ppbv #	71
13) Ethanol	3.63	45	56806	11.739	ppbv #	100
15) Acetone	3.88	43	604045	4.920	ppbv	93
16) 1,3-Butadiene	3.33	39	11268	0.161	ppbv #	49
19) Isopropyl Alcohol	4.00	45	159044	2.534	ppbv #	100
20) Methylene Chloride	4.37	84	35714	0.802	ppbv	86
23) Vinyl Acetate	5.08	43	6831	0.057	ppbv #	1
25) Ethyl Acetate	5.71	43	315962	1.014	ppbv #	93
26) Hexane	5.72	57	28644	0.202	ppbv #	1
31) cis-1,2-Dichloroethene	5.70	61	14889	0.114	ppbv #	28
34) 2-Butanone	5.28	43	222253	1.882	ppbv	93
36) Benzene	6.92	78	17897	0.066	ppbv	93
39) 1,2-Dichloropropane	7.20	63	796828	7.662	ppbv #	27
50) 4-Methyl-2-Pentanone	8.78	43	62310	0.235	ppbv #	34
53) Toluene	9.83	91	828437	2.639	ppbv	100
58) Ethyl Benzene	12.74	91	139044	0.346	ppbv	99
59) m/p-Xylene	12.99	91	363354	1.076	ppbv	91
60) o-Xylene	13.72	91	122836	0.389	ppbv	95
61) Styrene	13.56	104	520218	2.703	ppbv	95
72) 4-Ethyltoluene	15.87	105	20037	0.053	ppbv #	55
74) 1,2,4-Trimethylbenzene	16.80	105	26117	0.073	ppbv #	69

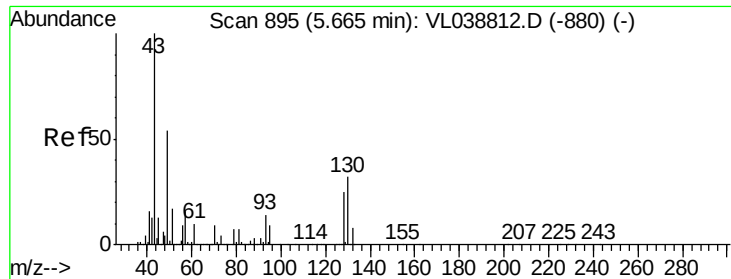
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL040722\
Data File : VL038849.D
Acq On : 7 Apr 2022 20:12
Operator : SY/AP
Sample : N2273-03DL 4X
Misc : 400mL/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
1160-1-1A-3DL

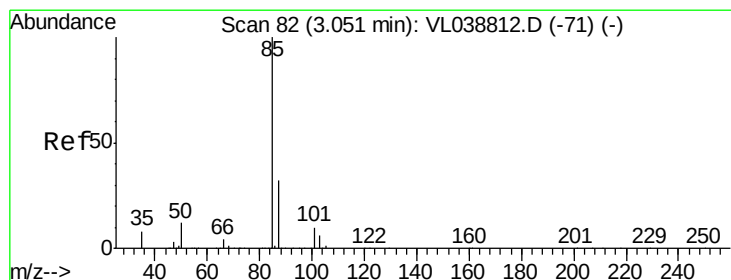
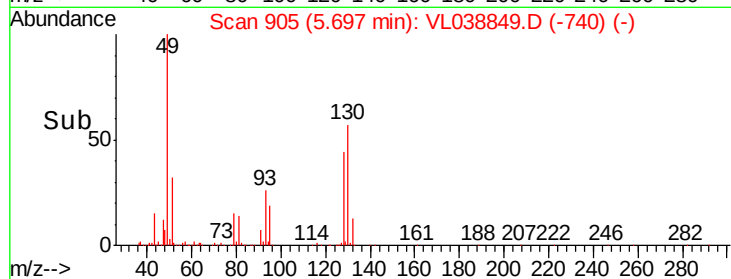
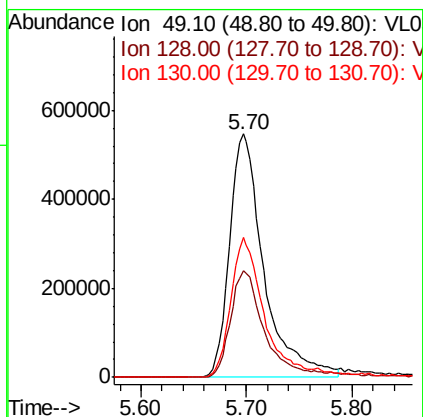
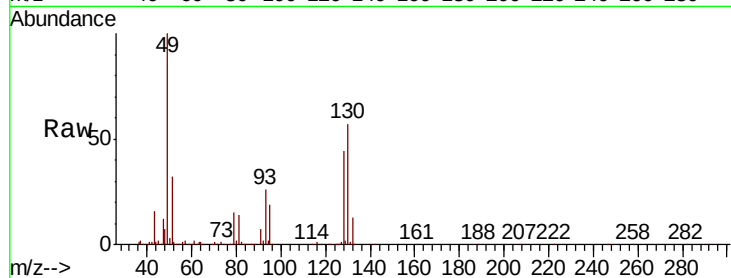
Quant Time: Apr 11 05:15:05 2022
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL040522AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Apr 06 06:12:53 2022
QLast Update : Wed Apr 06 06:12:53 2022
Response via : Initial Calibration





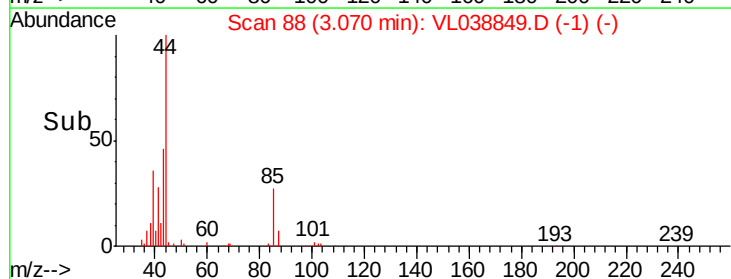
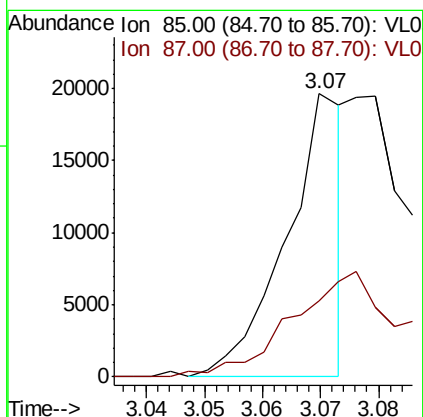
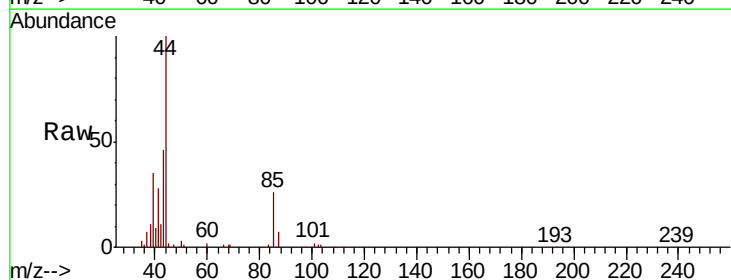
#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.70
 Instrument: MSVOA_L
 Delta R.T.:
 Lab File: ClientSampleId:
 1160-1-1A-3DL
 Acq: 7 Apr 2022 20:12

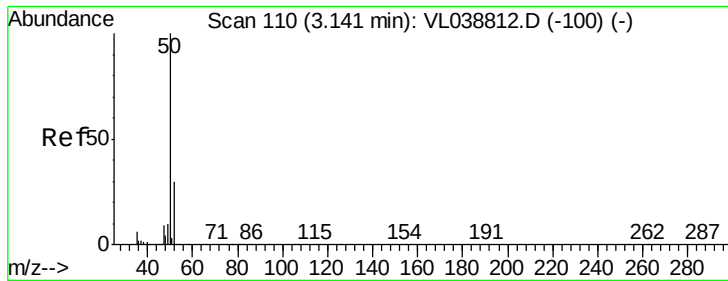
Tot Ion: 49 Resp: 1233233
 Ion Ratio Lower Upper
 49 100
 128 45.6 24.1 72.3
 130 58.9 30.9 92.8



#2
 Dichlorodifluoromethane
 Concen: 0.077 ppbv
 RT: 3.07 min Scan# 88
 Delta R.T. 0.02 min
 Lab File: VL038849.D
 Acq: 7 Apr 2022 20:12

Tgt Ion: 85 Resp: 13414
 Ion Ratio Lower Upper
 85 100
 87 24.8 25.9 38.9#





#4

Chloromethane

Concen: 0.067 ppbv

RT: 3.17 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

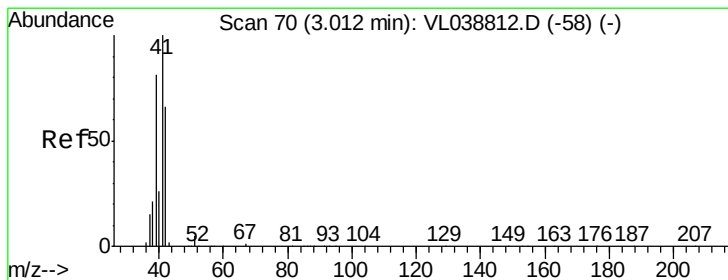
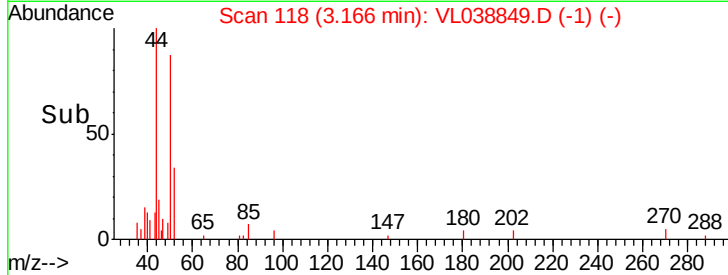
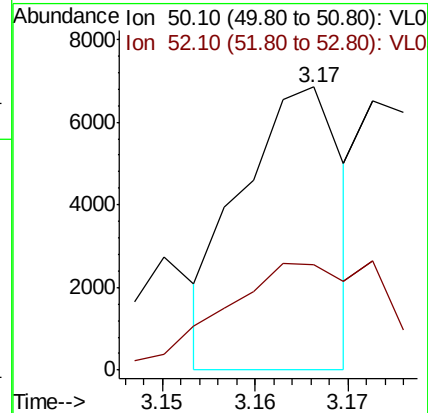
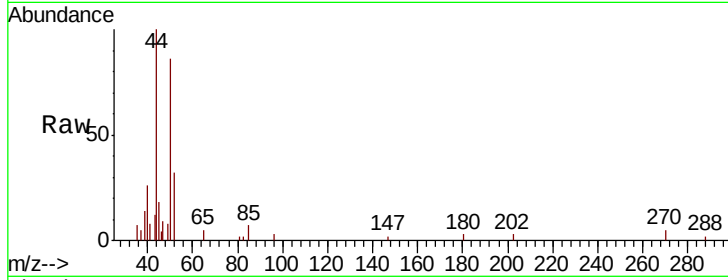
Acq: 7 Apr 2022 20:12

Tot Ion: 50 Resp: 5197

Ion Ratio Lower Upper

50 100

52 31.3 24.3 36.5



#9

Propene

Concen: 1.154 ppbv

RT: 3.23 min Scan# 139

Delta R.T. 0.22 min

Lab File: VL038849.D

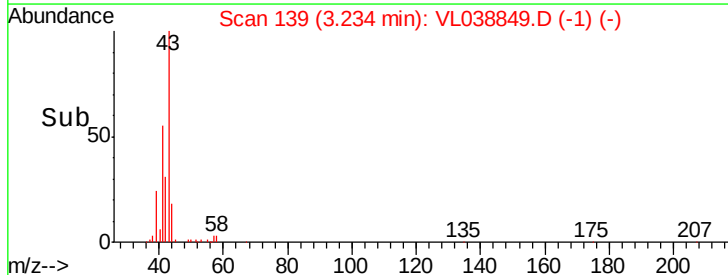
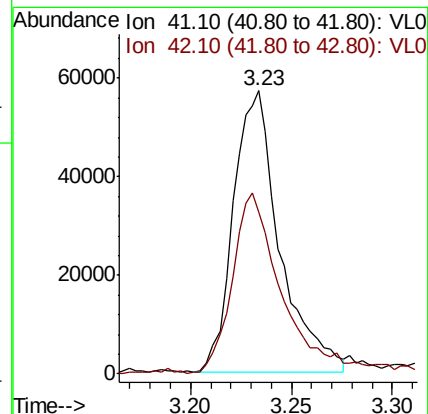
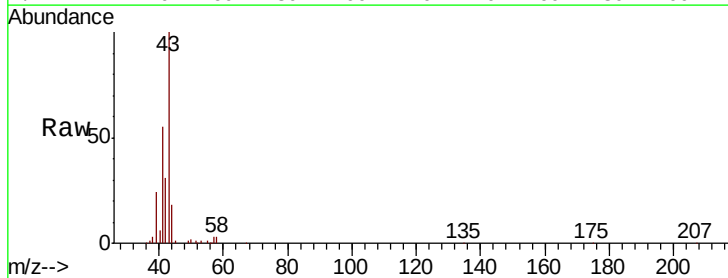
Acq: 7 Apr 2022 20:12

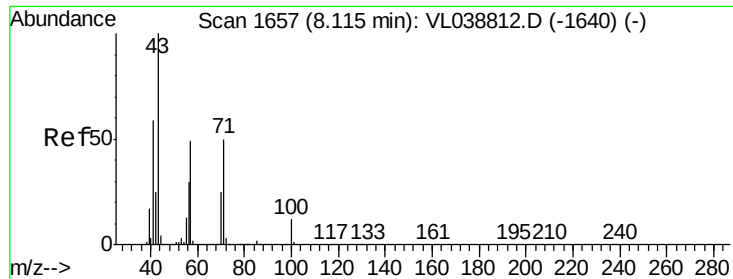
Tgt Ion: 41 Resp: 91885

Ion Ratio Lower Upper

41 100

42 72.3 54.2 81.4





#10

Heptane

Concen: 0.159 ppbv

RT: 8.14 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

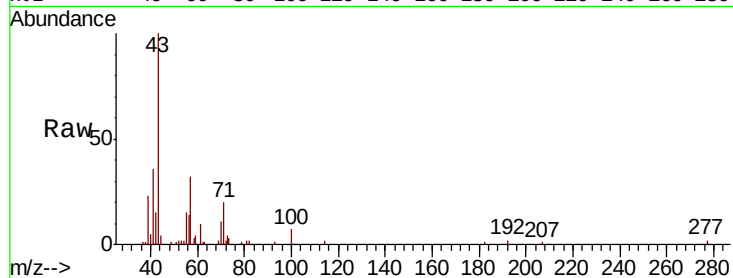
Acq: 7 Apr 2022 20:12 1160-1-1A-3DL

Tot Ion: 43 Resp: 31842

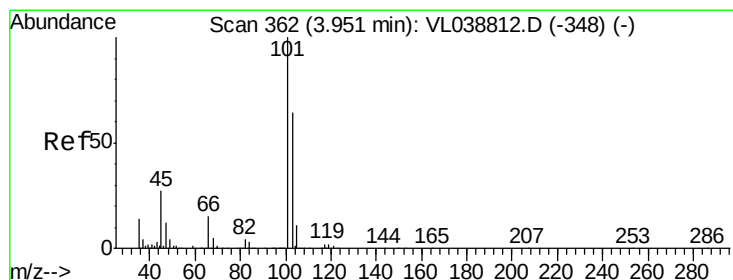
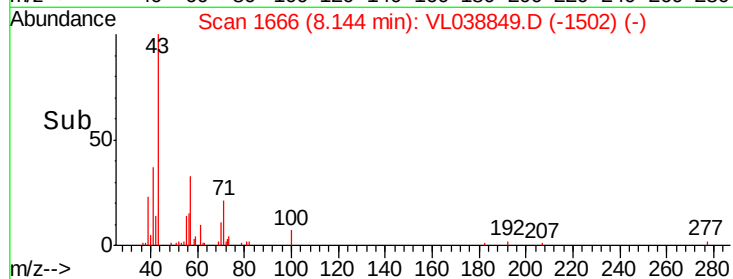
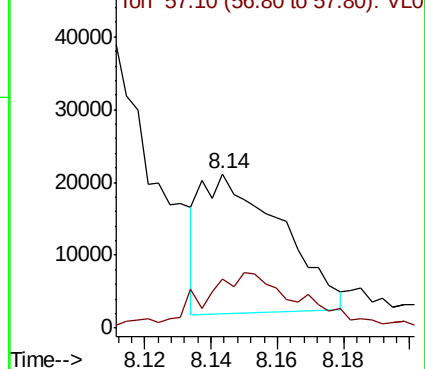
Ion Ratio Lower Upper

43 100

57 53.0 39.3 58.9



Abundance Ion 43.10 (42.80 to 43.80): VL0



#11

Trichlorofluoromethane

Concen: 0.049 ppbv

RT: 3.98 min Scan# 372

Delta R.T. 0.03 min

Lab File: VL038849.D

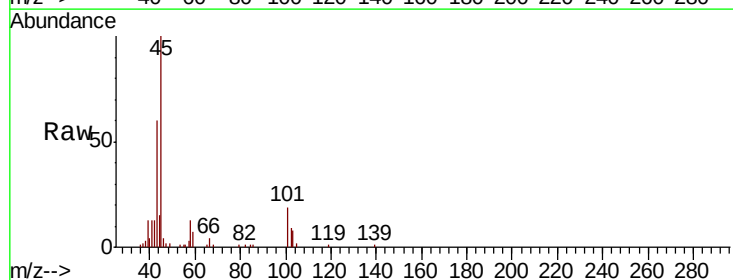
Acq: 7 Apr 2022 20:12

Tgt Ion:101 Resp: 6864

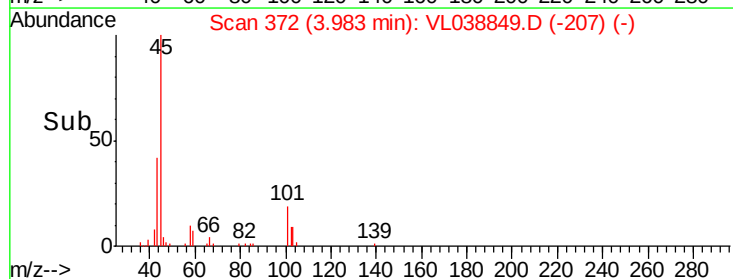
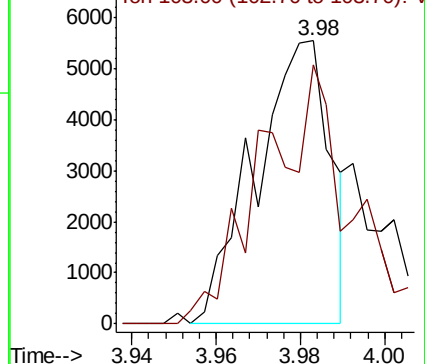
Ion Ratio Lower Upper

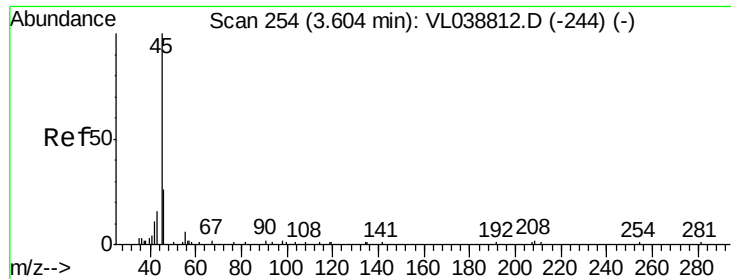
101 100

103 86.9 51.4 77.0#



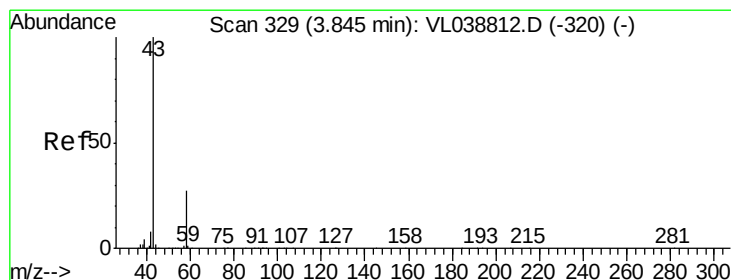
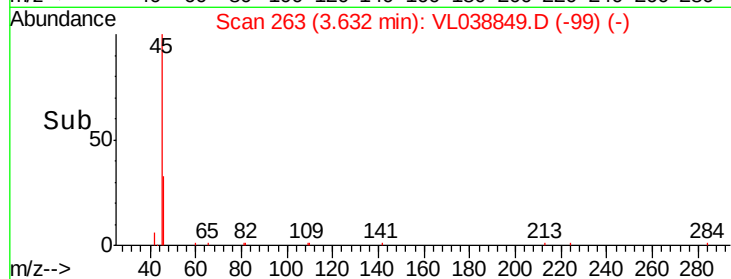
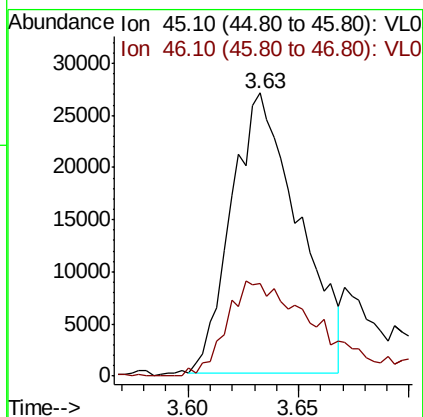
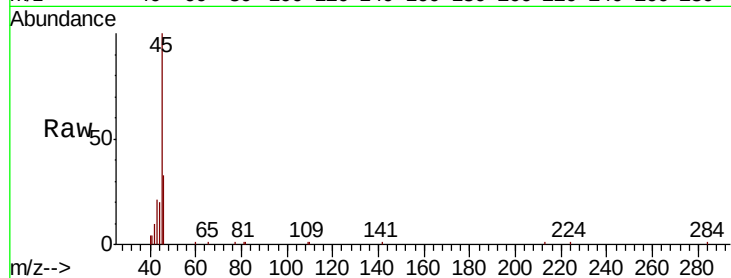
Abundance Ion 101.00 (100.70 to 101.70): V





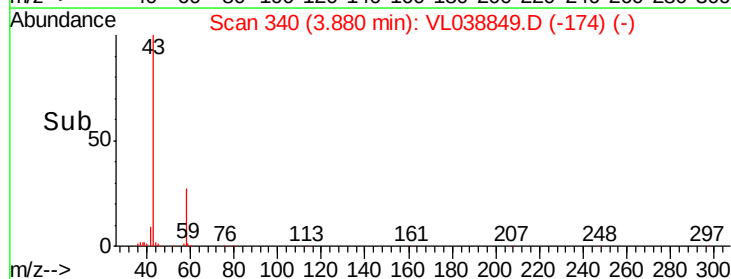
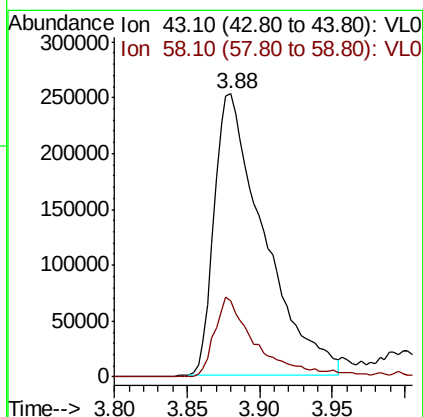
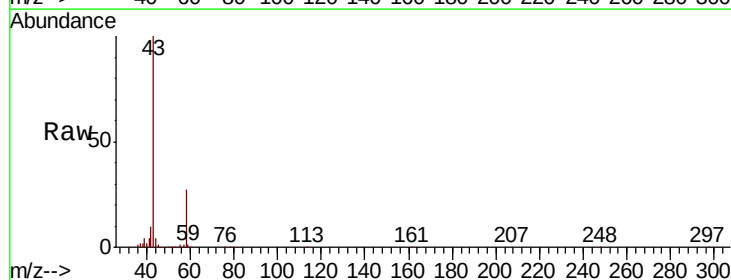
#13
 Ethanol
 Concen: 11.739 ppbv
 RT: 3.63
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 7 Apr 2022 20:12

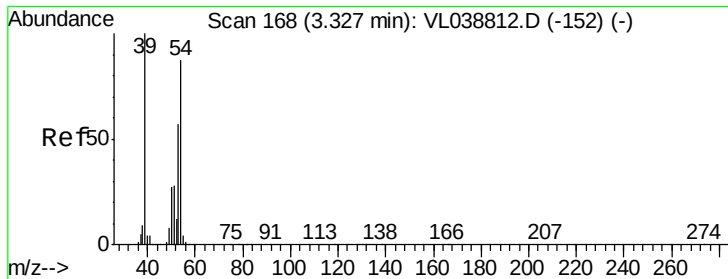
Tot Ion: 45 Resp: 56806
 Ion Ratio Lower Upper
 45 100
 46 51.1 0.0 0.0#



#15
 Acetone
 Concen: 4.920 ppbv
 RT: 3.88 min Scan# 340
 Delta R.T. 0.04 min
 Lab File: VL038849.D
 Acq: 7 Apr 2022 20:12

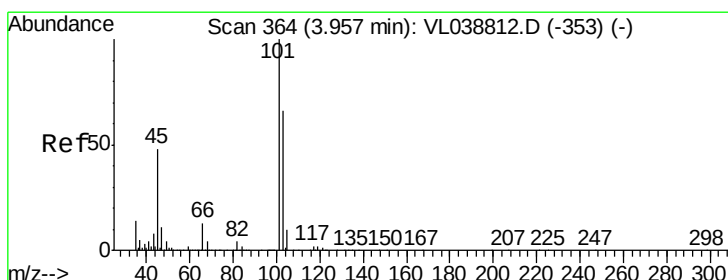
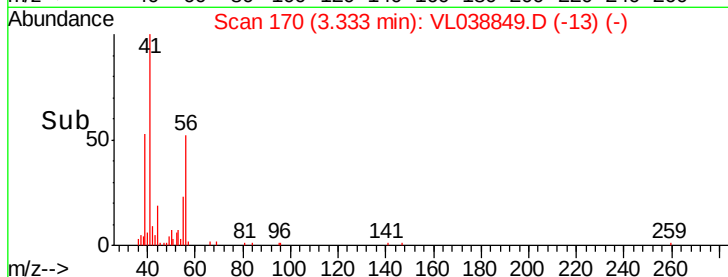
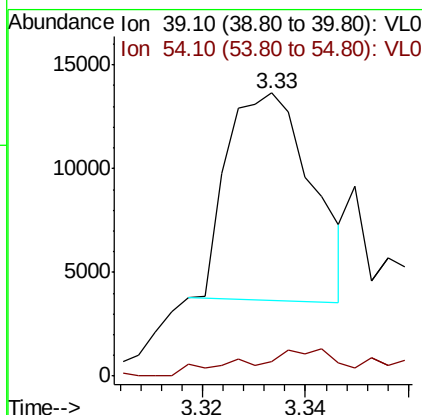
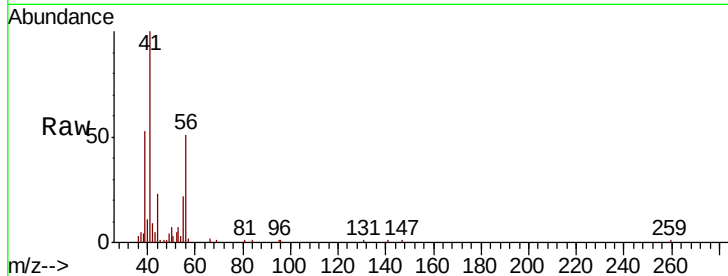
Tgt Ion: 43 Resp: 604045
 Ion Ratio Lower Upper
 43 100
 58 24.3 22.5 33.7





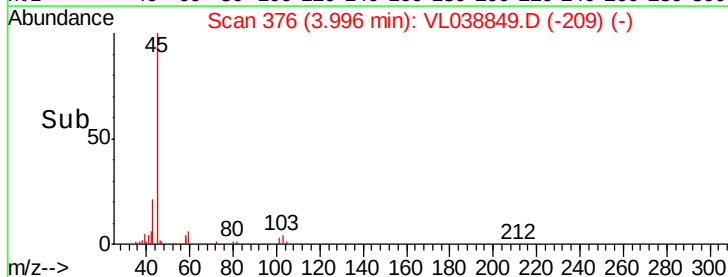
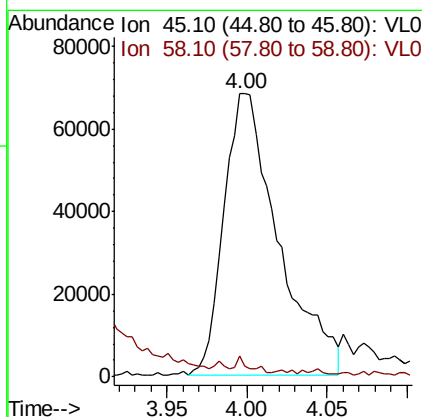
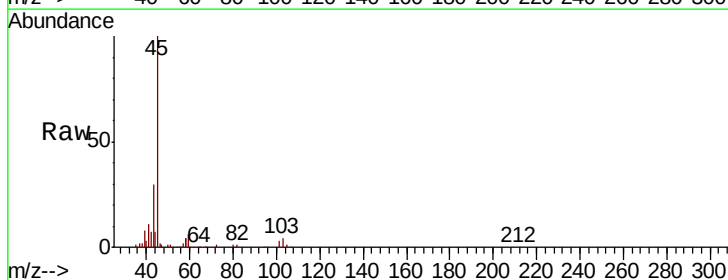
#16
 1,3-Butadiene
 Concen: 0.161 ppbv
 RT: 3.33
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId:
 1160-1-1A-3DL
 Acq: 7 Apr 2022 20:12

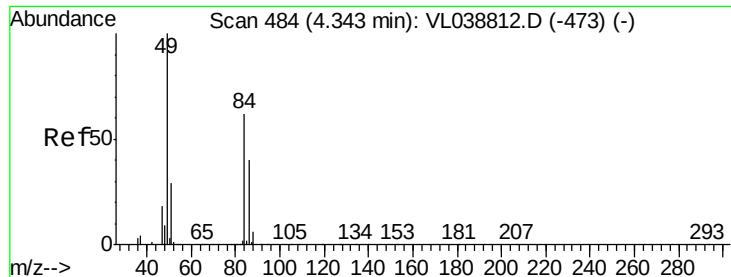
Tot Ion: 39 Resp: 11268
 Ion Ratio Lower Upper
 39 100
 54 35.7 64.8 97.2#



#19
 Isopropyl Alcohol
 Concen: 2.534 ppbv
 RT: 4.00 min Scan# 376
 Delta R.T. 0.04 min
 Lab File: VL038849.D
 Acq: 7 Apr 2022 20:12

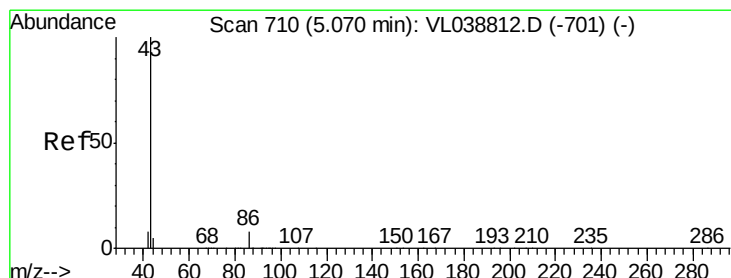
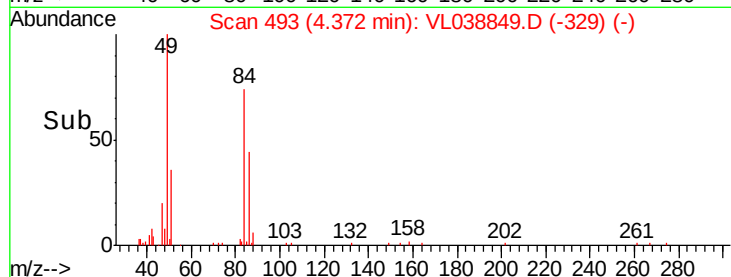
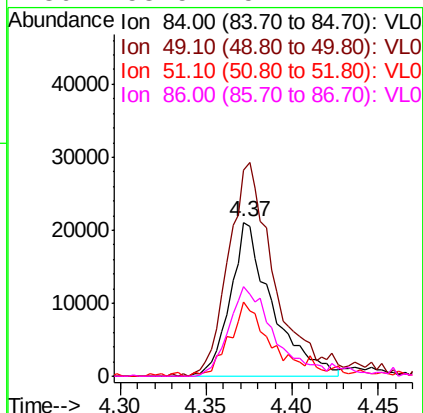
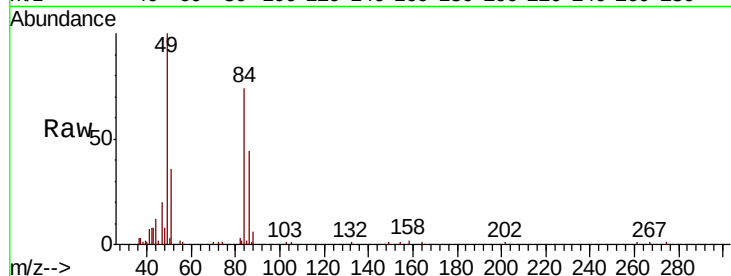
Tgt Ion: 45 Resp: 159044
 Ion Ratio Lower Upper
 45 100
 58 3.9 0.0 0.0#





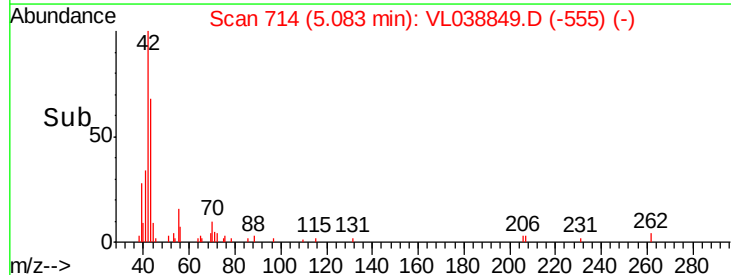
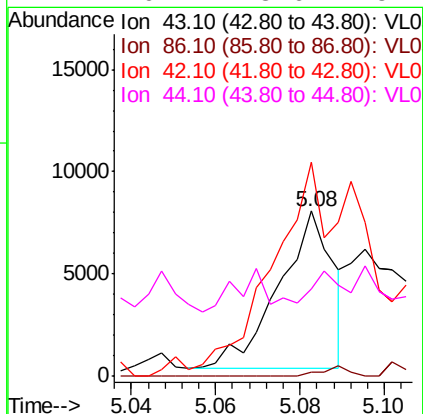
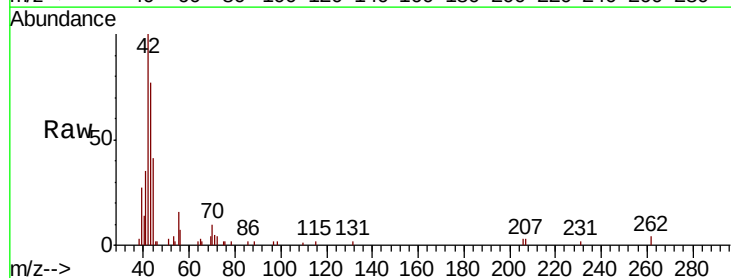
#20
Methvlene Chloride
Concen: 0.802 ppbv
RT: 4.37
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
Acq: 7 Apr 2022 20:12

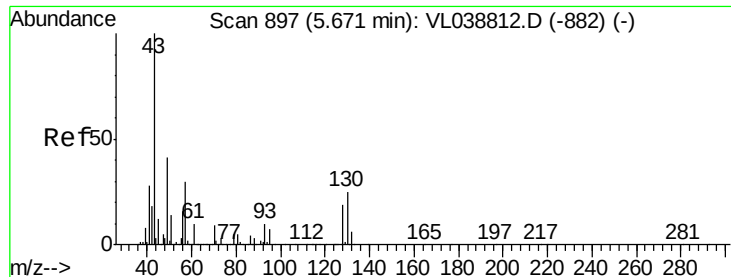
Tot Ion:	84	Resp:	35714
Ion	Ratio	Lower	Upper
84	100		
49	134.3	129.4	194.0
51	48.4	37.4	56.2
86	58.5	51.4	77.2



#23
Vinyl Acetate
Concen: 0.057 ppbv
RT: 5.08 min Scan# 714
Delta R.T. 0.01 min
Lab File: VL038849.D
Acq: 7 Apr 2022 20:12

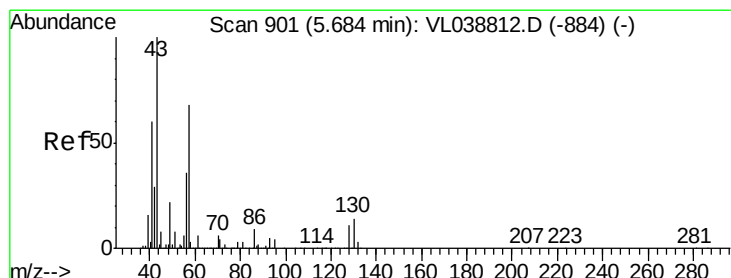
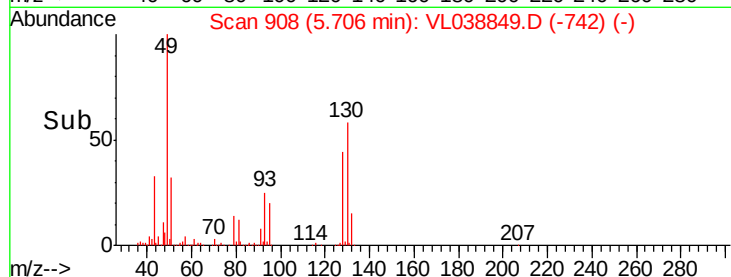
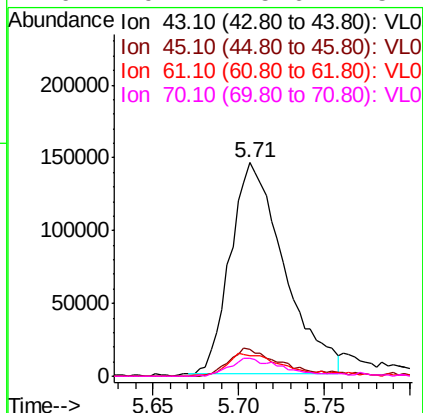
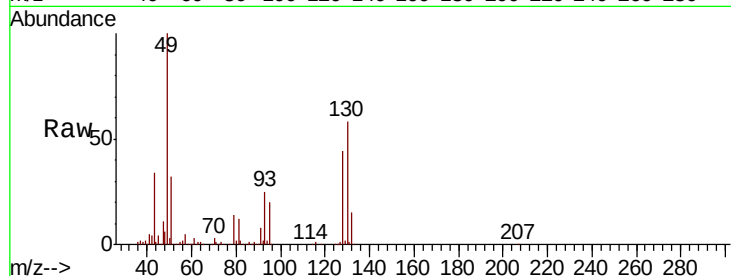
Tgt Ion:	43	Resp:	6831
Ion	Ratio	Lower	Upper
43	100		
86	2.1	5.8	8.6#
42	132.0	7.8	11.6#
44	10.2	3.6	5.4#





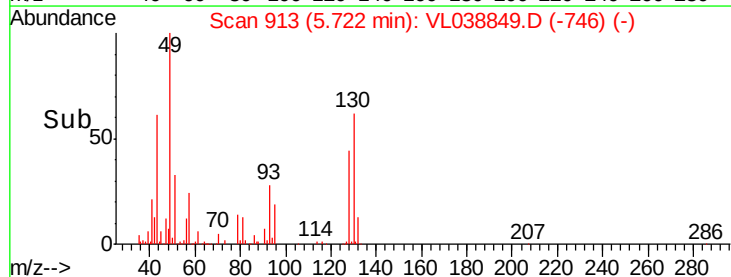
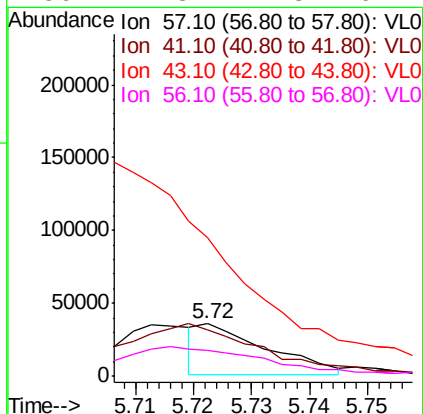
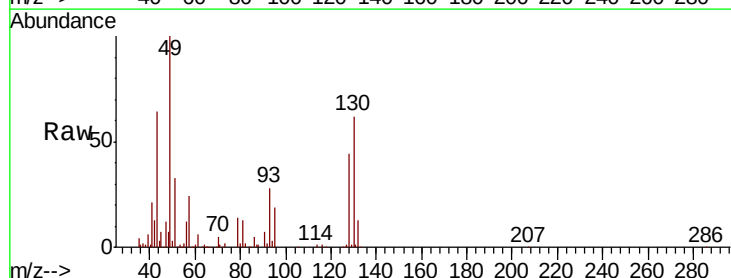
#25
Ethyl Acetate
Concen: 1.014 ppbv
RT: 5.71 min
Delta R.T.: 0.04 min
Lab File: VL038812.D
Acq: 7 Apr 2022 20:12

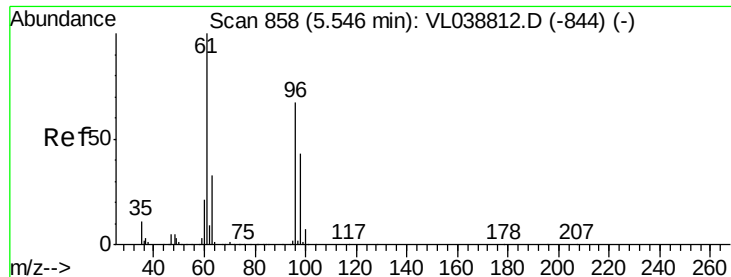
Tot Ion:	43	Resp:	315962
Ion	Ratio	Lower	Upper
43	100		
45	13.4	8.4	12.6#
61	12.3	7.9	11.9#
70	9.2	5.6	8.4#



#26
Hexane
Concen: 0.202 ppbv
RT: 5.72 min Scan# 913
Delta R.T.: 0.04 min
Lab File: VL038849.D
Acq: 7 Apr 2022 20:12

Tgt Ion:	57	Resp:	28644
Ion	Ratio	Lower	Upper
57	100		
41	251.8	72.0	108.0#
43	0.0	186.6	280.0#
56	142.3	42.8	64.2#





#31

cis-1,2-Dichloroethene

Concen: 0.114 ppbv

RT: 5.70 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 7 Apr 2022 20:12

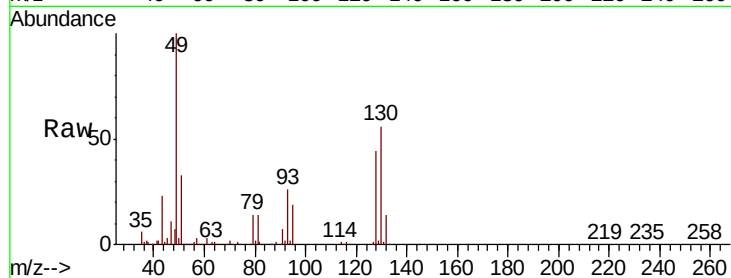
Tot Ion: 61 Resp: 14889

Ion Ratio Lower Upper

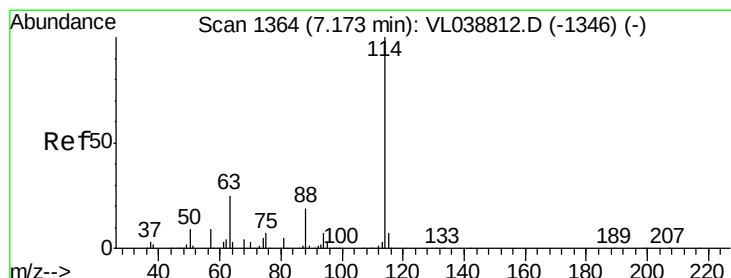
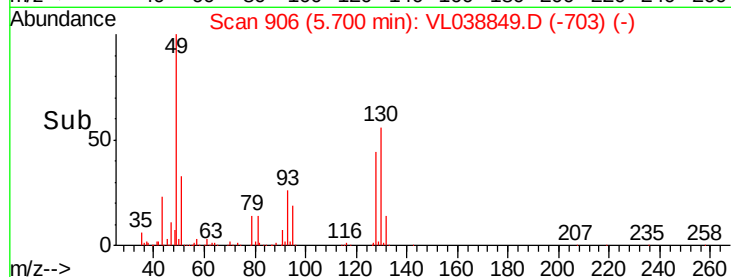
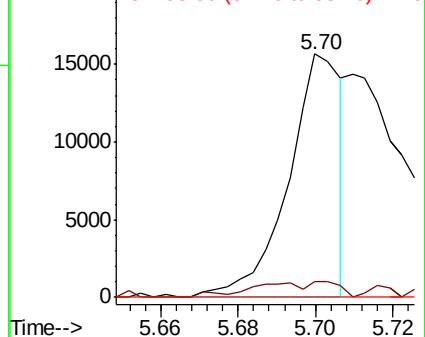
61 100

96 6.2 53.4 80.0#

98 0.0 34.2 51.4#



Abundance Ion 61.10 (60.80 to 61.80): VL0
Ion 96.00 (95.70 to 96.70): VL0
Ion 98.00 (97.70 to 98.70): VL0



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.20 min Scan# 1374

Delta R.T. 0.03 min

Lab File: VL038849.D

Acq: 7 Apr 2022 20:12

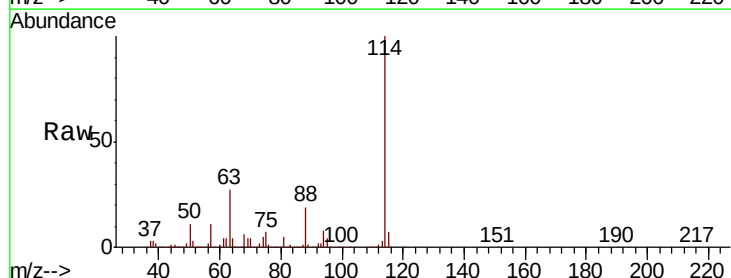
Tgt Ion: 114 Resp: 2988941

Ion Ratio Lower Upper

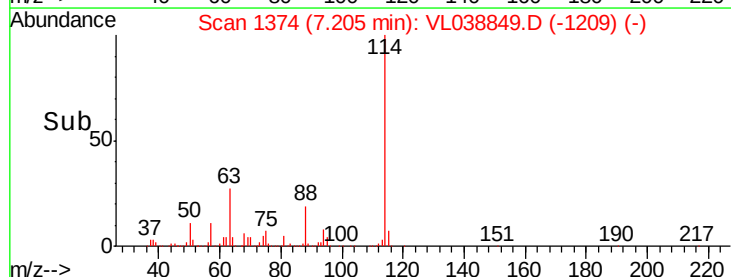
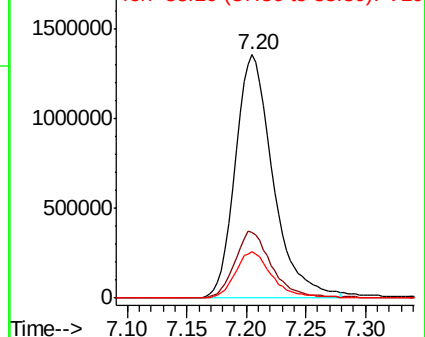
114 100

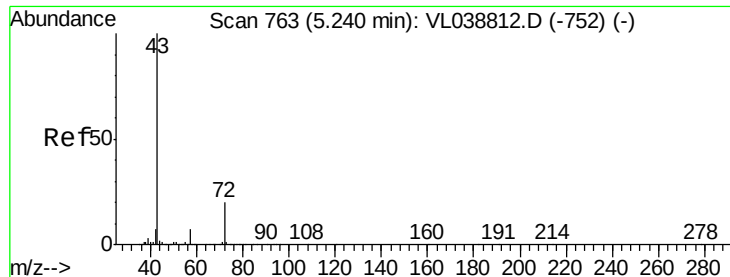
63 27.5 19.8 29.8

88 19.2 14.2 21.4



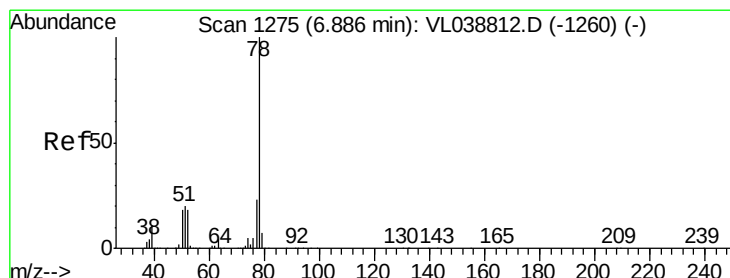
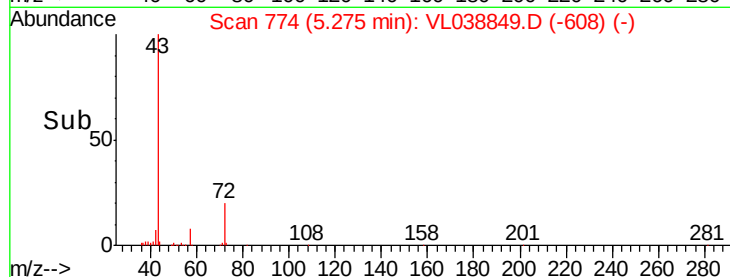
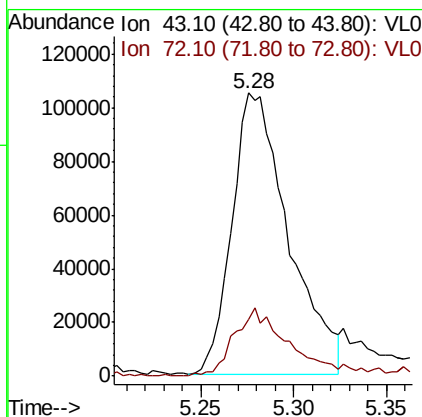
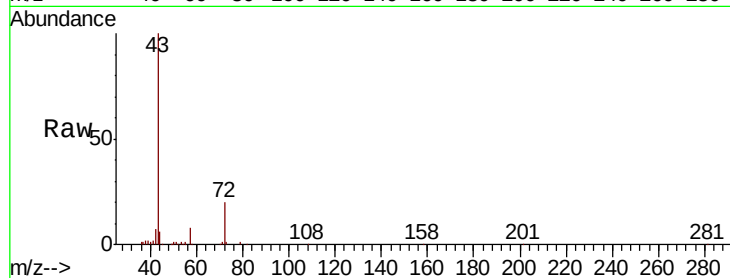
Abundance Ion 114.10 (113.80 to 114.80): V
Ion 63.10 (62.80 to 63.80): VL0
Ion 88.10 (87.80 to 88.80): VL0





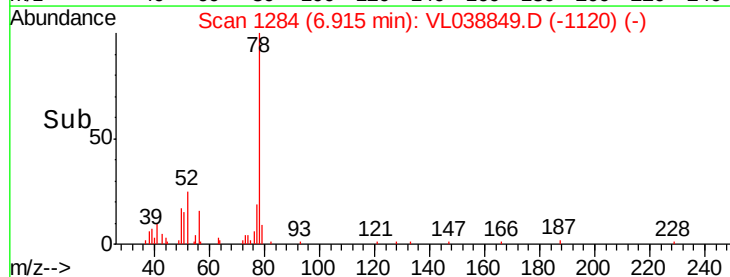
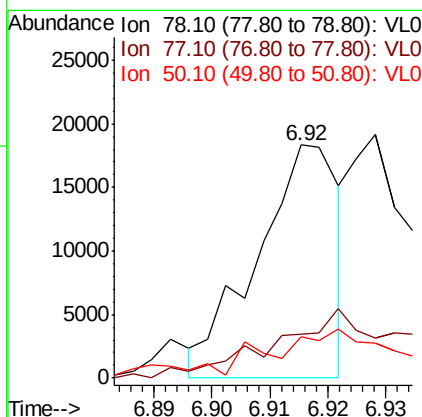
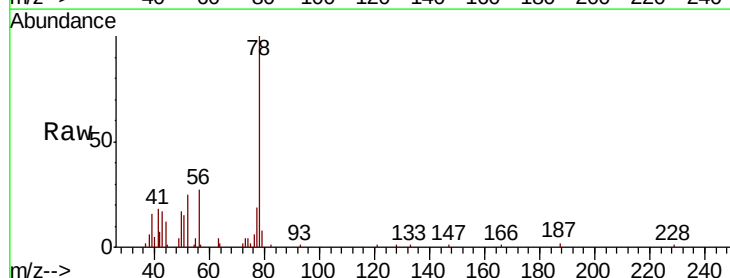
#34
 2-Butanone
 Concen: 1.882 ppbv
 RT: 5.28
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 7 Apr 2022 20:12

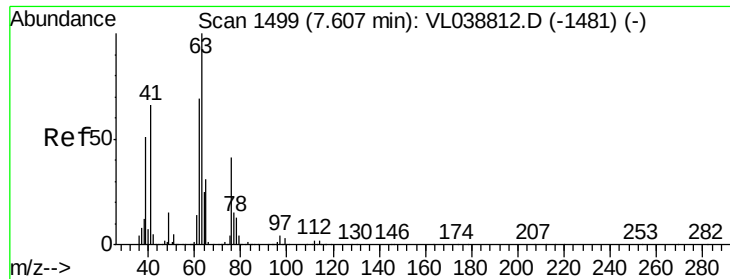
Tot Ion: 43 Resp: 222253
 Ion Ratio Lower Upper
 43 100
 72 24.5 16.9 25.3



#36
 Benzene
 Concen: 0.066 ppbv
 RT: 6.92 min Scan# 1284
 Delta R.T. 0.03 min
 Lab File: VL038849.D
 Acq: 7 Apr 2022 20:12

Tgt Ion: 78 Resp: 17897
 Ion Ratio Lower Upper
 78 100
 77 18.2 18.2 27.2
 50 16.0 14.0 21.0





#39

1,2-Dichloropropane

Concen: 7.662 ppbv

RT: 7.20 Instrument: MSVOA_1

Delta R.T.

Lab File: ClientSampleId:

Acq: 7 Apr 2022 20:12

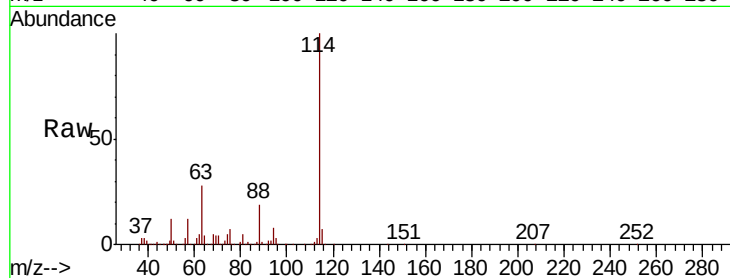
Tot Ion: 63 Resp: 796828

Ion Ratio Lower Upper

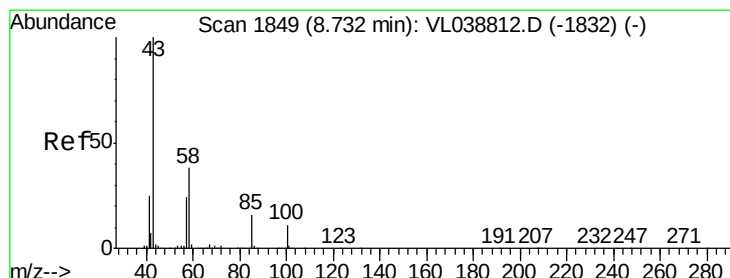
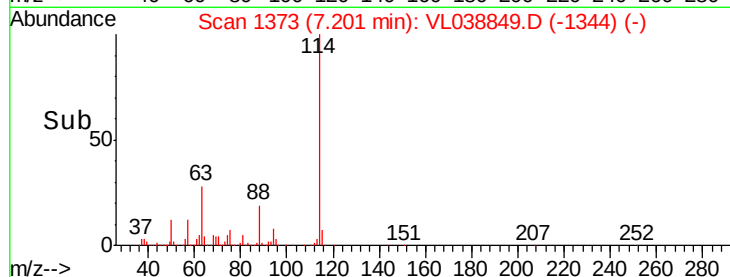
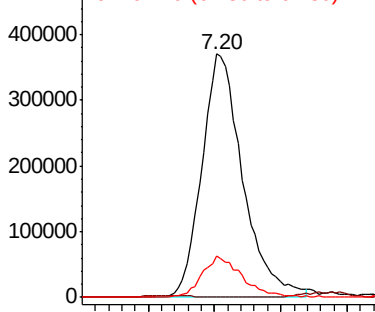
63 100

41 0.0 53.0 79.6#

62 16.9 55.0 82.4#



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



#50

4-Methyl-2-Pentanone

Concen: 0.235 ppbv

RT: 8.78 min Scan# 1865

Delta R.T. 0.05 min

Lab File: VL038849.D

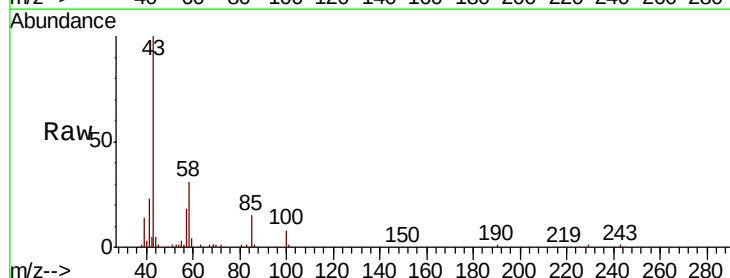
Acq: 7 Apr 2022 20:12

Tgt Ion: 43 Resp: 62310

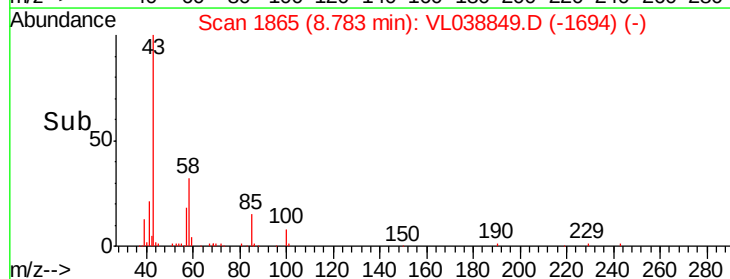
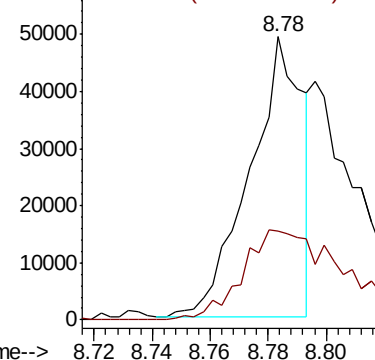
Ion Ratio Lower Upper

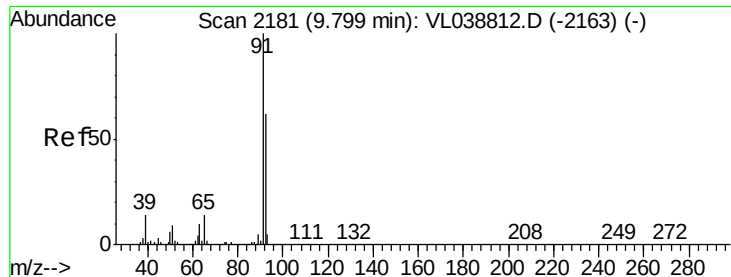
43 100

58 75.4 29.0 43.6#



Abundance Ion 43.10 (42.80 to 43.80): VL0
Ion 58.10 (57.80 to 58.80): VL0





#53

Toluene

Concen: 2.639 ppbv

RT: 9.83 Instrument: MSVOA_1

Delta R.T.

Lab File: ClientSampleId:

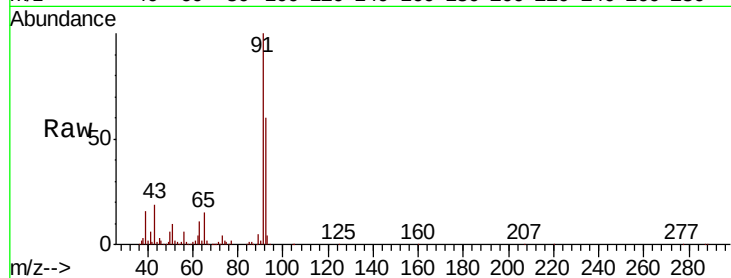
Acq: 7 Apr 2022 20:12

Tot Ion: 91 Resp: 828437

Ion Ratio Lower Upper

91 100

92 61.3 49.2 73.8



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

9.83

400000

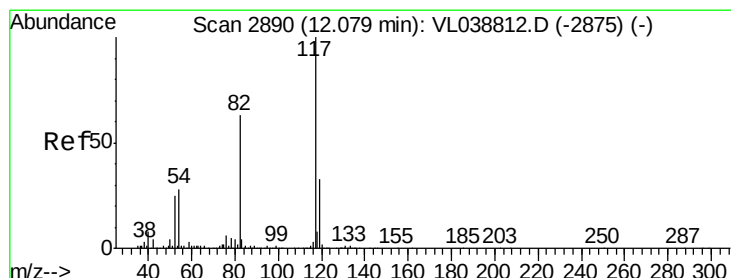
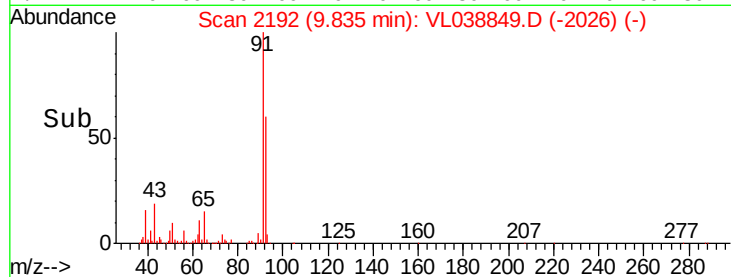
300000

200000

100000

0

Time-->



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.12 min Scan# 2902

Delta R.T. 0.04 min

Lab File: VL038849.D

Acq: 7 Apr 2022 20:12

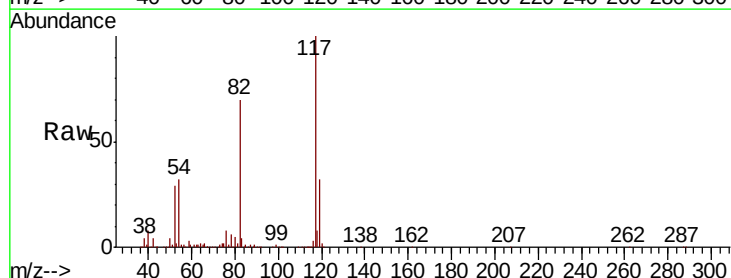
Tgt Ion: 117 Resp: 2688792

Ion Ratio Lower Upper

117 100

82 69.7 53.0 79.6

119 32.4 24.9 37.3



Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V

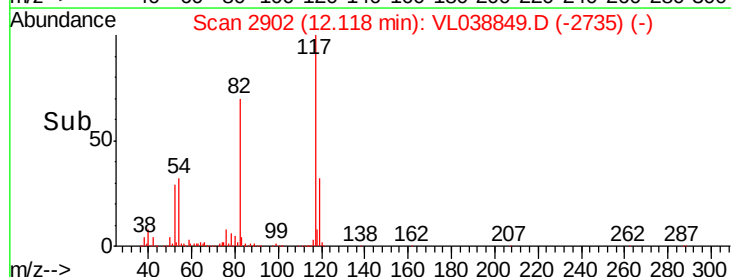
1500000

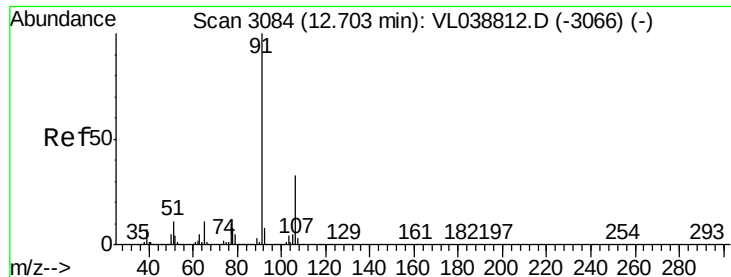
1000000

500000

0

Time-->





#58

Ethyl Benzene

Concen: 0.346 ppbv

RT: 12.74

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

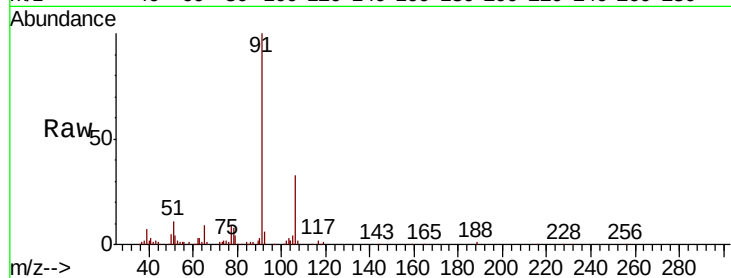
Acq: 7 Apr 2022 20:12

Tot Ion: 91 Resp: 139044

Ion Ratio Lower Upper

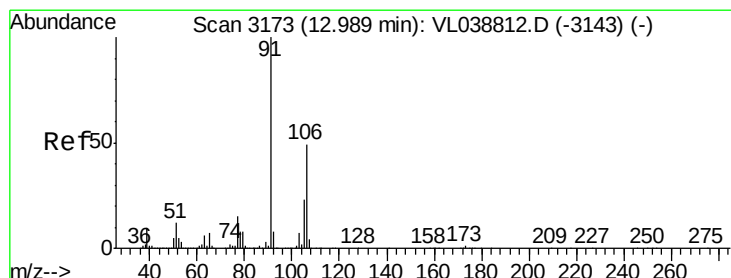
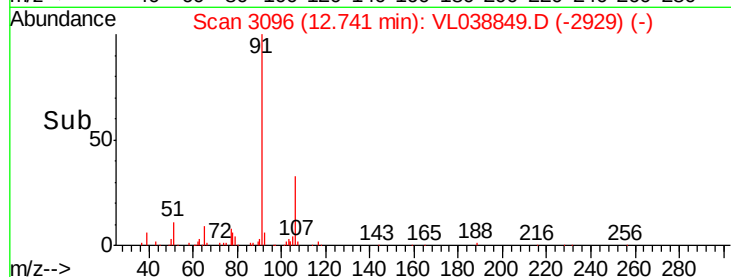
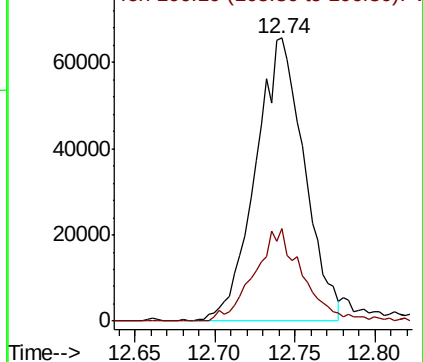
91 100

106 32.9 26.7 40.1



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



#59

m/p-Xylene

Concen: 1.076 ppbv

RT: 12.99 min Scan# 3174

Delta R.T. 0.00 min

Lab File: VL038849.D

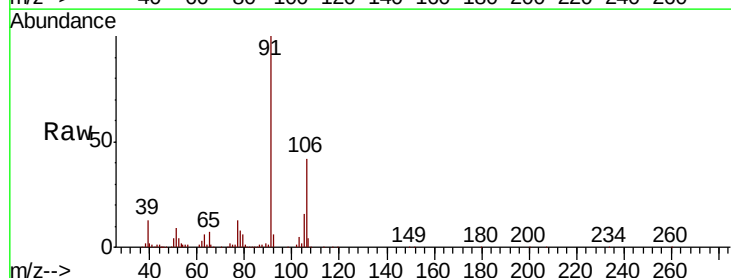
Acq: 7 Apr 2022 20:12

Tgt Ion: 91 Resp: 363354

Ion Ratio Lower Upper

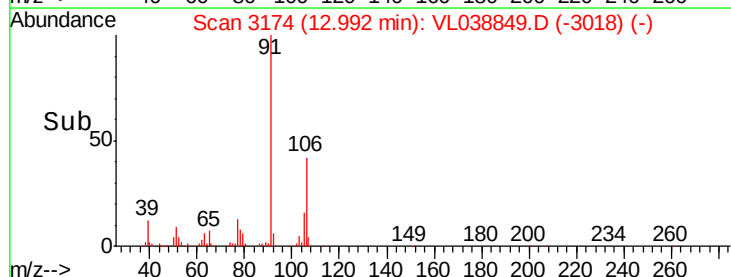
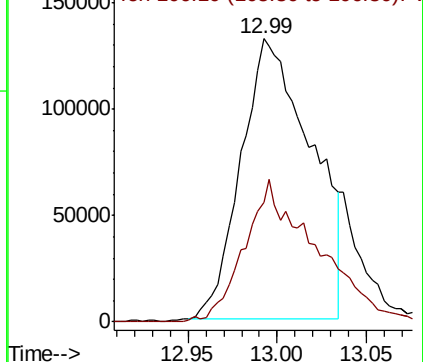
91 100

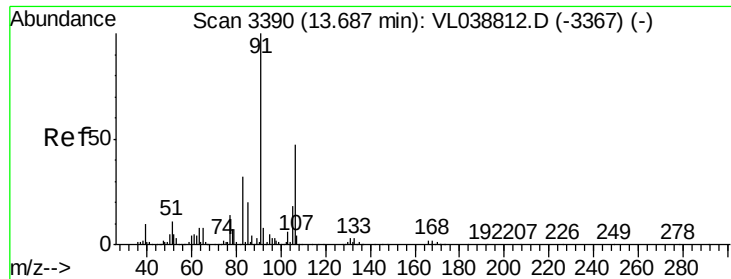
106 52.6 37.1 55.7



Abundance Ion 91.10 (90.80 to 91.80): VL0

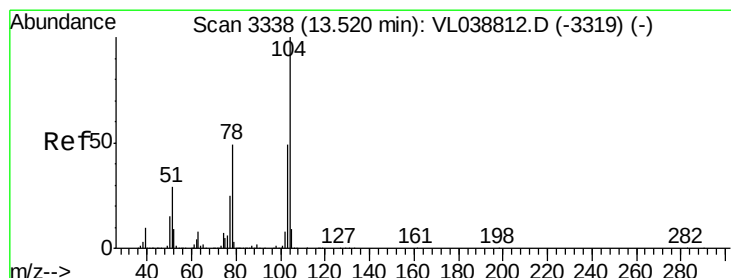
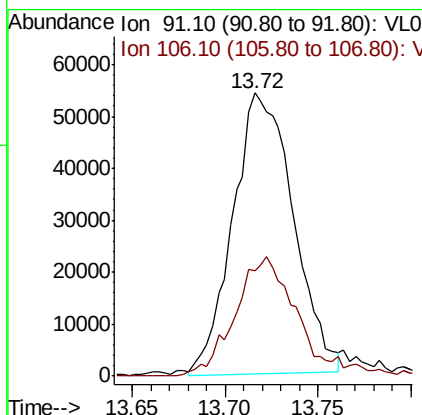
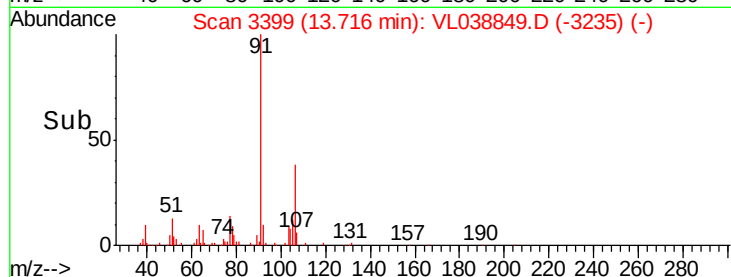
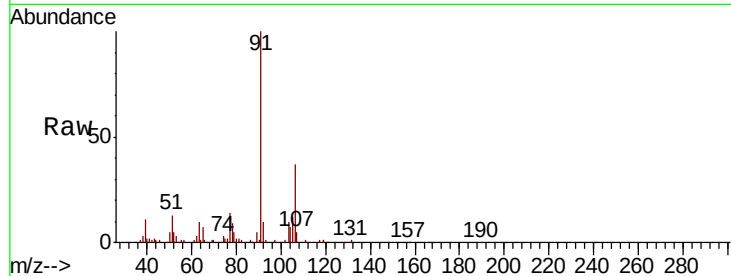
Ion 106.10 (105.80 to 106.80): V





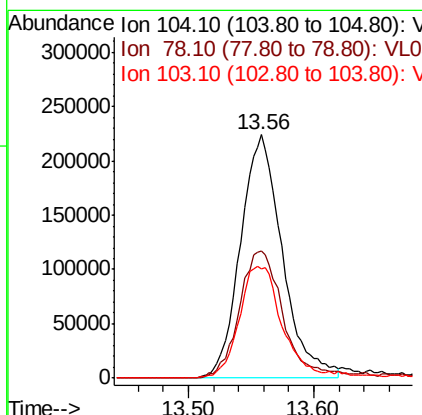
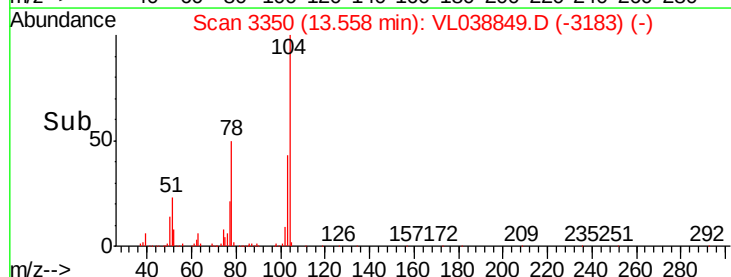
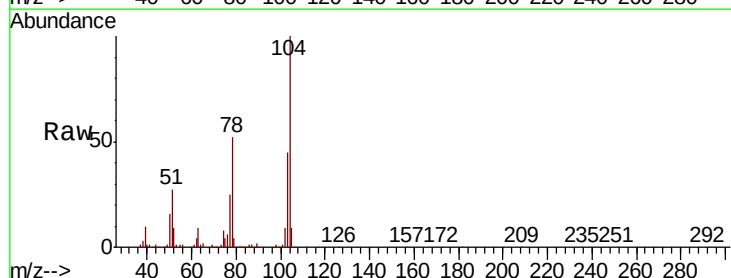
#60
o-Xylene
Concen: 0.389 ppbv
RT: 13.72
Delta R.T. MSVOA_L
Lab File: ClientSampled :
Acq: 7 Apr 2022 20:12

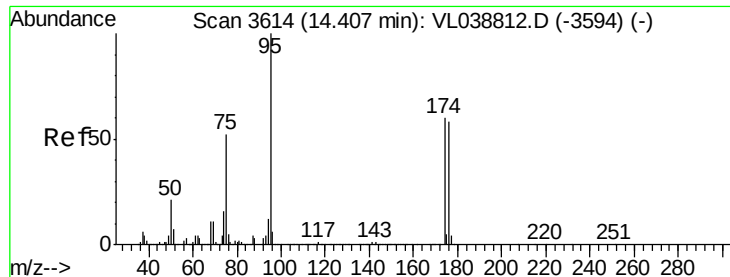
Tot Ion: 91 Resp: 122836
Ion Ratio Lower Upper
91 100
106 44.4 23.8 71.4



#61
Styrene
Concen: 2.703 ppbv
RT: 13.56 min Scan# 3350
Delta R.T. 0.04 min
Lab File: VL038849.D
Acq: 7 Apr 2022 20:12

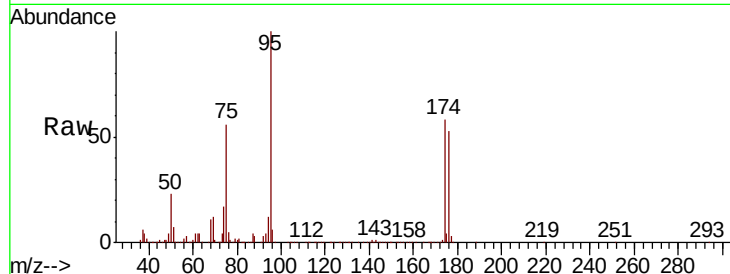
Tgt Ion:104 Resp: 520218
Ion Ratio Lower Upper
104 100
78 56.5 40.5 60.7
103 48.9 39.0 58.4



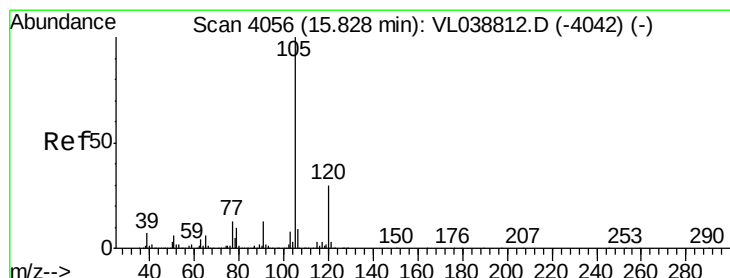
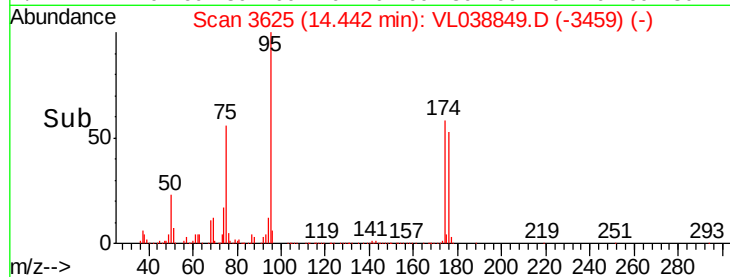
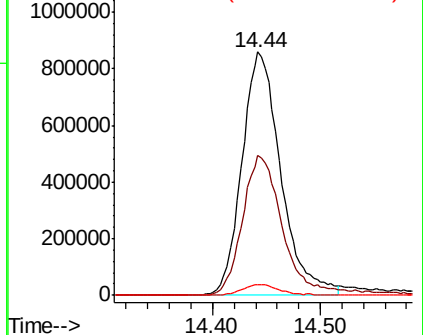


#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.582 ppbv
 RT: 14.44 min
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 7 Apr 2022 20:12

Tot Ion:	95	Resp:	2158138
Ion	Ratio	Lower	Upper
95	100		
174	61.8	52.0	78.0
175	4.4	4.0	6.0

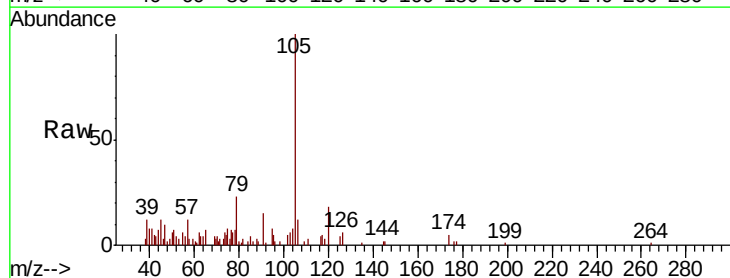


Abundance Ion 95.10 (94.80 to 95.80): VL0
 Ion 174.00 (173.70 to 174.70): VL0
 Ion 175.00 (174.70 to 175.70): VL0

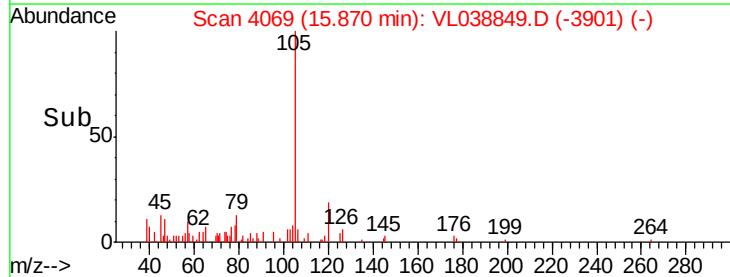
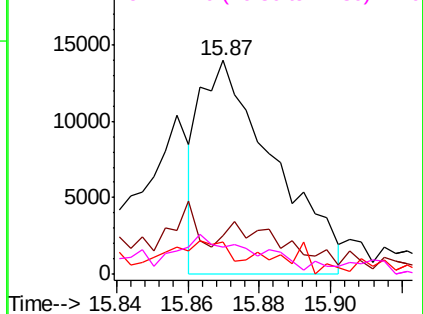


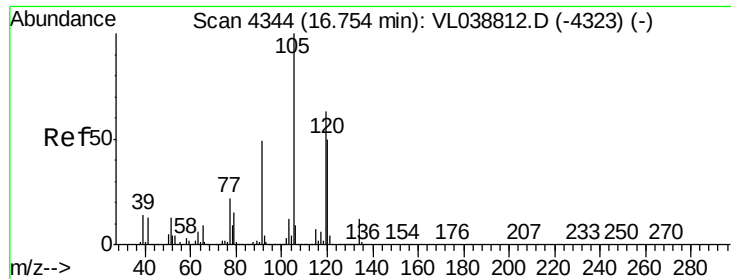
#72
 4-Ethyltoluene
 Concen: 0.053 ppbv
 RT: 15.87 min Scan# 4069
 Delta R.T. 0.04 min
 Lab File: VL038849.D
 Acq: 7 Apr 2022 20:12

Tgt Ion:	105	Resp:	20037
Ion	Ratio	Lower	Upper
105	100		
120	0.0	24.3	36.5#
91	0.0	9.4	14.2#
77	0.0	10.6	15.8#



Abundance Ion 105.10 (104.80 to 105.80): VL0
 Ion 120.20 (119.90 to 120.90): VL0
 Ion 91.10 (90.80 to 91.80): VL0
 Ion 77.10 (76.80 to 77.80): VL0





#74
 1,2,4-Trimethylbenzene
 Concen: 0.073 ppbv
 RT: 16.80
 Delta R.T: MSVOA_L
 Lab File: ClientSampleId :
 Acq: 7 Apr 2022 20.12

Tot Ion:	105	Resp:	26117
Ion Ratio	Lower	Upper	
105	100		
120	40.9	39.8	59.8
91	11.6	39.4	59.0#
77	14.3	17.3	25.9#

