

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL030922\
 Data File : VL038576.D
 Acq On : 9 Mar 2022 15:07
 Operator : SY/AP
 Sample : N1813-01
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-1

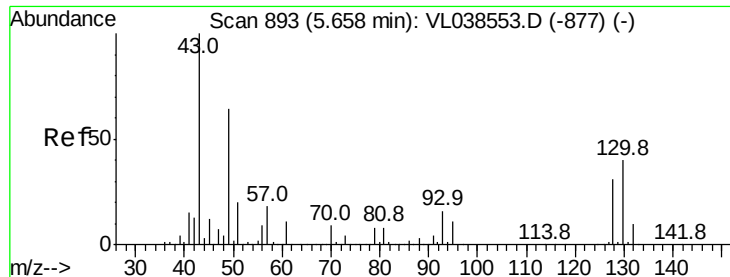
Quant Time: Mar 10 00:31:49 2022
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL030822AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Mar 08 21:18:44 2022
 QLast Update : Tue Mar 08 21:18:44 2022
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	816976	10.00	ppbv	0.01
33) 1,4-Difluorobenzene	7.18	114	1974664	10.00	ppbv	0.02
55) Chlorobenzene-d5	12.09	117	1701133	10.00	ppbv	0.02

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.42	95	1309092	10.12	ppbv	0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.20%

Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.06	85	28282	0.23	ppbv	91
3) Chlorodifluoromethane	3.00	51	145370	1.01	ppbv	98
4) Chloromethane	3.15	50	37561	0.70	ppbv	99
9) Propene	3.03	41	22810	0.45	ppbv #	82
11) Trichlorofluoromethane	3.96	101	25488	0.24	ppbv	86
12) 1,1,2-Trichlorotrifluoroet	4.49	101	3900	0.05	ppbv #	10
13) Ethanol	3.62	45	80600	13.80	ppbv	85
15) Acetone	3.86	43	263613	4.57	ppbv	98
19) Isopropyl Alcohol	3.99	45	6465	0.17	ppbv #	92
20) Methylene Chloride	4.35	84	152753	4.40	ppbv	97
23) Vinyl Acetate	5.08	43	20954	0.25	ppbv #	87
25) Ethyl Acetate	5.69	43	202650	1.04	ppbv #	78
26) Hexane	5.69	57	270153	2.96	ppbv #	45
29) Chloroform	5.75	83	7147	0.05	ppbv	94
34) 2-Butanone	5.26	43	26784	0.52	ppbv	92
35) Carbon Tetrachloride	7.02	117	5879	0.04	ppbv	88
36) Benzene	6.90	78	11756	0.07	ppbv #	90
39) 1,2-Dichloropropane	7.18	63	471218	6.88	ppbv #	26
41) Tetrahydrofuran	6.08	42	1504	0.04	ppbv #	57
53) Toluene	9.81	91	84084	0.44	ppbv	97
59) m/p-Xylene	13.00	91	5864	0.03	ppbv #	30
60) o-Xylene	13.69	91	7780	0.04	ppbv	82
72) 4-Ethyltoluene	15.84	105	6682	0.03	ppbv #	79
74) 1,2,4-Trimethylbenzene	16.77	105	22136	0.11	ppbv #	83

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



#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 5.67 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 9 Mar 2022 15:07

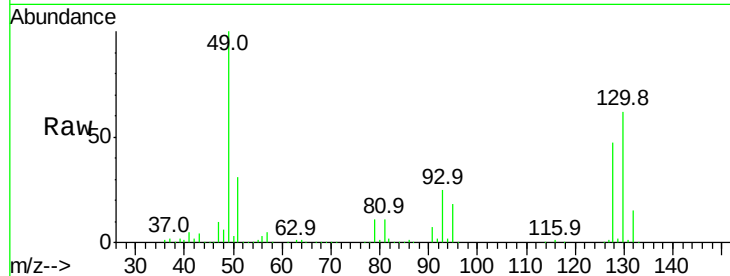
Tgt Ion: 49 Resp: 816976

Ion Ratio Lower Upper

49 100

128 49.6 26.4 79.2

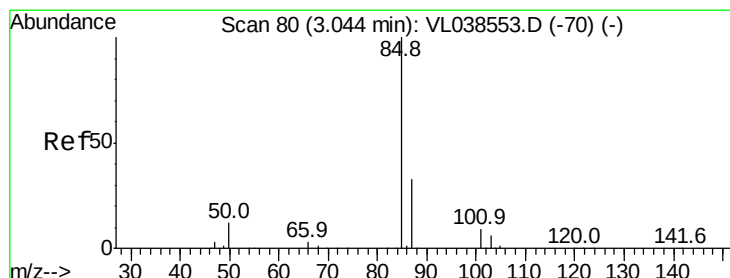
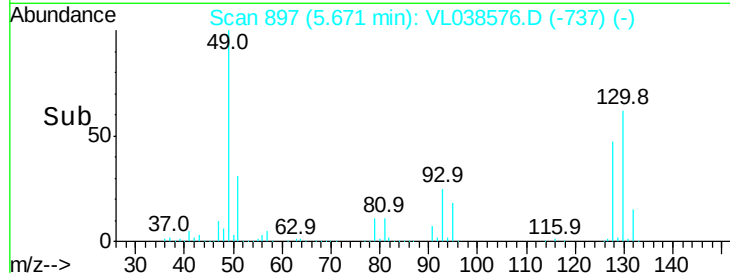
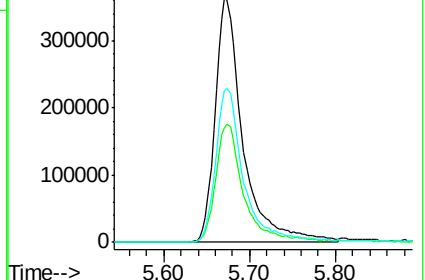
130 65.4 33.0 98.9



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: 0.23 ppbv

RT: 3.06 min Scan# 85

Delta R.T. 0.02 min

Lab File: VL038576.D

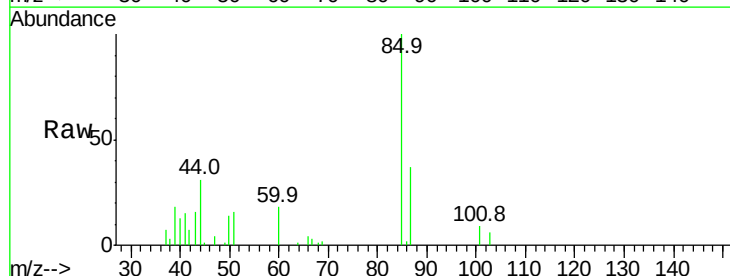
Acq: 9 Mar 2022 15:07

Tgt Ion: 85 Resp: 28282

Ion Ratio Lower Upper

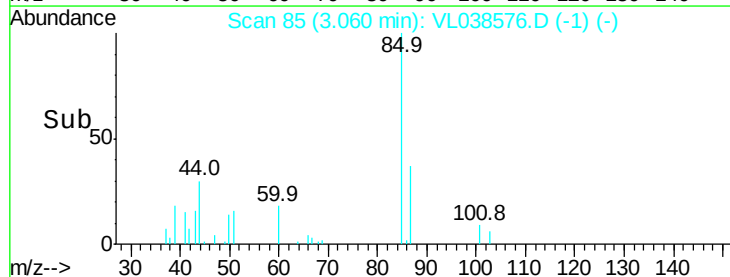
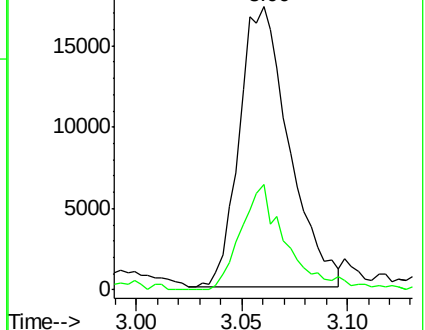
85 100

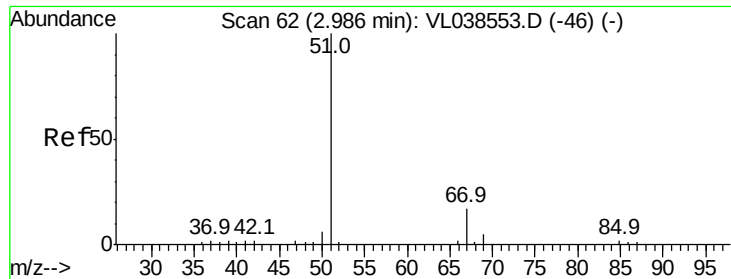
87 37.8 26.2 39.2



Abundance Ion 85.00 (84.70 to 85.70): VL0

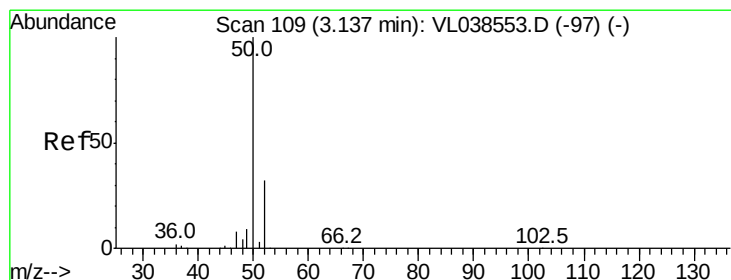
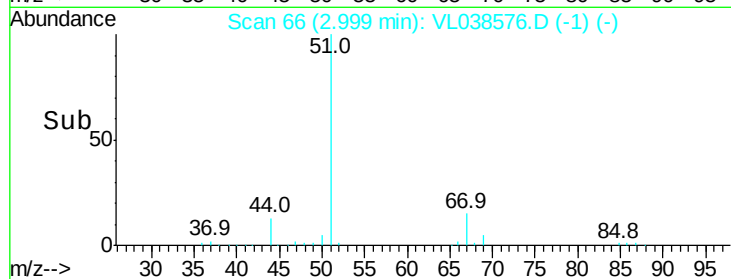
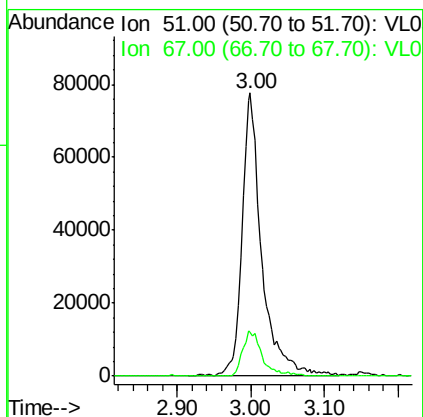
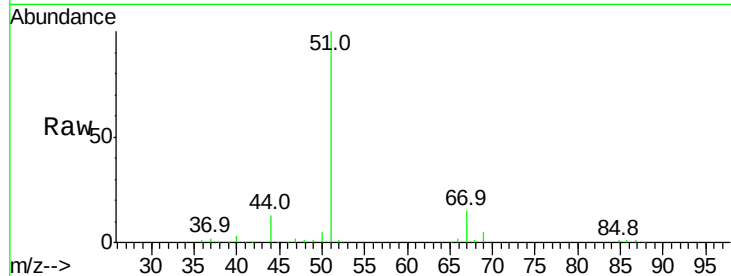
Ion 87.00 (86.70 to 87.70): VL0





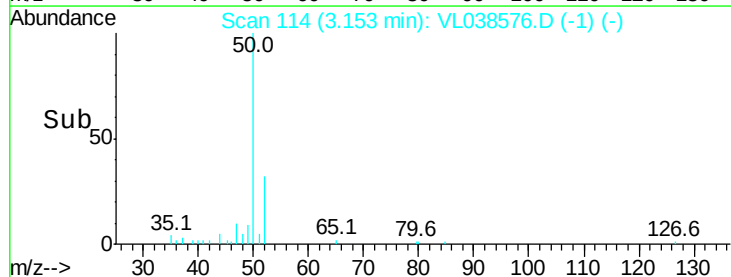
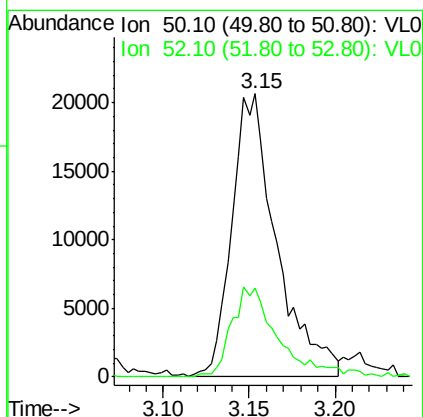
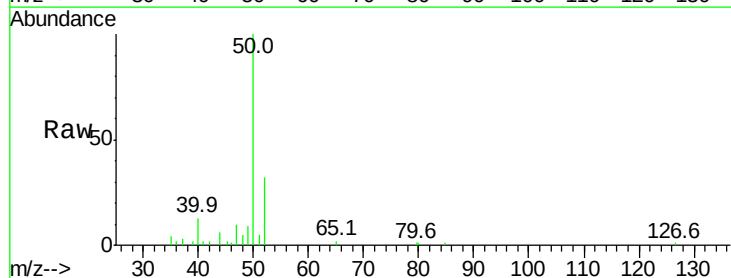
#3
 Chlorodifluoromethane
 Concen: 1.01 ppbv
 RT: 3.00
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 9 Mar 2022 15:07

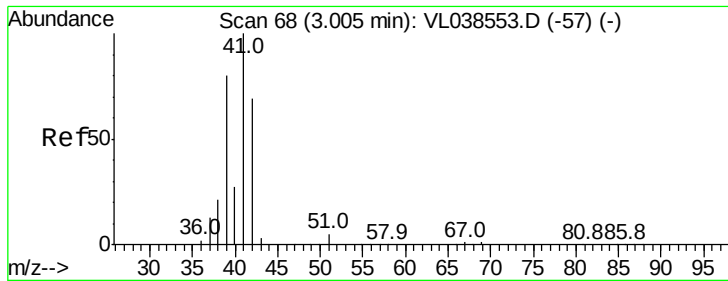
Tgt Ion: 51 Resp: 145370
 Ion Ratio Lower Upper
 51 100
 67 15.9 13.6 20.4



#4
 Chloromethane
 Concen: 0.70 ppbv
 RT: 3.15 min Scan# 114
 Delta R.T. 0.02 min
 Lab File: VL038576.D
 Acq: 9 Mar 2022 15:07

Tgt Ion: 50 Resp: 37561
 Ion Ratio Lower Upper
 50 100
 52 31.5 25.6 38.4





#9

Propene

Concen: 0.45 ppbv

RT: 3.03 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

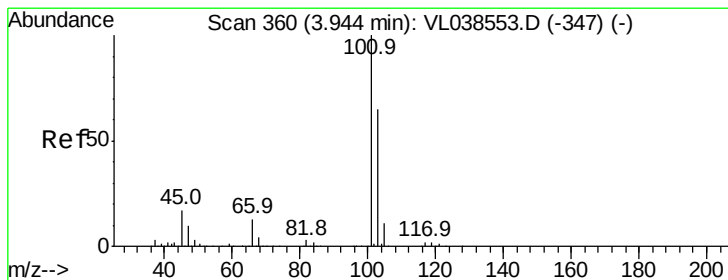
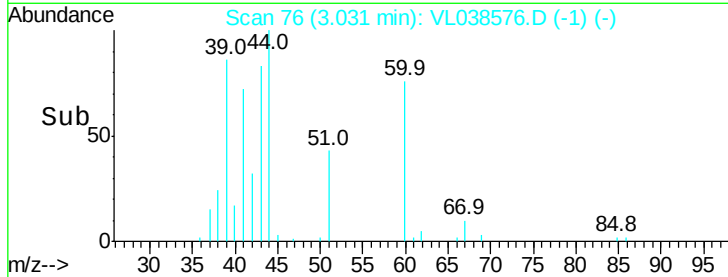
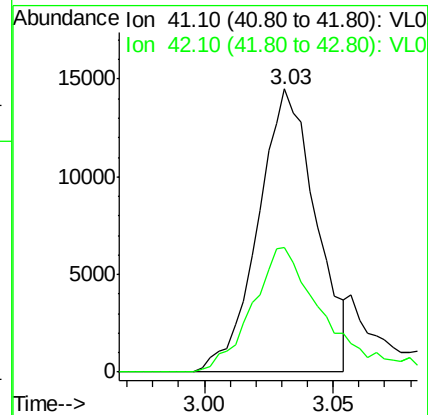
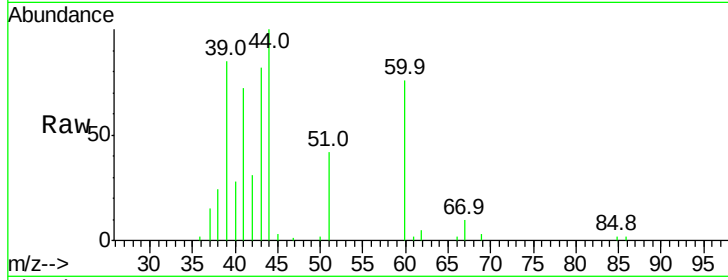
Acq: 9 Mar 2022 15:07

Tgt Ion: 41 Resp: 22810

Ion Ratio Lower Upper

41 100

42 54.6 55.7 83.5#



#11

Trichlorofluoromethane

Concen: 0.24 ppbv

RT: 3.96 min Scan# 366

Delta R.T. 0.02 min

Lab File: VL038576.D

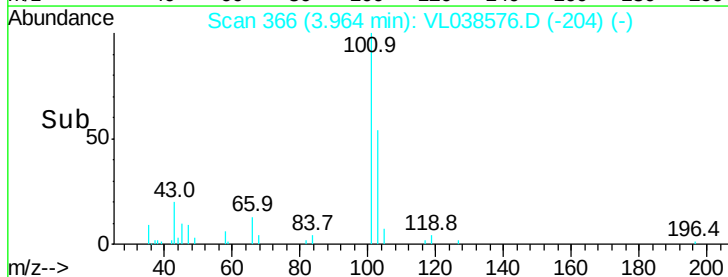
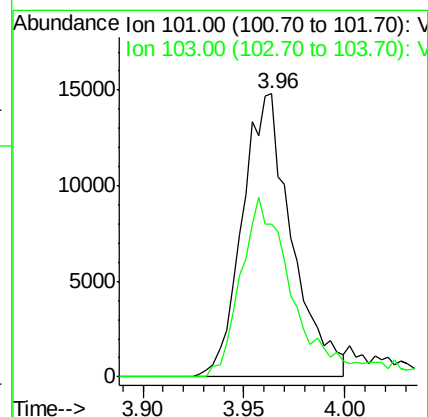
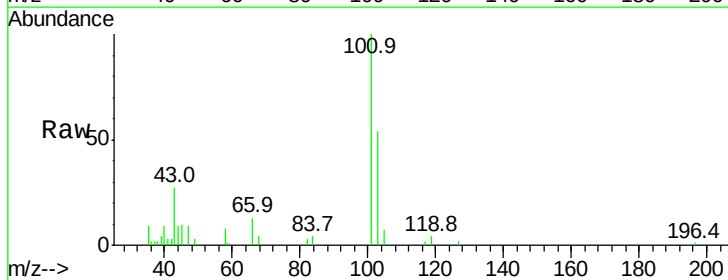
Acq: 9 Mar 2022 15:07

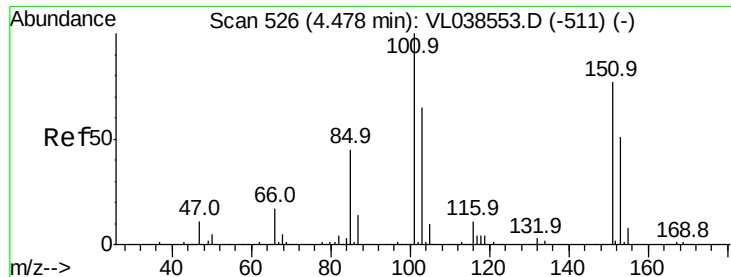
Tgt Ion: 101 Resp: 25488

Ion Ratio Lower Upper

101 100

103 54.0 52.0 78.0





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.05 ppbv

RT: 4.49 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

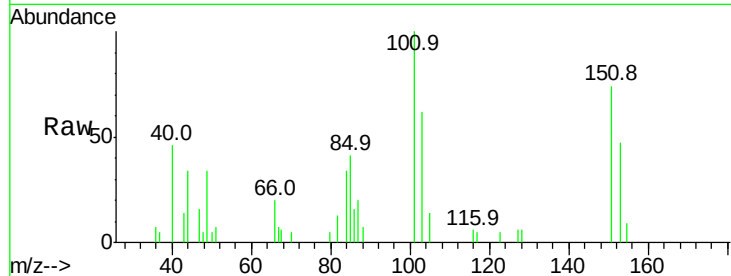
Acq: 9 Mar 2022 15:07

Tgt Ion:101 Resp: 3900

Ion Ratio Lower Upper

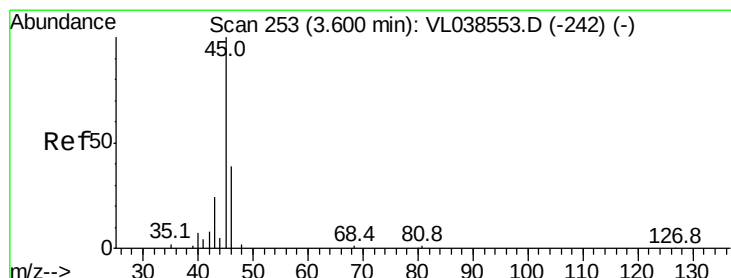
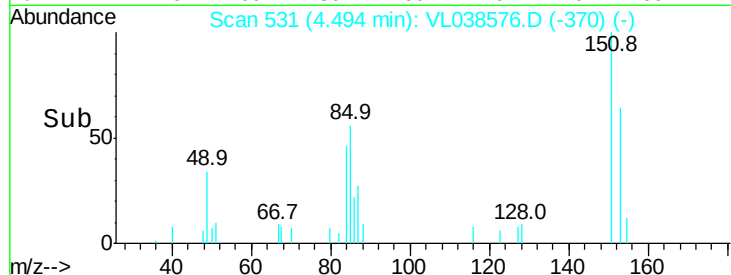
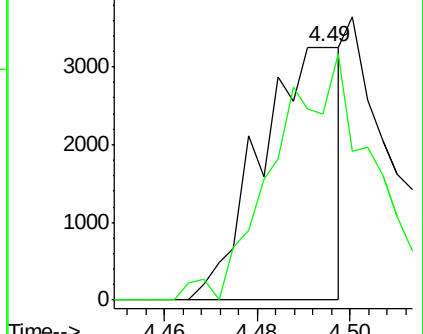
101 100

151 0.0 63.4 95.0#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V



#13

Ethanol

Concen: 13.80 ppbv

RT: 3.62 min Scan# 258

Delta R.T. 0.02 min

Lab File: VL038576.D

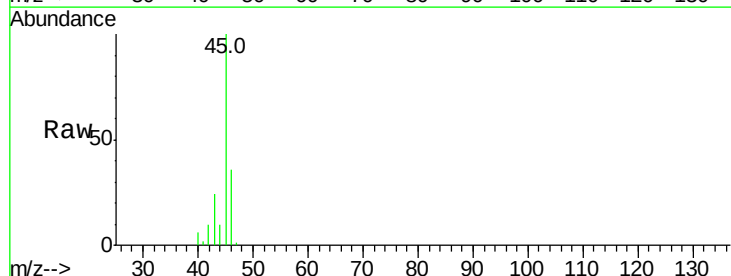
Acq: 9 Mar 2022 15:07

Tgt Ion: 45 Resp: 80600

Ion Ratio Lower Upper

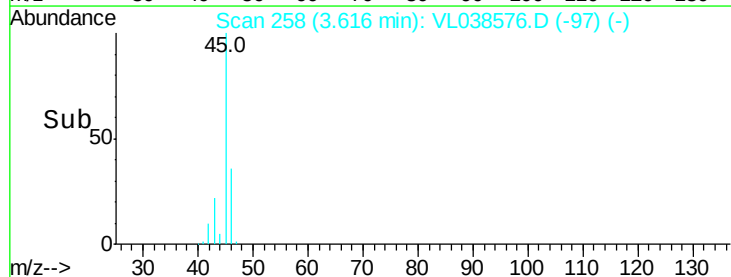
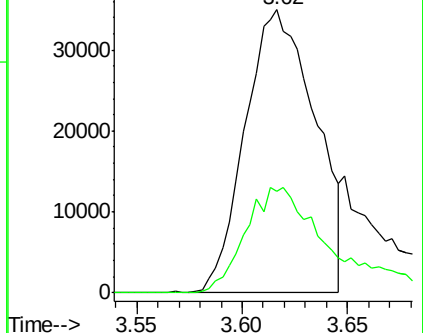
45 100

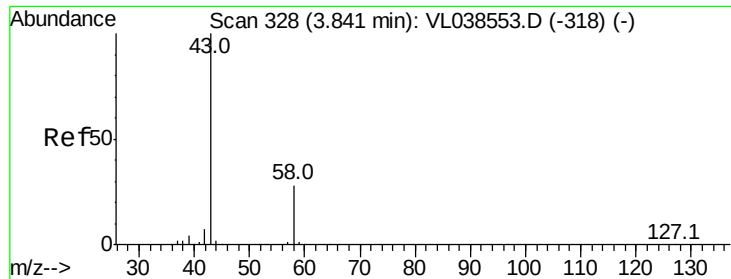
46 51.5 16.8 67.0



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0





#15

Acetone

Concen: 4.57 ppbv

RT: 3.86 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

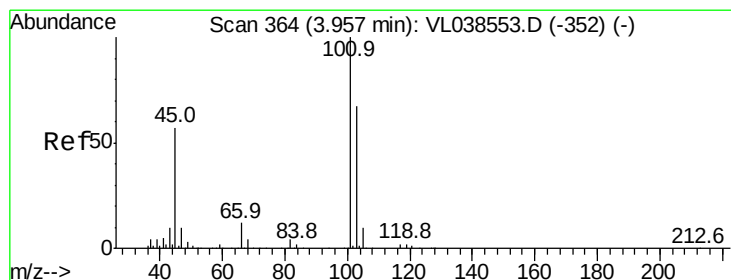
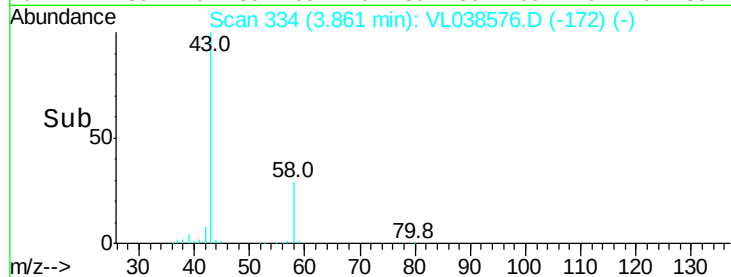
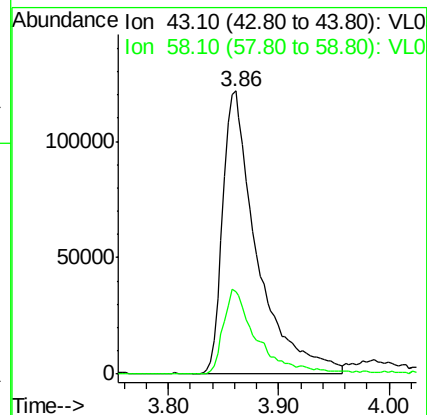
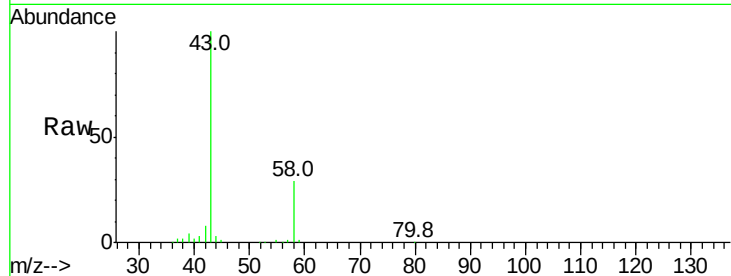
Acq: 9 Mar 2022 15:07

Tgt Ion: 43 Resp: 263613

Ion Ratio Lower Upper

43 100

58 29.5 22.7 34.1



#19

Isopropyl Alcohol

Concen: 0.17 ppbv

RT: 3.99 min Scan# 375

Delta R.T. 0.04 min

Lab File: VL038576.D

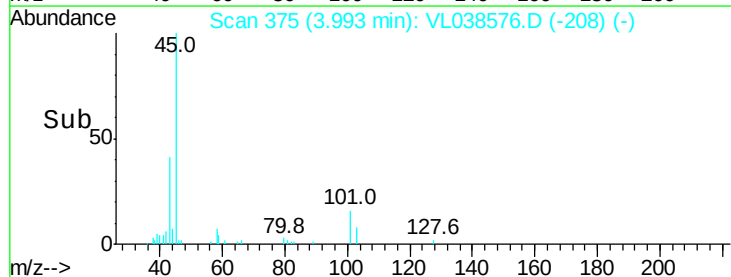
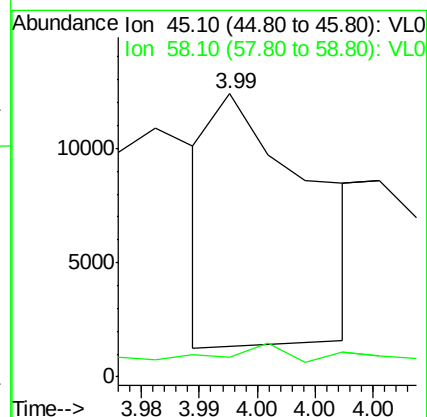
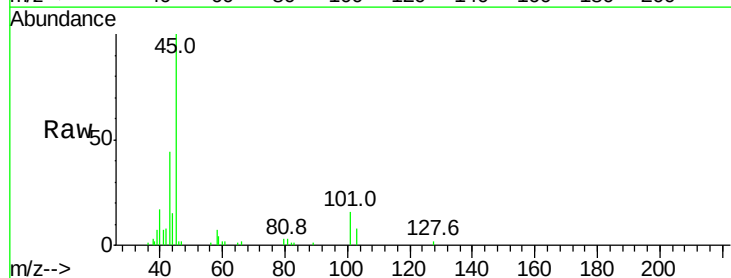
Acq: 9 Mar 2022 15:07

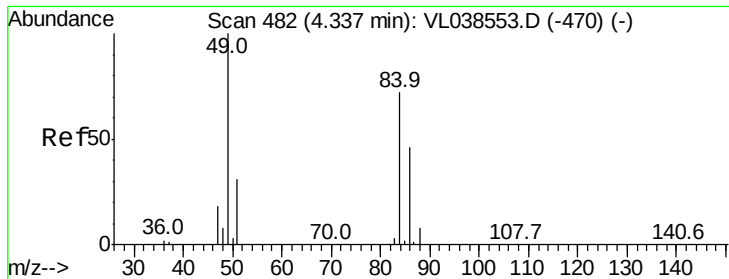
Tgt Ion: 45 Resp: 6465

Ion Ratio Lower Upper

45 100

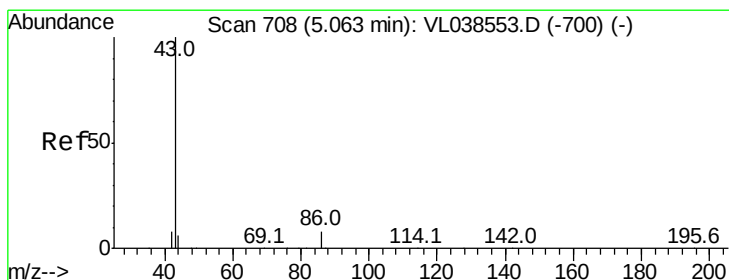
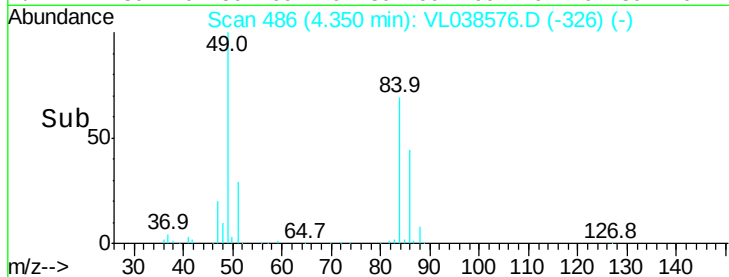
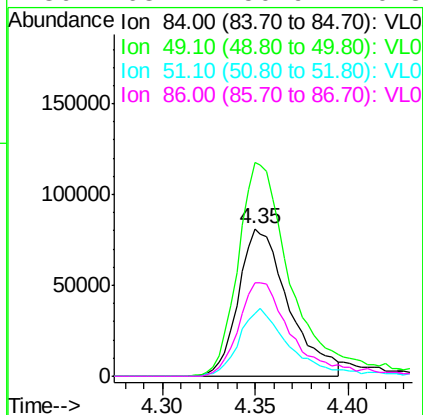
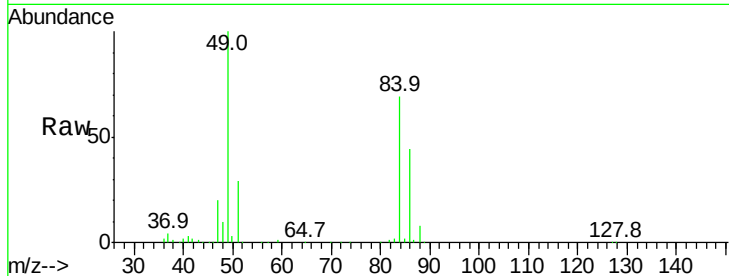
58 0.0 2.2 3.2#





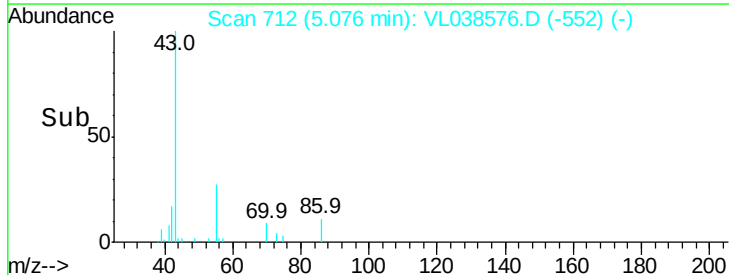
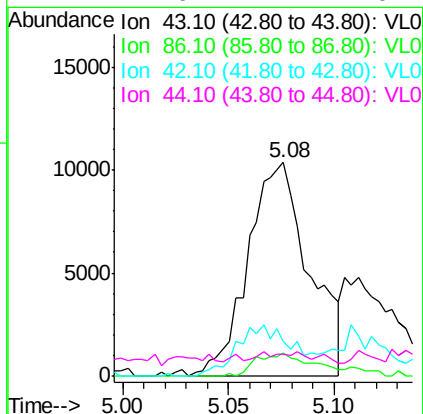
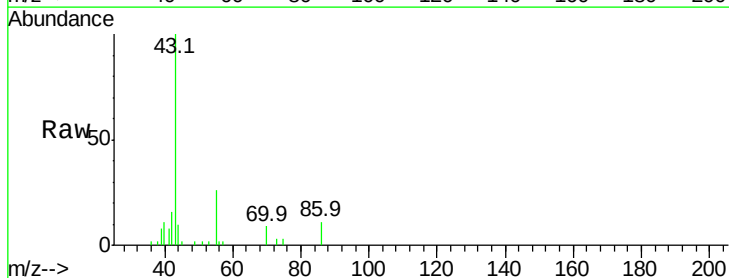
#20
Methylene Chloride
Concen: 4.40 ppbv
RT: 4.35
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
Acq: 9 Mar 2022 15:07

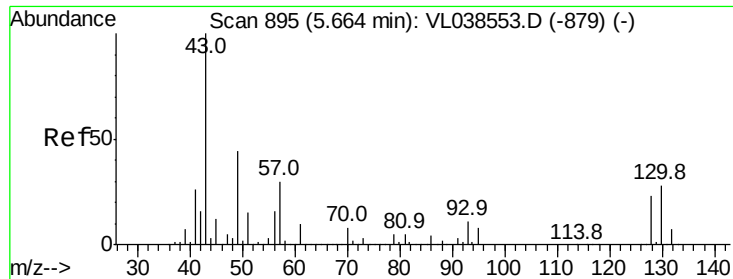
Tgt Ion:	84	Resp:	152753
Ion	Ratio	Lower	Upper
84	100		
49	144.9	111.1	166.7
51	42.3	34.0	51.0
86	63.2	50.9	76.3



#23
Vinyl Acetate
Concen: 0.25 ppbv
RT: 5.08 min Scan# 712
Delta R.T.: 0.01 min
Lab File: VL038576.D
Acq: 9 Mar 2022 15:07

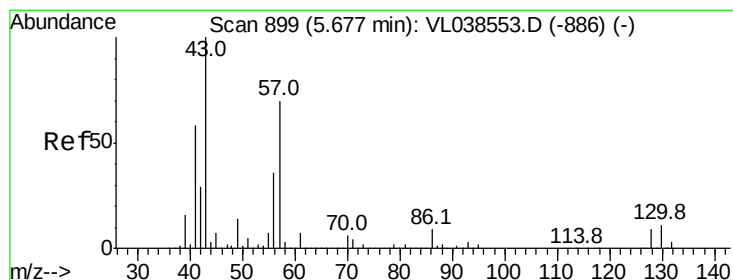
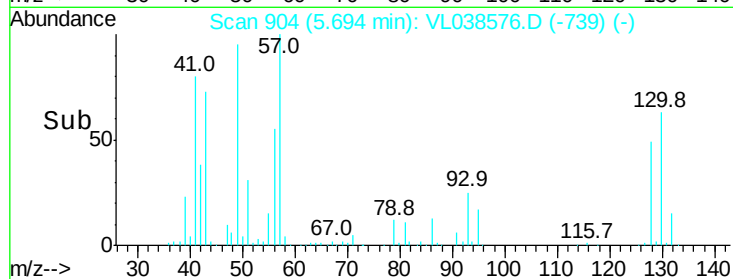
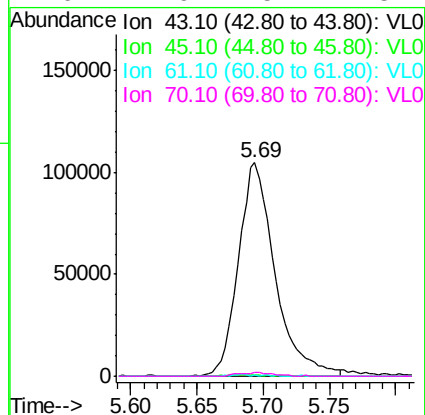
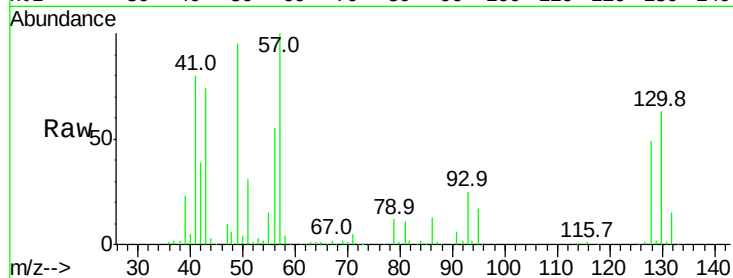
Tgt Ion:	43	Resp:	20954
Ion	Ratio	Lower	Upper
43	100		
86	10.7	5.6	8.4#
42	16.2	7.1	10.7#
44	4.6	4.1	6.1





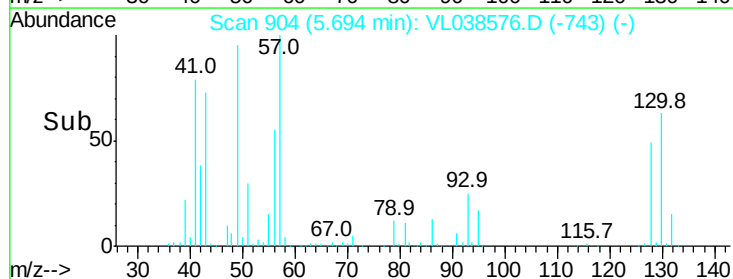
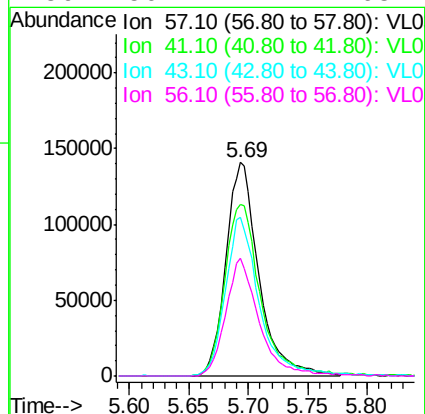
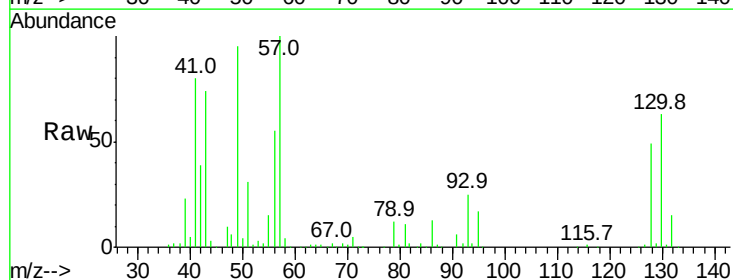
#25
Ethyl Acetate
Concen: 1.04 ppbv
RT: 5.69 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 9 Mar 2022 15:07

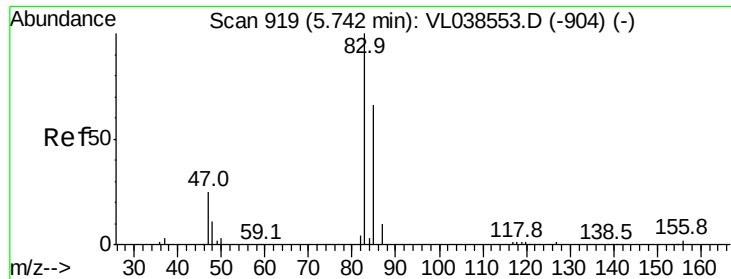
Tgt Ion:	43	Resp:	202650
Ion Ratio	Lower	Upper	
43	100		
45	1.0	8.0	12.0#
61	0.7	8.2	12.4#
70	1.9	5.4	8.2#



#26
Hexane
Concen: 2.96 ppbv
RT: 5.69 min Scan# 904
Delta R.T.: 0.02 min
Lab File: VL038576.D
Acq: 9 Mar 2022 15:07

Tgt Ion:	57	Resp:	270153
Ion Ratio	Lower	Upper	
57	100		
41	88.3	67.8	101.6
43	77.0	173.6	260.4#
56	56.2	42.2	63.2





#29

Chloroform

Concen: 0.05 ppbv

RT: 5.75 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

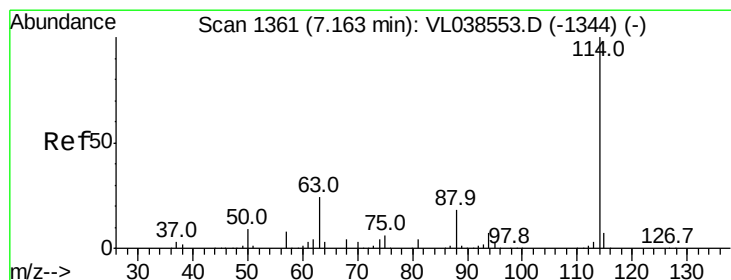
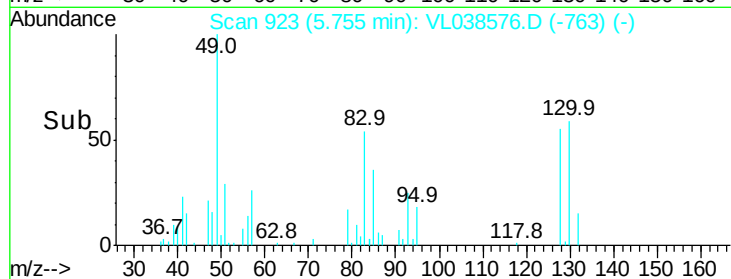
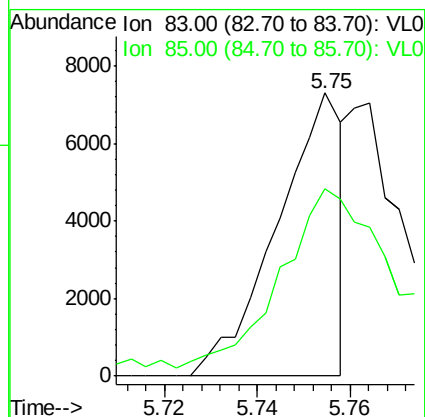
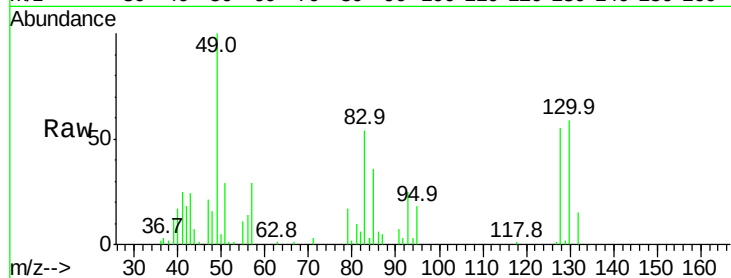
Acq: 9 Mar 2022 15:07

Tgt Ion: 83 Resp: 7147

Ion Ratio Lower Upper

83 100

85 60.9 52.8 79.2



#33

1,4-Difluorobenzene

Concen: 10.00 ppbv

RT: 7.18 min Scan# 1366

Delta R.T. 0.02 min

Lab File: VL038576.D

Acq: 9 Mar 2022 15:07

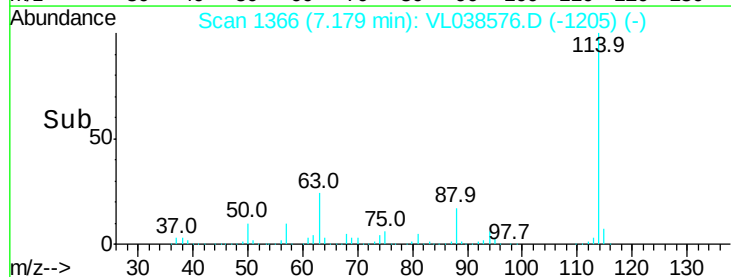
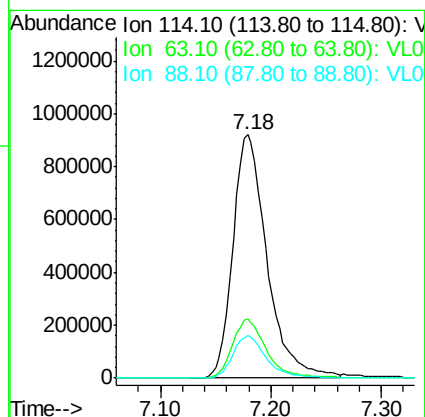
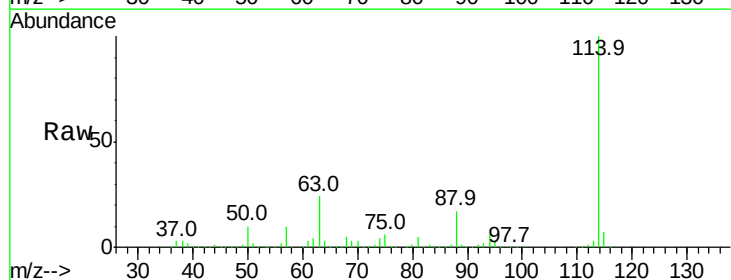
Tgt Ion: 114 Resp: 1974664

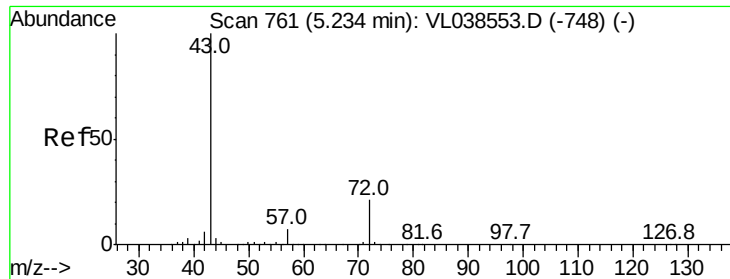
Ion Ratio Lower Upper

114 100

63 24.5 19.6 29.4

88 17.3 13.9 20.9





#34

2-Butanone

Concen: 0.52 ppbv

RT: 5.26 Instrument: MSVOA_1

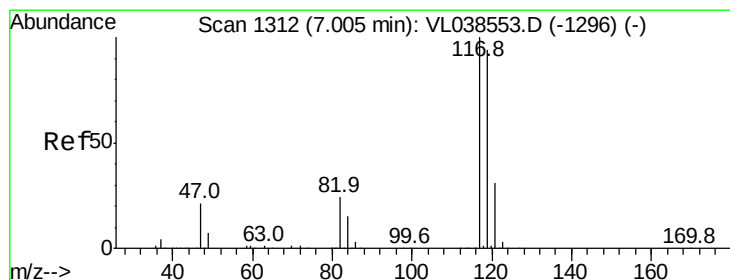
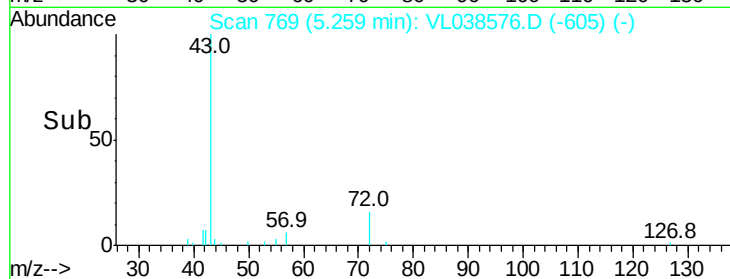
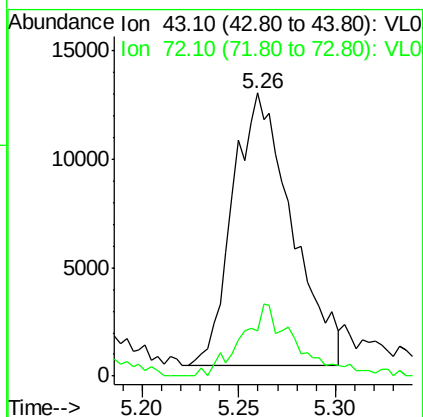
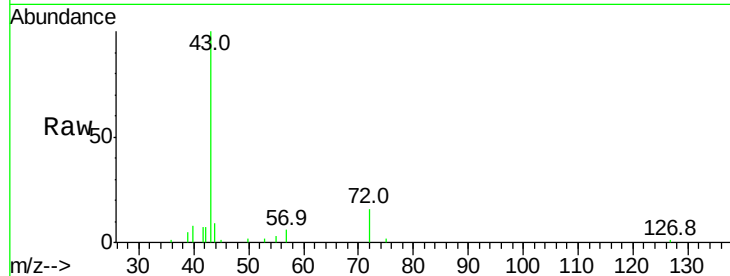
Delta R.T. ClientSampleId:

Lab File: A-1

Acq: 9 Mar 2022 15:07

Tgt Ion: 43 Resp: 26784

Ion	Ratio	Lower	Upper
43	100		
72	25.9	17.8	26.6



#35

Carbon Tetrachloride

Concen: 0.04 ppbv

RT: 7.02 min Scan# 1317

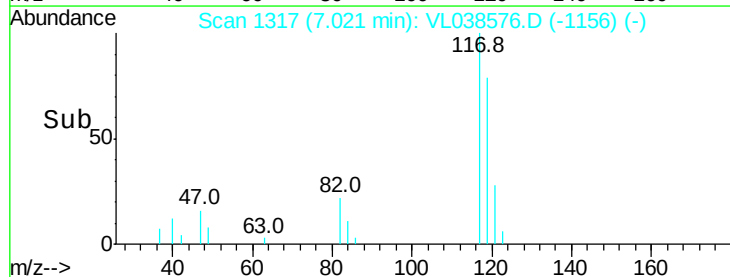
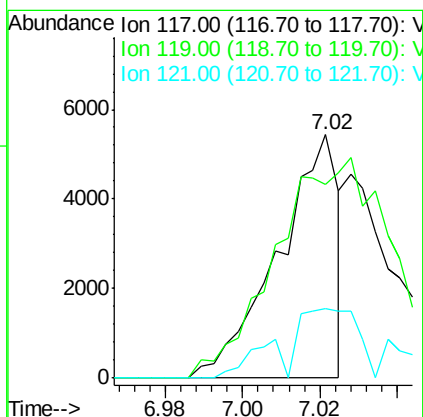
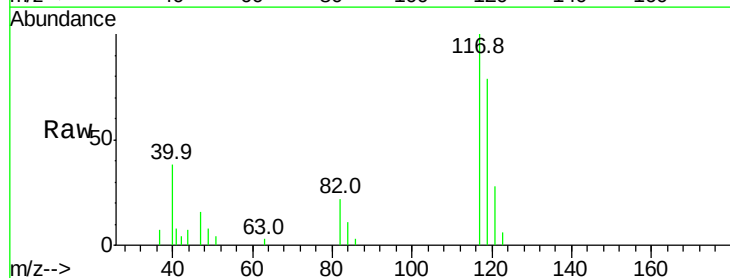
Delta R.T. 0.02 min

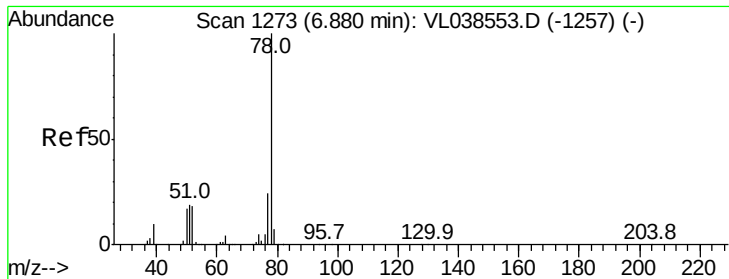
Lab File: VL038576.D

Acq: 9 Mar 2022 15:07

Tgt Ion: 117 Resp: 5879

Ion	Ratio	Lower	Upper
117	100		
119	79.5	75.2	112.8
121	28.4	24.8	37.2





#36

Benzene

Concen: 0.07 ppbv

RT: 6.90 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 9 Mar 2022 15:07

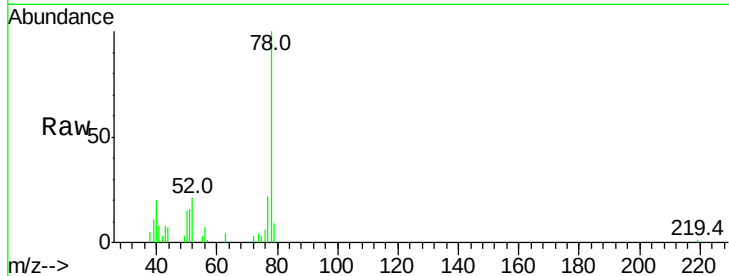
Tgt Ion: 78 Resp: 11756

Ion Ratio Lower Upper

78 100

77 18.1 19.0 28.4#

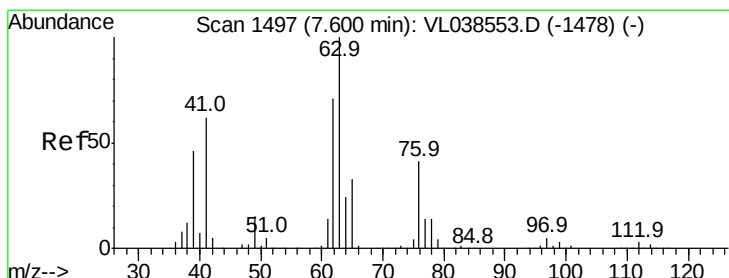
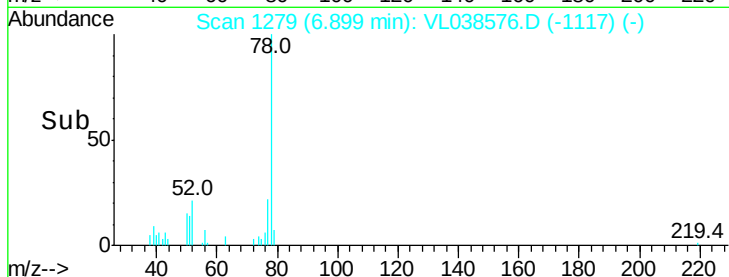
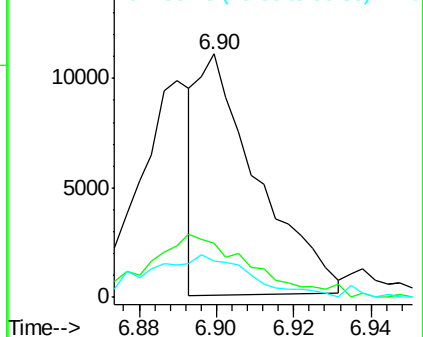
50 13.5 13.9 20.9#



Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0



#39

1,2-Dichloropropane

Concen: 6.88 ppbv

RT: 7.18 min Scan# 1366

Delta R.T. -0.42 min

Lab File: VL038576.D

Acq: 9 Mar 2022 15:07

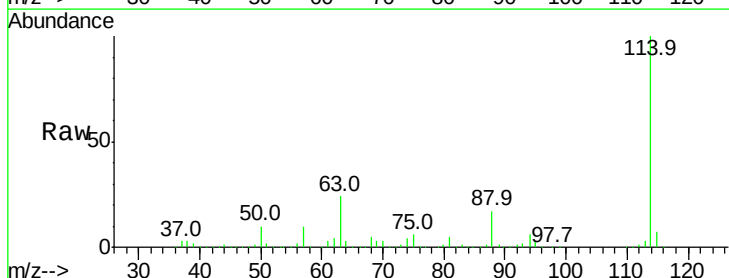
Tgt Ion: 63 Resp: 471218

Ion Ratio Lower Upper

63 100

41 0.0 49.8 74.6#

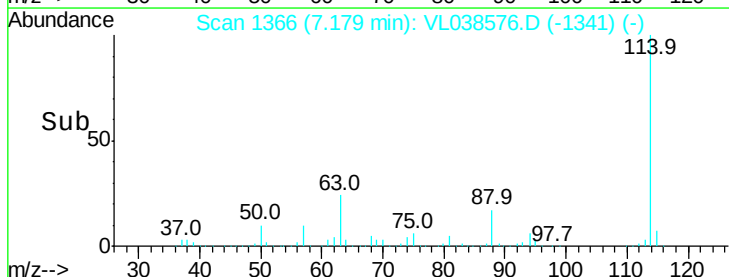
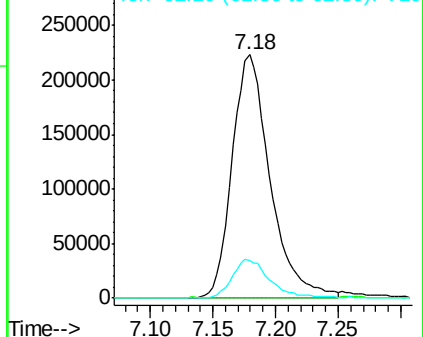
62 15.3 56.7 85.1#

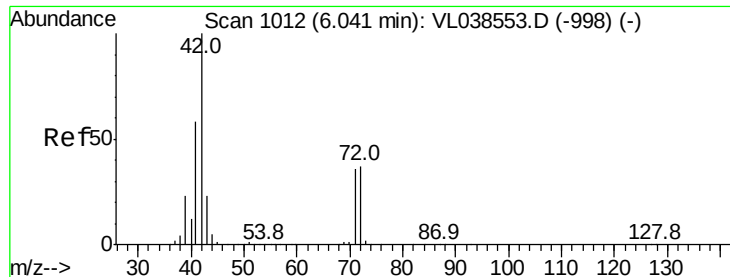


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0





#41

Tetrahydrofuran

Concen: 0.04 ppbv

RT: 6.08 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

Acq: 9 Mar 2022 15:07

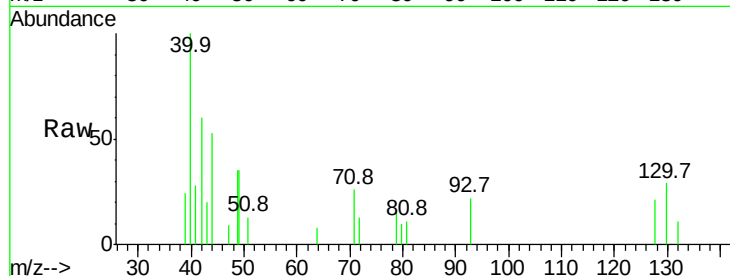
Tgt Ion: 42 Resp: 1504

Ion Ratio Lower Upper

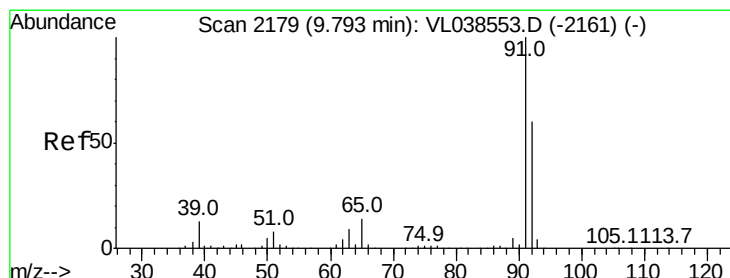
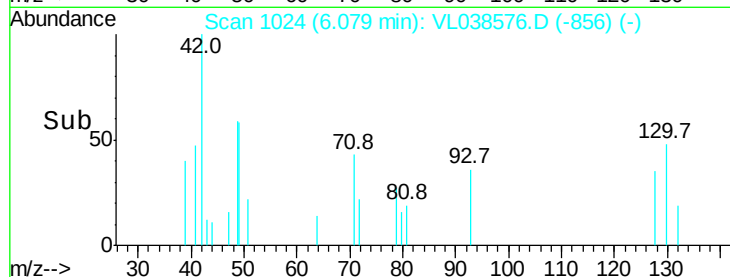
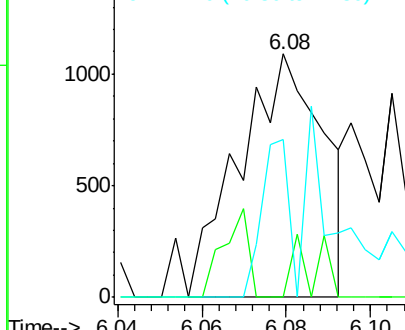
42 100

72 7.2 30.9 46.3#

71 56.4 29.1 43.7#



Abundance Ion 42.10 (41.80 to 42.80): VL0
Ion 72.10 (71.80 to 72.80): VL0
Ion 71.10 (70.80 to 71.80): VL0



#53

Toluene

Concen: 0.44 ppbv

RT: 9.81 min Scan# 2185

Delta R.T. 0.02 min

Lab File: VL038576.D

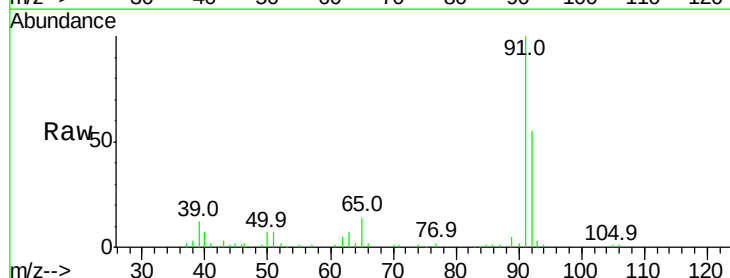
Acq: 9 Mar 2022 15:07

Tgt Ion: 91 Resp: 84084

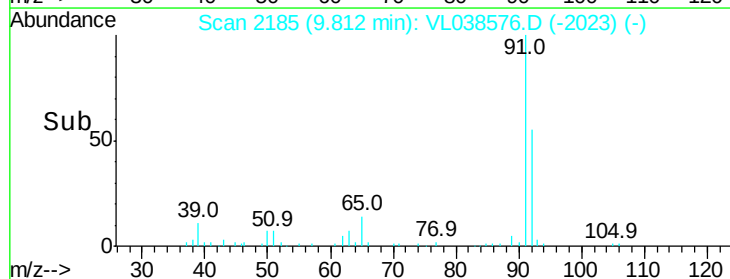
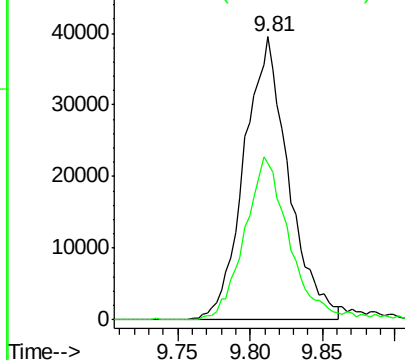
Ion Ratio Lower Upper

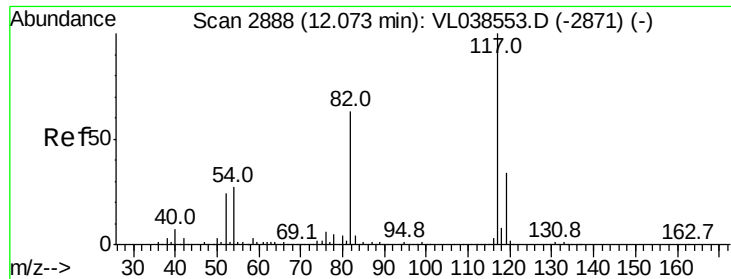
91 100

92 58.1 48.1 72.1



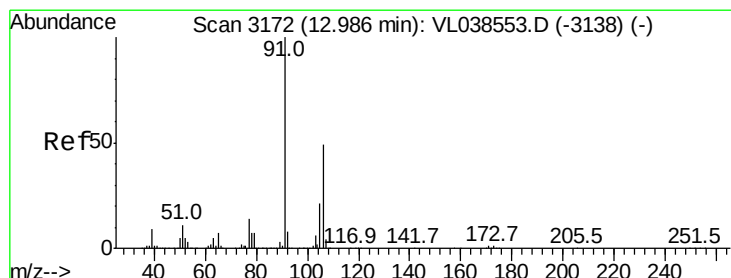
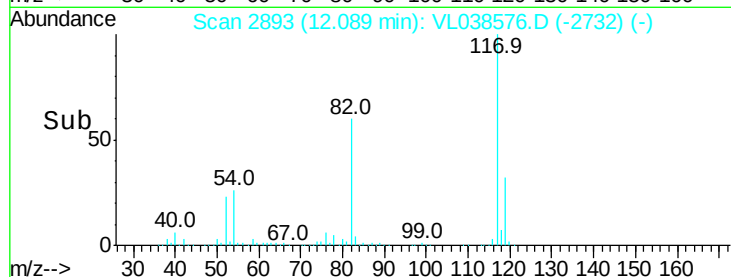
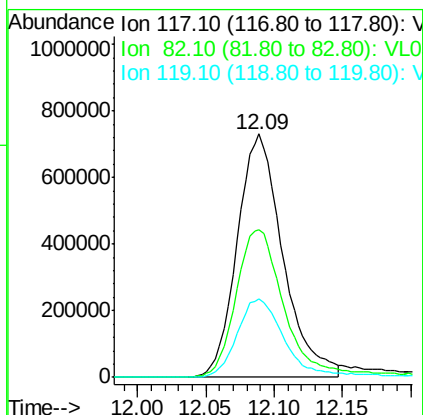
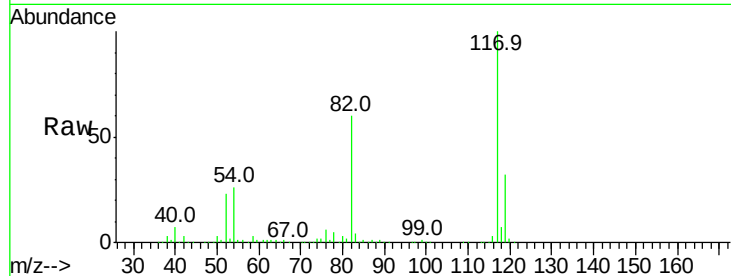
Abundance Ion 91.10 (90.80 to 91.80): VL0
Ion 92.10 (91.80 to 92.80): VL0





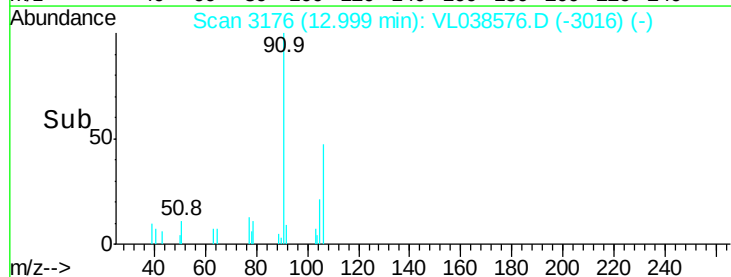
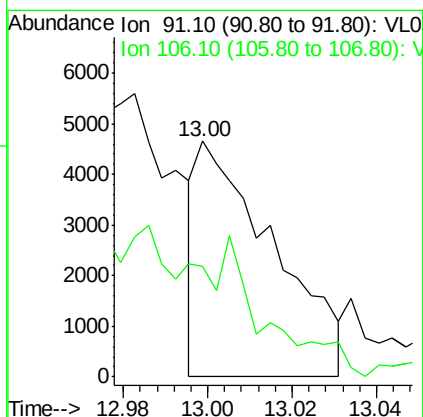
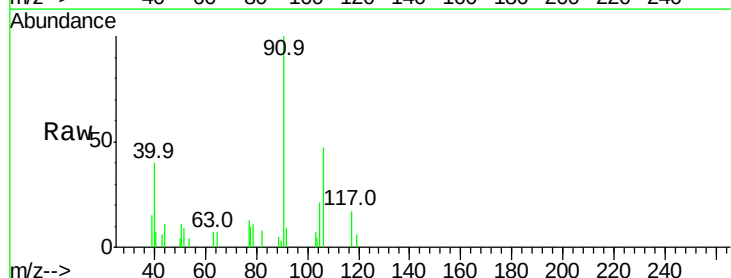
#55
Chlorobenzene-d5
Concen: 10.00 ppbv
RT: 12.09 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
Acq: 9 Mar 2022 15:07

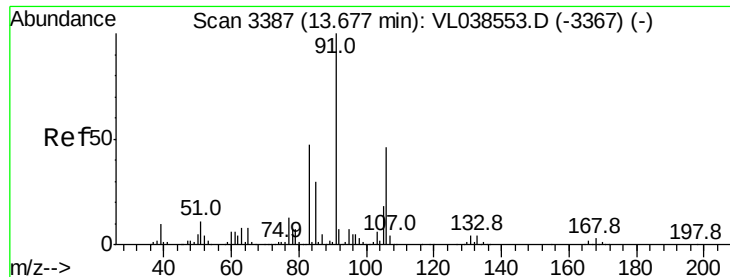
Tgt Ion: 117 Resp: 1701133
Ion Ratio Lower Upper
117 100
82 68.2 52.5 78.7
119 34.7 46.4 69.6#



#59
m/p-Xylene
Concen: 0.03 ppbv
RT: 13.00 min Scan# 3176
Delta R.T. 0.01 min
Lab File: VL038576.D
Acq: 9 Mar 2022 15:07

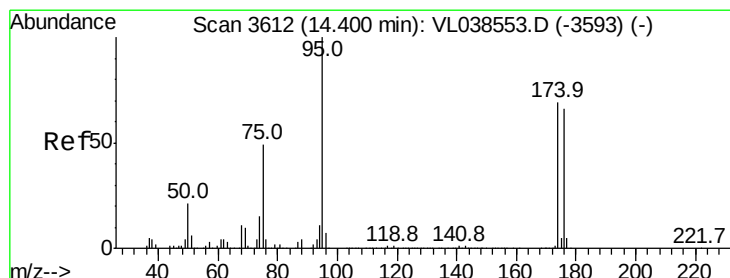
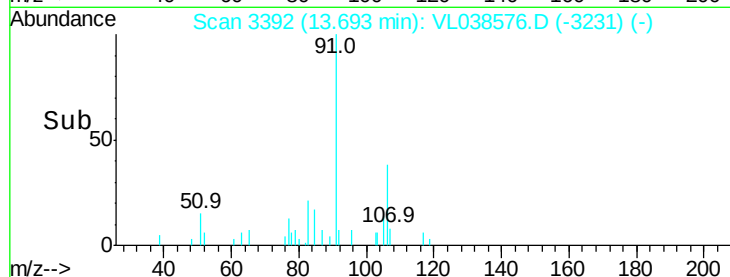
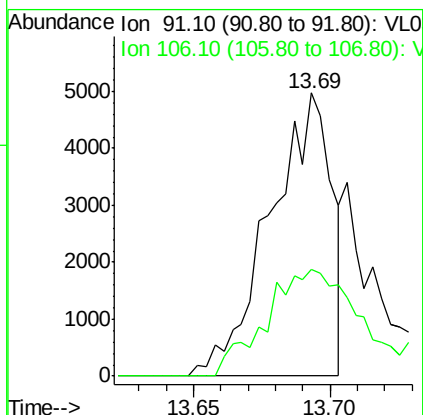
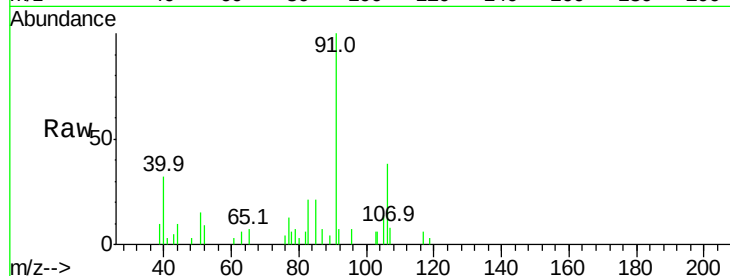
Tgt Ion: 91 Resp: 5864
Ion Ratio Lower Upper
91 100
106 0.0 37.1 55.7#





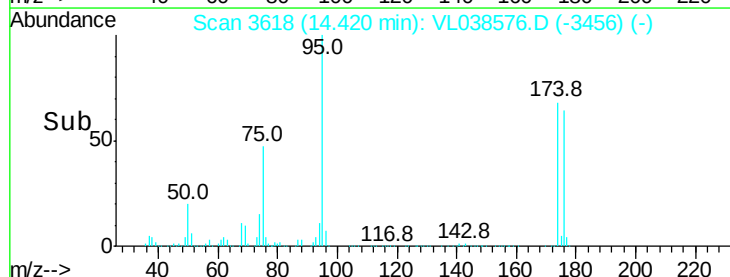
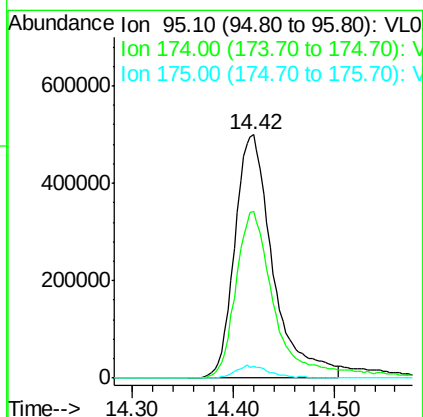
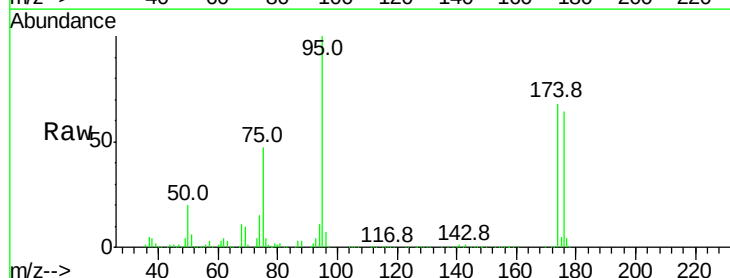
#60
o-Xylene
Concen: 0.04 ppbv
RT: 13.69
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 9 Mar 2022 15:07

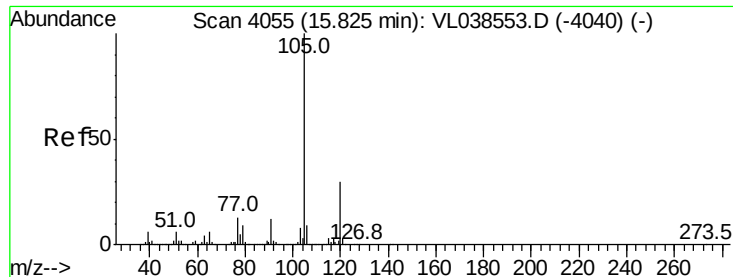
Tgt Ion: 91 Resp: 7780
Ion Ratio Lower Upper
91 100
106 59.3 23.5 70.6



#68
1-Bromo-4-Fluorobenzene
Concen: 10.12 ppbv
RT: 14.42 min Scan# 3618
Delta R.T. 0.02 min
Lab File: VL038576.D
Acq: 9 Mar 2022 15:07

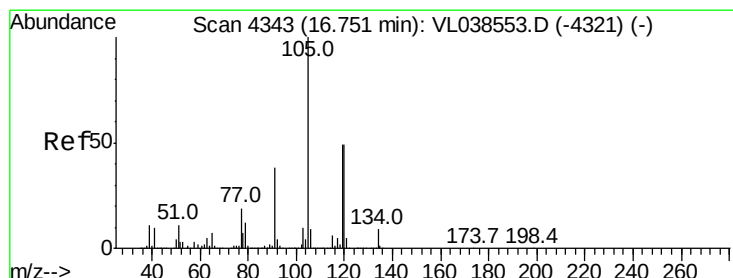
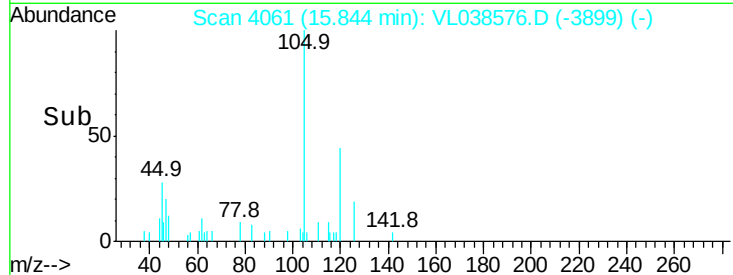
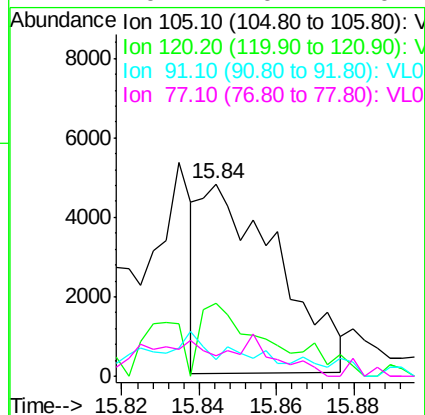
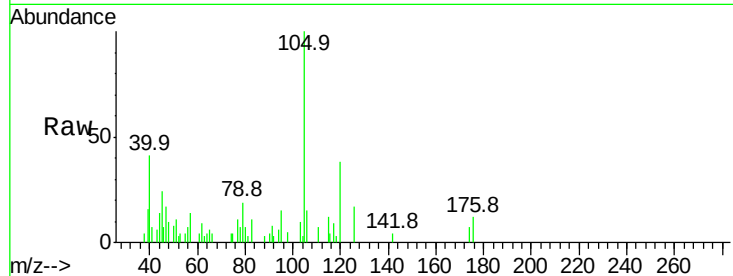
Tgt Ion: 95 Resp: 1309092
Ion Ratio Lower Upper
95 100
174 72.4 56.2 84.4
175 5.1 4.2 6.2





#72
 4-Ethyltoluene
 Concen: 0.03 ppbv
 RT: 15.84 min
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 9 Mar 2022 15:07

Tgt Ion:	105	Resp:	6682
Ion Ratio	Lower	Upper	
105	100		
120	35.9	25.0	37.4
91	0.0	9.8	14.6#
77	29.2	10.7	16.1#



#74
 1,2,4-Trimethylbenzene
 Concen: 0.11 ppbv
 RT: 16.77 min Scan# 4349
 Delta R.T. 0.02 min
 Lab File: VL038576.D
 Acq: 9 Mar 2022 15:07

Tgt Ion:	105	Resp:	22136
Ion Ratio	Lower	Upper	
105	100		
120	47.0	38.9	58.3
91	15.2	30.6	46.0#
77	23.4	15.2	22.8#

