

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL110121\
 Data File : VL037950.D
 Acq On : 1 Nov 2021 22:54
 Operator : SY/AP
 Sample : M4426-03
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 OA1

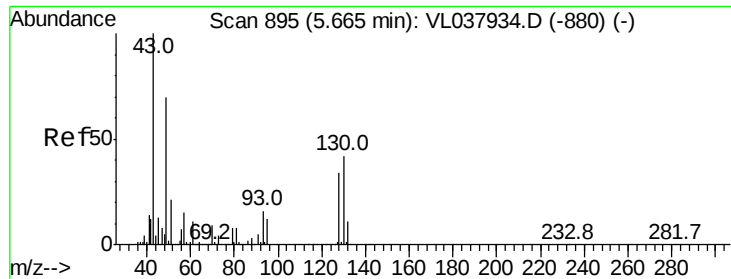
Quant Time: Nov 02 06:07:36 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL110121AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LTue Nov 02 05:54:07 2021
 QLast Update : Tue Nov 02 05:54:07 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1317375	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.16	114	3786395	10.00	ppbv	-0.01
55) Chlorobenzene-d5	12.06	117	3338919	10.00	ppbv	-0.02

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.39	95	2409948	9.93	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.30%

Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.04	85	45689	0.246 ppbv	93
3) Chlorodifluoromethane	2.99	51	71488	0.291 ppbv #	90
4) Chloromethane	3.14	50	26232	0.281 ppbv #	63
9) Propene	3.01	41	71276	0.811 ppbv #	83
11) Trichlorofluoromethane	3.94	101	18884	0.102 ppbv #	79
13) Ethanol	3.60	45	243192	27.416 ppbv	97
15) Acetone	3.84	43	1237832	11.371 ppbv	95
16) 1,3-Butadiene	3.32	39	2885	0.034 ppbv #	1
19) Isopropyl Alcohol	3.97	45	152395	2.189 ppbv #	1
20) Methylene Chloride	4.34	84	95732	1.602 ppbv #	87
23) Vinyl Acetate	5.06	43	9920	0.061 ppbv #	1
25) Ethyl Acetate	5.66	43	131796	0.408 ppbv #	62
26) Hexane	5.68	57	114759	0.749 ppbv	80
30) Cyclohexane	7.12	84	7973	0.061 ppbv #	1
34) 2-Butanone	5.24	43	62602	0.446 ppbv #	48
36) Benzene	6.87	78	37497	0.122 ppbv	96
39) 1,2-Dichloropropane	7.16	63	893003	7.697 ppbv #	28
44) 2,2,4-Trimethylpentane	7.85	57	42202	0.080 ppbv #	1
50) 4-Methyl-2-Pentanone	8.74	43	12805	0.069 ppbv #	39
53) Toluene	9.79	91	781417	2.364 ppbv	99
58) Ethyl Benzene	12.69	91	152510	0.374 ppbv	96
59) m/p-Xylene	12.98	91	128439	0.354 ppbv #	30
60) o-Xylene	13.67	91	91443	0.267 ppbv #	62
72) 4-Ethyltoluene	15.81	105	50038	0.128 ppbv #	84
73) 1,3,5-Trimethylbenzene	15.97	105	29214	0.080 ppbv	99
74) 1,2,4-Trimethylbenzene	16.74	105	95645	0.249 ppbv #	70

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: OA1

Acq: 1 Nov 2021 22:54

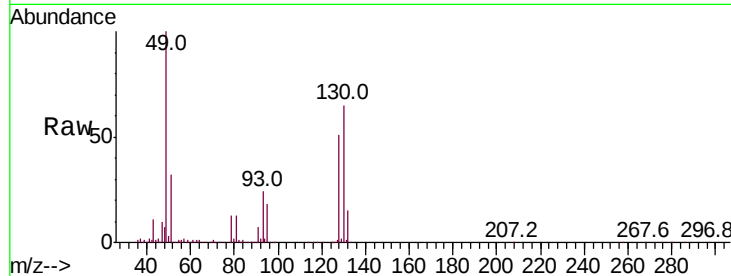
Tot Ion: 49 Resp: 1317375

Ion Ratio Lower Upper

49 100

128 52.5 27.0 81.0

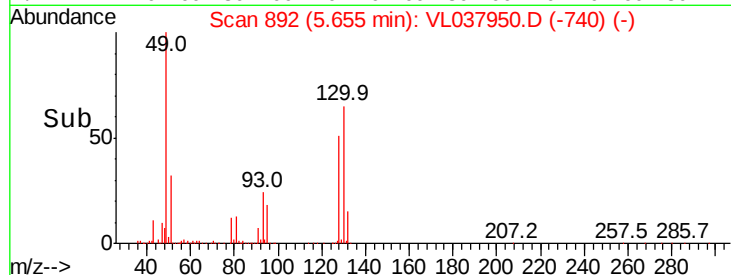
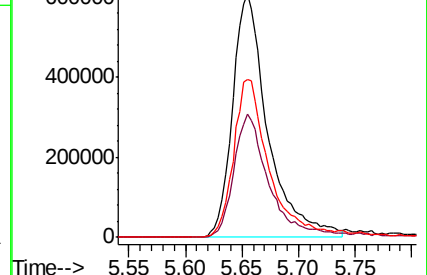
130 67.8 33.4 100.2



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: 0.246 ppbv

RT: 3.04 min Scan# 79

Delta R.T. -0.01 min

Lab File: VL037950.D

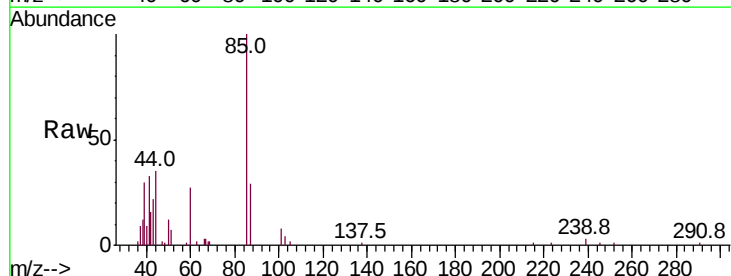
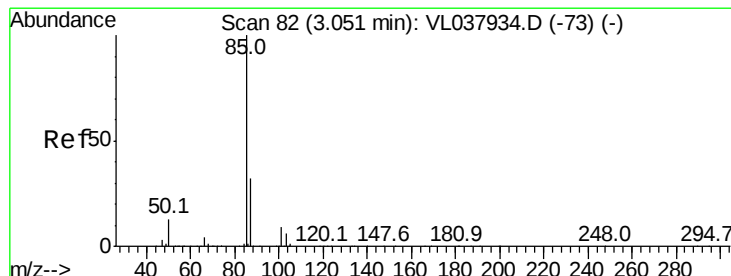
Acq: 1 Nov 2021 22:54

Tgt Ion: 85 Resp: 45689

Ion Ratio Lower Upper

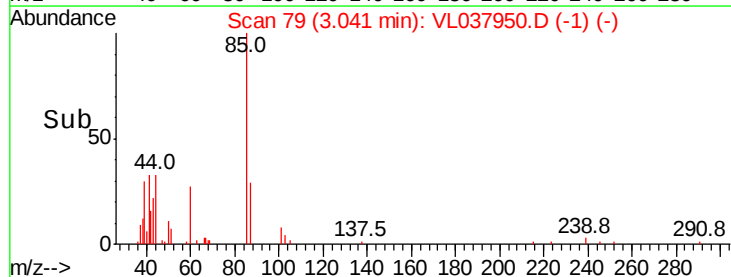
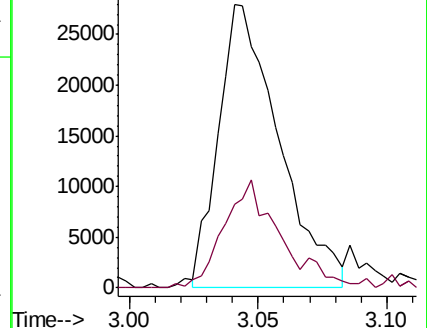
85 100

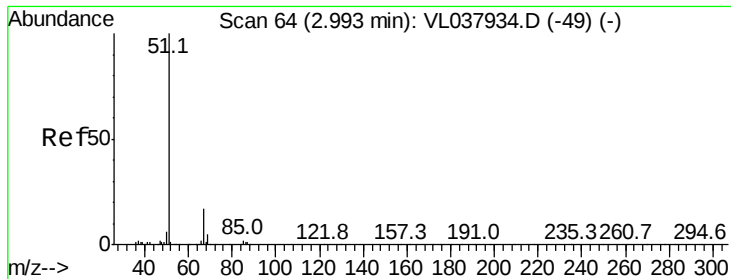
87 27.9 25.3 37.9



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.291 ppbv

RT: 2.99 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

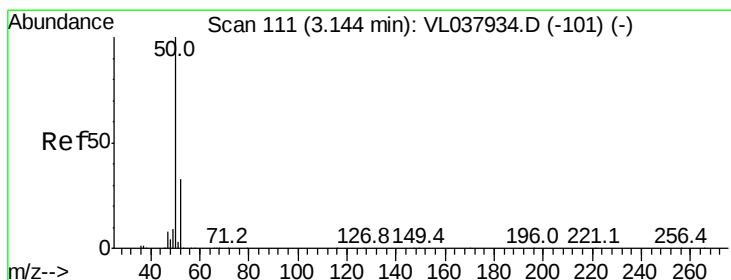
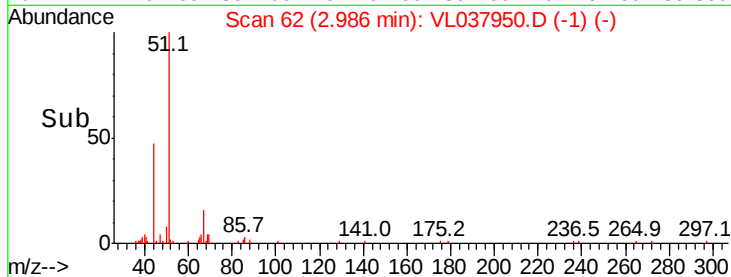
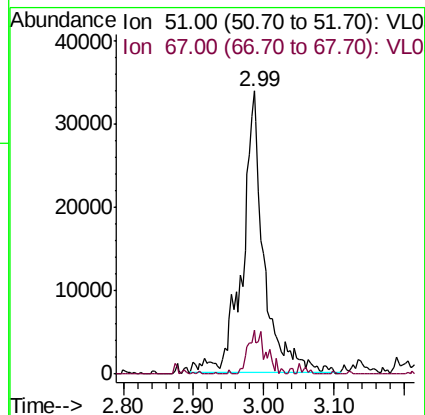
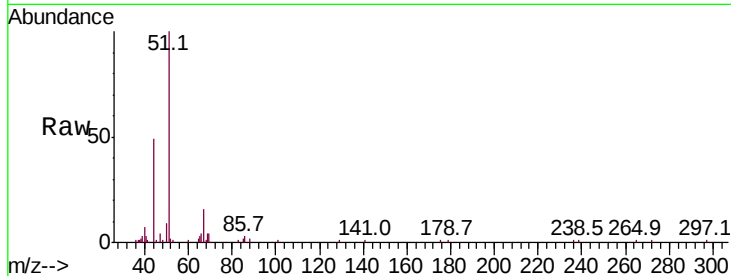
Acq: 1 Nov 2021 22:54

Tot Ion: 51 Resp: 71488

Ion Ratio Lower Upper

51 100

67 12.6 13.4 20.0#



#4

Chloromethane

Concen: 0.281 ppbv

RT: 3.14 min Scan# 110

Delta R.T. -0.00 min

Lab File: VL037950.D

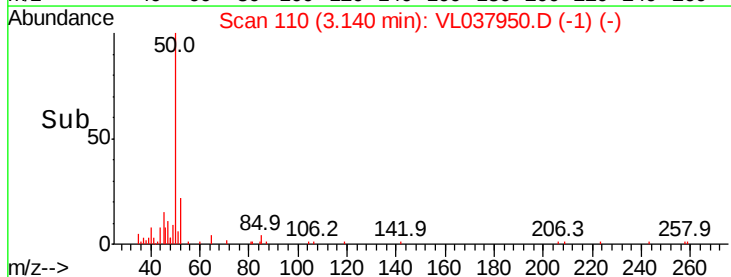
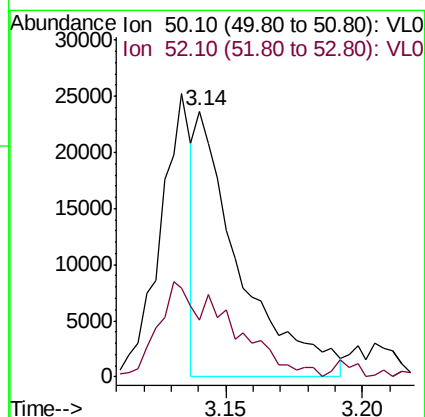
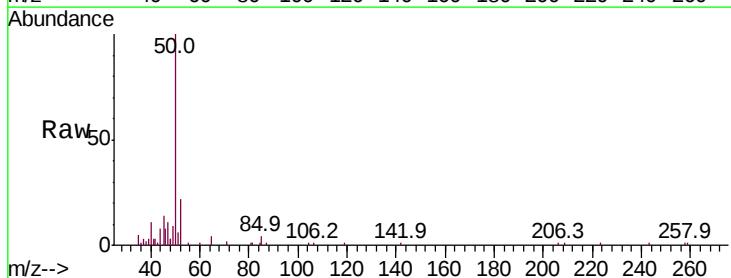
Acq: 1 Nov 2021 22:54

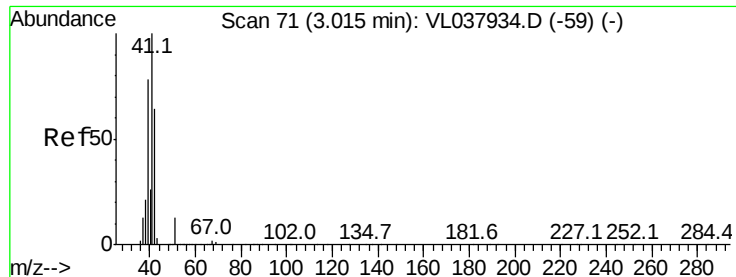
Tgt Ion: 50 Resp: 26232

Ion Ratio Lower Upper

50 100

52 12.1 26.3 39.5#





#9

Propene

Concen: 0.811 ppbv

RT: 3.01 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

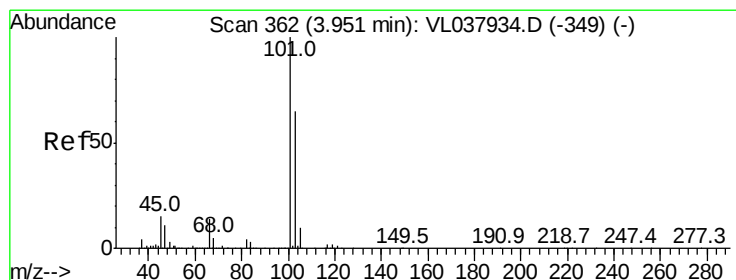
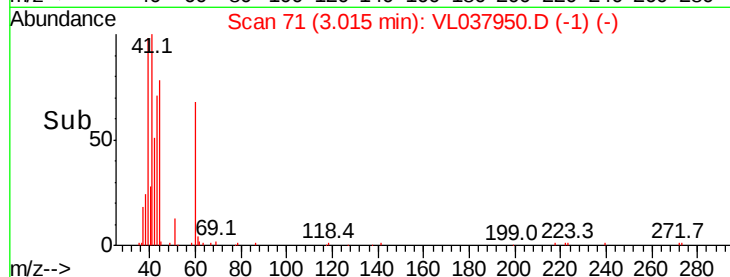
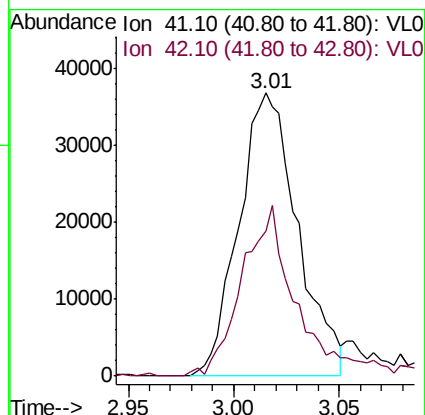
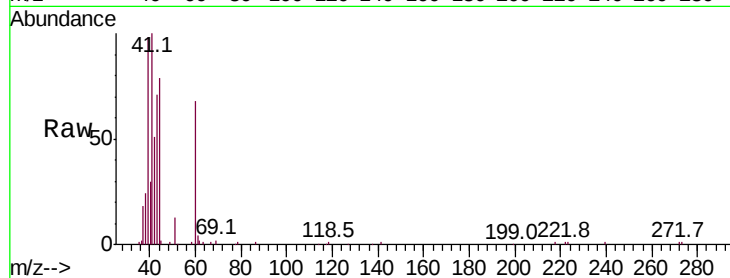
Acq: 1 Nov 2021 22:54

Tot Ion: 41 Resp: 71276

Ion Ratio Lower Upper

41 100

42 57.5 57.6 86.4#



#11

Trichlorofluoromethane

Concen: 0.102 ppbv

RT: 3.94 min Scan# 359

Delta R.T. -0.01 min

Lab File: VL037950.D

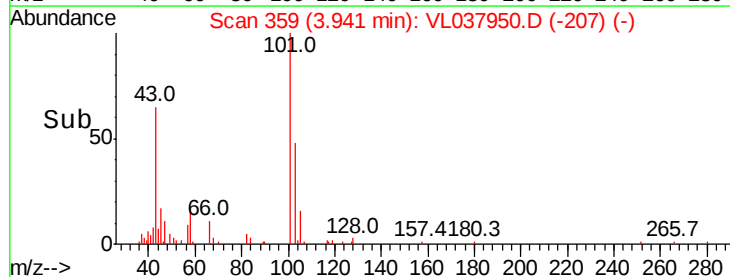
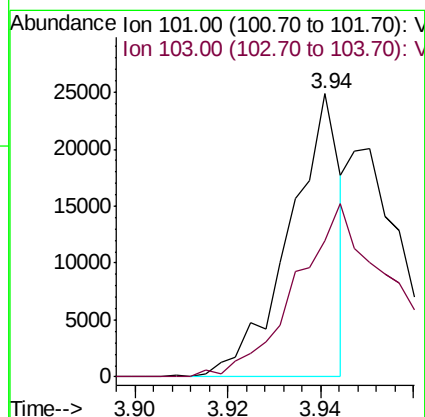
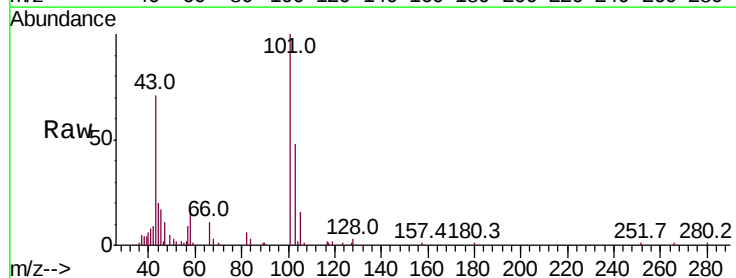
Acq: 1 Nov 2021 22:54

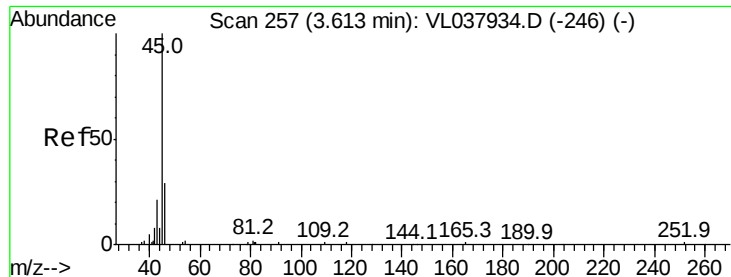
Tgt Ion: 101 Resp: 18884

Ion Ratio Lower Upper

101 100

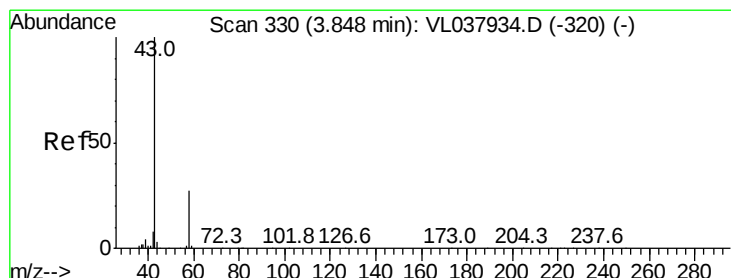
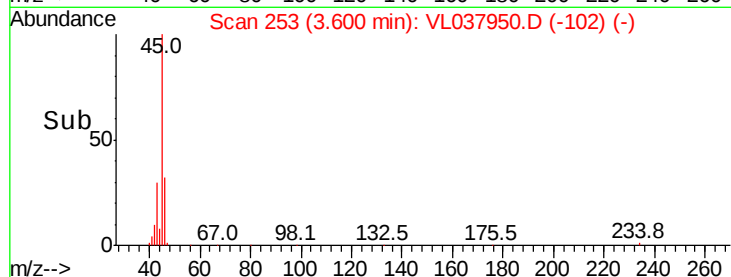
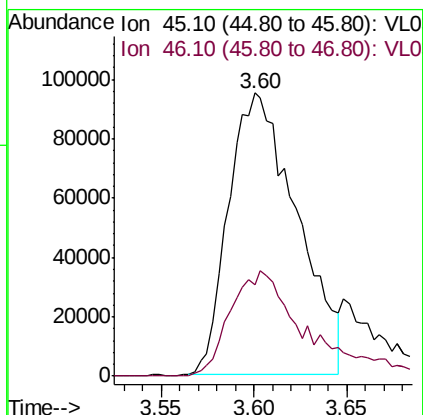
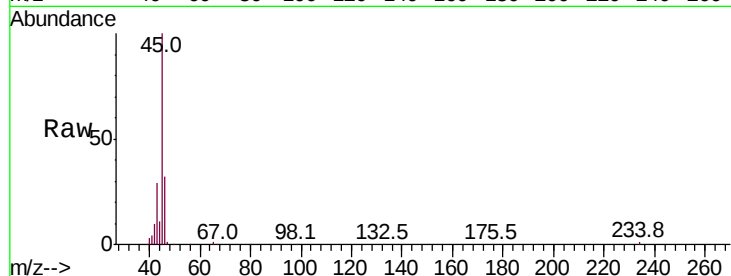
103 48.1 52.0 78.0#





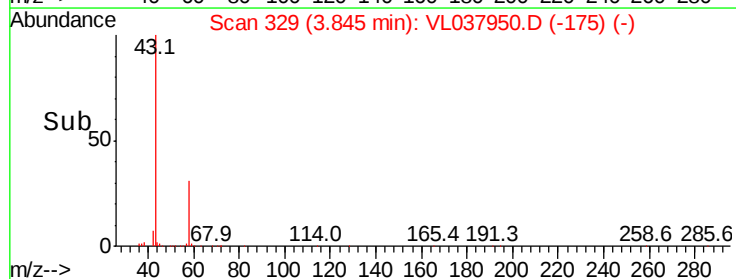
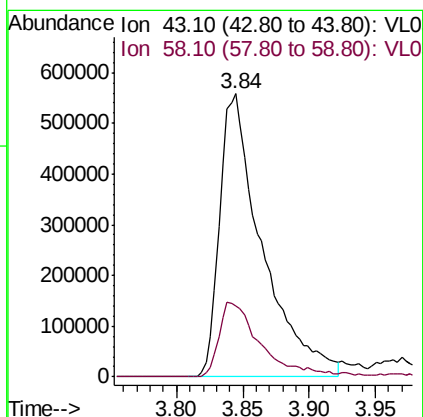
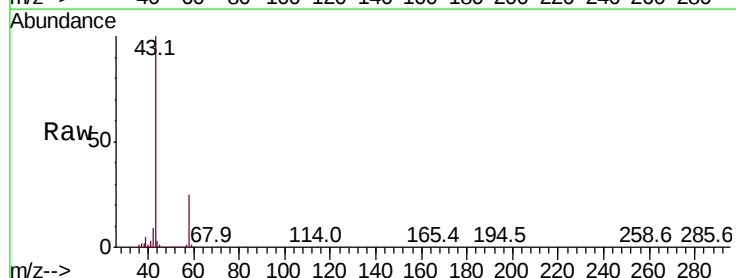
#13
 Ethanol
 Concen: 27.416 ppbv
 RT: 3.60
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 1 Nov 2021 22:54

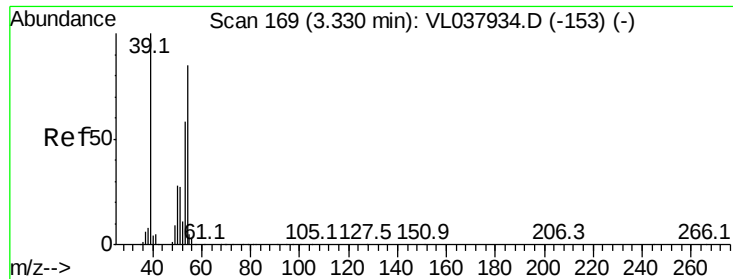
Tot Ion: 45 Resp: 243192
 Ion Ratio Lower Upper
 45 100
 46 45.8 17.4 69.8



#15
 Acetone
 Concen: 11.371 ppbv
 RT: 3.84 min Scan# 329
 Delta R.T. -0.00 min
 Lab File: VL037950.D
 Acq: 1 Nov 2021 22:54

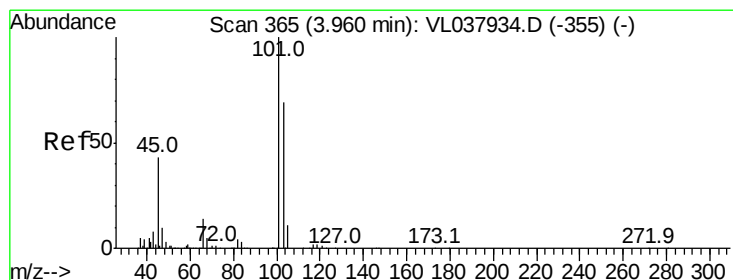
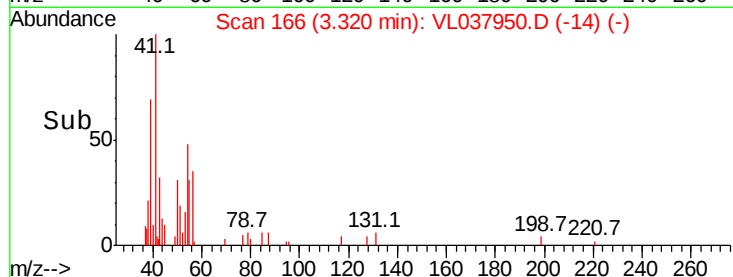
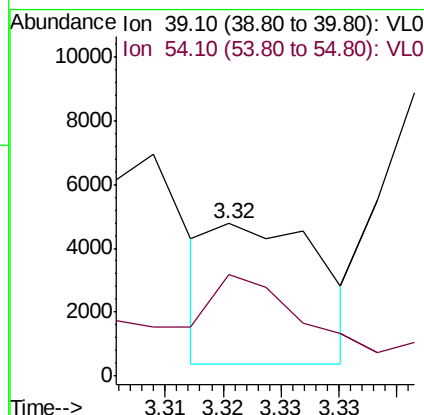
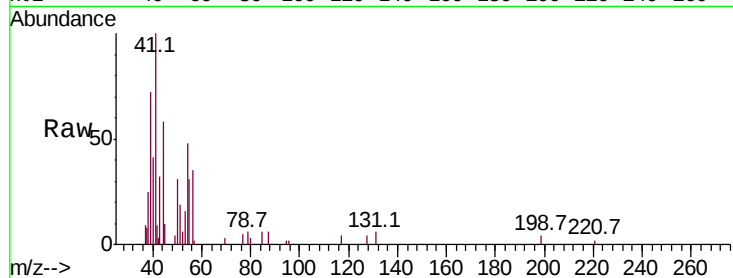
Tgt Ion: 43 Resp: 1237832
 Ion Ratio Lower Upper
 43 100
 58 26.7 23.3 34.9





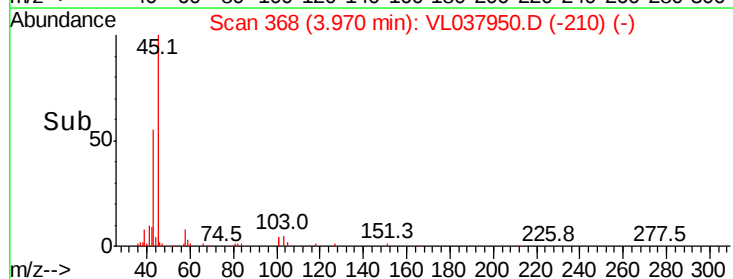
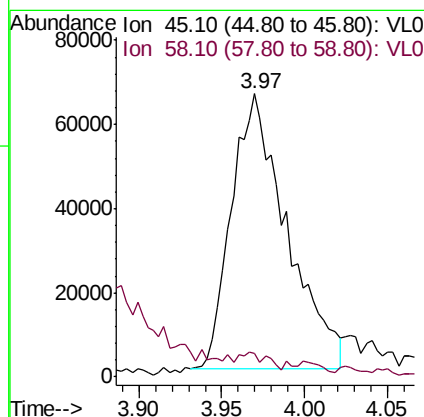
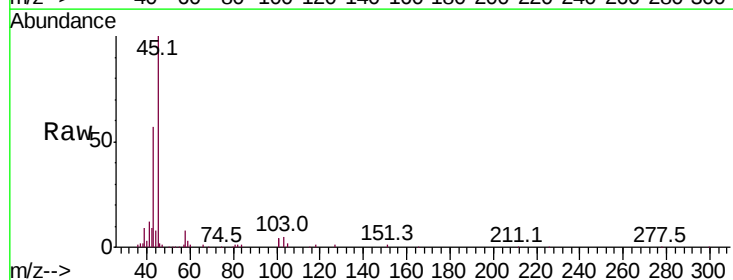
#16
 1,3-Butadiene
 Concen: 0.034 ppbv
 RT: 3.32
 Delta R.T. MSVOA_1
 Lab File: ClientSampleId :
 Acq: 1 Nov 2021 22:54

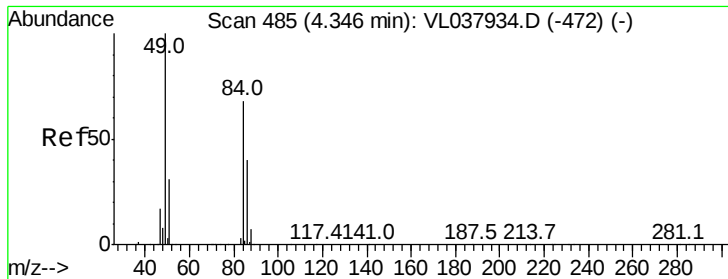
Tot Ion: 39 Resp: 2885
 Ion Ratio Lower Upper
 39 100
 54 167.7 62.6 93.8#



#19
 Isopropyl Alcohol
 Concen: 2.189 ppbv
 RT: 3.97 min Scan# 368
 Delta R.T. 0.01 min
 Lab File: VL037950.D
 Acq: 1 Nov 2021 22:54

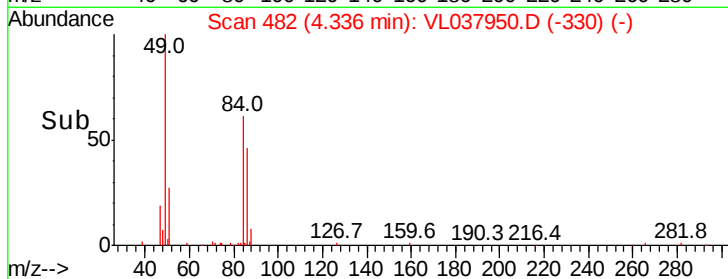
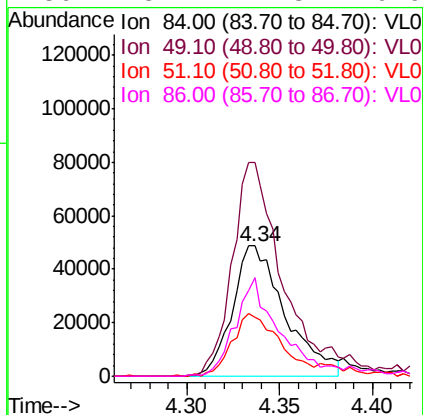
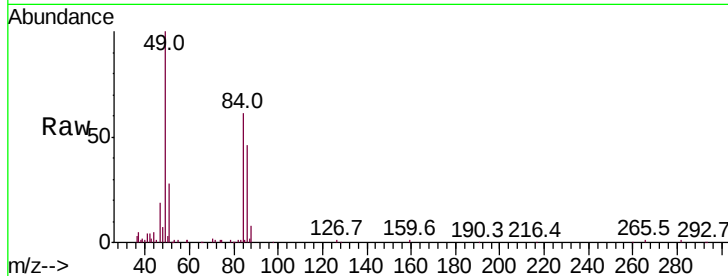
Tgt Ion: 45 Resp: 152395
 Ion Ratio Lower Upper
 45 100
 58 217.9 4.0 6.0#





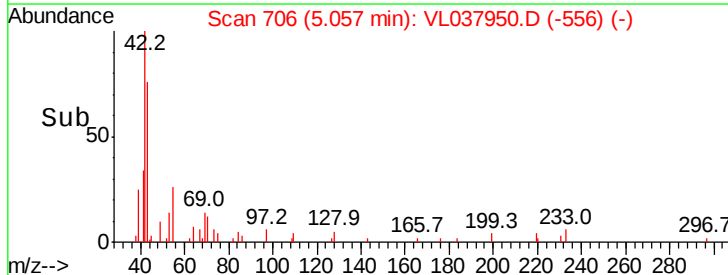
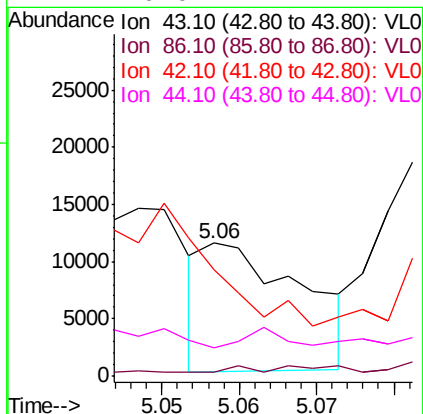
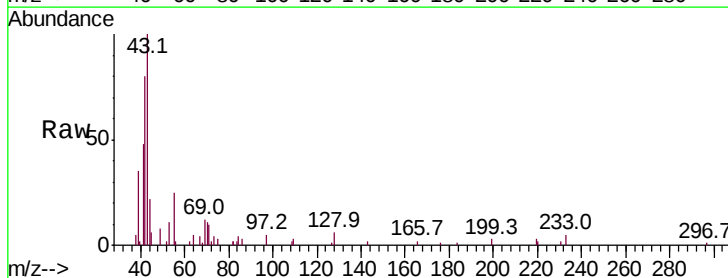
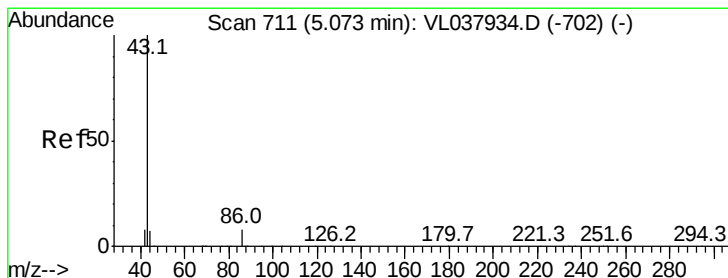
#20
Methvlene Chloride
Concen: 1.602 ppbv
RT: 4.34
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 1 Nov 2021 22:54

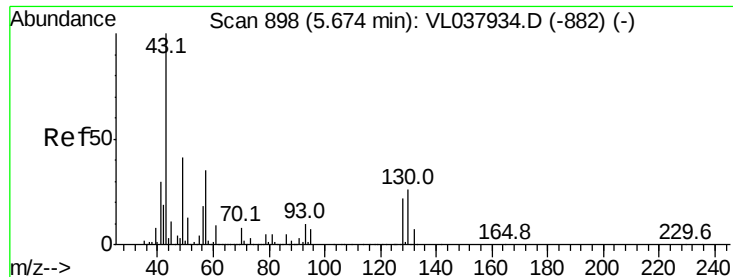
Tot Ion:	84	Resp:	95732
Ion	Ratio	Lower	Upper
84	100		
49	163.7	117.5	176.3
51	45.8	35.9	53.9
86	75.2	47.3	70.9#



#23
Vinyl Acetate
Concen: 0.061 ppbv
RT: 5.06 min Scan# 706
Delta R.T. -0.02 min
Lab File: VL037950.D
Acq: 1 Nov 2021 22:54

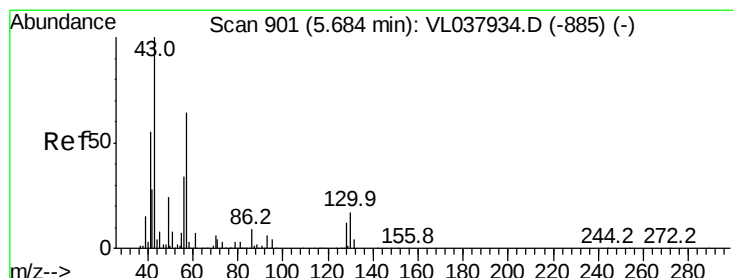
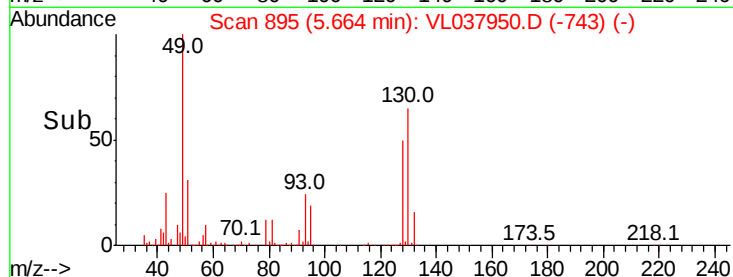
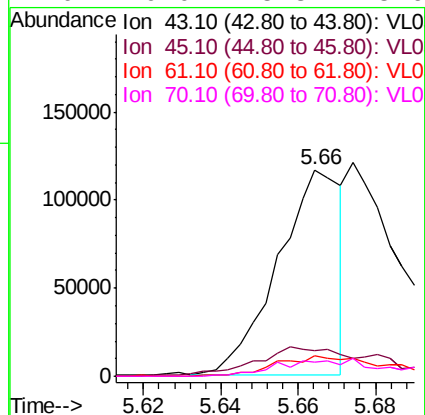
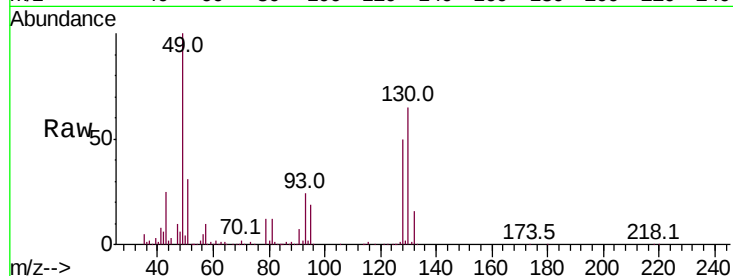
Tgt Ion:	43	Resp:	9920
Ion	Ratio	Lower	Upper
43	100		
86	0.1	5.5	8.3#
42	94.5	7.4	11.2#
44	0.0	4.7	7.1#





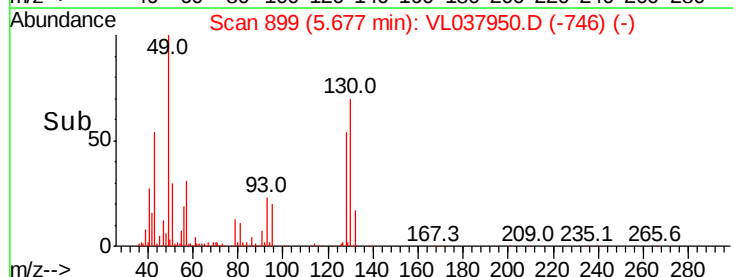
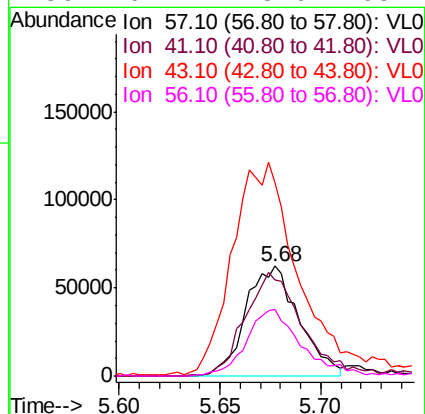
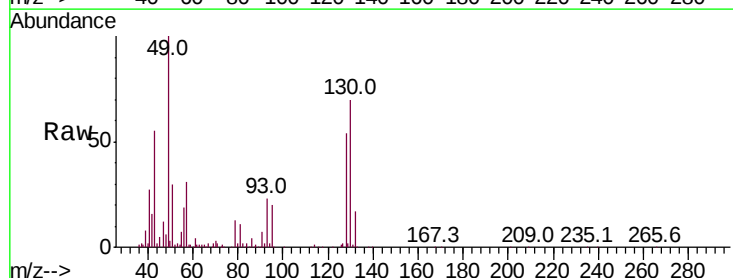
#25
Ethyl Acetate
Concen: 0.408 ppbv
RT: 5.66
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 1 Nov 2021 22:54

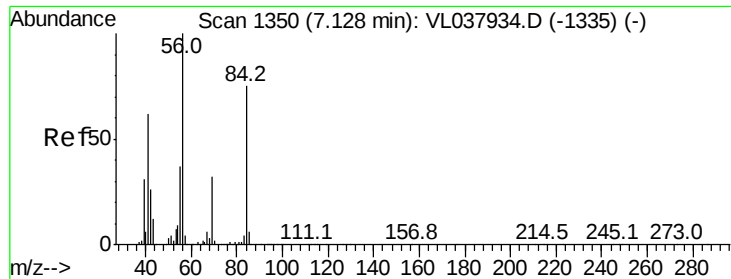
Tot Ion:	43	Resp:	131796
Ion	Ratio	Lower	Upper
43	100		
45	32.3	8.1	12.1#
61	20.4	8.1	12.1#
70	0.0	5.8	8.6#



#26
Hexane
Concen: 0.749 ppbv
RT: 5.68 min Scan# 899
Delta R.T.: -0.01 min
Lab File: VL037950.D
Acq: 1 Nov 2021 22:54

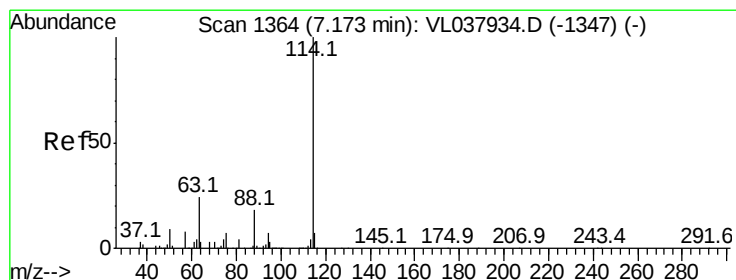
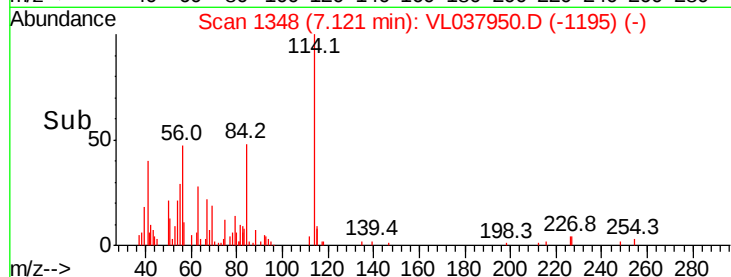
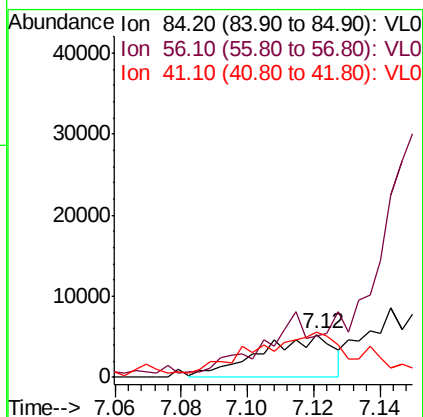
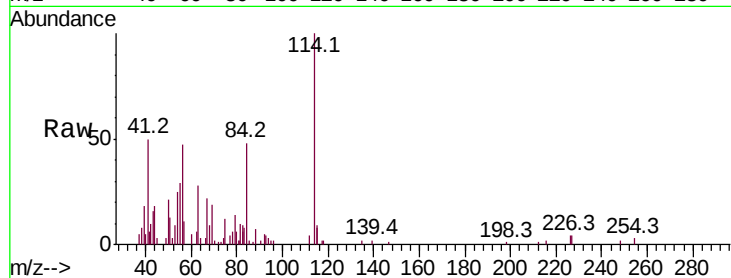
Tgt Ion:	57	Resp:	114759
Ion	Ratio	Lower	Upper
57	100		
41	106.0	71.0	106.6
43	253.1	173.0	259.6
56	62.7	43.6	65.4





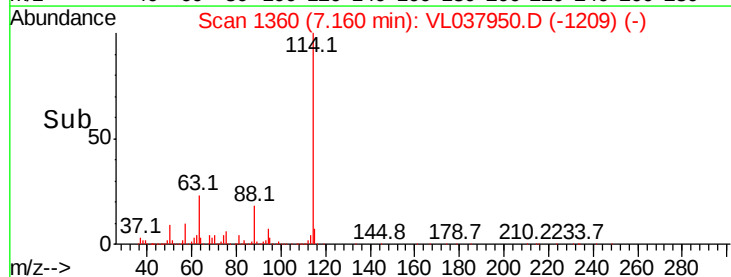
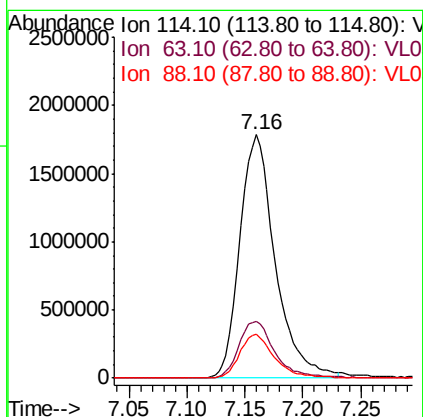
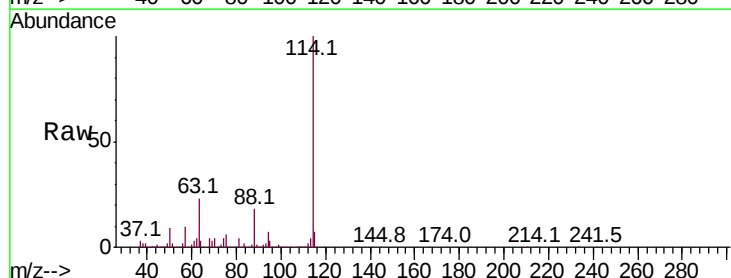
#30
Cvclohexane
Concen: 0.061 ppbv
RT: 7.12 min
Delta R.T.: MSVOA_1
Lab File: ClientSampleId :
Acq: 1 Nov 2021 22:54

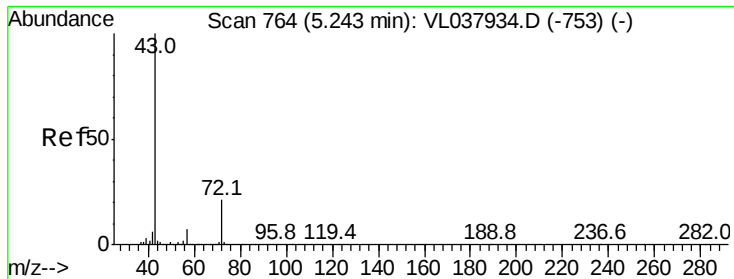
Tot Ion	Ratio	Lower	Upper
84	100		
56	0.0	114.0	171.0#
41	194.4	68.3	102.5#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.16 min Scan# 1360
Delta R.T.: -0.01 min
Lab File: VL037950.D
Acq: 1 Nov 2021 22:54

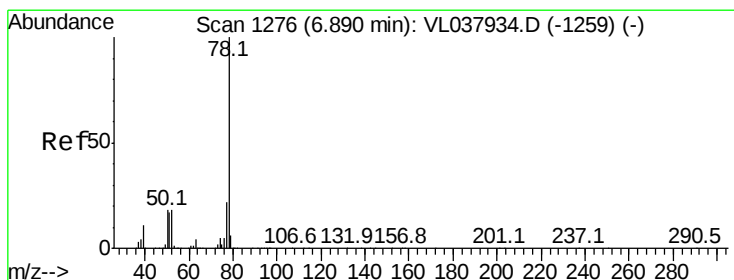
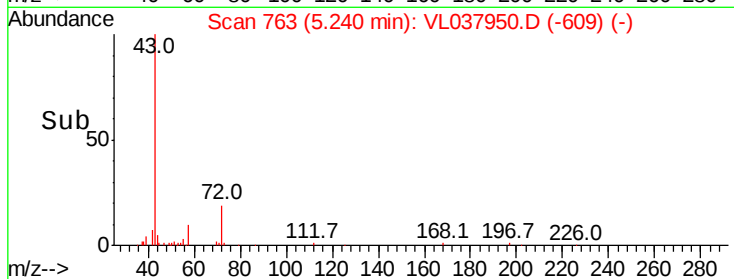
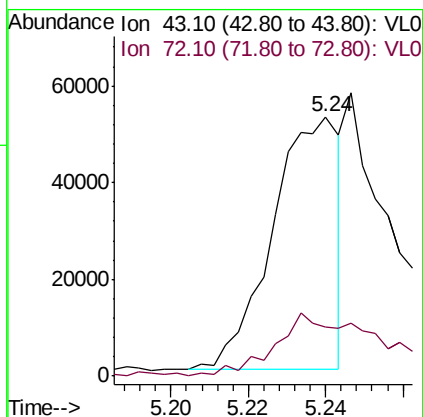
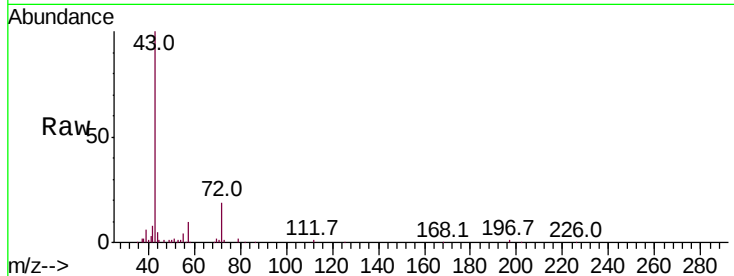
Tgt Ion	Ratio	Lower	Upper
114	100		
63	23.9	19.4	29.0
88	17.9	14.2	21.4





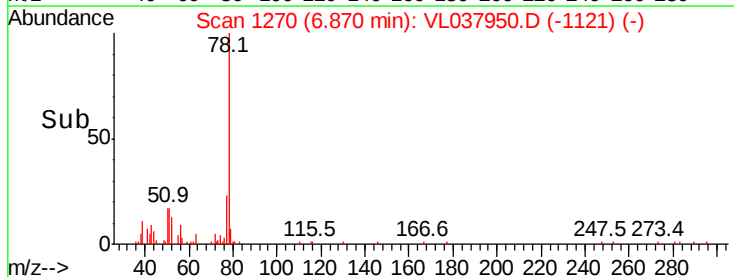
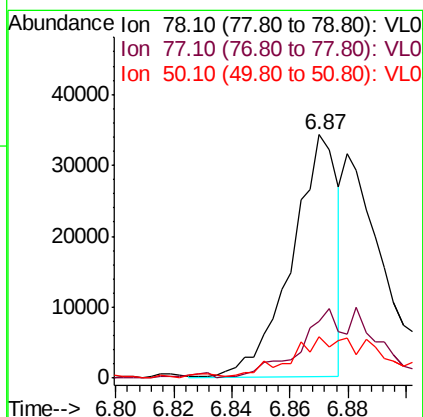
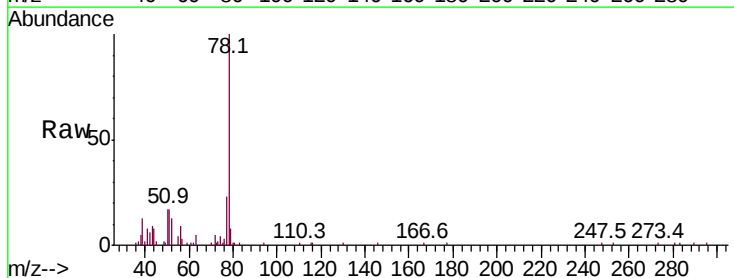
#34
2-Butanone
Concen: 0.446 ppbv
RT: 5.24
Delta R.T. MSVOA_1
Lab File: ClientSampleId :
Acq: 1 Nov 2021 22:54

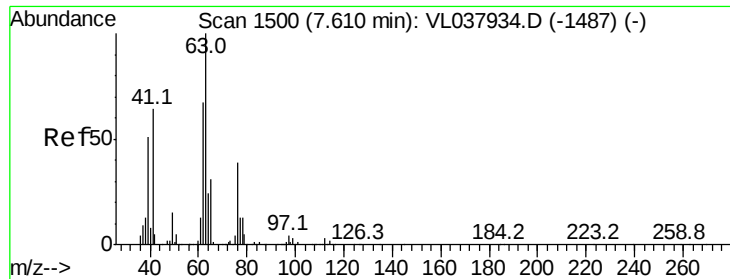
Tot Ion: 43 Resp: 62602
Ion Ratio Lower Upper
43 100
72 48.1 18.3 27.5#



#36
Benzene
Concen: 0.122 ppbv
RT: 6.87 min Scan# 1270
Delta R.T. -0.02 min
Lab File: VL037950.D
Acq: 1 Nov 2021 22:54

Tgt Ion: 78 Resp: 37497
Ion Ratio Lower Upper
78 100
77 21.5 17.9 26.9
50 15.1 14.4 21.6





#39

1,2-Dichloropropane

Concen: 7.697 ppbv

RT: 7.16 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

Acq: 1 Nov 2021 22:54

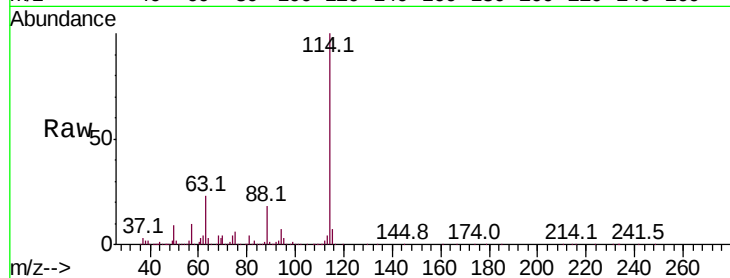
Tot Ion: 63 Resp: 893003

Ion Ratio Lower Upper

63 100

41 0.0 51.6 77.4#

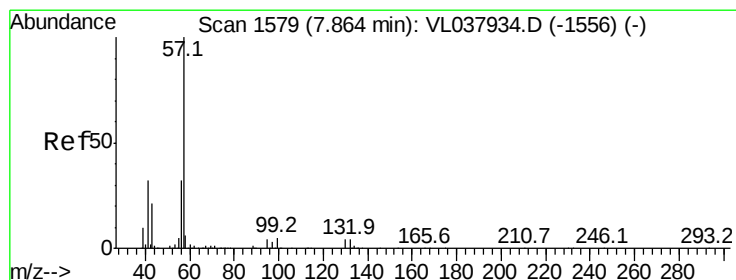
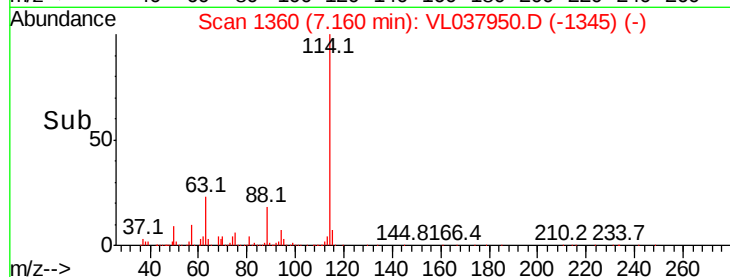
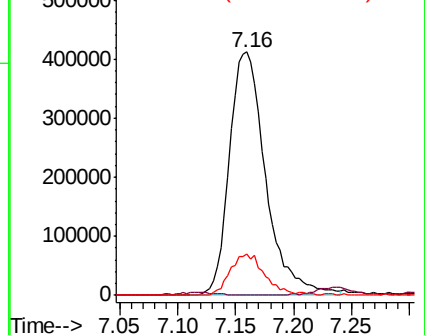
62 17.2 53.5 80.3#



Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0



#44

2,2,4-Trimethylpentane

Concen: 0.080 ppbv

RT: 7.85 min Scan# 1576

Delta R.T. -0.01 min

Lab File: VL037950.D

Acq: 1 Nov 2021 22:54

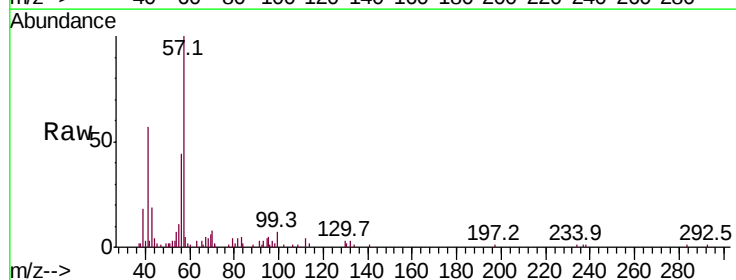
Tgt Ion: 57 Resp: 42202

Ion Ratio Lower Upper

57 100

41 108.1 25.8 38.8#

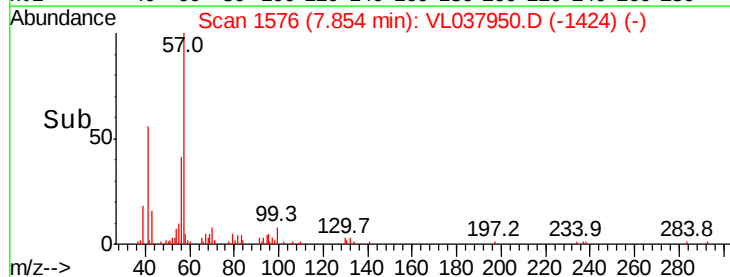
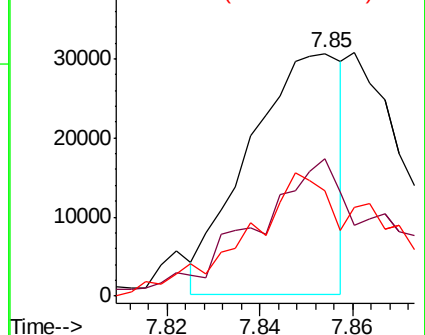
56 91.3 25.9 38.9#

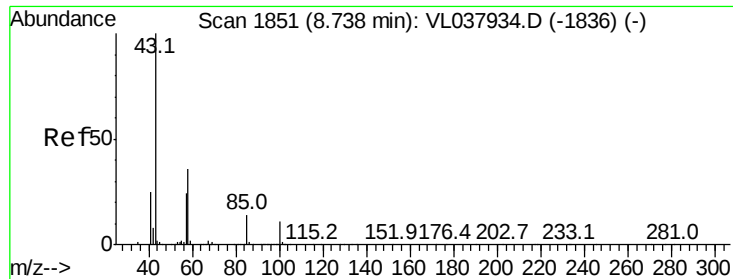


Abundance Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

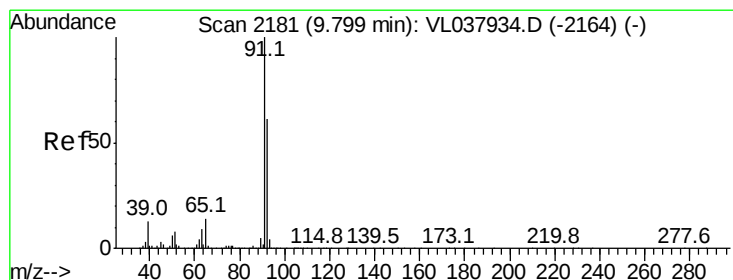
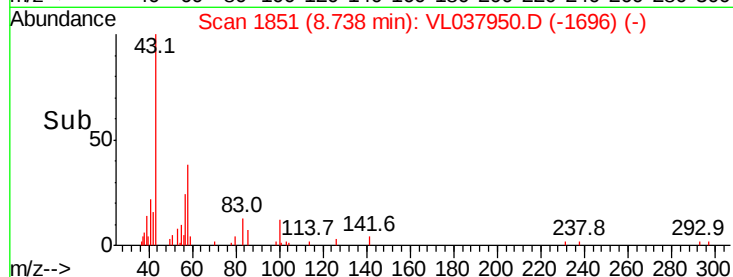
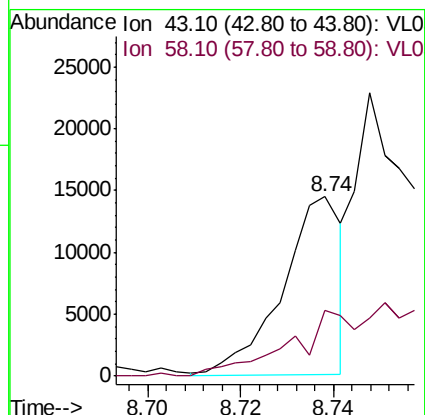
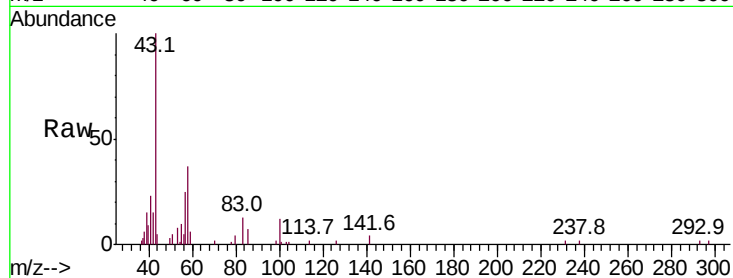
Ion 56.10 (55.80 to 56.80): VL0





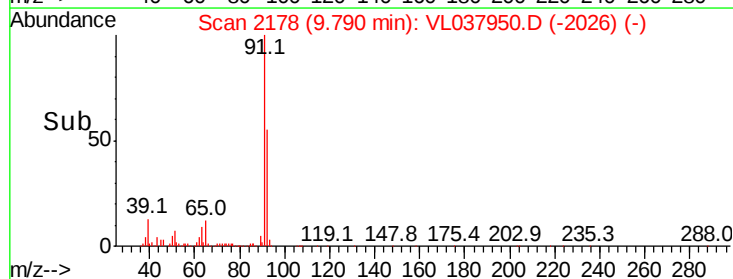
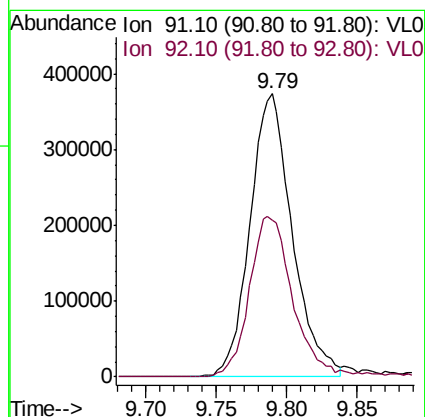
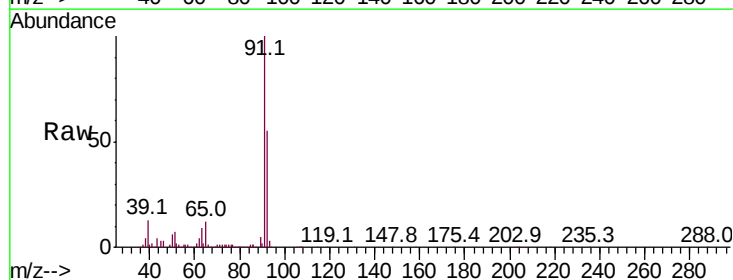
#50
4-Methyl-2-Pentanone
Concen: 0.069 ppbv
RT: 8.74
Delta R.T. MSVOA_1
Lab File: ClientSampleId :
Acq: 1 Nov 2021 22:54

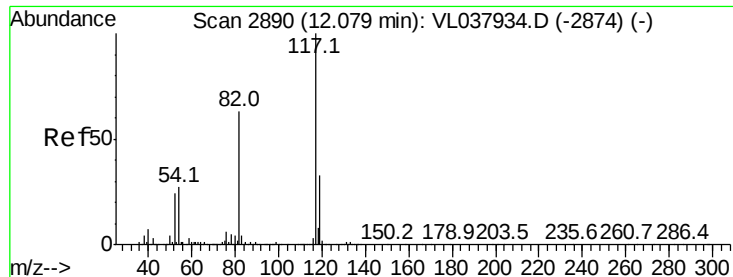
Tot Ion: 43 Resp: 12805
Ion Ratio Lower Upper
43 100
58 0.0 28.8 43.2#



#53
Toluene
Concen: 2.364 ppbv
RT: 9.79 min Scan# 2178
Delta R.T. -0.01 min
Lab File: VL037950.D
Acq: 1 Nov 2021 22:54

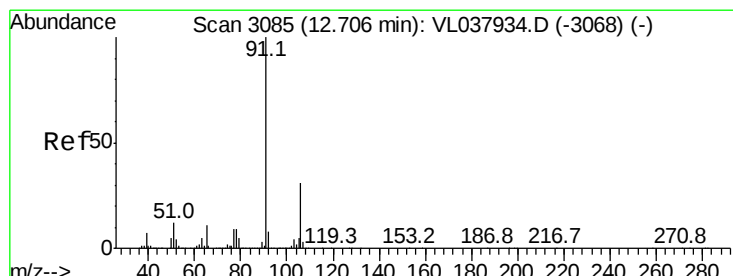
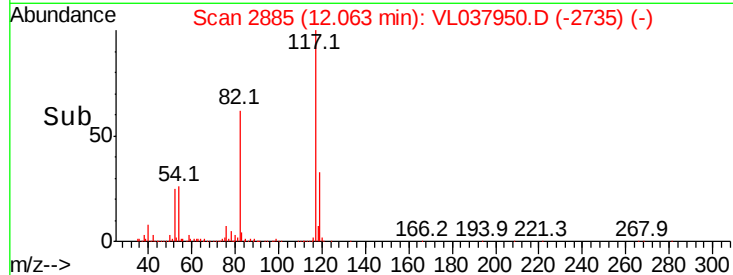
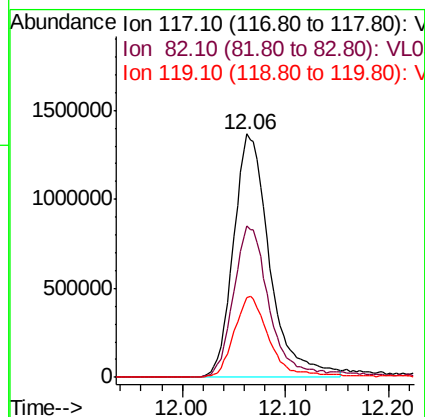
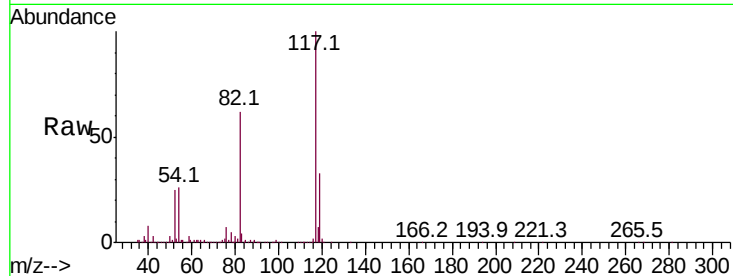
Tgt Ion: 91 Resp: 781417
Ion Ratio Lower Upper
91 100
92 59.4 48.2 72.4





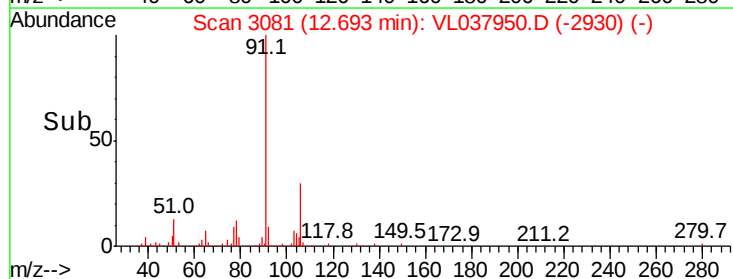
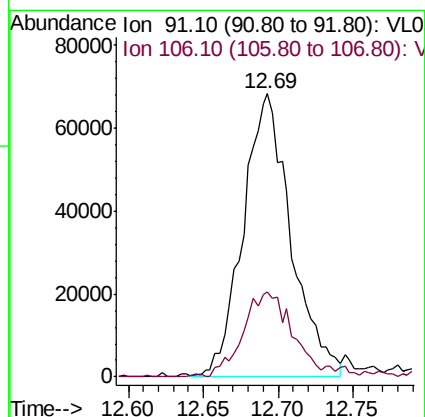
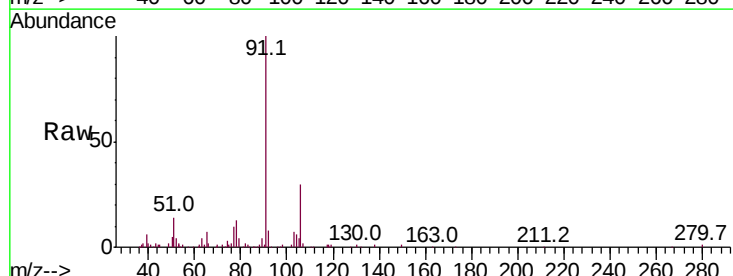
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.06 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
Acq: 1 Nov 2021 22:54

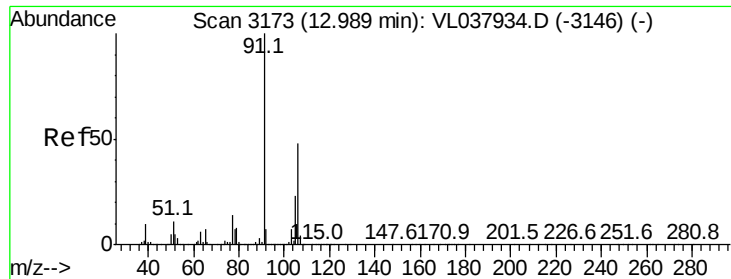
Tot Ion: 117 Resp: 3338919
Ion Ratio Lower Upper
117 100
82 64.4 51.0 76.6
119 33.5 26.9 40.3



#58
Ethyl Benzene
Concen: 0.374 ppbv
RT: 12.69 min Scan# 3081
Delta R.T. -0.01 min
Lab File: VL037950.D
Acq: 1 Nov 2021 22:54

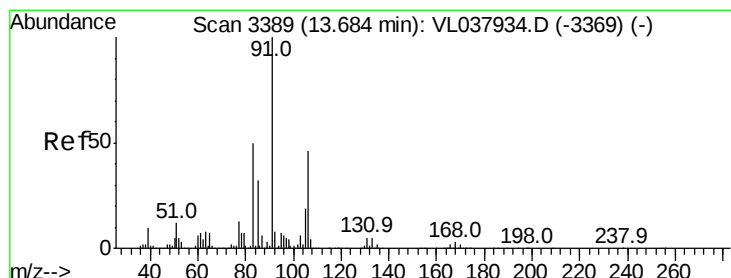
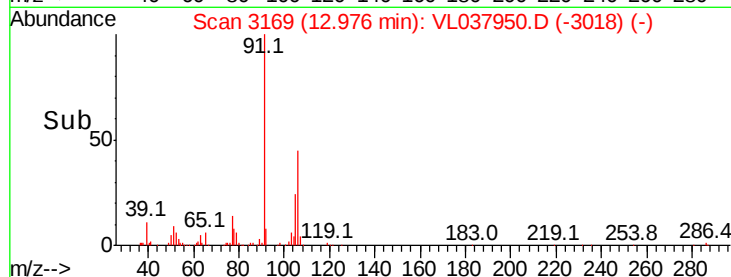
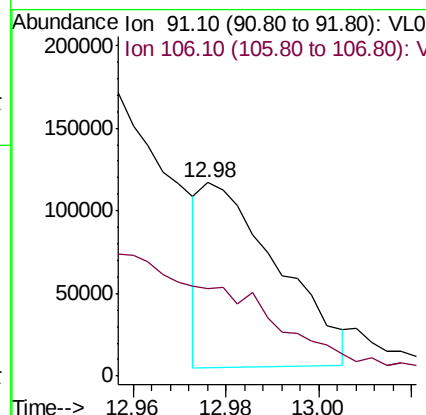
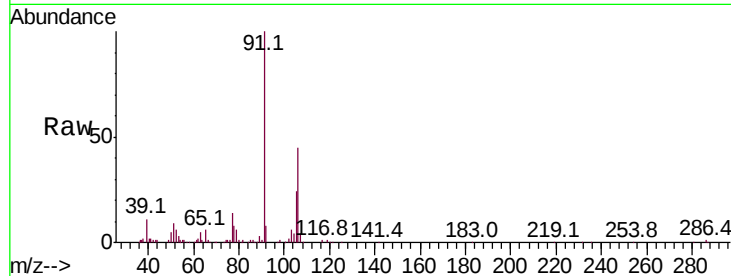
Tgt Ion: 91 Resp: 152510
Ion Ratio Lower Upper
91 100
106 29.3 25.1 37.7





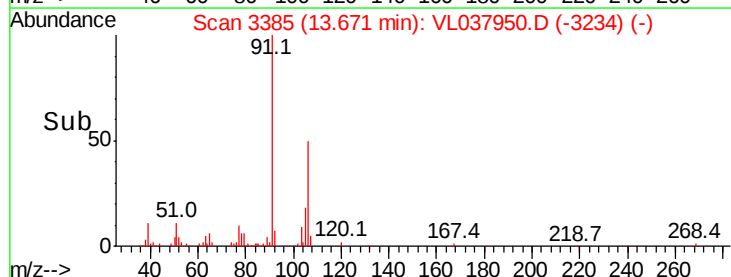
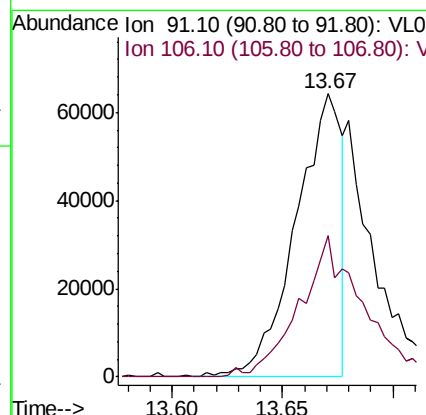
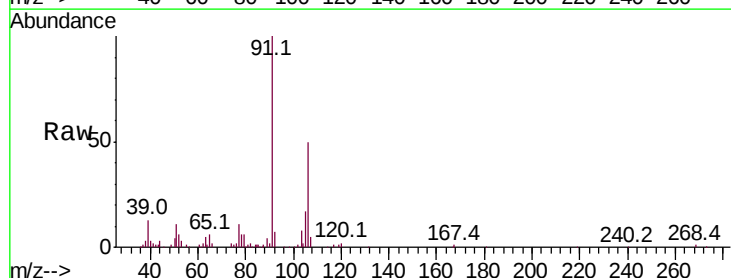
#59
m/p-Xylene
Concen: 0.354 ppbv
RT: 12.98
Delta R.T. MSVOA_1
Lab File: ClientSampleId :
Acq: 1 Nov 2021 22:54

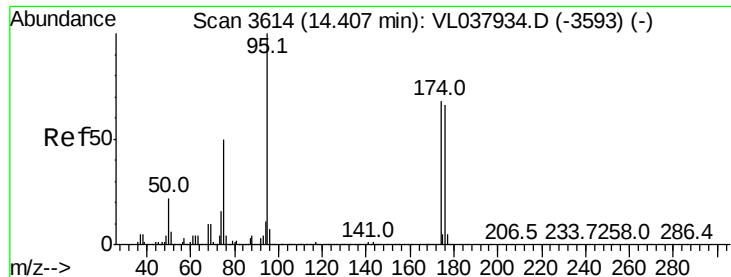
Tot Ion: 91 Resp: 128439
Ion Ratio Lower Upper
91 100
106 0.0 37.1 55.7#



#60
o-Xylene
Concen: 0.267 ppbv
RT: 13.67 min Scan# 3385
Delta R.T. -0.01 min
Lab File: VL037950.D
Acq: 1 Nov 2021 22:54

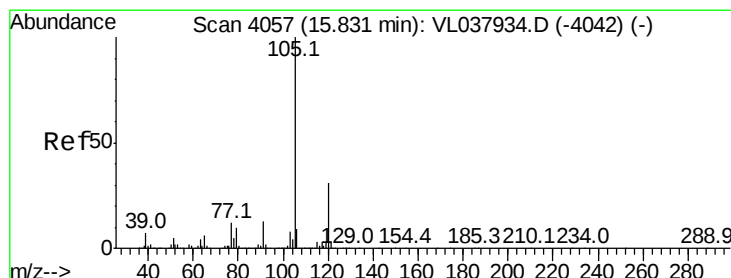
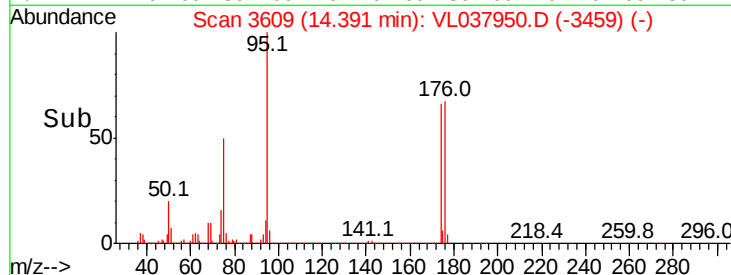
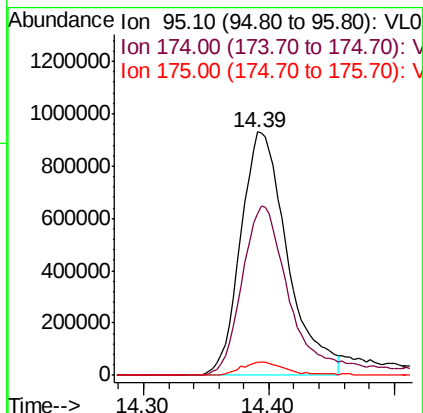
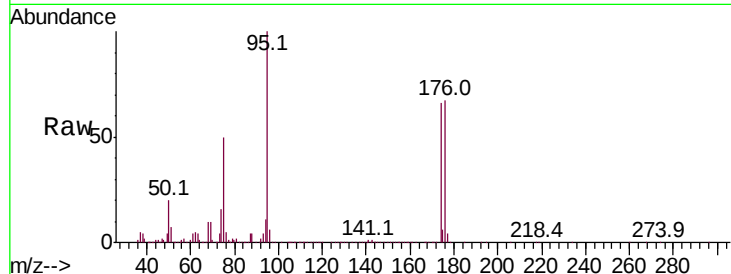
Tgt Ion: 91 Resp: 91443
Ion Ratio Lower Upper
91 100
106 72.3 23.5 70.6#





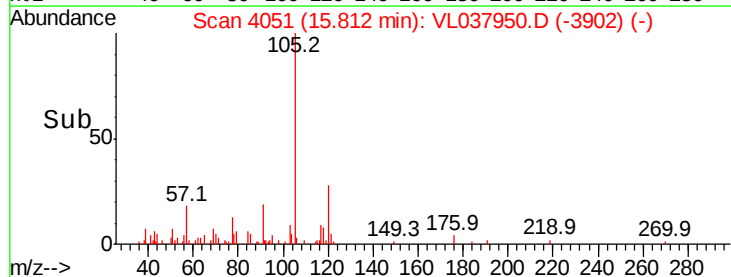
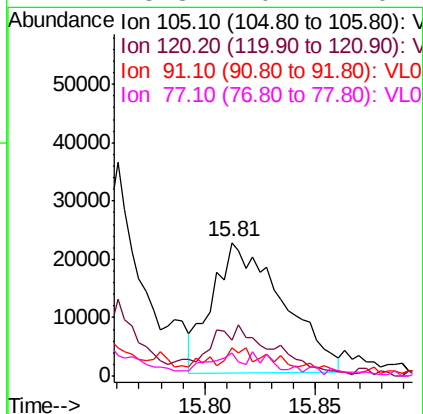
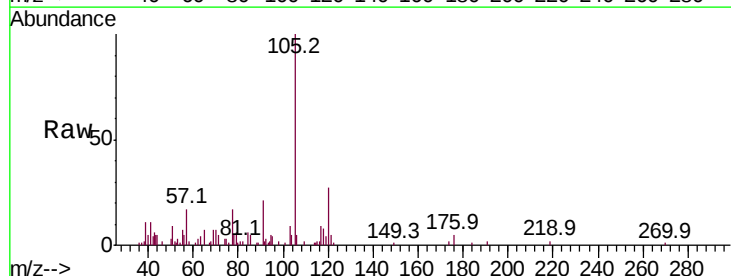
#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.930 ppbv
 RT: 14.39
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 1 Nov 2021 22:54

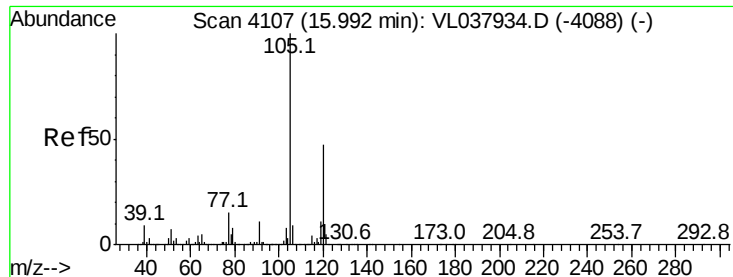
Tot Ion: 95 Resp: 2409948
 Ion Ratio Lower Upper
 95 100
 174 76.3 58.3 87.5
 175 5.6 4.6 6.8



#72
 4-Ethyltoluene
 Concen: 0.128 ppbv
 RT: 15.81 min Scan# 4051
 Delta R.T. -0.02 min
 Lab File: VL037950.D
 Acq: 1 Nov 2021 22:54

Tgt Ion: 105 Resp: 50038
 Ion Ratio Lower Upper
 105 100
 120 39.7 25.3 37.9#
 91 20.9 9.9 14.9#
 77 18.3 10.7 16.1#





#73

1,3,5-Trimethylbenzene

Concen: 0.080 ppbv

RT: 15.97

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

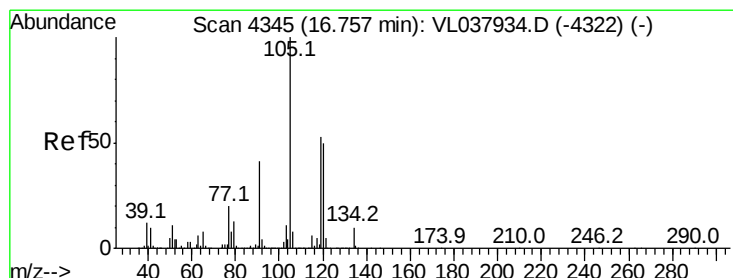
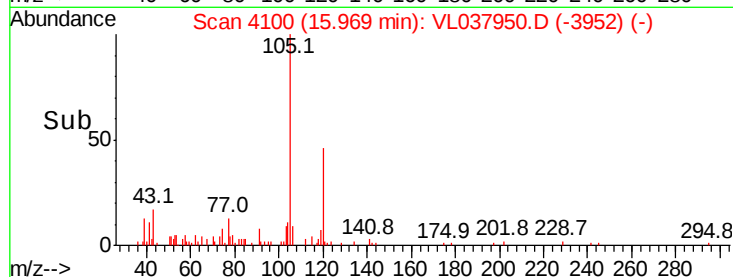
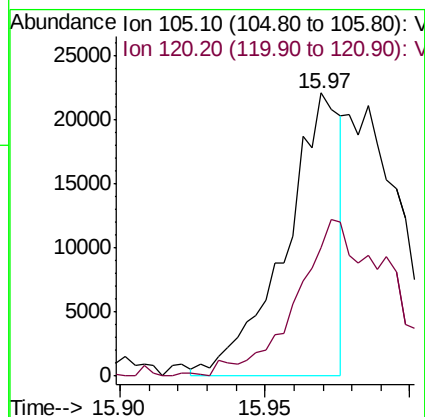
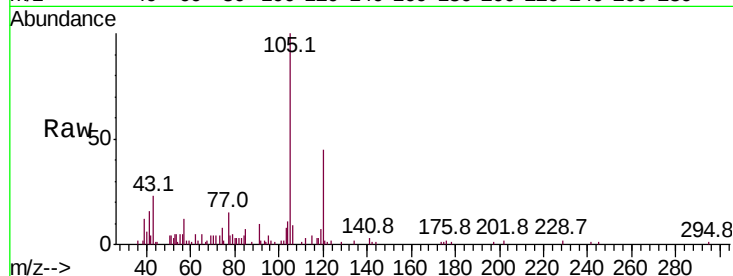
Acq: 1 Nov 2021 22:54

Tot Ion:105 Resp: 29214

Ion Ratio Lower Upper

105 100

120 46.8 37.9 56.9



#74

1,2,4-Trimethylbenzene

Concen: 0.249 ppbv

RT: 16.74 min Scan# 4339

Delta R.T. -0.02 min

Lab File: VL037950.D

Acq: 1 Nov 2021 22:54

Tgt Ion:105 Resp: 95645

Ion Ratio Lower Upper

105 100

120 37.2 40.0 60.0#

91 9.8 32.6 49.0#

77 10.5 15.8 23.8#

