

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL041122\
 Data File : VL038884.D
 Acq On : 12 Apr 2022 00:16
 Operator : SY/AP
 Sample : N2332-05DL 4X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-5DL

Quant Time: Apr 12 02:54:50 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	5.67	49	1168559	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	3035210	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.08	117	2781901	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.40	95	2160753	10.24	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.40%

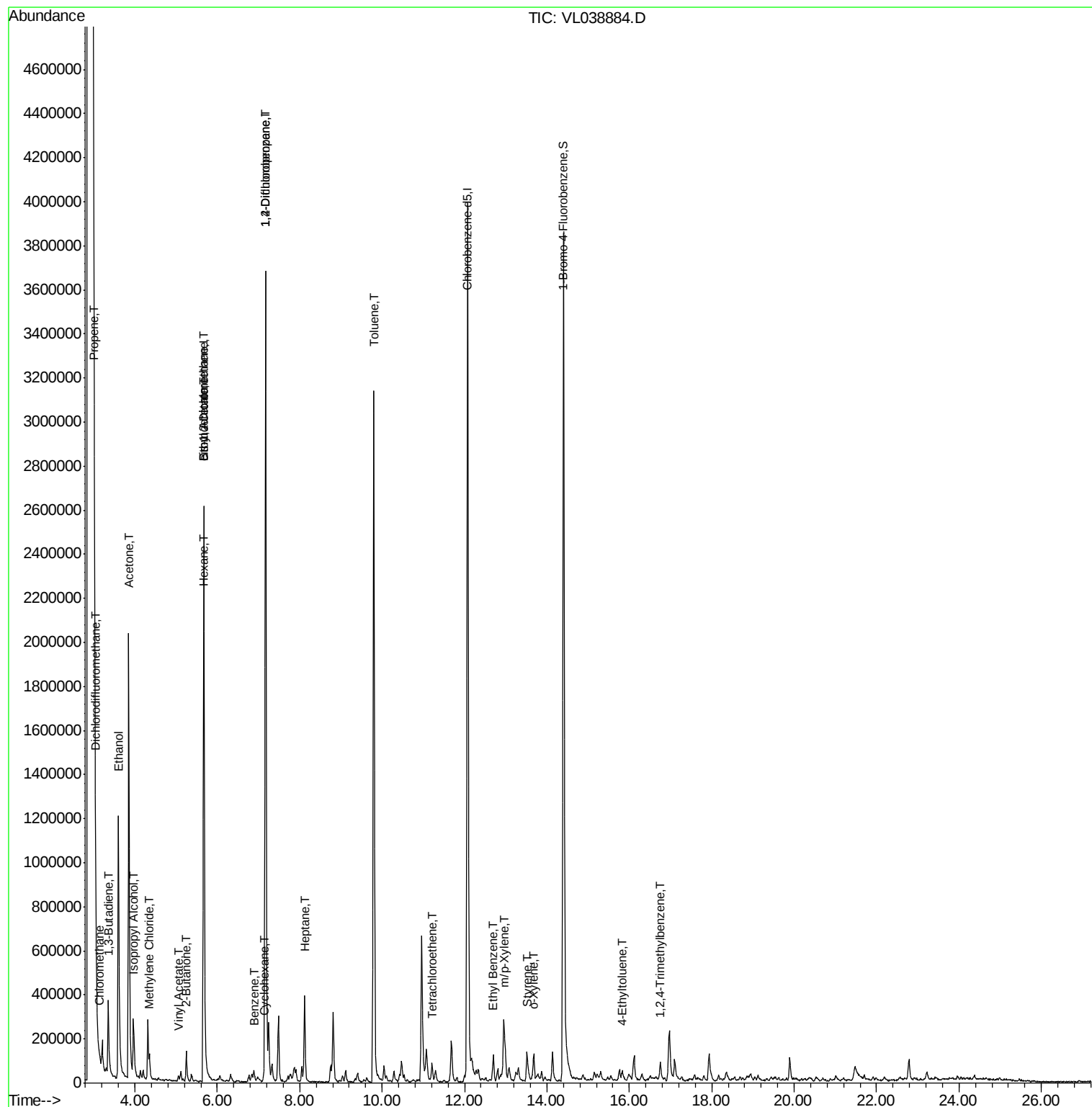
Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.05	85	20215	0.122 ppbv	95
4) Chloromethane	3.14	50	4321	0.059 ppbv	93
9) Propene	3.02	41	84813	1.124 ppbv #	79
10) Heptane	8.12	43	185452	0.976 ppbv	94
13) Ethanol	3.59	45	1438608	313.736 ppbv #	100
15) Acetone	3.85	43	2202216	18.929 ppbv	98
16) 1,3-Butadiene	3.35	39	42532	0.639 ppbv #	15
19) Isopropyl Alcohol	3.96	45	317951	5.347 ppbv #	100
20) Methylene Chloride	4.35	84	33221	0.787 ppbv #	83
23) Vinyl Acetate	5.07	43	6086	0.054 ppbv #	51
25) Ethyl Acetate	5.67	43	430244	1.457 ppbv #	93
26) Hexane	5.69	57	39923	0.297 ppbv #	12
30) Cyclohexane	7.13	84	6099	0.052 ppbv #	1
31) cis-1,2-Dichloroethene	5.67	61	45393	0.367 ppbv #	28
34) 2-Butanone	5.24	43	161535	1.347 ppbv	97
36) Benzene	6.89	78	31547	0.114 ppbv #	87
39) 1,2-Dichloropropane	7.17	63	745146	7.056 ppbv #	26
52) Tetrachloroethene	11.22	164	5702	0.059 ppbv	96
53) Toluene	9.80	91	2660035	8.345 ppbv	99
58) Ethyl Benzene	12.71	91	103958	0.250 ppbv	91
59) m/p-Xylene	12.98	91	90624	0.259 ppbv #	30
60) o-Xylene	13.68	91	95295	0.292 ppbv	97
61) Styrene	13.52	104	64588	0.324 ppbv	94
72) 4-Ethyltoluene	15.83	105	12555	0.032 ppbv #	55
74) 1,2,4-Trimethylbenzene	16.75	105	58479	0.158 ppbv #	73

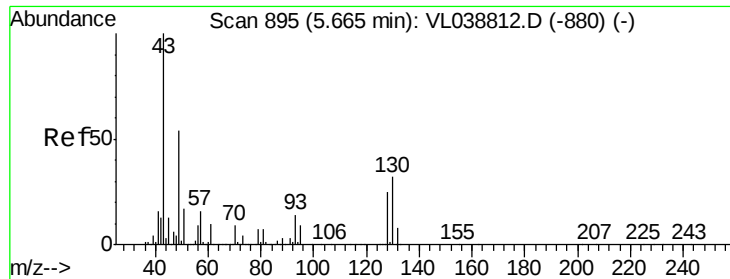
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL041122\
Data File : VL038884.D
Acq On : 12 Apr 2022 00:16
Operator : SY/AP
Sample : N2332-05DL 4X
Misc : 400mL/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-5DL

Quant Time: Apr 12 02:54:50 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: 5.67

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 12 Apr 2022 00:16

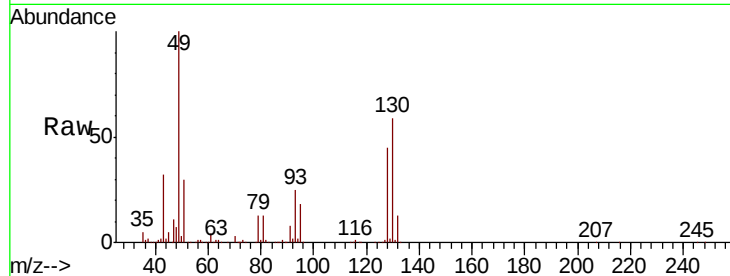
Tot Ion: 49 Resp: 1168559

Ion Ratio Lower Upper

49 100

128 48.2 24.1 72.3

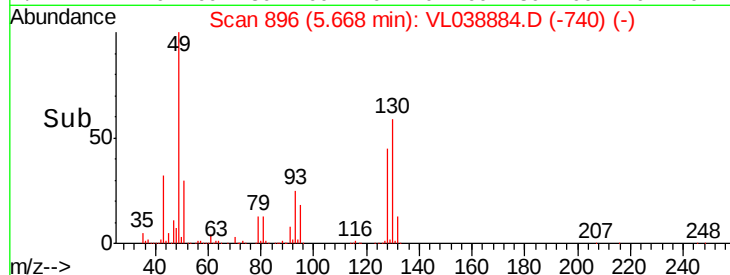
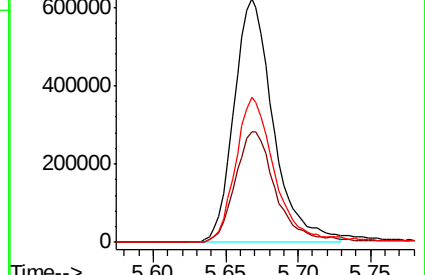
130 61.5 30.9 92.8



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.122 ppbv

RT: 3.05 min Scan# 81

Delta R.T. -0.00 min

Lab File: VL038884.D

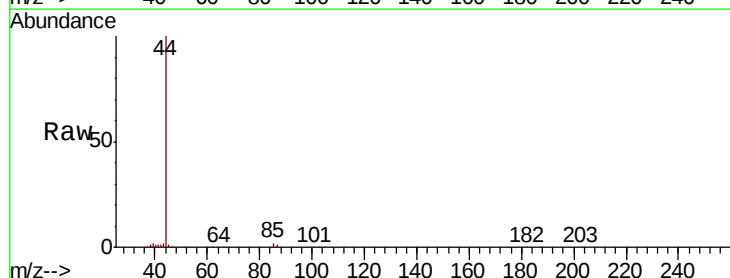
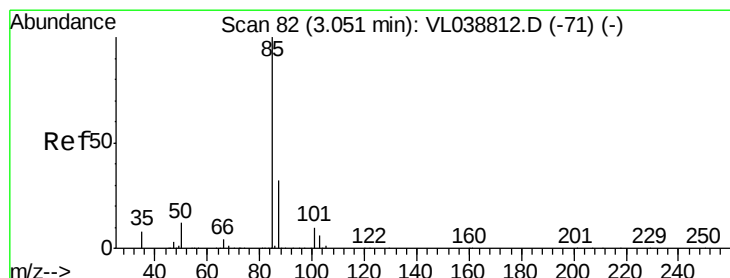
Acq: 12 Apr 2022 00:16

Tgt Ion: 85 Resp: 20215

Ion Ratio Lower Upper

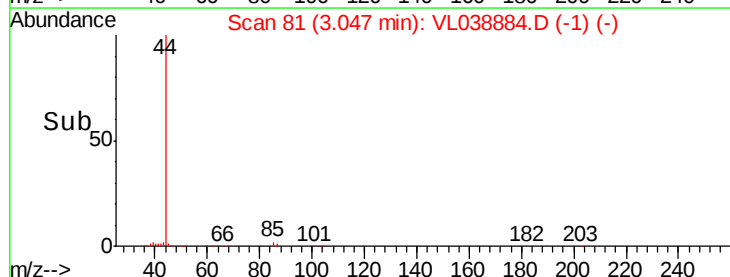
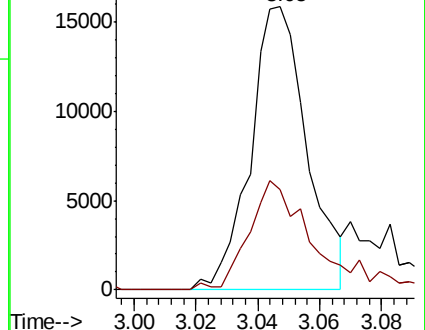
85 100

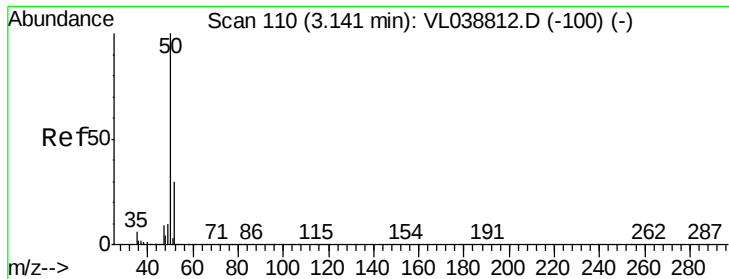
87 35.3 25.9 38.9



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#4

Chloromethane

Concen: 0.059 ppbv

RT: 3.14 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

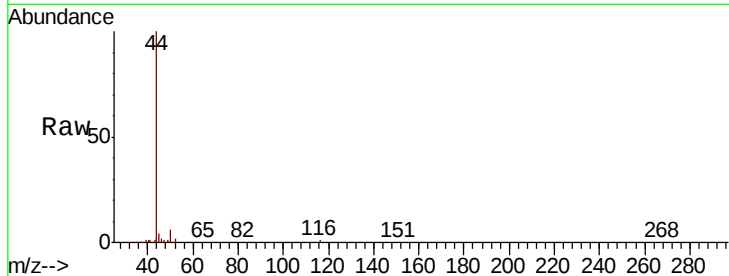
Acq: 12 Apr 2022 00:16

Tot Ion: 50 Resp: 4321

Ion Ratio Lower Upper

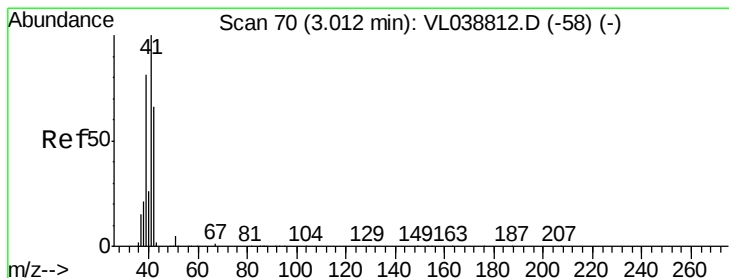
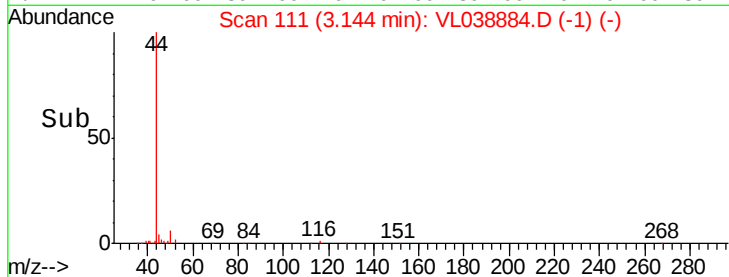
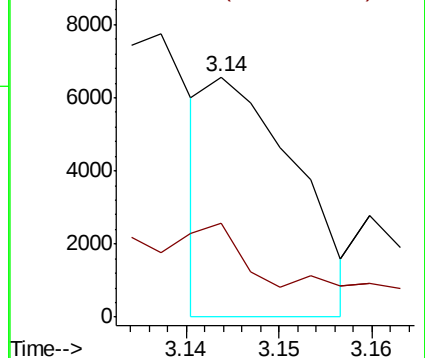
50 100

52 34.4 24.3 36.5



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0



#9

Propene

Concen: 1.124 ppbv

RT: 3.02 min Scan# 73

Delta R.T. 0.01 min

Lab File: VL038884.D

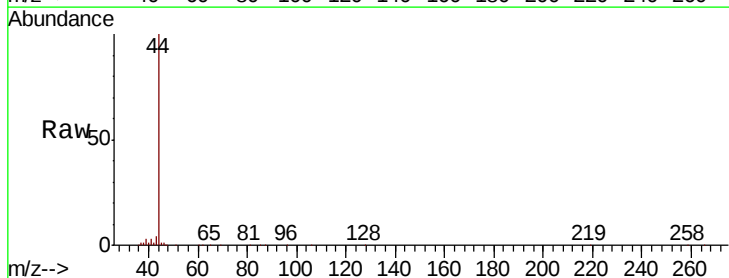
Acq: 12 Apr 2022 00:16

Tgt Ion: 41 Resp: 84813

Ion Ratio Lower Upper

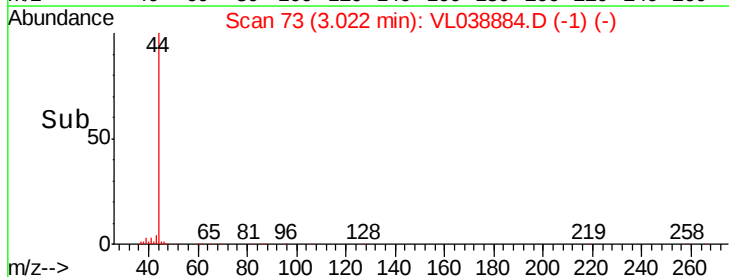
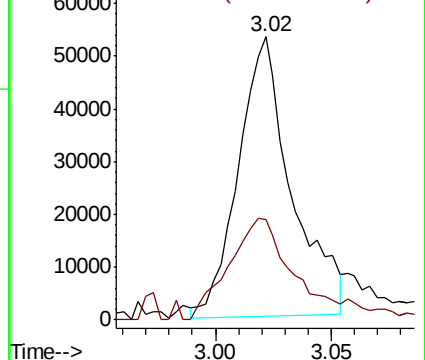
41 100

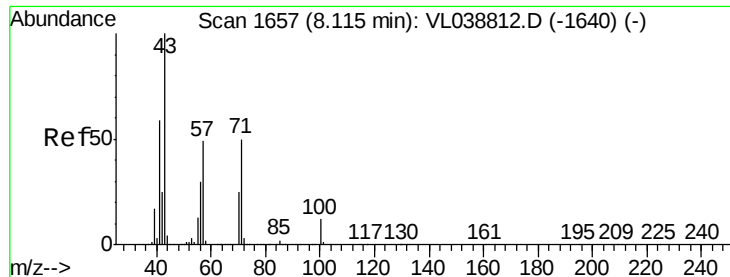
42 50.8 54.2 81.4#



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0





#10

Heptane

Concen: 0.976 ppbv

RT: 8.12 Instrument: MSVOA_1

Delta R.T. -0.01 min

Lab File: ClientSampleId: IA-5DL

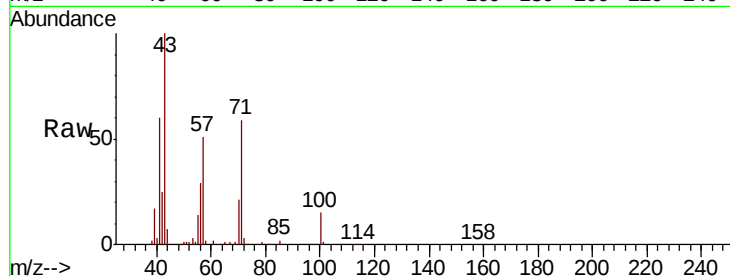
Acq: 12 Apr 2022 00:16

Tot Ion: 43 Resp: 185452

Ion Ratio Lower Upper

43 100

57 52.9 39.3 58.9



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0

8.12

100000

80000

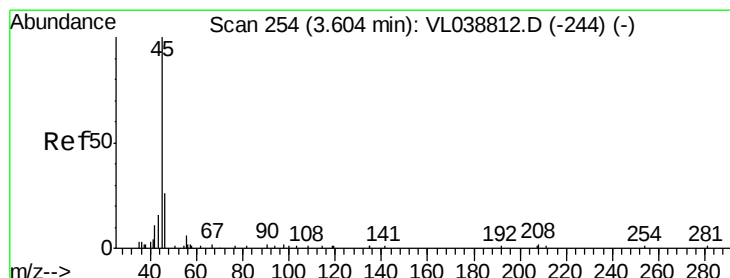
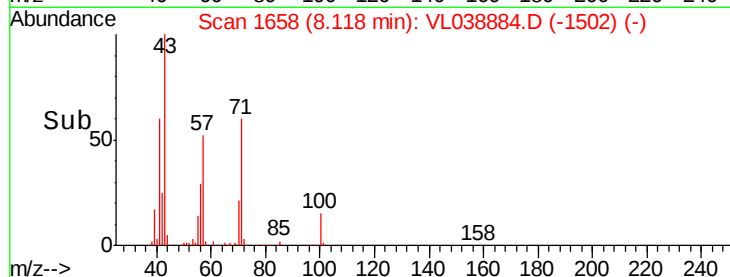
60000

40000

20000

0

Time--> 8.05 8.10 8.15



#13

Ethanol

Concen: 313.736 ppbv

RT: 3.59 min Scan# 251

Delta R.T. -0.01 min

Lab File: VL038884.D

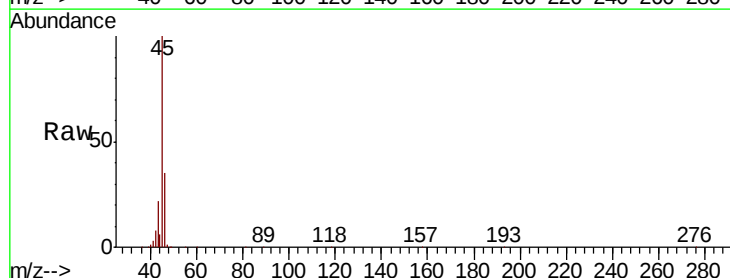
Acq: 12 Apr 2022 00:16

Tgt Ion: 45 Resp: 1438608

Ion Ratio Lower Upper

45 100

46 36.6 0.0 0.0#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0

3.59

800000

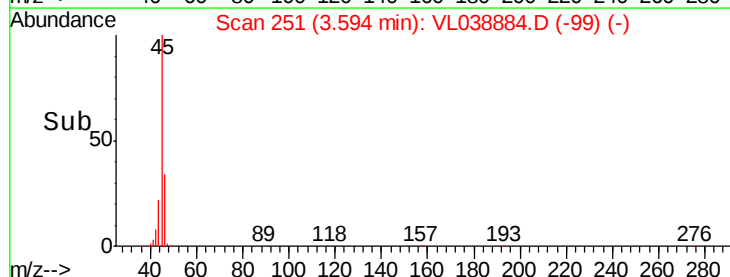
600000

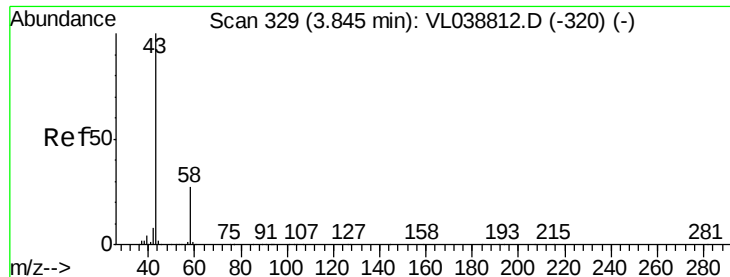
400000

200000

0

Time--> 3.50 3.55 3.60 3.65 3.70





#15

Acetone

Concen: 18.929 ppbv

RT: 3.85 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

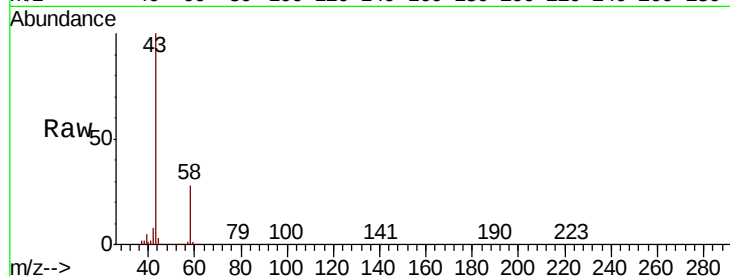
Acq: 12 Apr 2022 00:16

Tot Ion: 43 Resp: 2202216

Ion Ratio Lower Upper

43 100

58 26.9 22.5 33.7



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

1500000

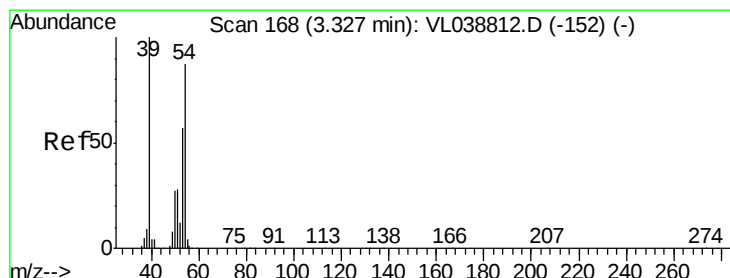
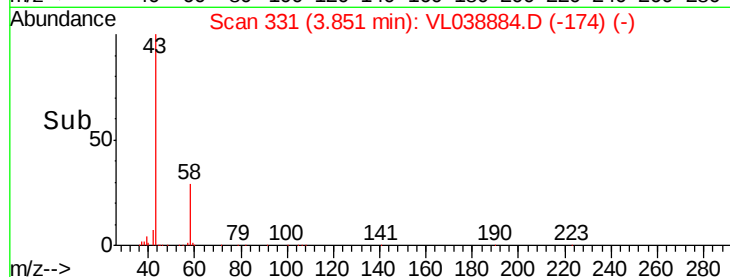
1000000

500000

0

3.80 3.85 3.90 3.95

Time-->



#16

1,3-Butadiene

Concen: 0.639 ppbv

RT: 3.35 min Scan# 176

Delta R.T. 0.03 min

Lab File: VL038884.D

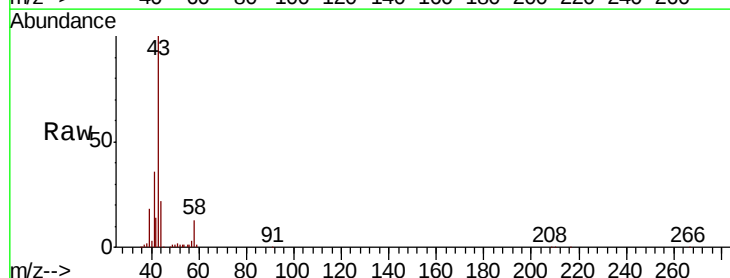
Acq: 12 Apr 2022 00:16

Tgt Ion: 39 Resp: 42532

Ion Ratio Lower Upper

39 100

54 5.2 64.8 97.2#



Abundance Ion 39.10 (38.80 to 39.80): VL0

Ion 54.10 (53.80 to 54.80): VL0

30000

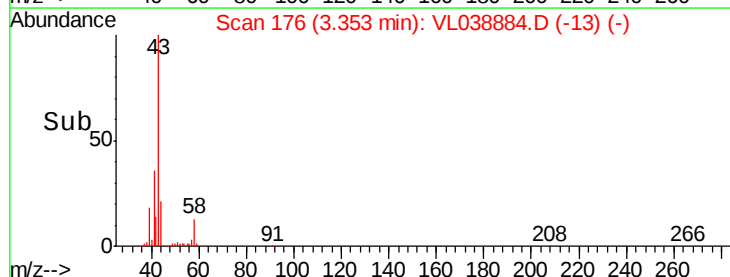
20000

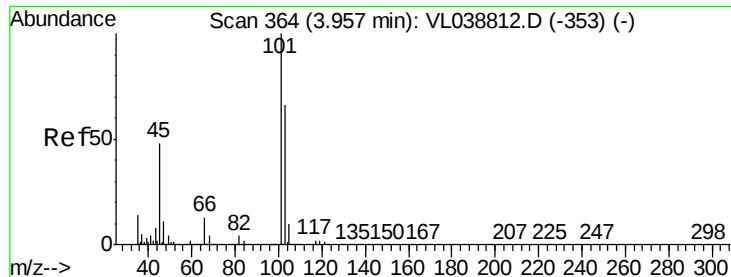
10000

0

3.30 3.35 3.40

Time-->





#19

Isopropyl Alcohol

Concen: 5.347 ppbv

RT: 3.96 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

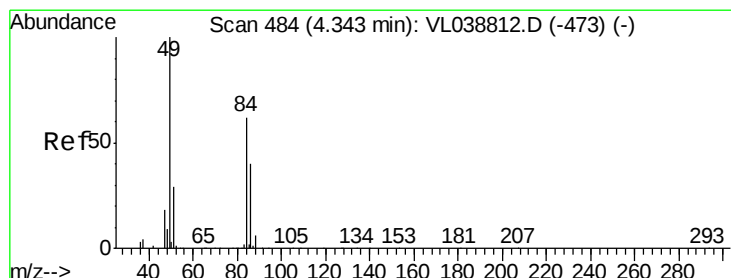
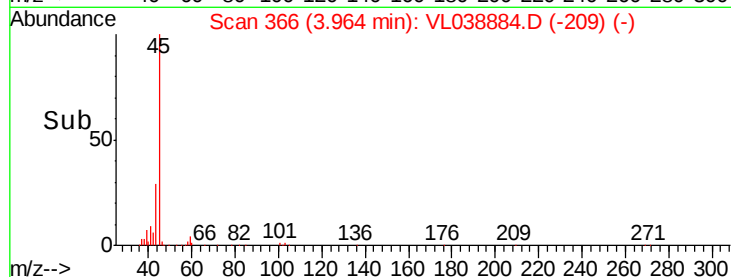
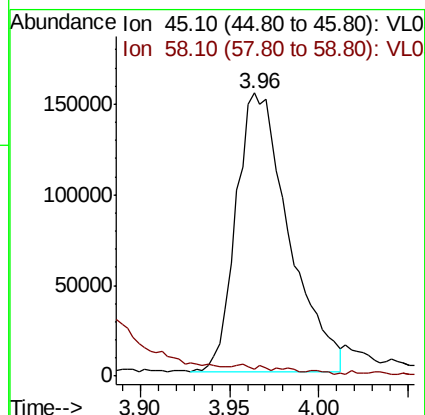
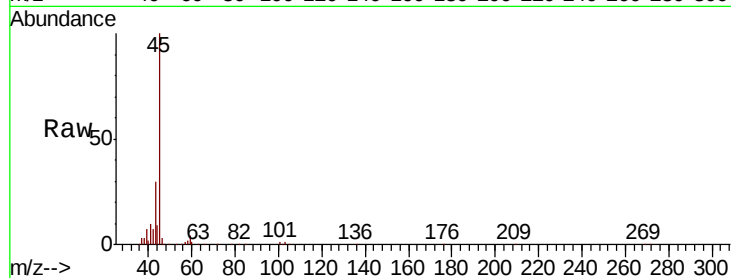
Acq: 12 Apr 2022 00:16

Tot Ion: 45 Resp: 317951

Ion Ratio Lower Upper

45 100

58 188.2 0.0 0.0#



#20

Methylene Chloride

Concen: 0.787 ppbv

RT: 4.35 min Scan# 486

Delta R.T. 0.01 min

Lab File: VL038884.D

Acq: 12 Apr 2022 00:16

Tgt Ion: 84 Resp: 33221

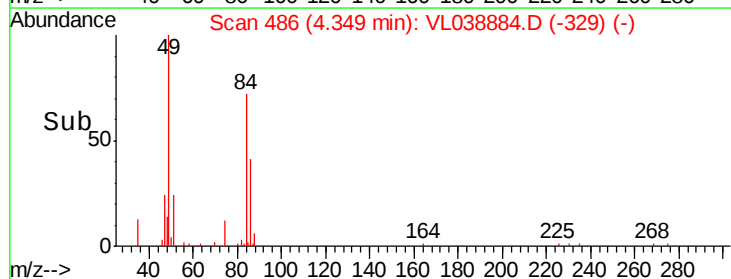
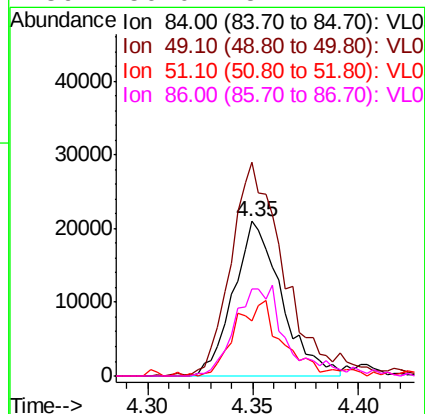
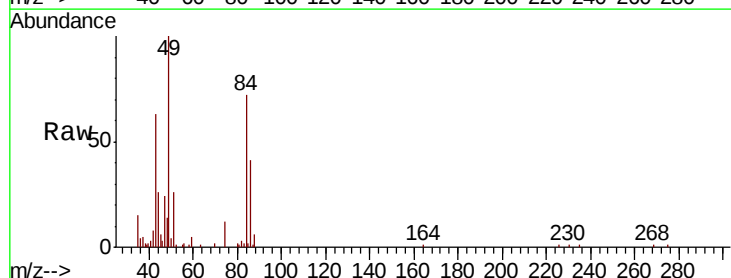
Ion Ratio Lower Upper

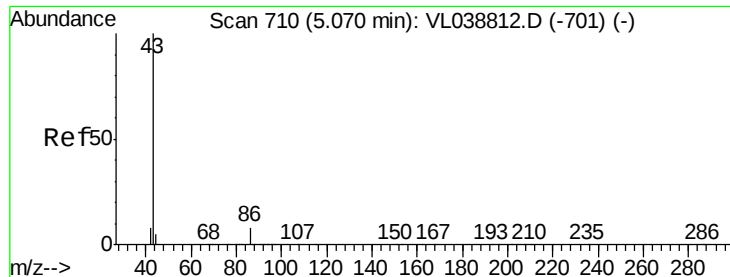
84 100

49 137.2 129.4 194.0

51 34.0 37.4 56.2#

86 56.0 51.4 77.2





#23

Vinyl Acetate

Concen: 0.054 ppbv

RT: 5.07 Instrument:

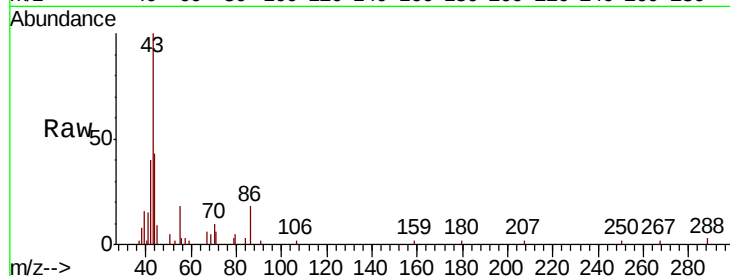
Delta R.T. MSVOA_L

Lab File: ClientSampleId:

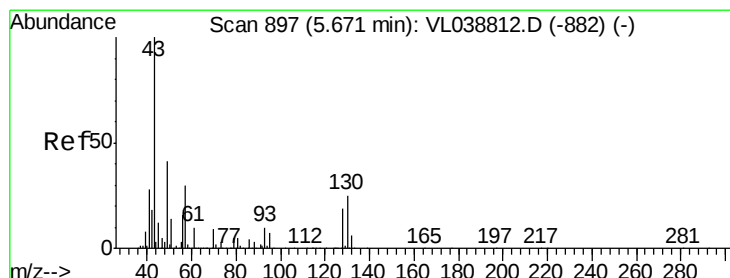
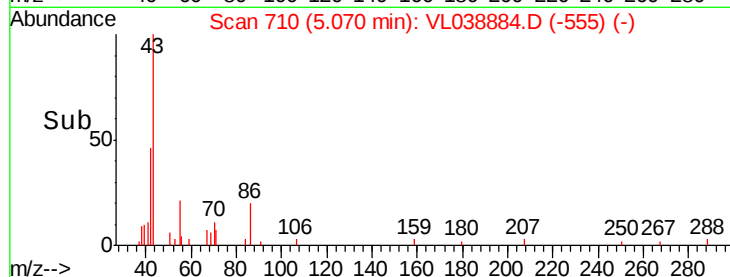
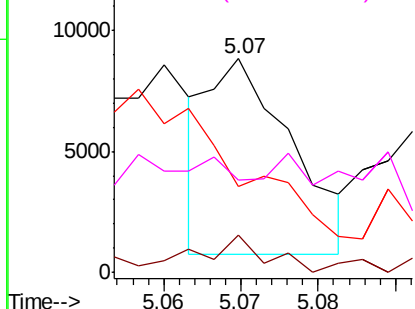
Acq: 12 Apr 2022 00:16

Tot Ion: 43 Resp: 6086

Ion	Ratio	Lower	Upper
43	100		
86	21.3	5.8	8.6#
42	37.4	7.8	11.6#
44	6.6	3.6	5.4#



Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 86.10 (85.80 to 86.80): VL0
 Ion 42.10 (41.80 to 42.80): VL0
 Ion 44.10 (43.80 to 44.80): VL0



#25

Ethyl Acetate

Concen: 1.457 ppbv

RT: 5.67 min Scan# 897

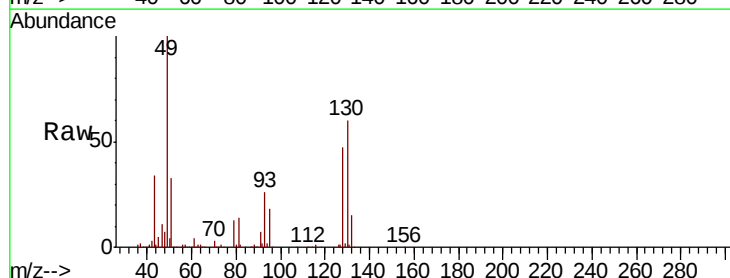
Delta R.T. -0.00 min

Lab File: VL038884.D

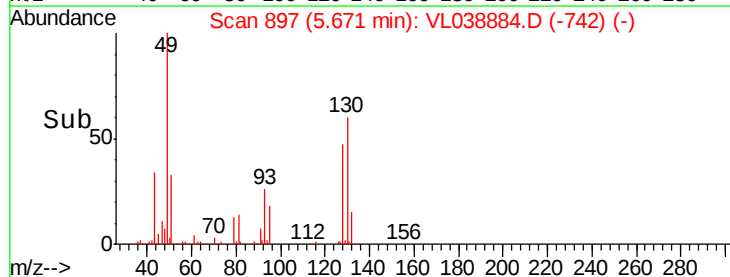
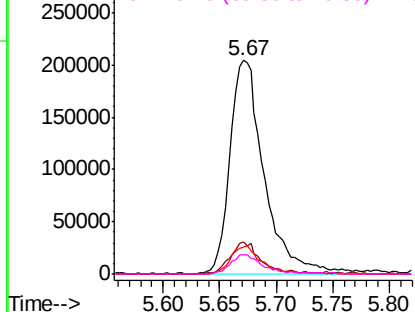
Acq: 12 Apr 2022 00:16

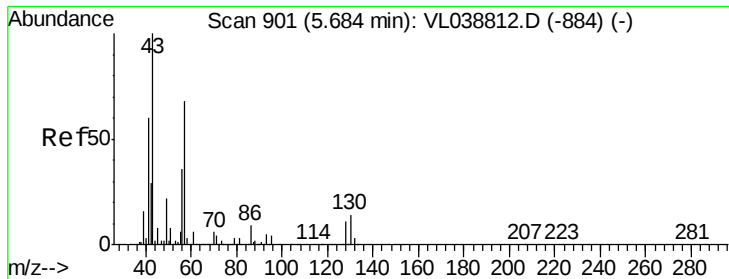
Tgt Ion: 43 Resp: 430244

Ion	Ratio	Lower	Upper
43	100		
45	13.8	8.4	12.6#
61	12.1	7.9	11.9#
70	8.9	5.6	8.4#



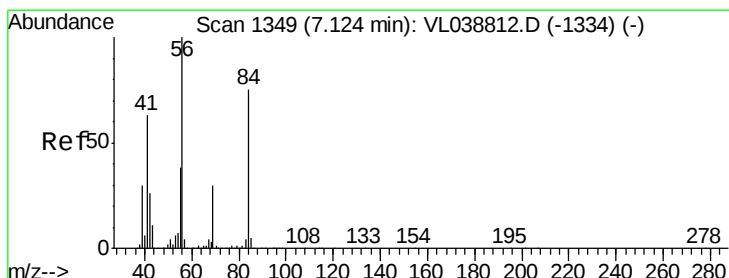
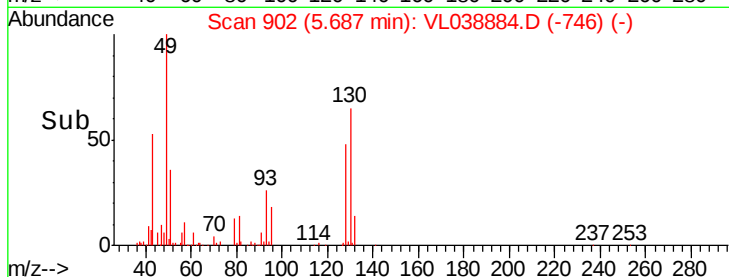
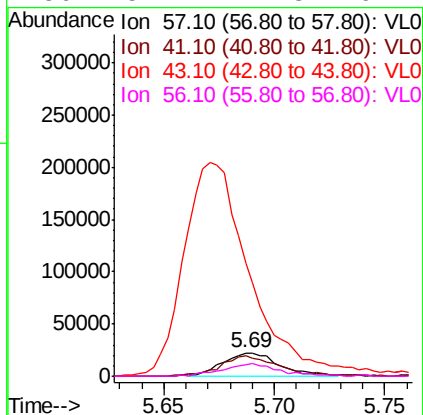
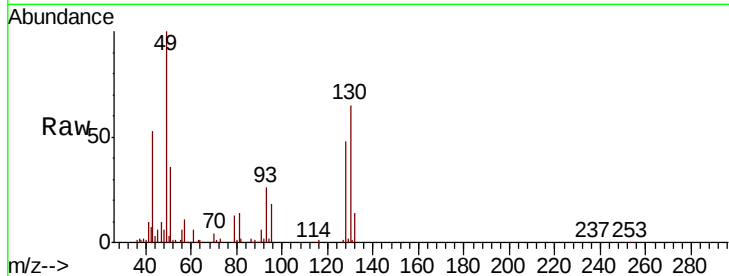
Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 45.10 (44.80 to 45.80): VL0
 Ion 61.10 (60.80 to 61.80): VL0
 Ion 70.10 (69.80 to 70.80): VL0





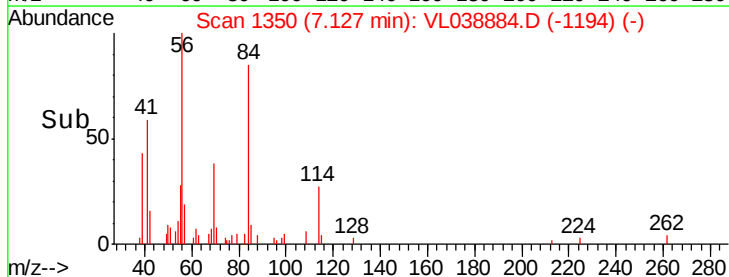
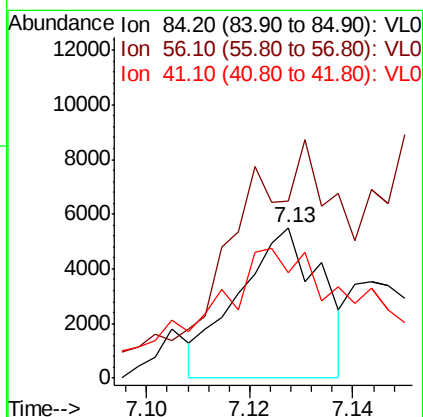
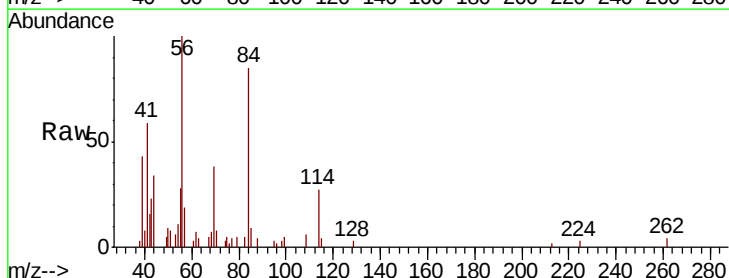
#26
Hexane
Concen: 0.297 ppbv
RT: 5.69
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 12 Apr 2022 00:16

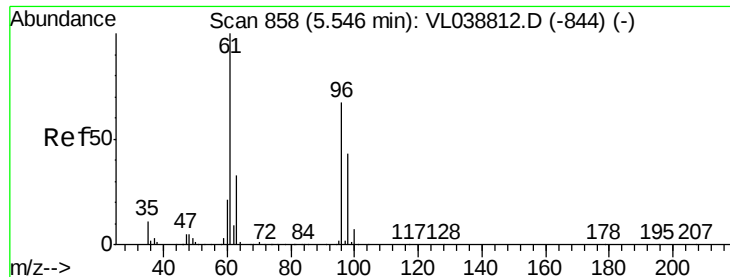
Tot Ion:	57	Resp:	39923
Ion	Ratio	Lower	Upper
57	100		
41	91.6	72.0	108.0
43	0.0	186.6	280.0#
56	57.2	42.8	64.2



#30
Cyclohexane
Concen: 0.052 ppbv
RT: 7.13 min Scan# 1350
Delta R.T. 0.00 min
Lab File: VL038884.D
Acq: 12 Apr 2022 00:16

Tgt Ion:	84	Resp:	6099
Ion	Ratio	Lower	Upper
84	100		
56	0.0	114.4	171.6#
41	178.8	69.0	103.4#





#31

cis-1,2-Dichloroethene

Concen: 0.367 ppbv

RT: 5.67 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 12 Apr 2022 00:16

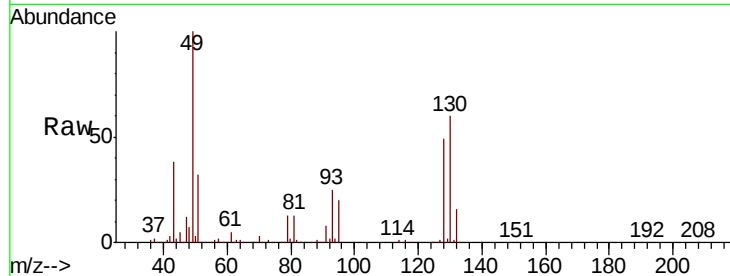
Tot Ion: 61 Resp: 45393

Ion Ratio Lower Upper

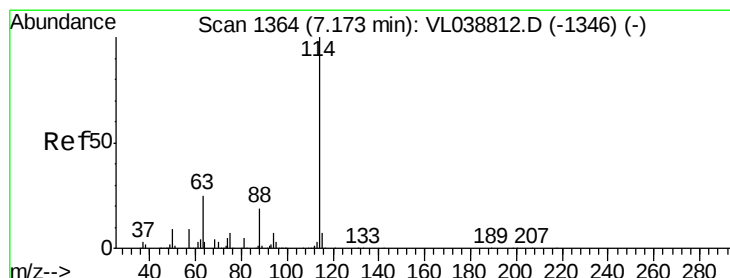
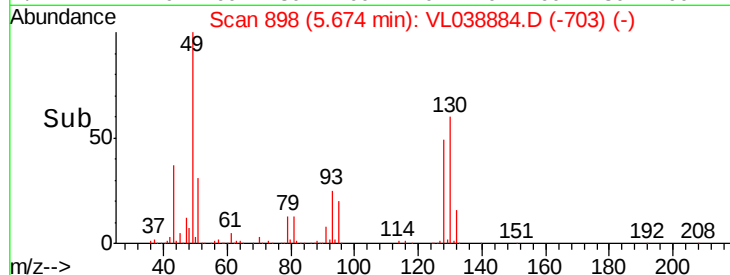
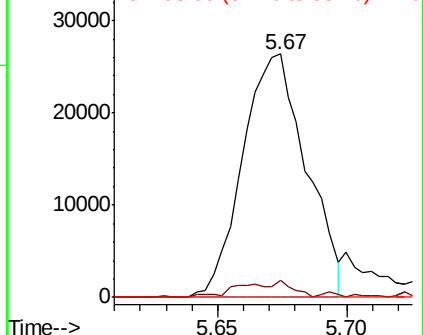
61 100

96 7.1 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: 7.17 min Scan# 1363

Delta R.T. -0.00 min

Lab File: VL038884.D

Acq: 12 Apr 2022 00:16

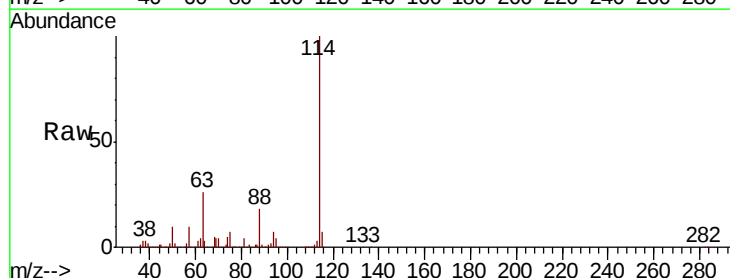
Tgt Ion: 114 Resp: 3035210

Ion Ratio Lower Upper

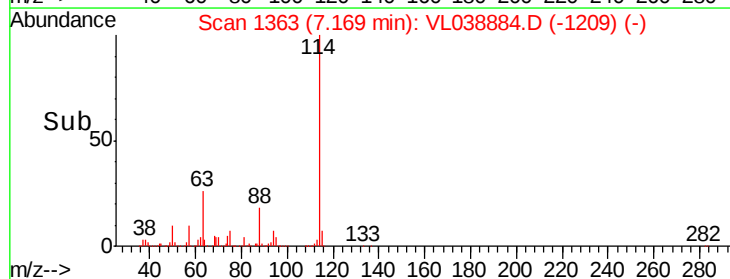
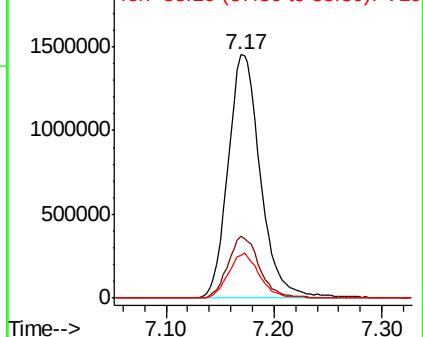
114 100

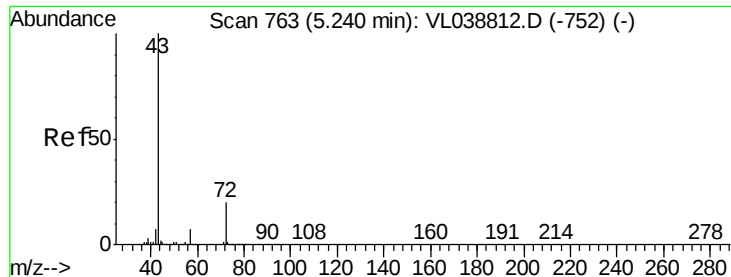
63 25.1 19.8 29.8

88 18.1 14.2 21.4



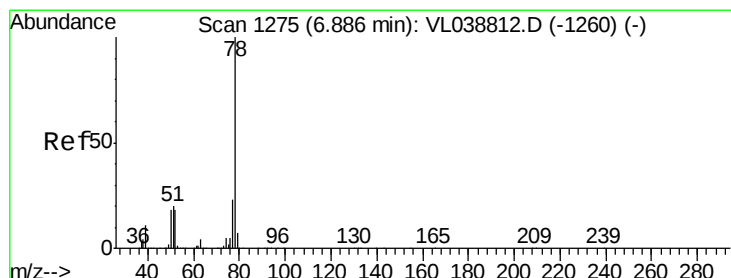
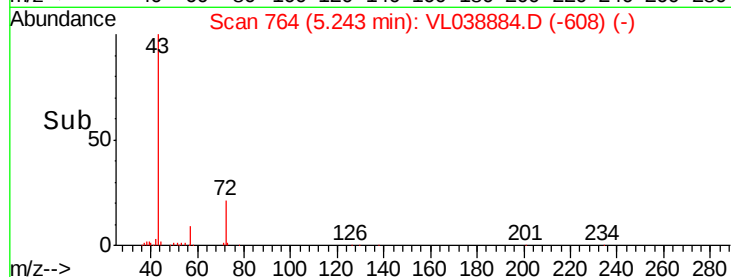
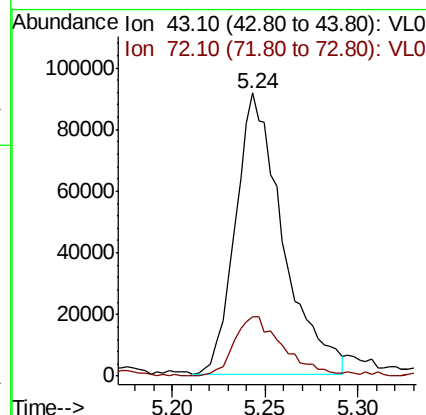
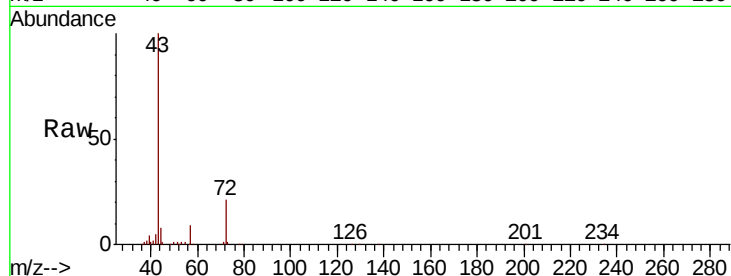
Abundance Ion 114.10 (113.80 to 114.80): V
Ion 63.10 (62.80 to 63.80): VL0
Ion 88.10 (87.80 to 88.80): VL0





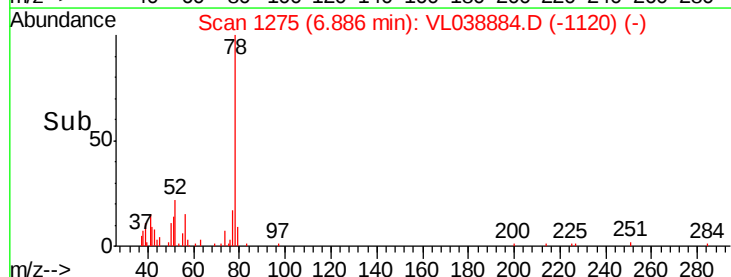
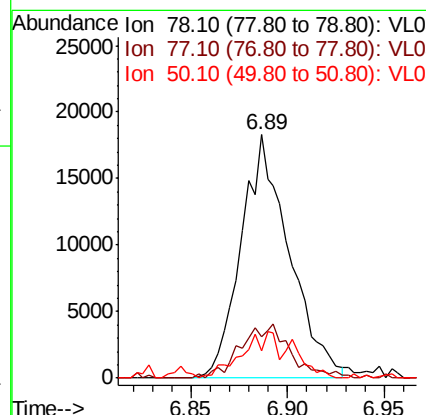
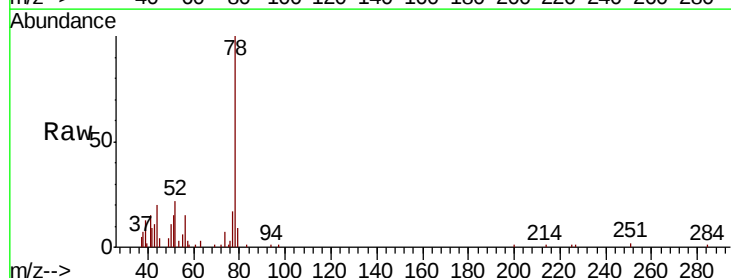
#34
 2-Butanone
 Concen: 1.347 ppbv
 RT: 5.24
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 12 Apr 2022 00:16

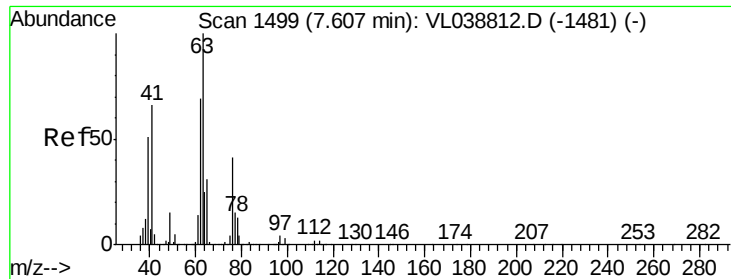
Tot Ion: 43 Resp: 161535
 Ion Ratio Lower Upper
 43 100
 72 22.7 16.9 25.3



#36
 Benzene
 Concen: 0.114 ppbv
 RT: 6.89 min Scan# 1275
 Delta R.T. -0.00 min
 Lab File: VL038884.D
 Acq: 12 Apr 2022 00:16

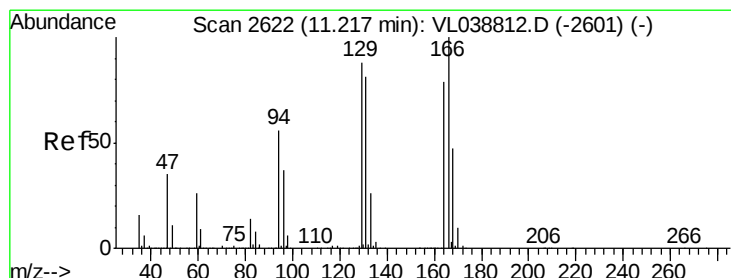
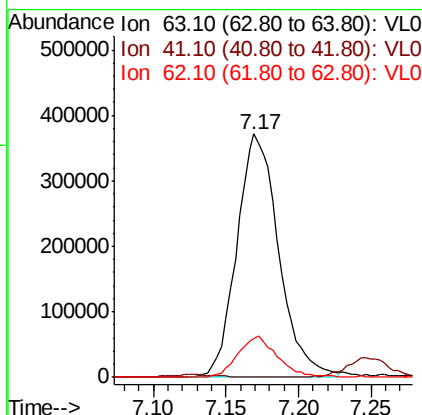
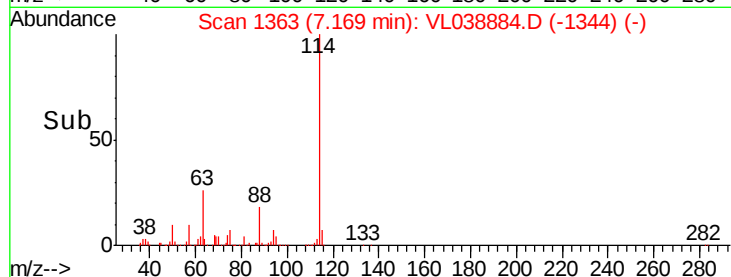
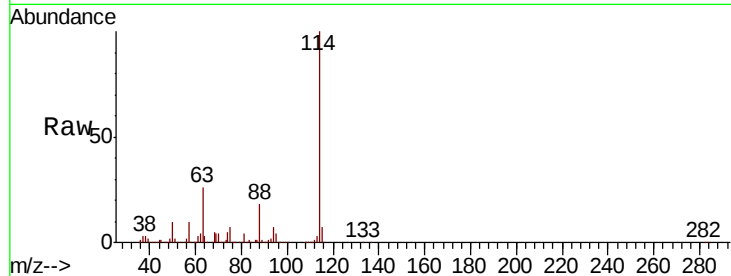
Tgt Ion: 78 Resp: 31547
 Ion Ratio Lower Upper
 78 100
 77 17.2 18.2 27.2#
 50 11.0 14.0 21.0#





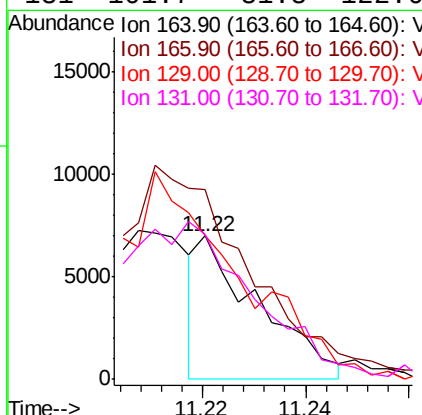
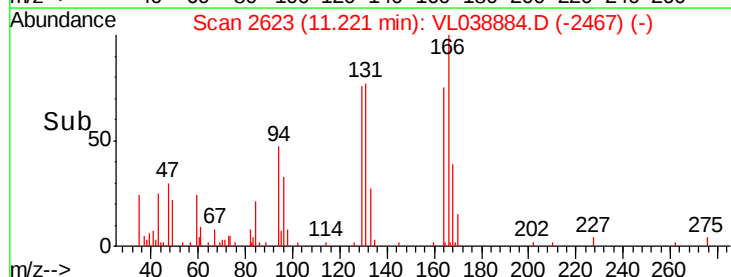
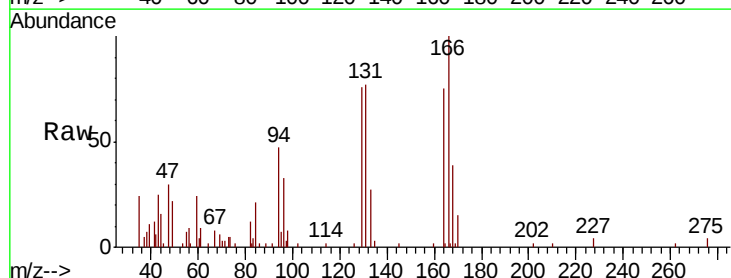
#39
 1,2-Dichloropropane
 Concen: 7.056 ppbv
 RT: 7.17
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 12 Apr 2022 00:16

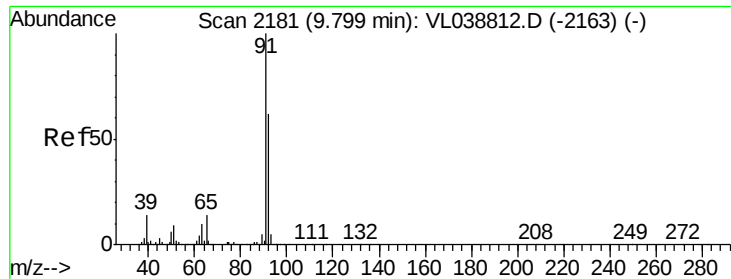
Tot Ion	Ratio	Lower	Upper
63	100		
41	0.0	53.0	79.6#
62	15.7	55.0	82.4#



#52
 Tetrachloroethene
 Concen: 0.059 ppbv
 RT: 11.22 min Scan# 2623
 Delta R.T. 0.00 min
 Lab File: VL038884.D
 Acq: 12 Apr 2022 00:16

Tgt Ion	Ratio	Lower	Upper
164	100		
166	128.9	101.0	151.6
129	101.9	88.7	133.1
131	101.7	81.8	122.6





#53

Toluene

Concen: 8.345 ppbv

RT: 9.80 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

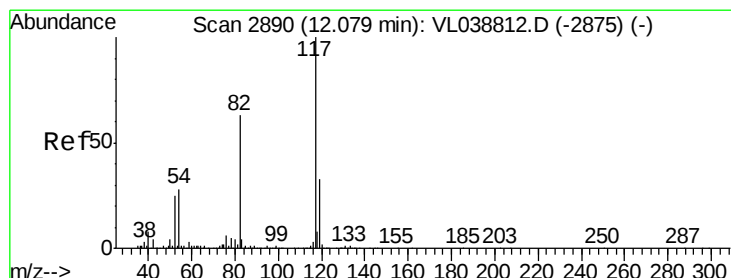
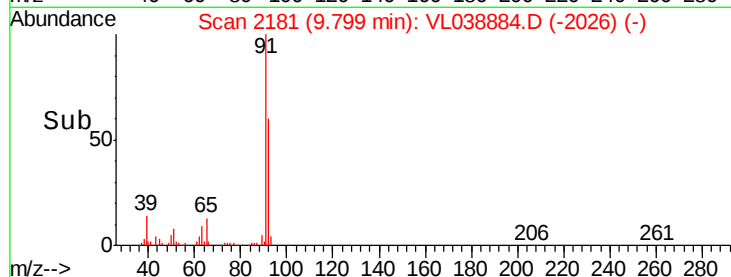
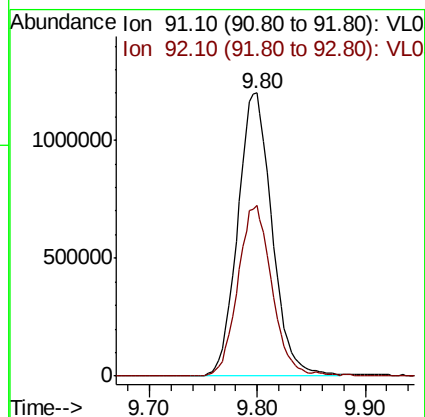
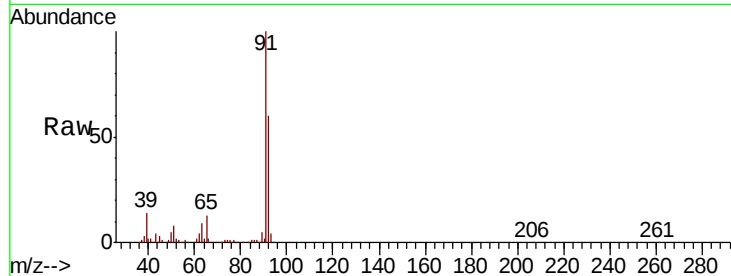
Acq: 12 Apr 2022 00:16

Tot Ion: 91 Resp: 2660035

Ion Ratio Lower Upper

91 100

92 60.6 49.2 73.8



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.08 min Scan# 2889

Delta R.T. -0.00 min

Lab File: VL038884.D

Acq: 12 Apr 2022 00:16

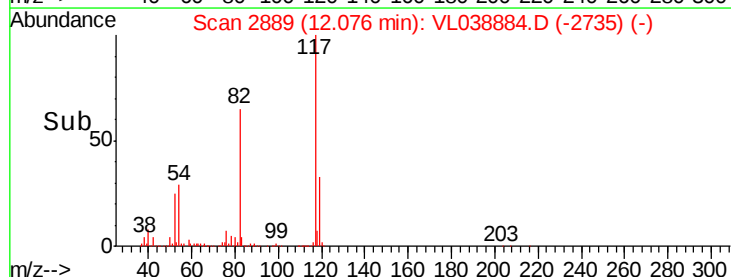
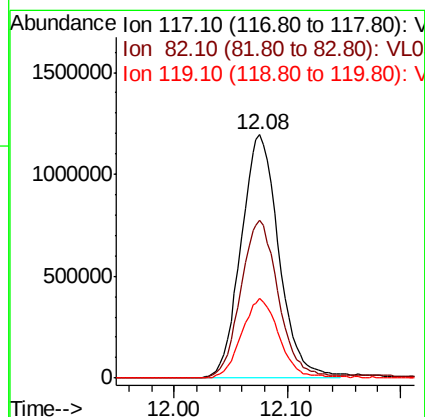
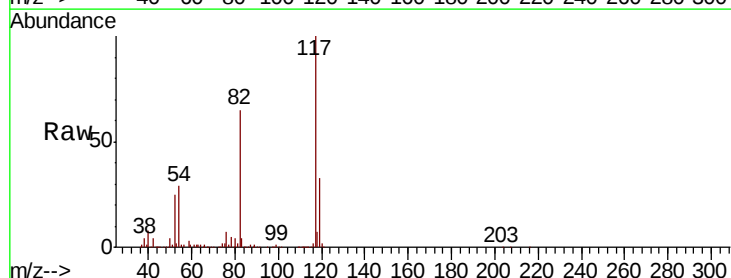
Tgt Ion: 117 Resp: 2781901

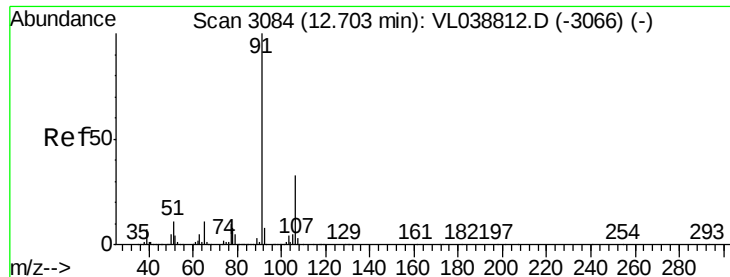
Ion Ratio Lower Upper

117 100

82 67.3 53.0 79.6

119 33.2 24.9 37.3





#58

Ethyl Benzene

Concen: 0.250 ppbv

RT: 12.71

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

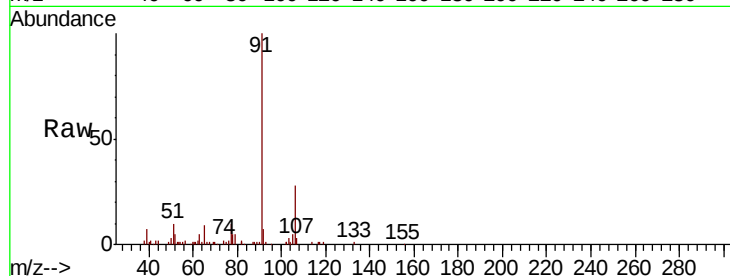
Acq: 12 Apr 2022 00:16

Tot Ion: 91 Resp: 103958

Ion Ratio Lower Upper

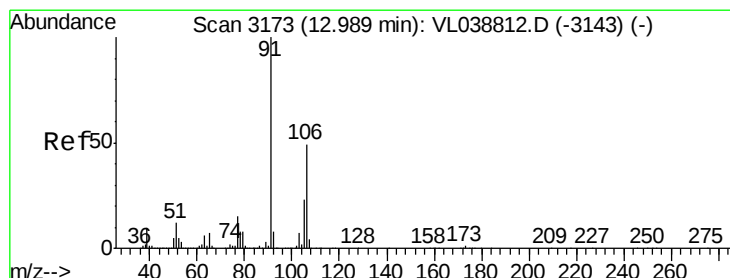
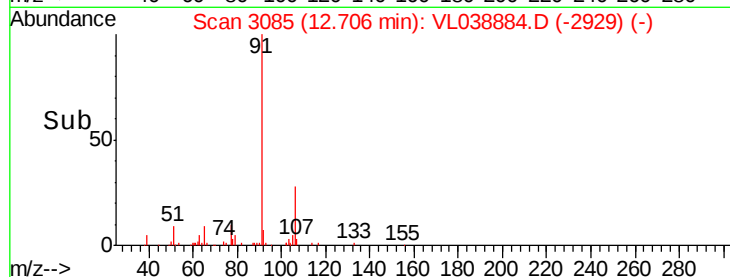
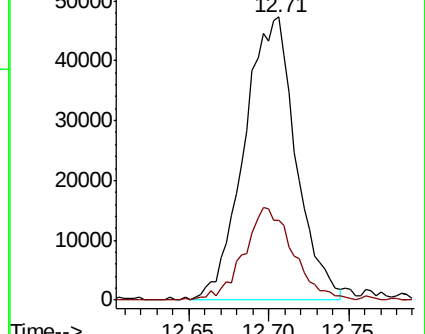
91 100

106 28.4 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: 0.259 ppbv

RT: 12.98 min Scan# 3170

Delta R.T. -0.01 min

Lab File: VL038884.D

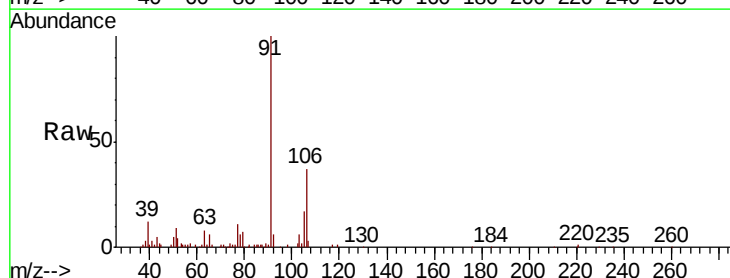
Acq: 12 Apr 2022 00:16

Tgt Ion: 91 Resp: 90624

Ion Ratio Lower Upper

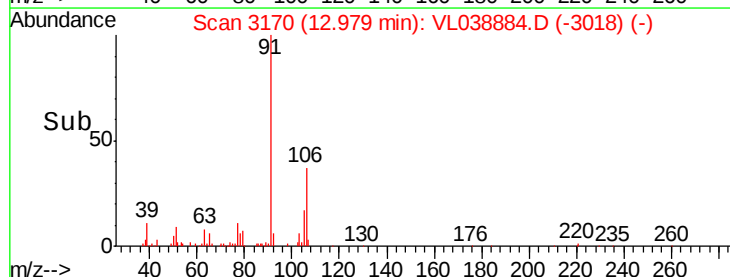
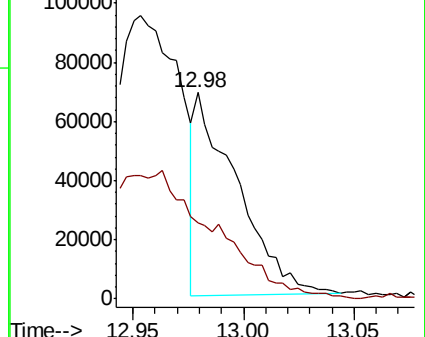
91 100

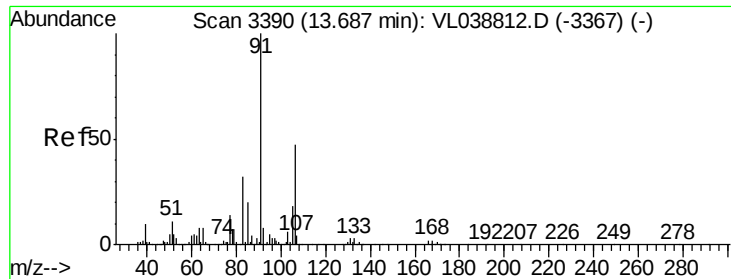
106 0.0 37.1 55.7#



Abundance Ion 91.10 (90.80 to 91.80): VL0

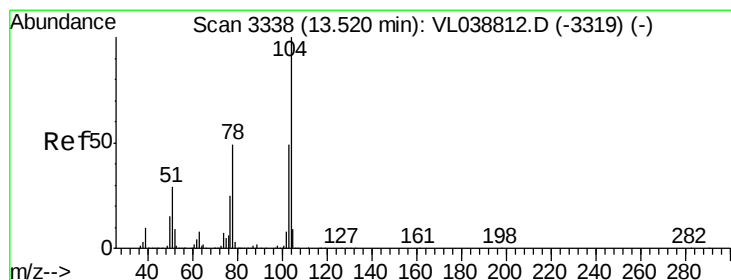
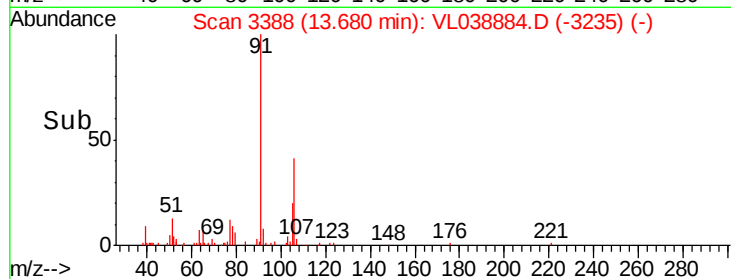
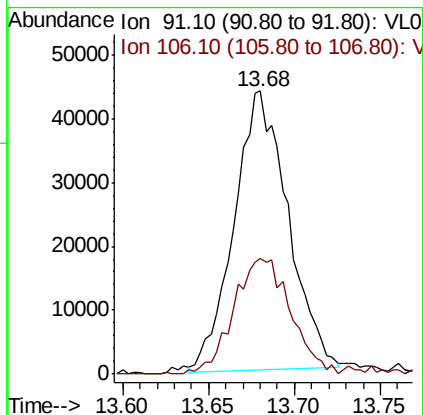
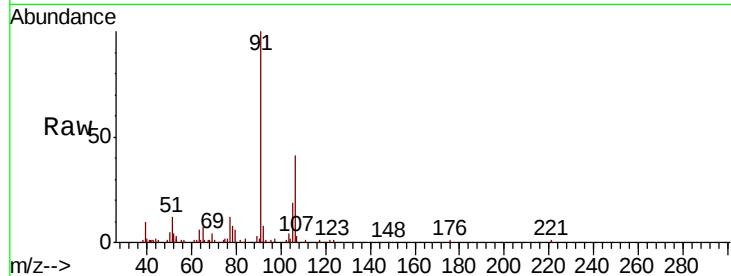
Ion 106.10 (105.80 to 106.80): V





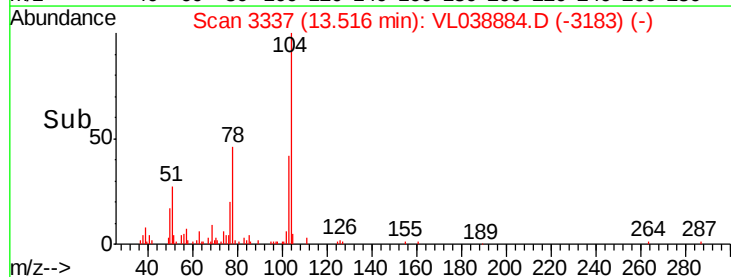
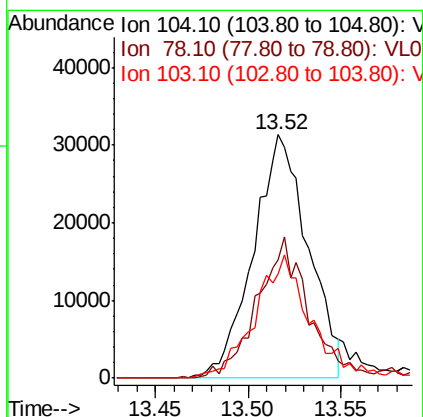
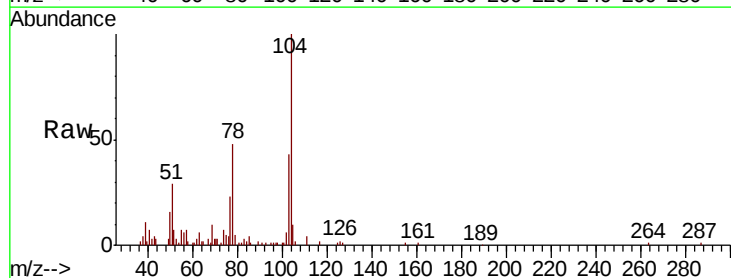
#60
o-Xylene
Concen: 0.292 ppbv
RT: 13.68 min
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 12 Apr 2022 00:16

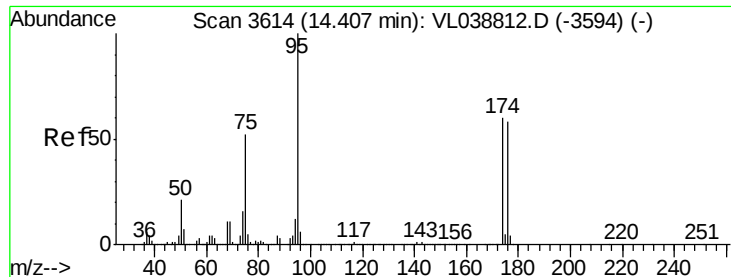
Tot Ion: 91 Resp: 95295
Ion Ratio Lower Upper
91 100
106 45.6 23.8 71.4



#61
Styrene
Concen: 0.324 ppbv
RT: 13.52 min Scan# 3337
Delta R.T. -0.00 min
Lab File: VL038884.D
Acq: 12 Apr 2022 00:16

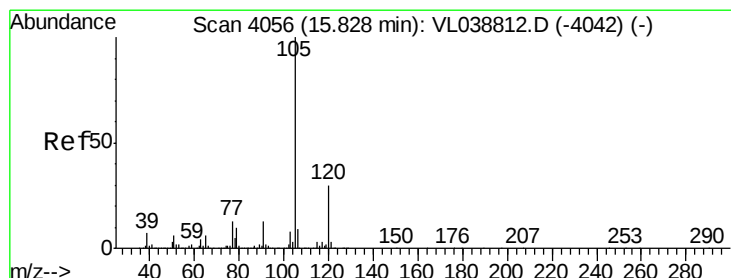
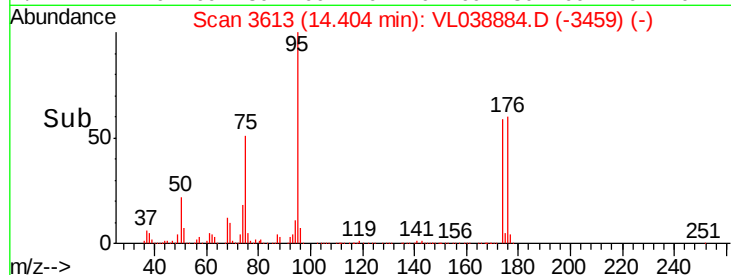
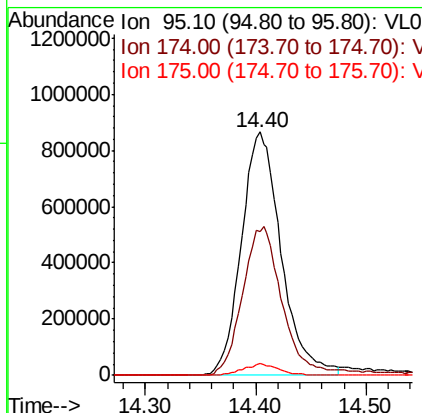
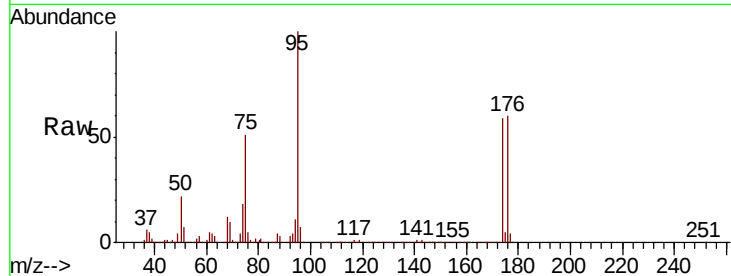
Tgt Ion:104 Resp: 64588
Ion Ratio Lower Upper
104 100
78 55.8 40.5 60.7
103 51.9 39.0 58.4





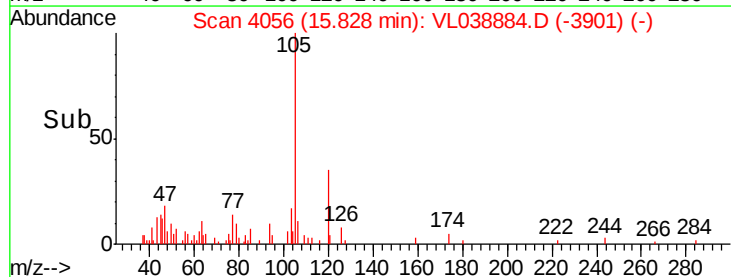
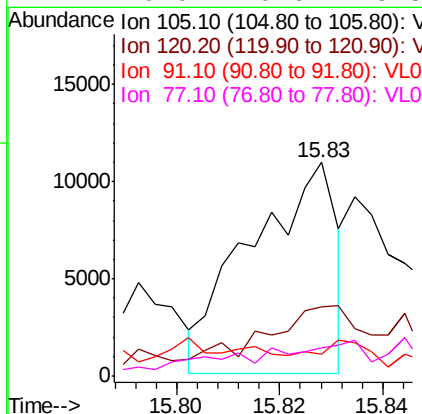
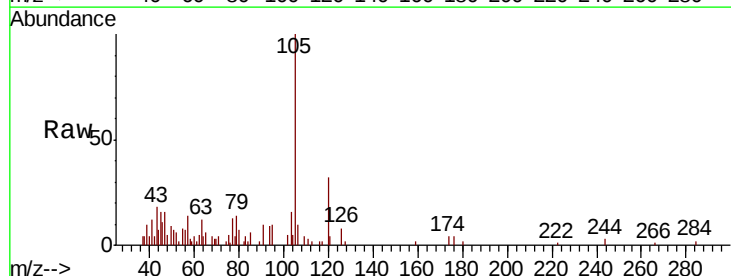
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.240 ppbv
 RT: 14.40 min
 Delta R.T.: MSVOA_L
 Lab File: ClientSampled :
 Acq: 12 Apr 2022 00:16

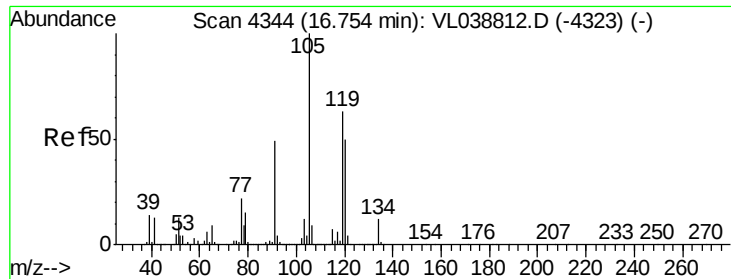
Tot Ion: 95 Resp: 2160753
 Ion Ratio Lower Upper
 95 100
 174 63.6 52.0 78.0
 175 4.5 4.0 6.0



#72
 4-Ethyltoluene
 Concen: 0.032 ppbv
 RT: 15.83 min Scan# 4056
 Delta R.T.: -0.00 min
 Lab File: VL038884.D
 Acq: 12 Apr 2022 00:16

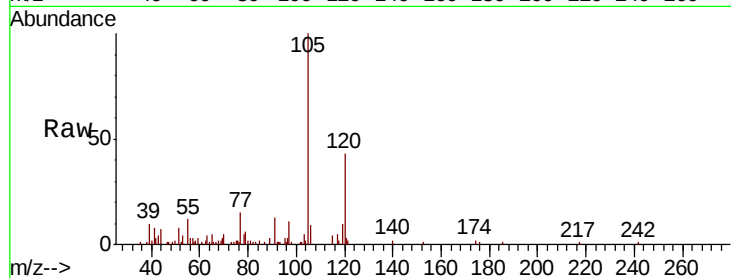
Tgt Ion: 105 Resp: 12555
 Ion Ratio Lower Upper
 105 100
 120 0.0 24.3 36.5#
 91 0.0 9.4 14.2#
 77 0.0 10.6 15.8#





#74
 1,2,4-Trimethylbenzene
 Concen: 0.158 ppbv
 RT: 16.75
 Delta R.T: MSVOA_L
 Lab File: ClientSampleId :
 Acq: 12 Apr 2022 00:10

Tot Ion:	105	Resp:	58479
Ion	Ratio	Lower	Upper
105	100		
120	46.0	39.8	59.8
91	12.0	39.4	59.0#
77	15.1	17.3	25.9#



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

