

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL022222\
 Data File : VL038398.D
 Acq On : 22 Feb 2022 21:32
 Operator : SY/AP
 Sample : N1607-04DL 10X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 MP-12DL

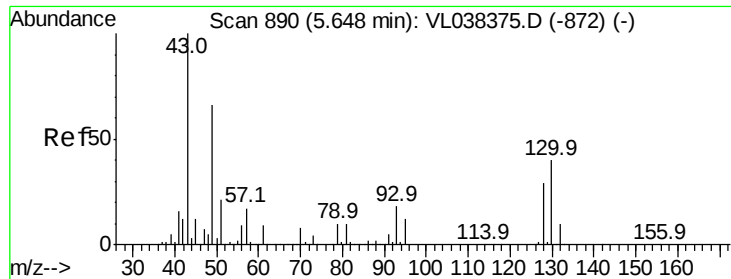
Quant Time: Mar 14 08:02:58 2022
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL022222AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Feb 22 19:45:51 2022
 QLast Update : Tue Feb 22 19:45:51 2022
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	893936	10.00	ppbv	0.02
33) 1,4-Difluorobenzene	7.18	114	2143942	10.00	ppbv	0.02
55) Chlorobenzene-d5	12.08	117	1958359	10.00	ppbv	0.03

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.41	95	1616148	9.97	ppbv	0.03
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.70%

Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.06	85	4275	0.03	ppbv	98
3) Chlorodifluoromethane	3.03	51	177831	1.13	ppbv #	59
4) Chloromethane	3.04	50	3017	0.06	ppbv #	84
9) Propene	3.22	41	14328	0.27	ppbv	88
10) Heptane	8.13	43	10240	0.08	ppbv #	28
11) Trichlorofluoromethane	3.96	101	4449	0.03	ppbv #	66
13) Ethanol	3.63	45	24675	4.74	ppbv	86
15) Acetone	3.87	43	55328	0.73	ppbv	95
16) 1,3-Butadiene	3.31	39	38930	0.77	ppbv #	17
19) Isopropyl Alcohol	4.00	45	13814	0.31	ppbv #	83
20) Methylene Chloride	4.35	84	54027	1.43	ppbv	95
25) Ethyl Acetate	5.69	43	76095	0.37	ppbv #	78
26) Hexane	5.69	57	101330	1.10	ppbv #	44
30) Cyclohexane	7.14	84	11094	0.15	ppbv #	1
36) Benzene	6.89	78	10075	0.05	ppbv #	83
39) 1,2-Dichloropropane	7.18	63	572942	7.62	ppbv #	25
41) Tetrahydrofuran	5.99	42	1439	0.03	ppbv #	38
44) 2,2,4-Trimethylpentane	7.88	57	61411	0.19	ppbv #	59
53) Toluene	9.81	91	1335321	6.52	ppbv	99
58) Ethyl Benzene	12.71	91	10717	0.04	ppbv #	45
59) m/p-Xylene	12.99	91	28684	0.12	ppbv #	33
60) o-Xylene	13.69	91	37124	0.17	ppbv	95
73) 1,3,5-Trimethylbenzene	15.99	105	12545	0.06	ppbv #	73
74) 1,2,4-Trimethylbenzene	16.76	105	47359	0.21	ppbv #	70

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



#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 5.67 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

Acq: 22 Feb 2022 21:32 MP-12DL

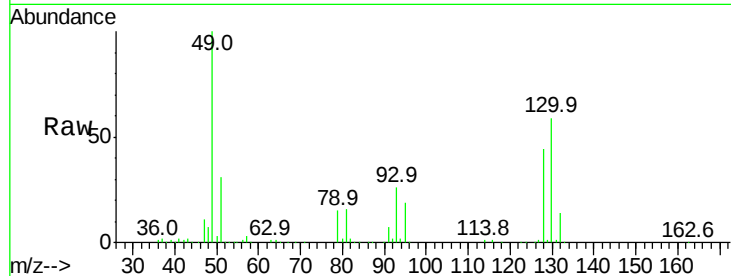
Tgt Ion: 49 Resp: 893936

Ion Ratio Lower Upper

49 100

128 47.0 24.3 72.9

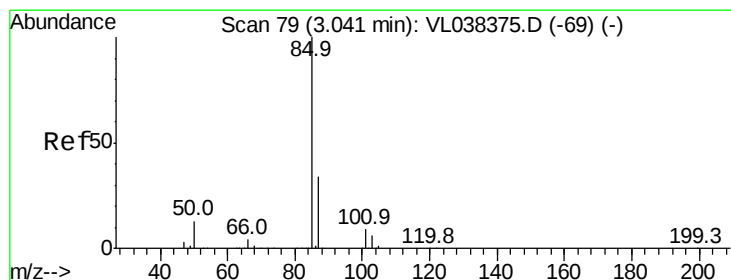
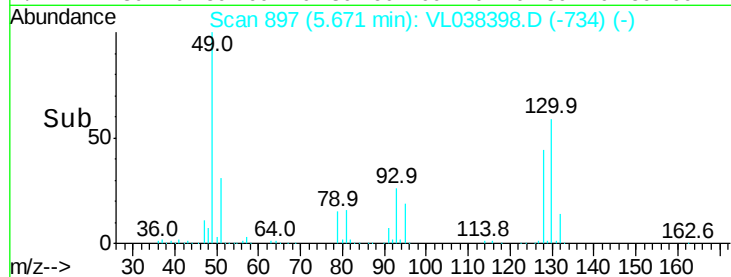
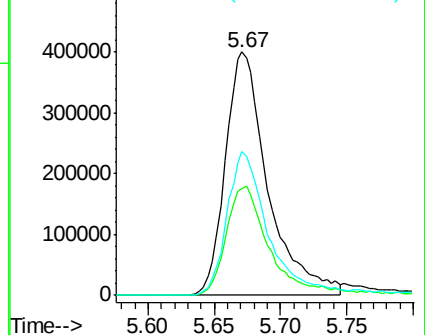
130 59.1 30.1 90.5



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: 0.03 ppbv

RT: 3.06 min Scan# 86

Delta R.T. 0.02 min

Lab File: VL038398.D

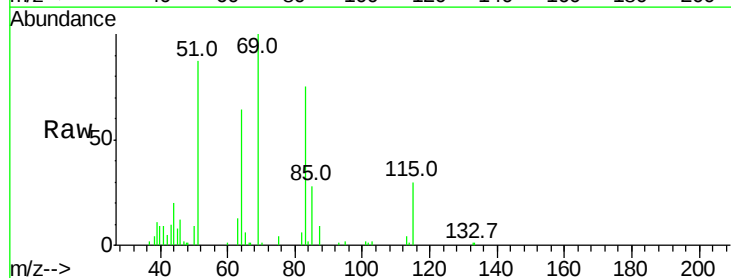
Acq: 22 Feb 2022 21:32

Tgt Ion: 85 Resp: 4275

Ion Ratio Lower Upper

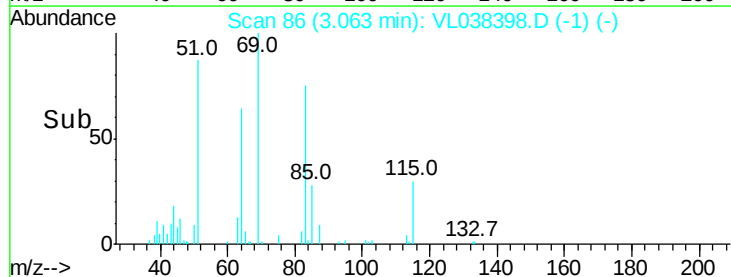
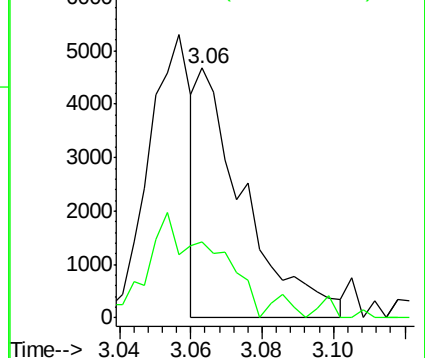
85 100

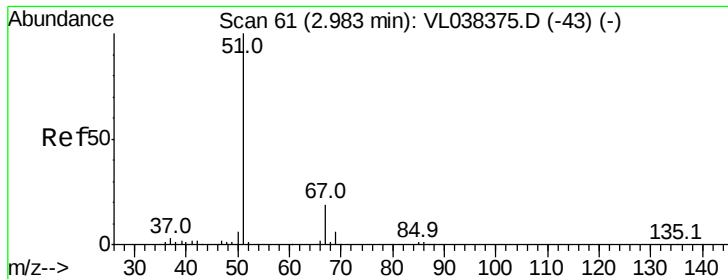
87 33.1 27.4 41.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 1.13 ppbv

RT: 3.03 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

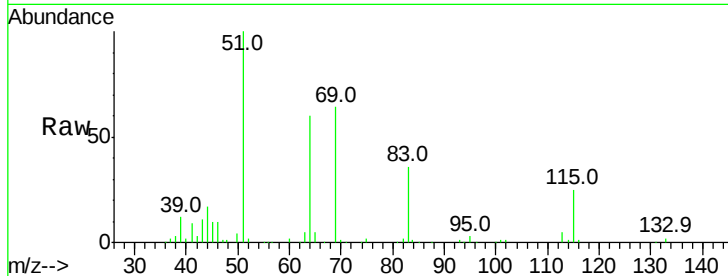
Acq: 22 Feb 2022 21:32 MP-12DL

Tgt Ion: 51 Resp: 177831

Ion Ratio Lower Upper

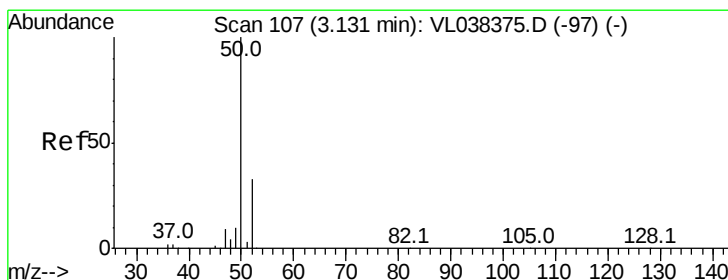
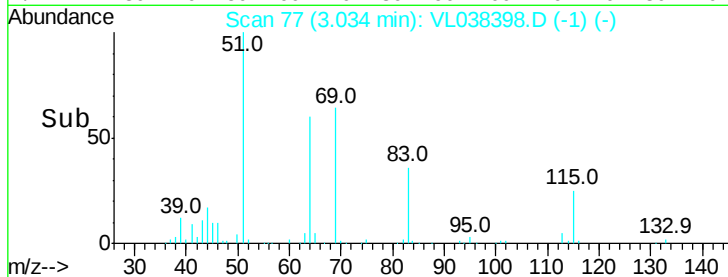
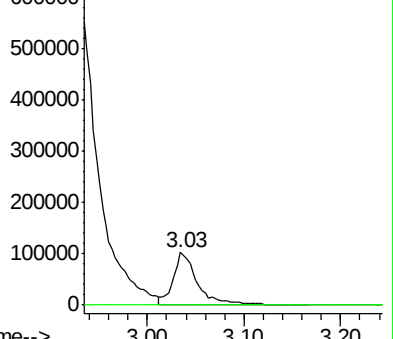
51 100

67 0.2 14.7 22.1#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.06 ppbv

RT: 3.04 min Scan# 78

Delta R.T. -0.09 min

Lab File: VL038398.D

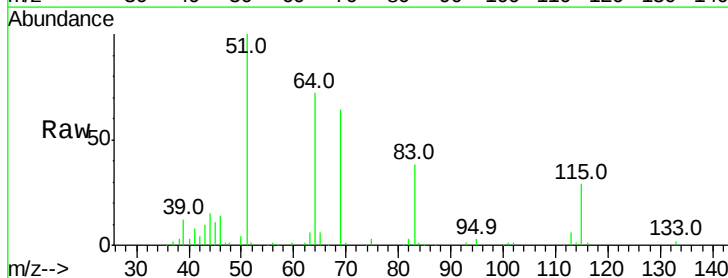
Acq: 22 Feb 2022 21:32

Tgt Ion: 50 Resp: 3017

Ion Ratio Lower Upper

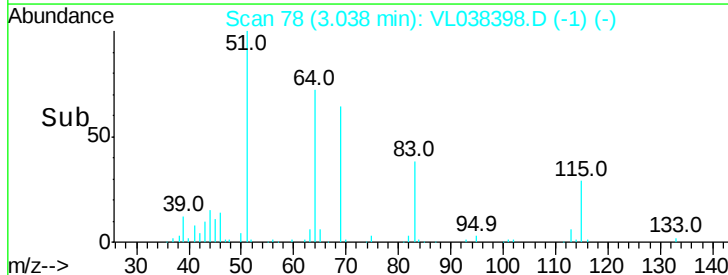
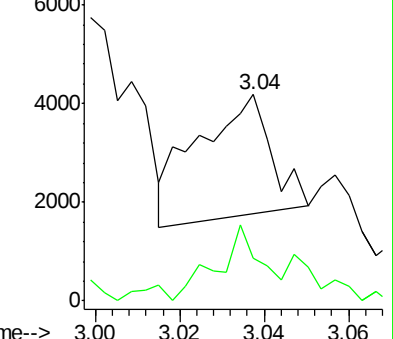
50 100

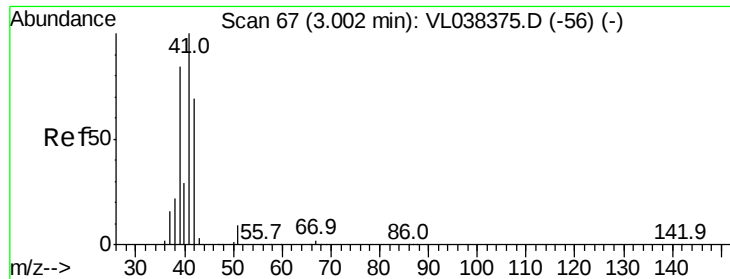
52 24.3 26.5 39.7#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 0.27 ppbv

RT: 3.22 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

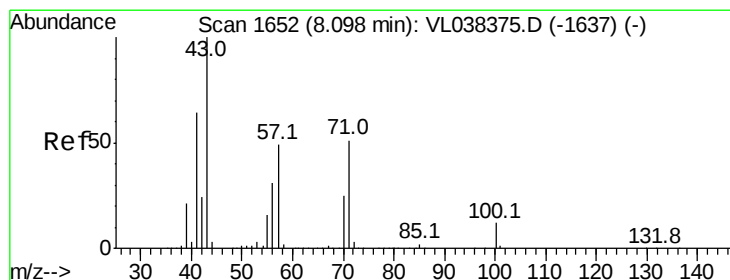
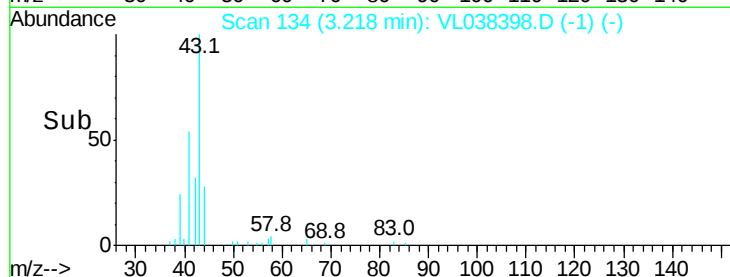
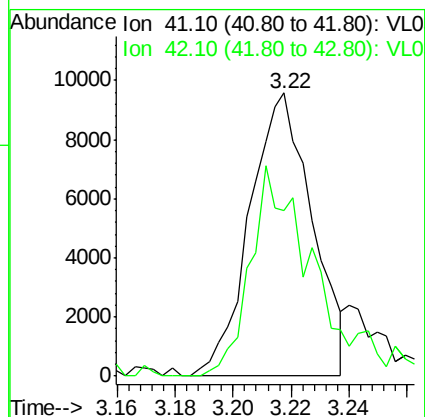
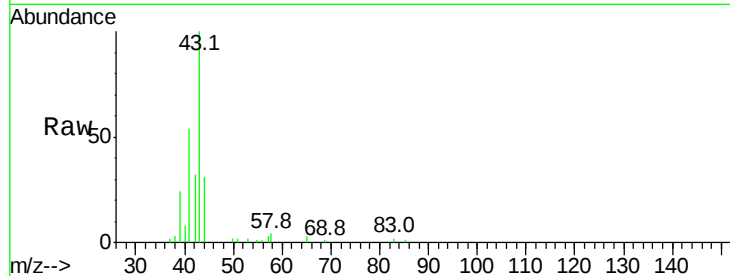
Acq: 22 Feb 2022 21:32 MP-12DL

Tgt Ion: 41 Resp: 14328

Ion Ratio Lower Upper

41 100

42 77.8 54.6 82.0



#10

Heptane

Concen: 0.08 ppbv

RT: 8.13 min Scan# 1663

Delta R.T. 0.04 min

Lab File: VL038398.D

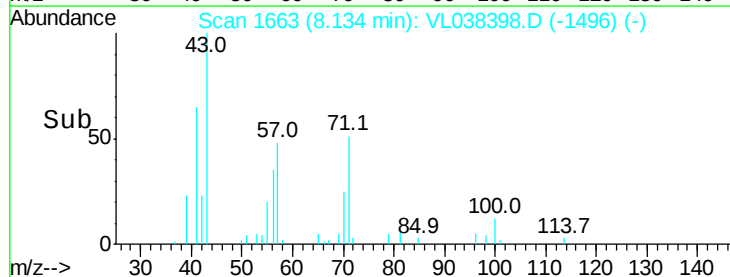
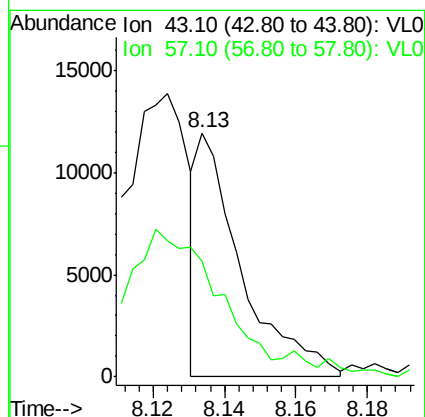
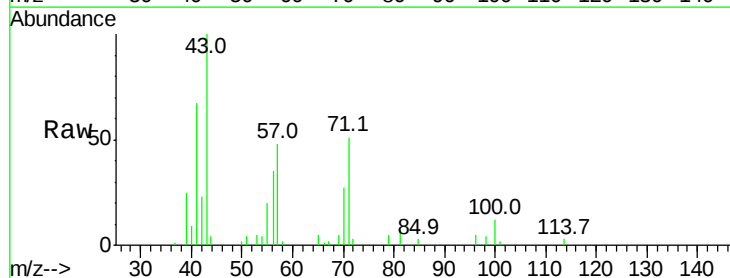
Acq: 22 Feb 2022 21:32

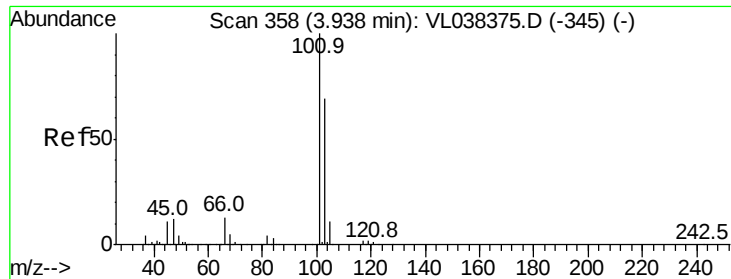
Tgt Ion: 43 Resp: 10240

Ion Ratio Lower Upper

43 100

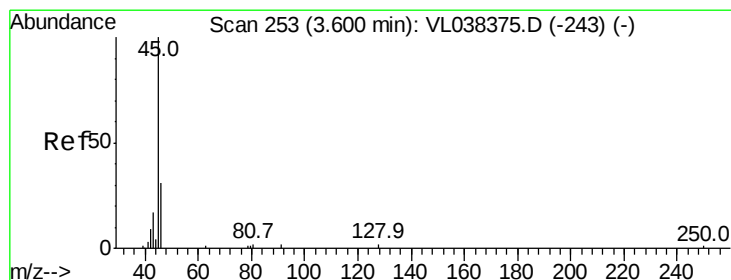
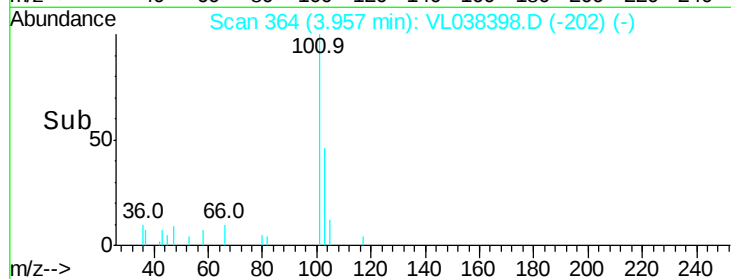
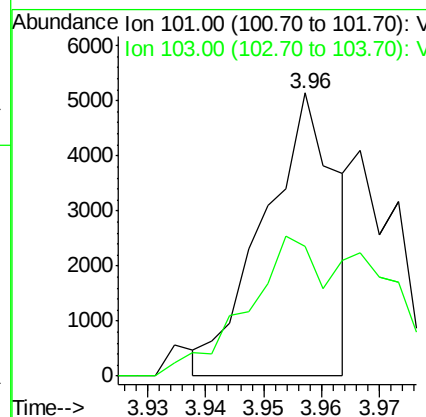
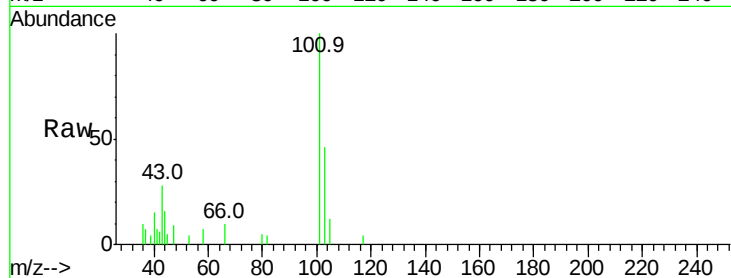
57 0.0 39.8 59.8#





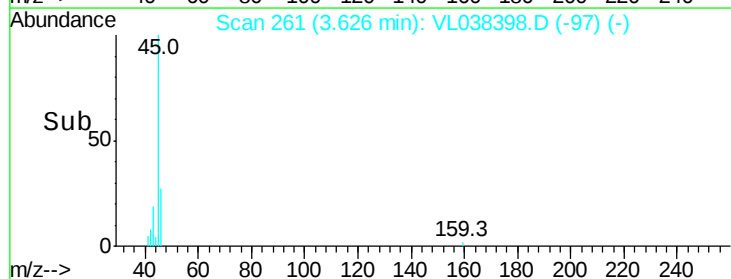
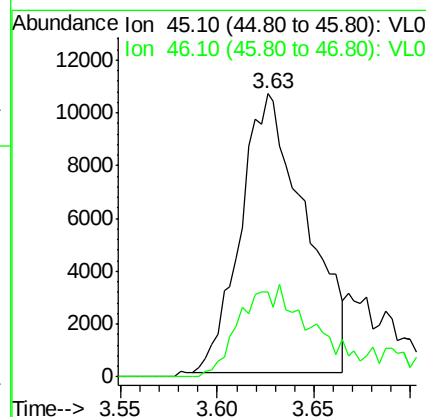
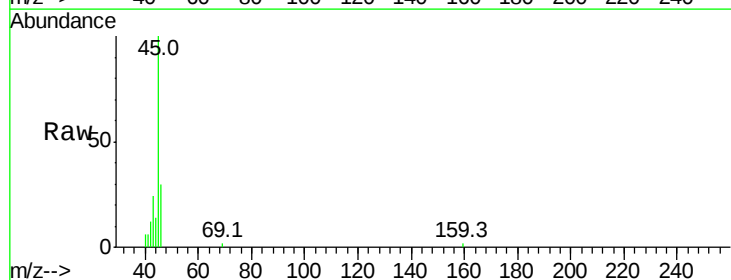
#11
 Trichlorofluoromethane
 Concen: 0.03 ppbv
 RT: 3.96
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId:
 Acq: 22 Feb 2022 21:32

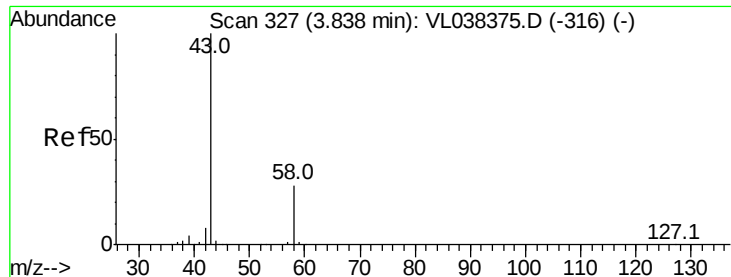
Tgt Ion: 101 Resp: 4449
 Ion Ratio Lower Upper
 101 100
 103 41.4 55.0 82.4#



#13
 Ethanol
 Concen: 4.74 ppbv
 RT: 3.63 min Scan# 261
 Delta R.T.: 0.03 min
 Lab File: VL038398.D
 Acq: 22 Feb 2022 21:32

Tgt Ion: 45 Resp: 24675
 Ion Ratio Lower Upper
 45 100
 46 36.3 18.2 72.8





#15

Acetone

Concen: 0.73 ppbv

RT: 3.87 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

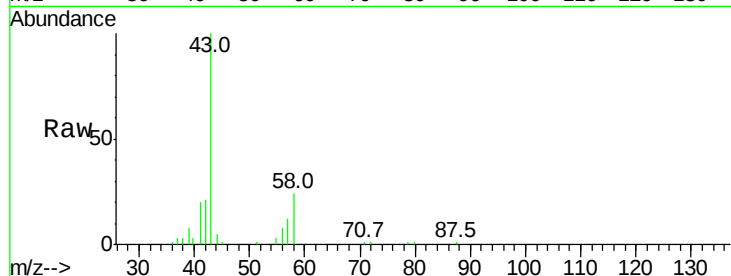
Acq: 22 Feb 2022 21:32 MP-12DL

Tgt Ion: 43 Resp: 55328

Ion Ratio Lower Upper

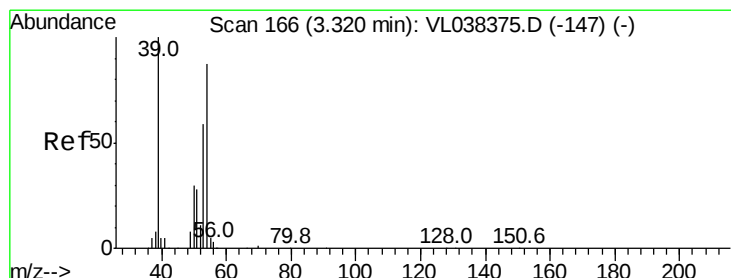
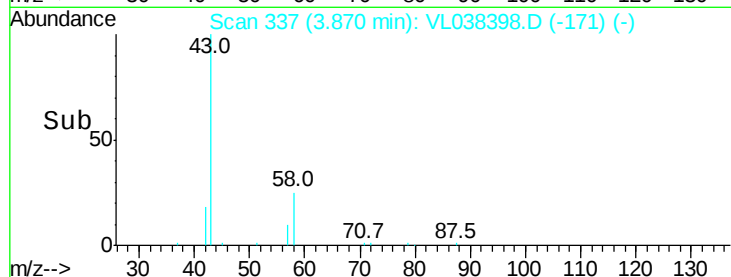
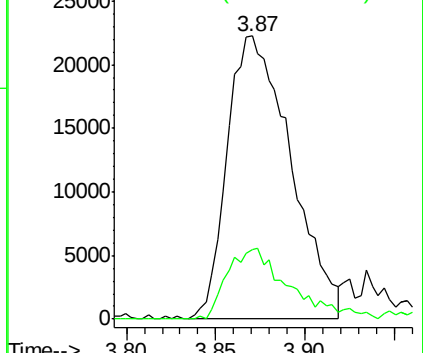
43 100

58 24.3 21.7 32.5



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#16

1,3-Butadiene

Concen: 0.77 ppbv

RT: 3.31 min Scan# 164

Delta R.T. -0.01 min

Lab File: VL038398.D

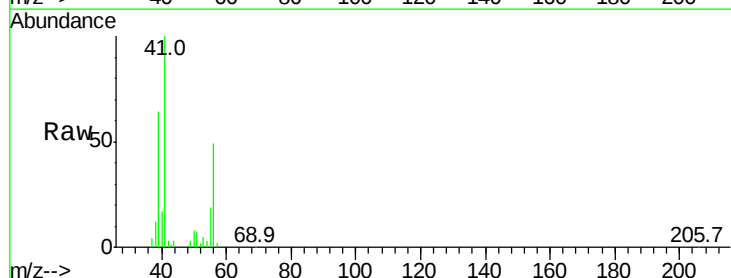
Acq: 22 Feb 2022 21:32

Tgt Ion: 39 Resp: 38930

Ion Ratio Lower Upper

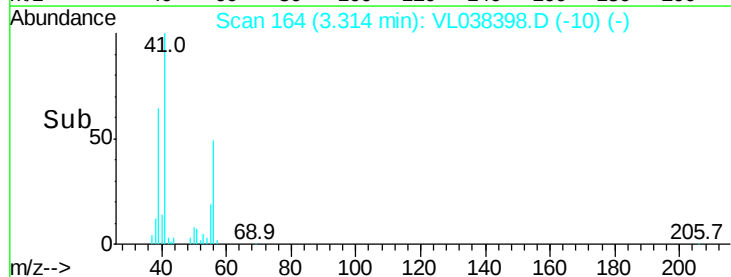
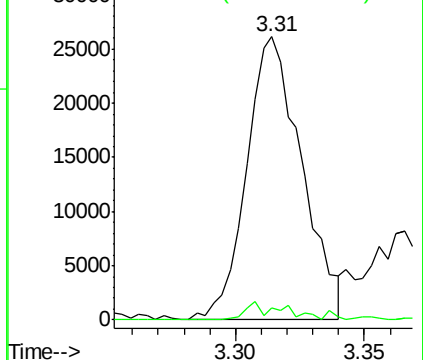
39 100

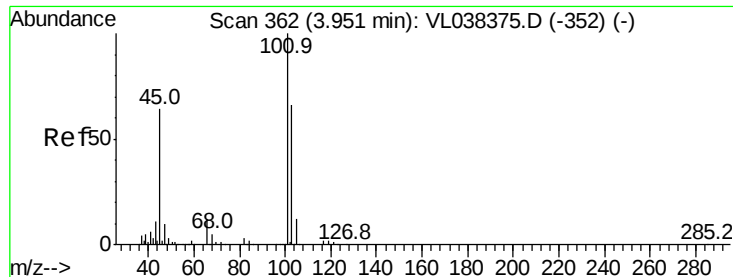
54 4.7 60.3 90.5#



Abundance Ion 39.10 (38.80 to 39.80): VL0

Ion 54.10 (53.80 to 54.80): VL0





#19

Isopropyl Alcohol

Concen: 0.31 ppbv

RT: 4.00 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

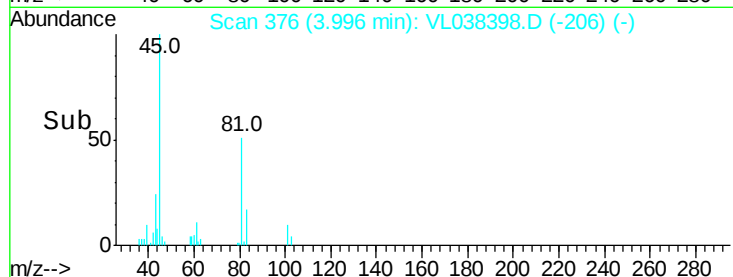
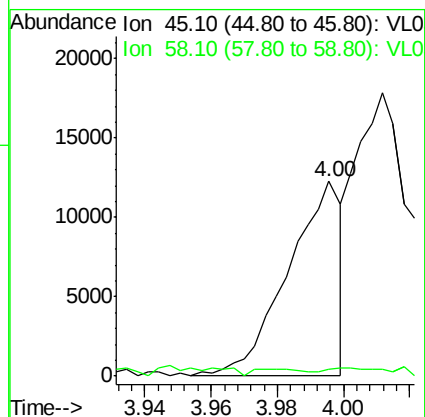
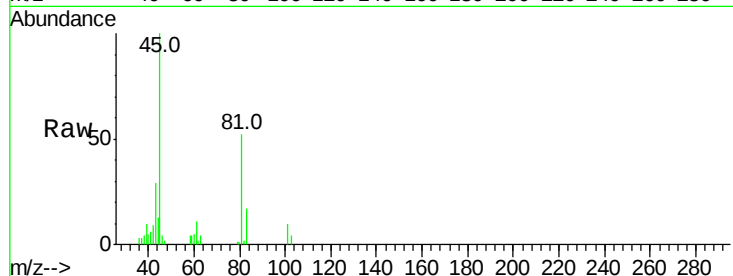
Acq: 22 Feb 2022 21:32 MP-12DL

Tgt Ion: 45 Resp: 13814

Ion Ratio Lower Upper

45 100

58 8.3 1.8 2.8#



#20

Methylene Chloride

Concen: 1.43 ppbv

RT: 4.35 min Scan# 486

Delta R.T. 0.02 min

Lab File: VL038398.D

Acq: 22 Feb 2022 21:32

Tgt Ion: 84 Resp: 54027

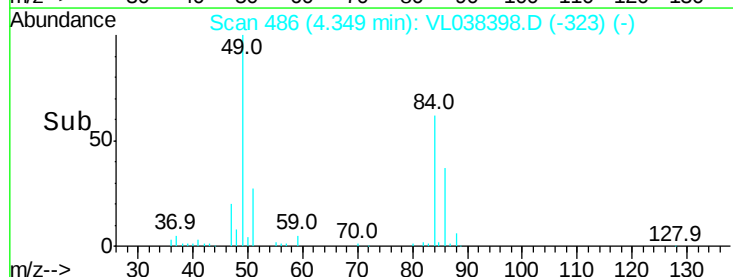
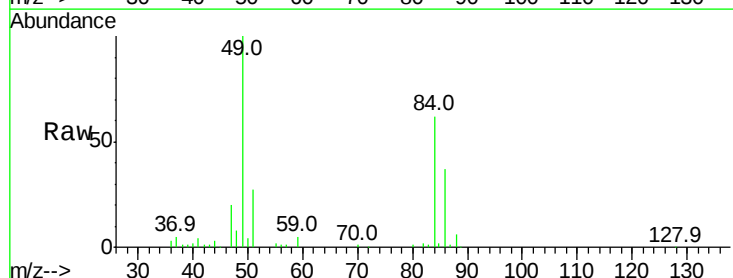
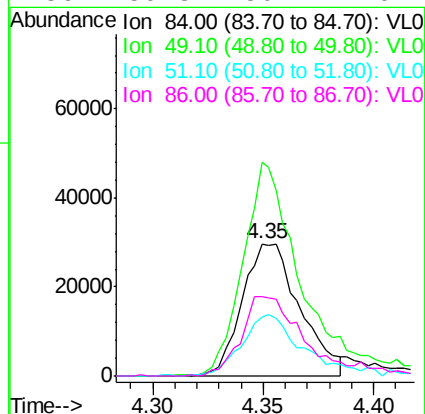
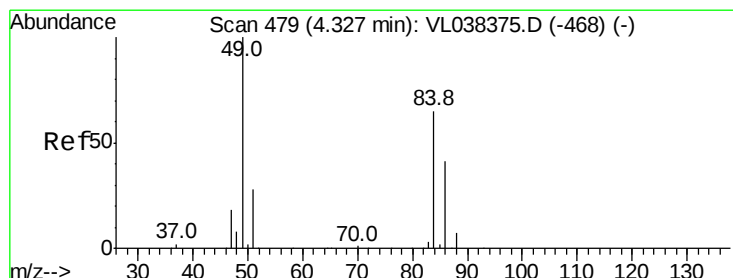
Ion Ratio Lower Upper

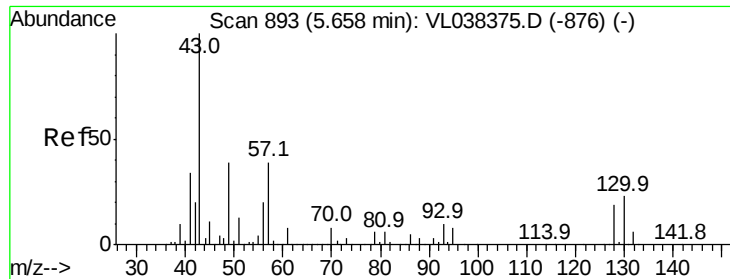
84 100

49 160.1 122.4 183.6

51 43.4 33.3 49.9

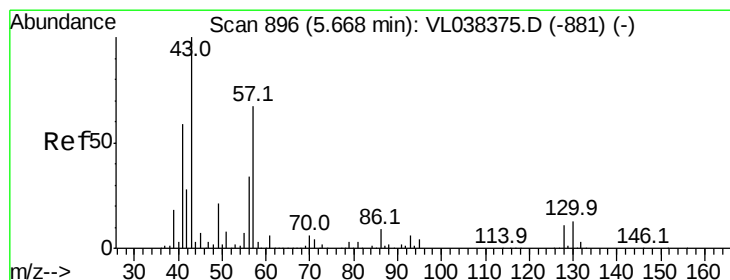
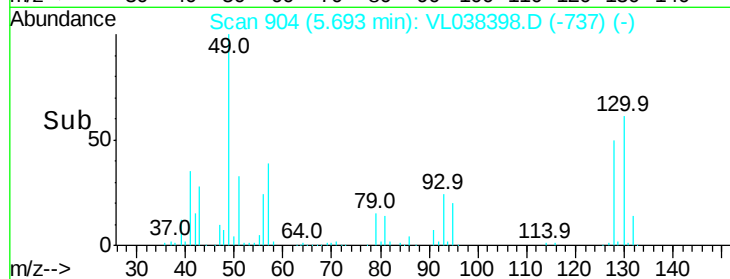
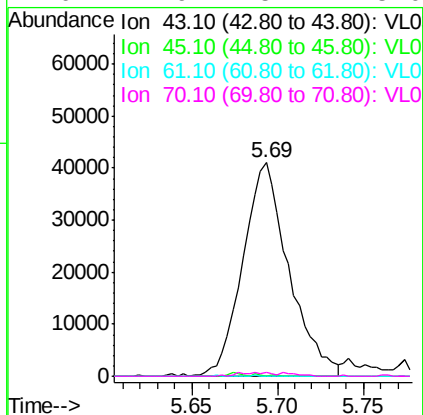
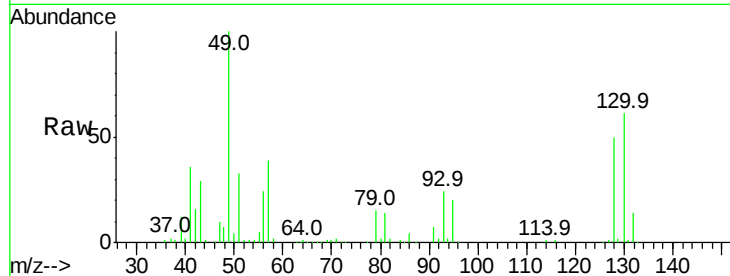
86 59.3 50.7 76.1





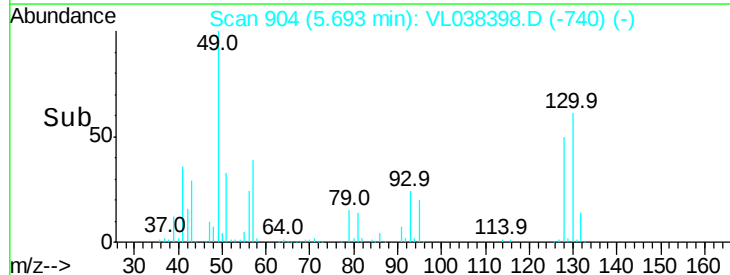
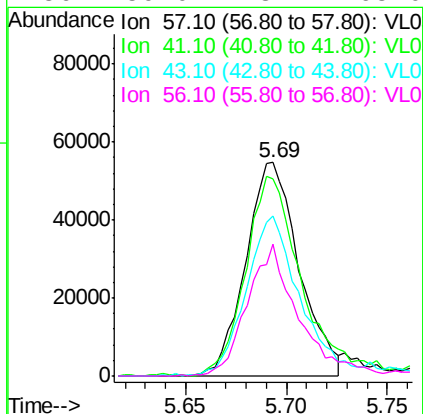
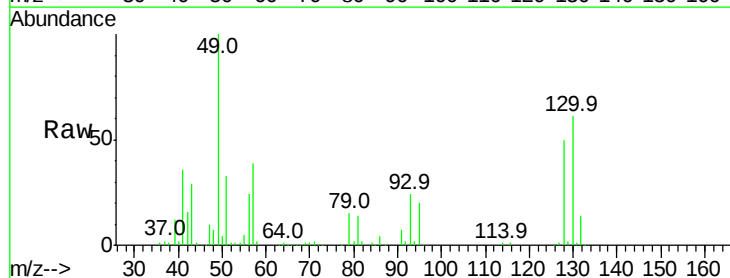
#25
Ethyl Acetate
Concen: 0.37 ppbv
RT: 5.69
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
MP-12DL
Acq: 22 Feb 2022 21:32

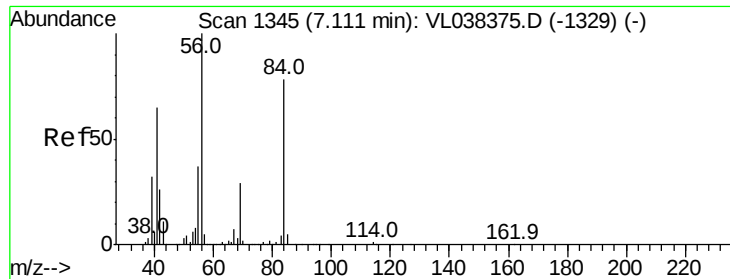
Tgt Ion:	43	Resp:	76095
Ion	Ratio	Lower	Upper
43	100		
45	0.7	7.8	11.6#
61	0.0	7.5	11.3#
70	1.9	5.4	8.0#



#26
Hexane
Concen: 1.10 ppbv
RT: 5.69 min Scan# 904
Delta R.T.: 0.03 min
Lab File: VL038398.D
Acq: 22 Feb 2022 21:32

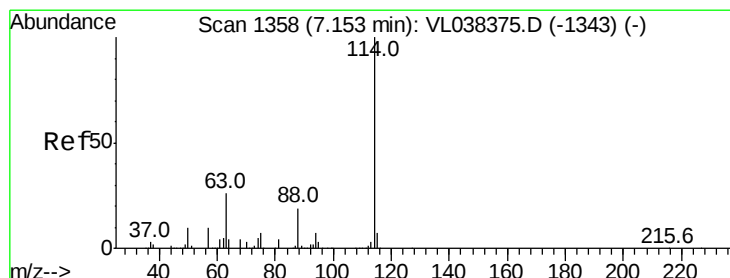
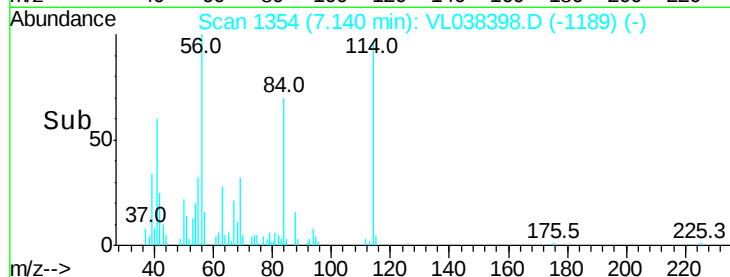
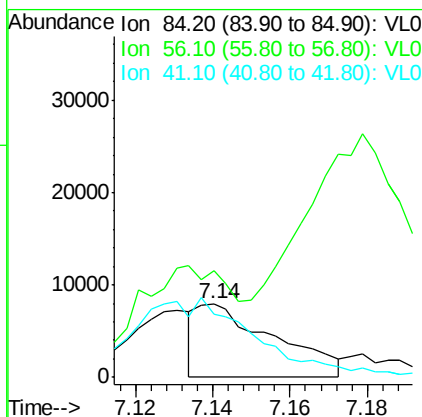
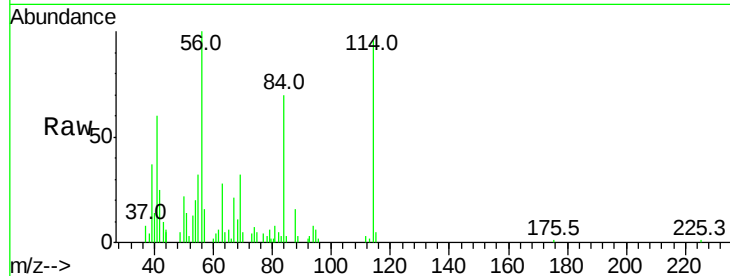
Tgt Ion:	57	Resp:	101330
Ion	Ratio	Lower	Upper
57	100		
41	99.9	73.1	109.7
43	82.9	181.0	271.4#
56	59.0	43.4	65.0





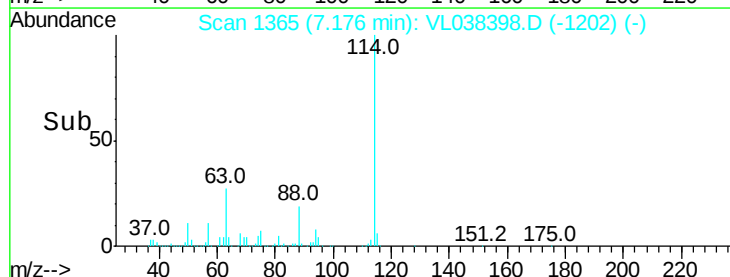
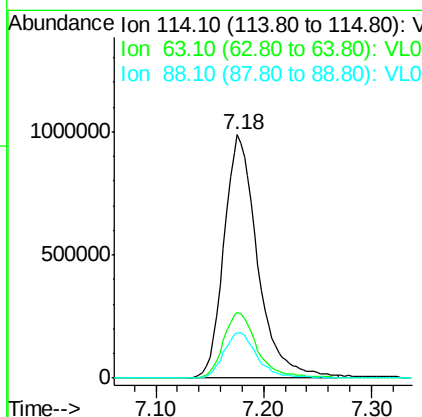
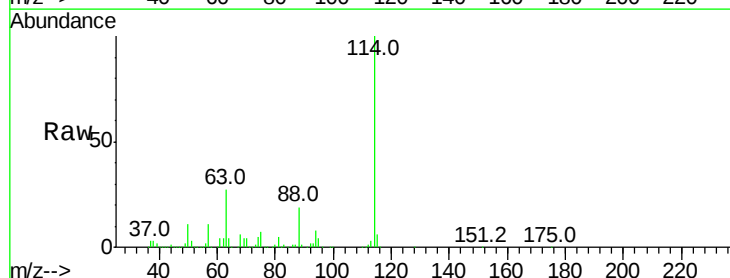
#30
Cyclohexane
Concen: 0.15 ppbv
RT: 7.14
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 22 Feb 2022 21:32

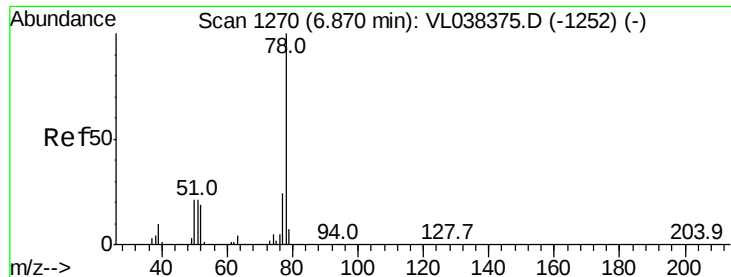
Tgt Ion: 84 Resp: 11094
Ion Ratio Lower Upper
84 100
56 0.0 116.2 174.4#
41 174.7 74.3 111.5#



#33
1,4-Difluorobenzene
Concen: 10.00 ppbv
RT: 7.18 min Scan# 1365
Delta R.T. 0.02 min
Lab File: VL038398.D
Acq: 22 Feb 2022 21:32

Tgt Ion: 114 Resp: 2143942
Ion Ratio Lower Upper
114 100
63 27.4 22.2 33.2
88 18.9 15.2 22.8





#36

Benzene

Concen: 0.05 ppbv

RT: 6.89 Instrument: MSVOA_1

Delta R.T.

Lab File: ClientSampleId:

Acq: 22 Feb 2022 21:32

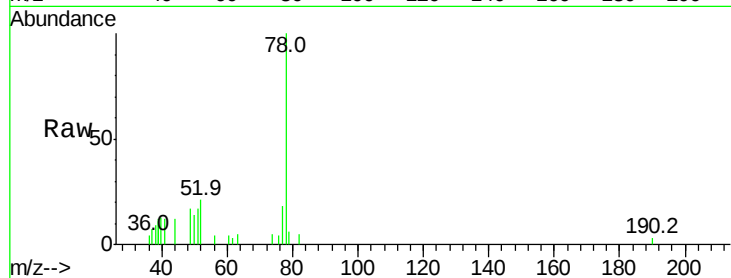
Tgt Ion: 78 Resp: 10075

Ion Ratio Lower Upper

78 100

77 14.0 19.0 28.6#

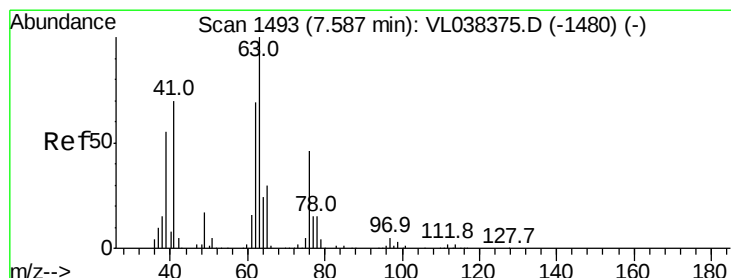
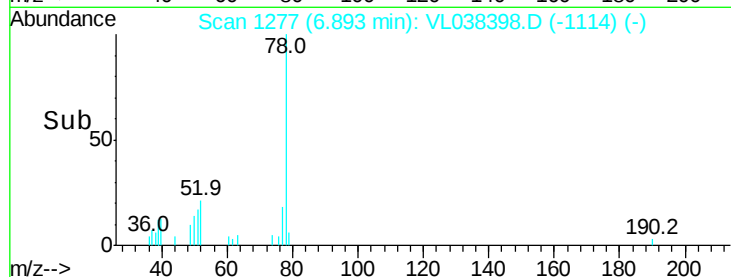
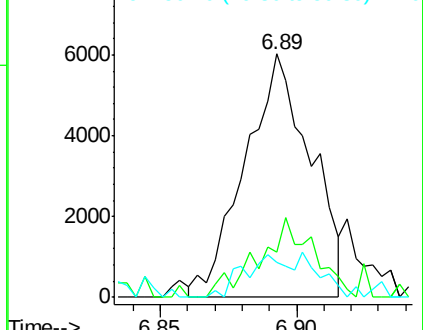
50 14.1 16.6 24.8#



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: 7.62 ppbv

RT: 7.18 min Scan# 1365

Delta R.T. -0.41 min

Lab File: VL038398.D

Acq: 22 Feb 2022 21:32

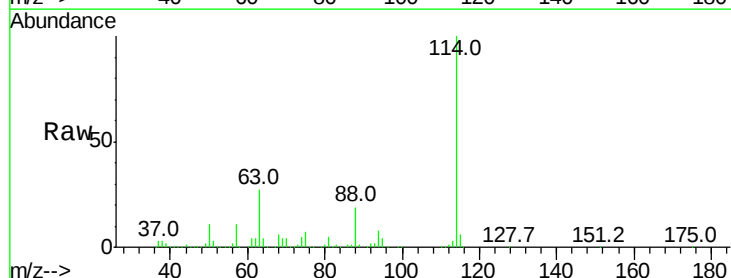
Tgt Ion: 63 Resp: 572942

Ion Ratio Lower Upper

63 100

41 0.0 56.1 84.1#

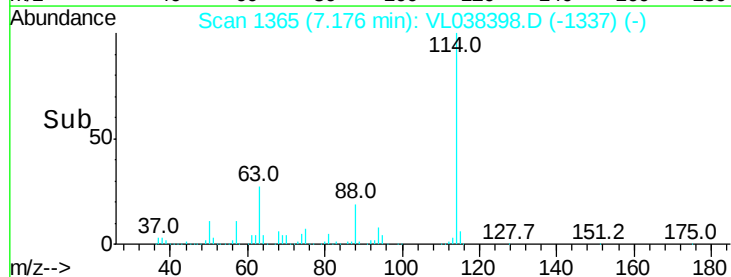
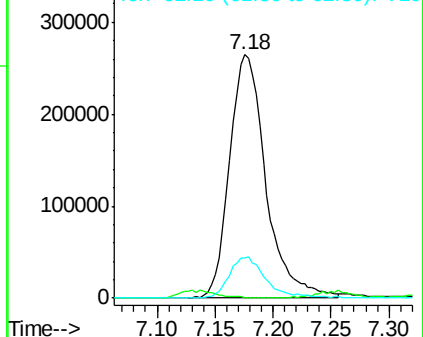
62 16.4 55.5 83.3#

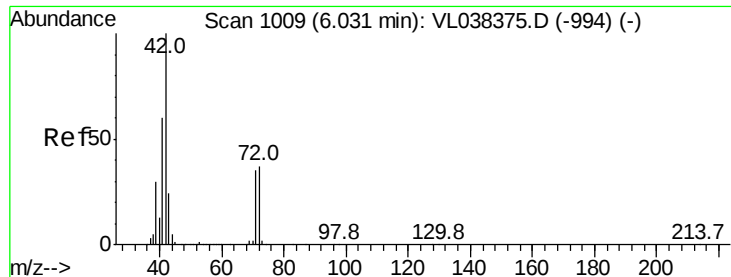


Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0





#41

Tetrahydrofuran

Concen: 0.03 ppbv

RT: 5.99 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 22 Feb 2022 21:32 MP-12DL

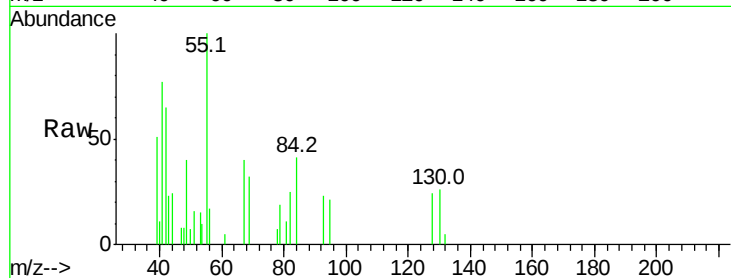
Tgt Ion: 42 Resp: 1439

Ion Ratio Lower Upper

42 100

72 0.0 29.9 44.9#

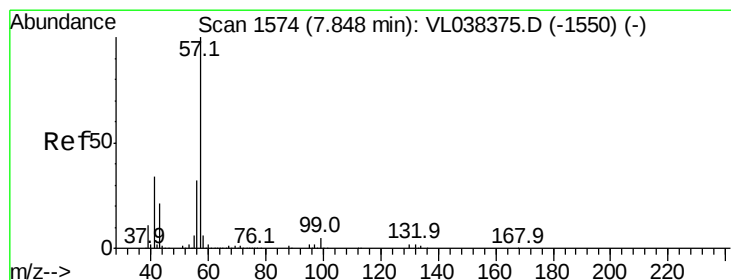
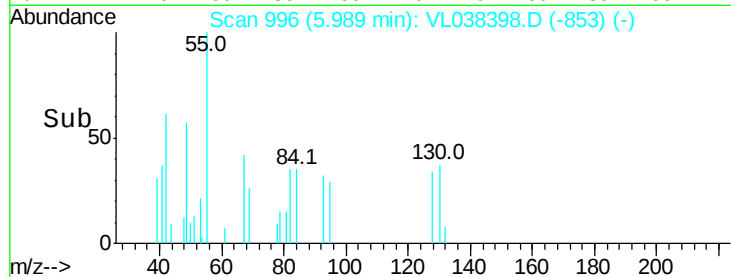
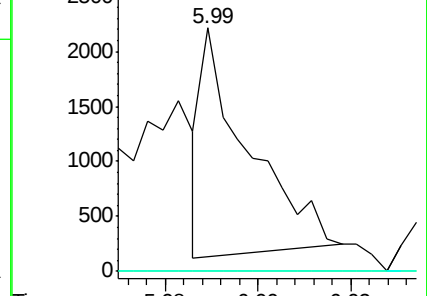
71 0.0 28.6 42.8#



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



#44

2,2,4-Trimethylpentane

Concen: 0.19 ppbv

RT: 7.88 min Scan# 1583

Delta R.T. 0.03 min

Lab File: VL038398.D

Acq: 22 Feb 2022 21:32

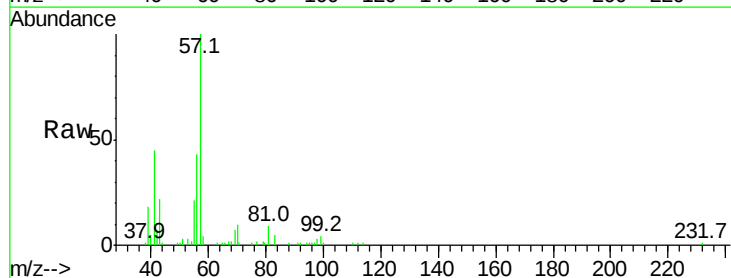
Tgt Ion: 57 Resp: 61411

Ion Ratio Lower Upper

57 100

41 53.2 26.6 39.8#

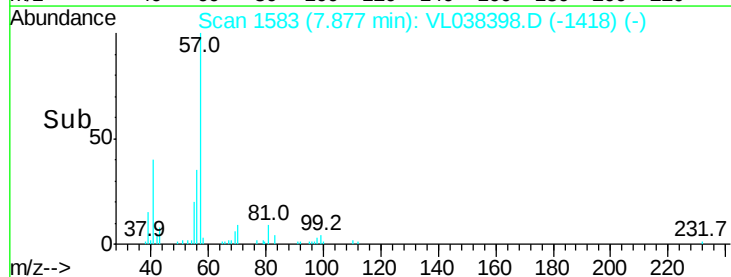
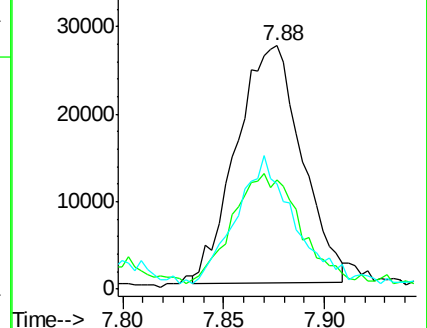
56 57.1 25.0 37.6#

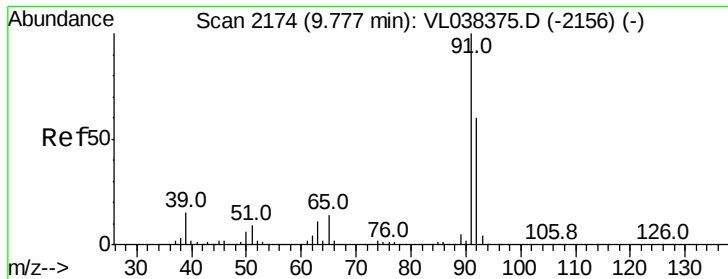


Abundance Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 56.10 (55.80 to 56.80): VL0





#53

Toluene

Concen: 6.52 ppbv

RT: 9.81 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

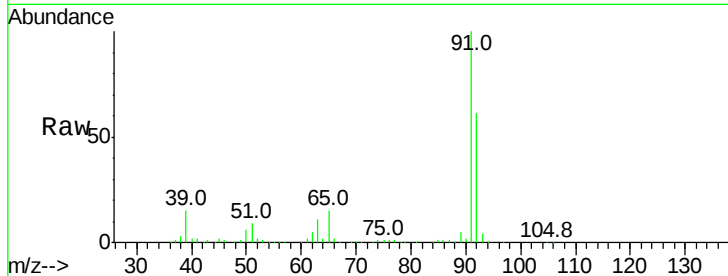
Acq: 22 Feb 2022 21:32 MP-12DL

Tgt Ion: 91 Resp: 1335321

Ion Ratio Lower Upper

91 100

92 59.8 48.2 72.4



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

600000

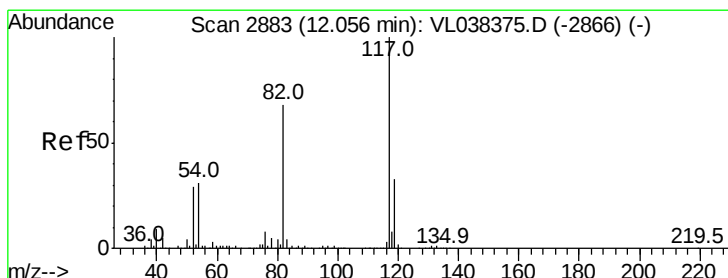
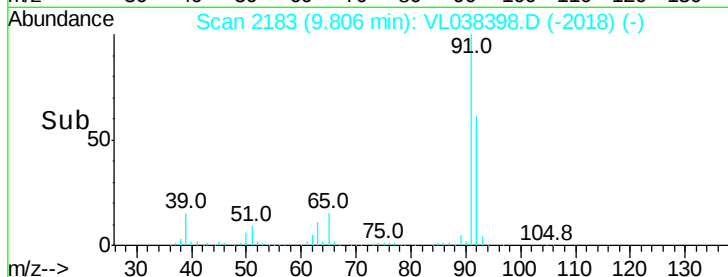
400000

200000

0

9.70 9.80 9.90

Time-->



#55

Chlorobenzene-d5

Concen: 10.00 ppbv

RT: 12.08 min Scan# 2891

Delta R.T. 0.03 min

Lab File: VL038398.D

Acq: 22 Feb 2022 21:32

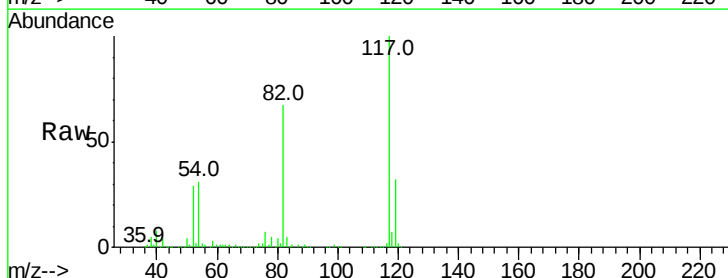
Tgt Ion: 117 Resp: 1958359

Ion Ratio Lower Upper

117 100

82 68.8 54.9 82.3

119 33.6 46.1 69.1#



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

1000000

800000

600000

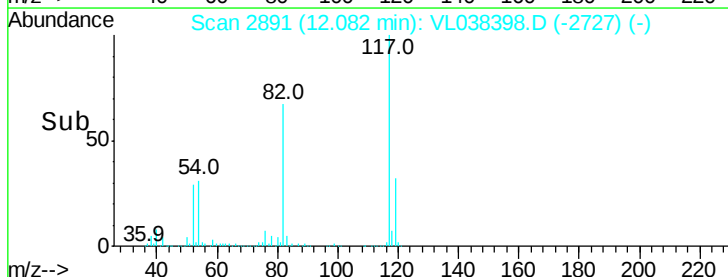
400000

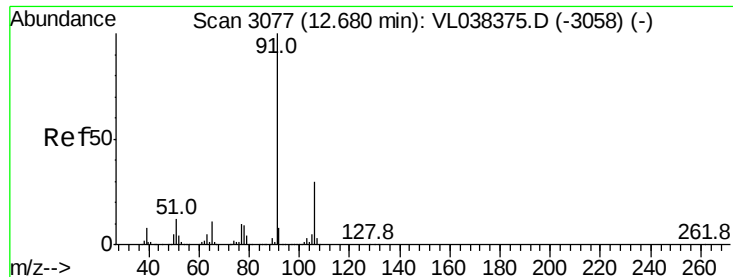
200000

0

12.00 12.10

Time-->





#58

Ethyl Benzene

Concen: 0.04 ppbv

RT: 12.71

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

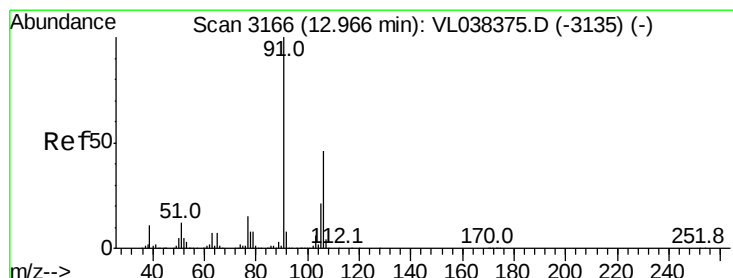
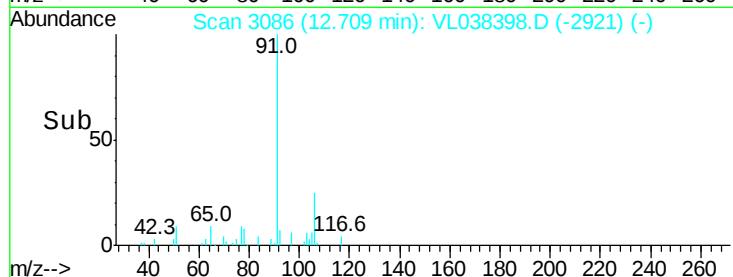
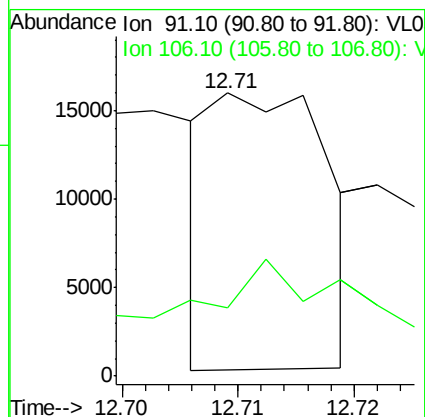
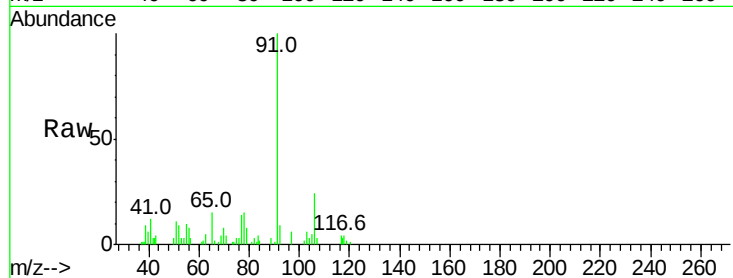
Acq: 22 Feb 2022 21:32

Tgt Ion: 91 Resp: 10717

Ion Ratio Lower Upper

91 100

106 0.0 24.0 36.0#



#59

m/p-Xylene

Concen: 0.12 ppbv

RT: 12.99 min Scan# 3173

Delta R.T. 0.02 min

Lab File: VL038398.D

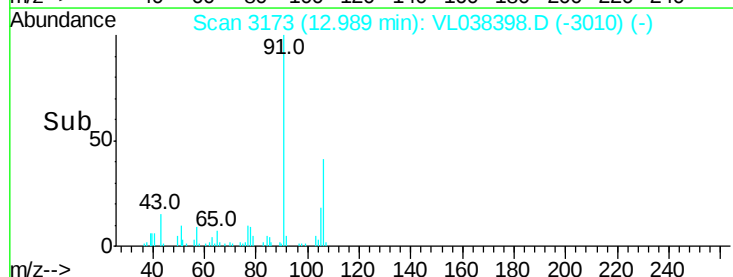
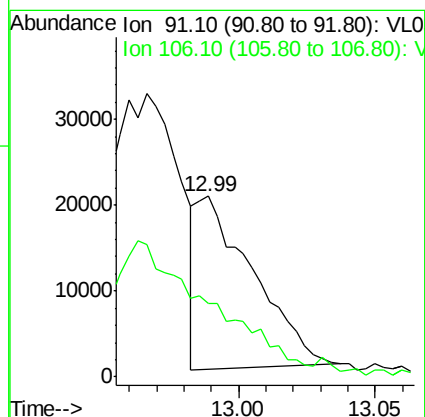
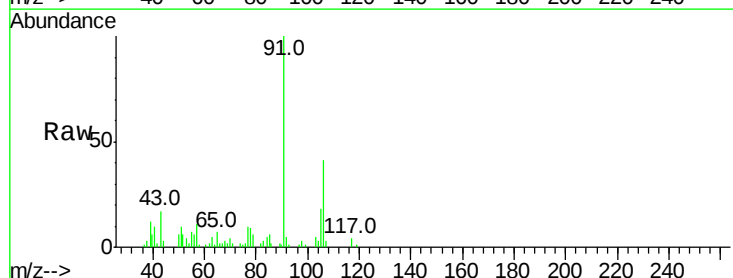
Acq: 22 Feb 2022 21:32

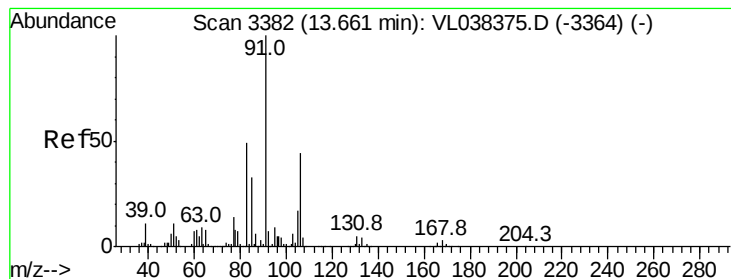
Tgt Ion: 91 Resp: 28684

Ion Ratio Lower Upper

91 100

106 0.0 34.4 51.6#





#60

o-Xylene

Concen: 0.17 ppbv

RT: 13.69

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

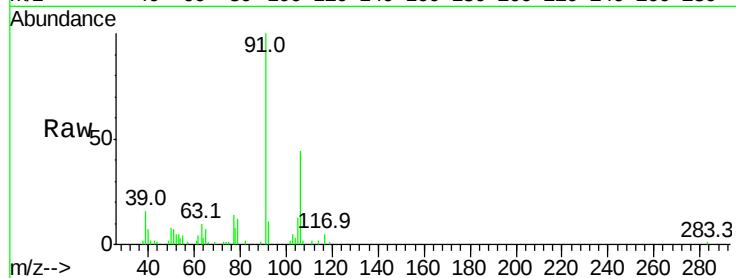
Acq: 22 Feb 2022 21:32

Tgt Ion: 91 Resp: 37124

Ion Ratio Lower Upper

91 100

106 47.0 21.9 65.5



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

13.69

15000

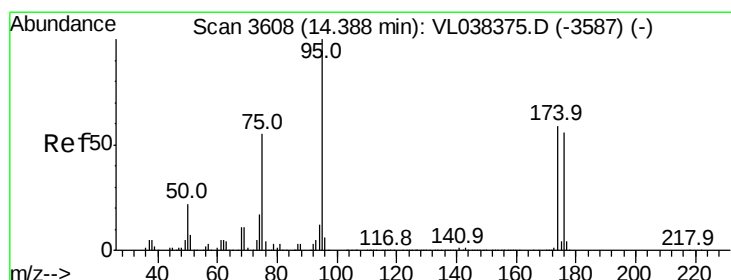
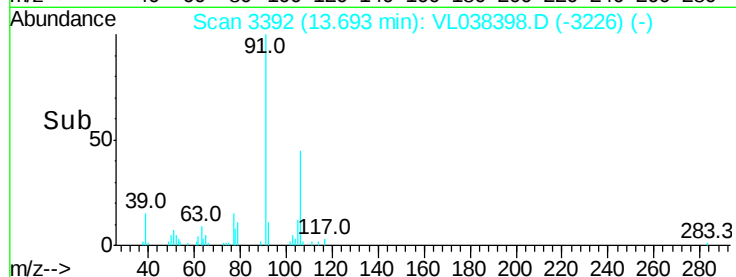
10000

5000

0

Time-->

13.65 13.70 13.75



#68

1-Bromo-4-Fluorobenzene

Concen: 9.97 ppbv

RT: 14.41 min Scan# 3616

Delta R.T. 0.03 min

Lab File: VL038398.D

Acq: 22 Feb 2022 21:32

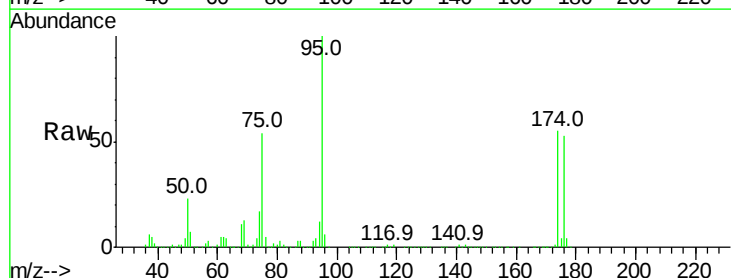
Tgt Ion: 95 Resp: 1616148

Ion Ratio Lower Upper

95 100

174 61.3 49.0 73.4

175 4.4 3.6 5.4



Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V

14.41

800000

600000

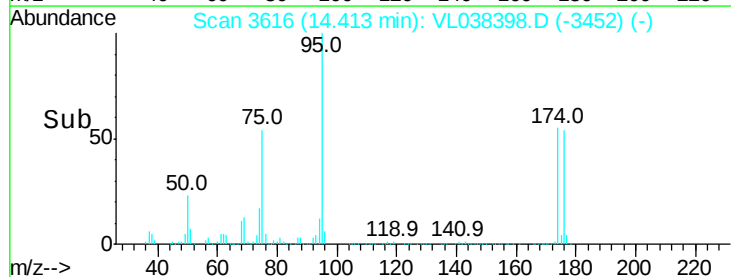
400000

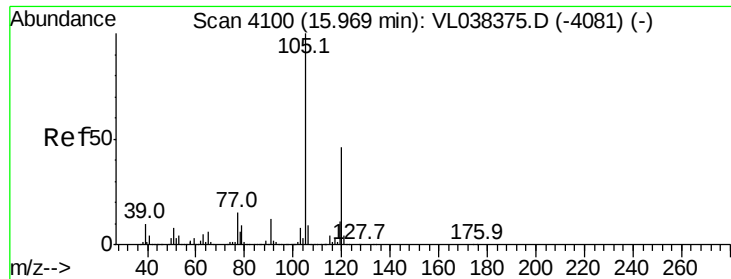
200000

0

Time-->

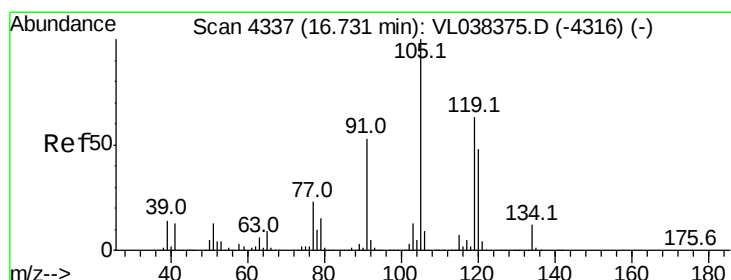
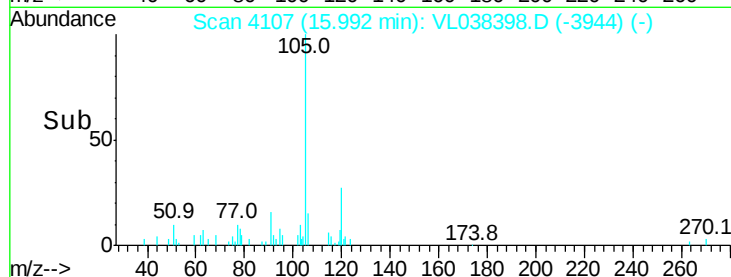
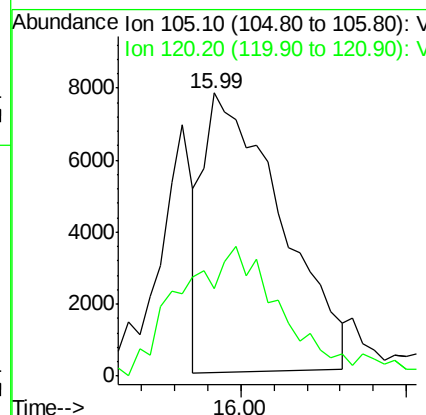
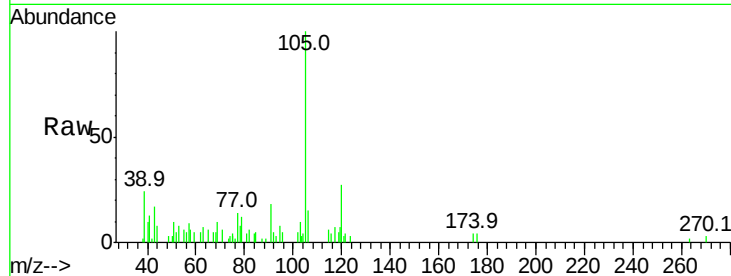
14.30 14.40 14.50





#73
 1,3,5-Trimethylbenzene
 Concen: 0.06 ppbv
 RT: 15.99 min
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 22 Feb 2022 21:32

Tgt Ion:105 Resp: 12545
 Ion Ratio Lower Upper
 105 100
 120 28.1 36.6 55.0#



#74
 1,2,4-Trimethylbenzene
 Concen: 0.21 ppbv
 RT: 16.76 min Scan# 4347
 Delta R.T. 0.03 min
 Lab File: VL038398.D
 Acq: 22 Feb 2022 21:32

Tgt Ion:105 Resp: 47359
 Ion Ratio Lower Upper
 105 100
 120 43.7 38.2 57.4
 91 11.0 42.7 64.1#
 77 18.9 18.5 27.7

