

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL030222\
 Data File : VL038502.D
 Acq On : 3 Mar 2022 3:59
 Operator : SY/AP
 Sample : N1754-02
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA2

Quant Time: Mar 03 04:40:13 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	5.68	49	878804	10.00	ppbv	0.03
33) 1,4-Difluorobenzene	7.19	114	1945365	10.00	ppbv	0.03
55) Chlorobenzene-d5	12.10	117	1800433	10.00	ppbv	0.04

System Monitoring Compounds

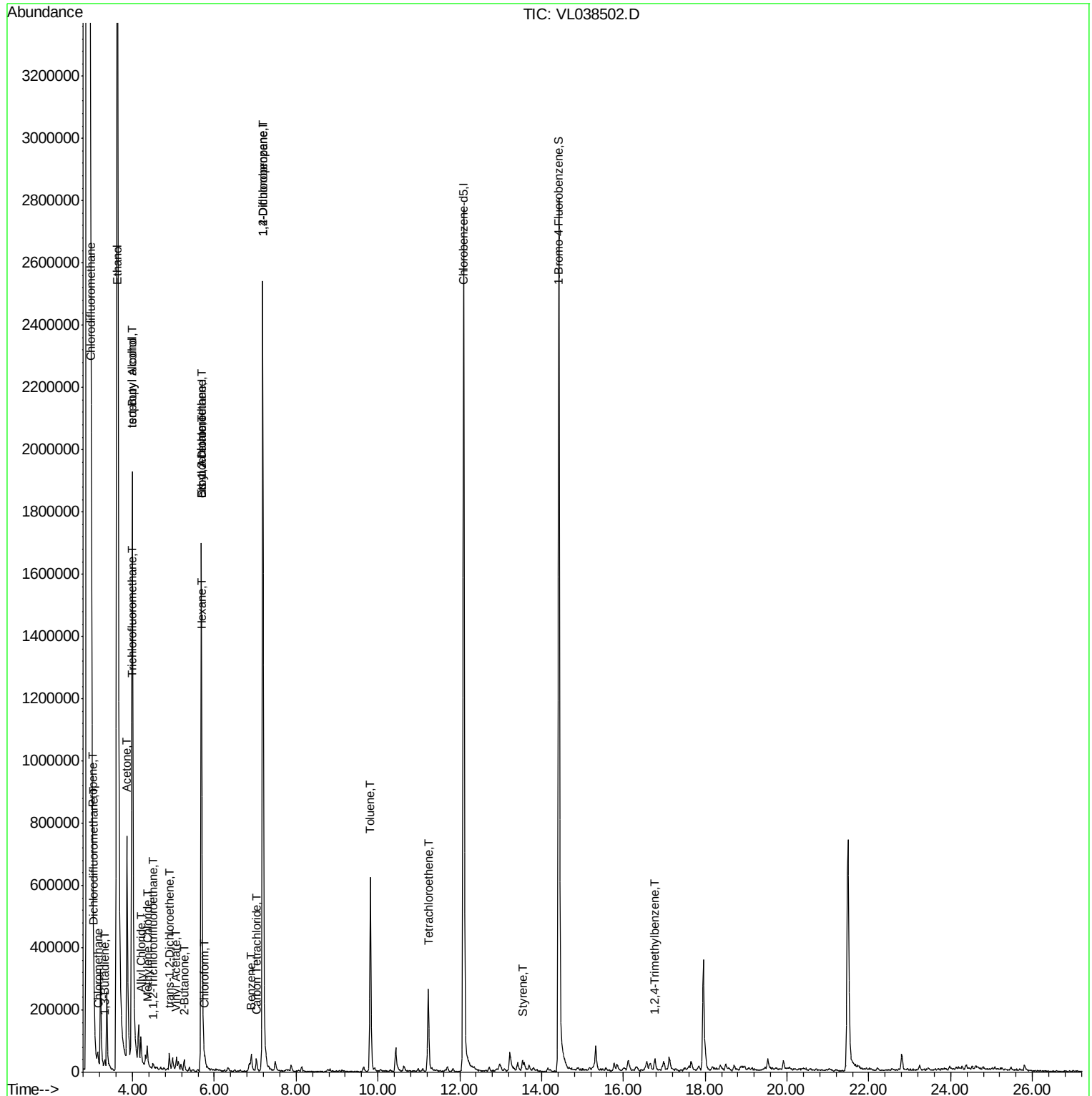
68) 1-Bromo-4-Fluorobenzene	14.42	95	1485829	9.97	ppbv	0.04
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.70%

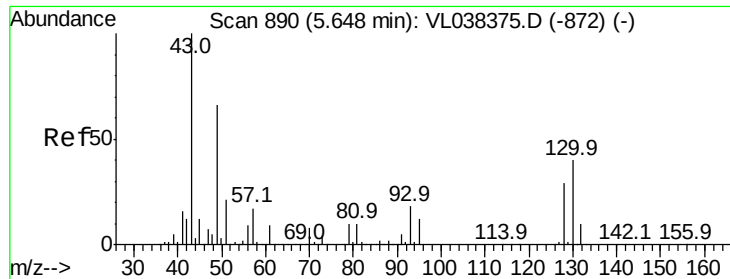
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.06	85	80255	0.58	ppbv	92
3) Chlorodifluoromethane	3.00	51	801500	5.16	ppbv	96
4) Chloromethane	3.16	50	27771	0.52	ppbv #	86
9) Propene	3.03	41	54579	1.07	ppbv #	75
11) Trichlorofluoromethane	3.97	101	27175	0.20	ppbv #	78
12) 1,1,2-Trichlorotrifluoroet	4.50	101	6058	0.06	ppbv	98
13) Ethanol	3.63	45	9064863	1772.78	ppbv	89
15) Acetone	3.86	43	888777	11.89	ppbv	100
16) 1,3-Butadiene	3.33	39	1637	0.03	ppbv #	12
17) tert-Butyl alcohol	4.00	59	99131	1.33	ppbv	99
19) Isopropyl Alcohol	3.99	45	2787246	64.41	ppbv #	99
20) Methylene Chloride	4.36	84	13272	0.36	ppbv	92
21) Allyl Chloride	4.20	41	5698	0.09	ppbv #	1
22) trans-1,2-Dichloroethene	4.90	96	7511	0.17	ppbv	94
23) Vinyl Acetate	5.08	43	15572	0.16	ppbv #	10
25) Ethyl Acetate	5.69	43	173312	0.86	ppbv #	87
26) Hexane	5.70	57	14777	0.16	ppbv #	1
29) Chloroform	5.77	83	5119	0.03	ppbv	93
31) cis-1,2-Dichloroethene	5.69	61	19762	0.22	ppbv #	29
34) 2-Butanone	5.26	43	42955	0.70	ppbv	92
35) Carbon Tetrachloride	7.02	117	21977	0.16	ppbv	87
36) Benzene	6.90	78	18867	0.11	ppbv #	94
39) 1,2-Dichloropropane	7.19	63	545000	7.99	ppbv #	25
52) Tetrachloroethene	11.23	164	58876	1.04	ppbv	94
53) Toluene	9.82	91	462460	2.49	ppbv	99
61) Styrene	13.55	104	4125	0.04	ppbv #	1
74) 1,2,4-Trimethylbenzene	16.77	105	23578	0.11	ppbv #	74

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

```
Data Path : Z:\V0ASRV\HPCHEM1\MSV0A_L\DATA\VL030222\  
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Operator  : SY/AP  
Sample    : N1754-02  
Misc      : 400mL/MSV0A_L  
ALS Vial  : 1 Sample Multiplier: 1
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Quant Time: Mar 03 04:40:13 2022
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_L\METHODS\VL022222AIR.M
Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_LTue Feb 22 19:45:51 2022
QLast Update : Tue Feb 22 19:45:51 2022
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 5.68 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 3 Mar 2022 3:59

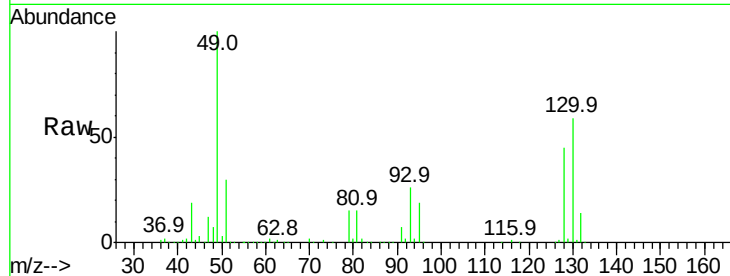
Tgt Ion: 49 Resp: 878804

Ion Ratio Lower Upper

49 100

128 44.2 24.3 72.9

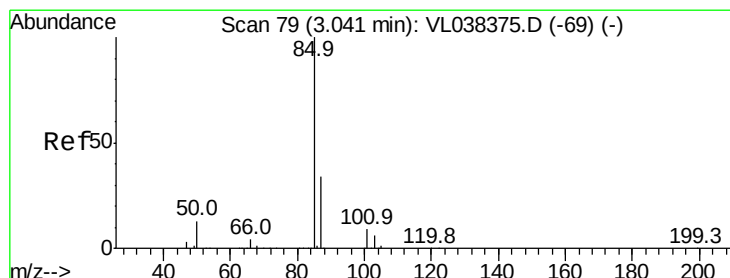
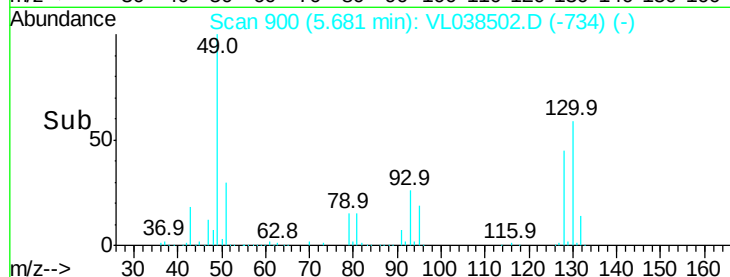
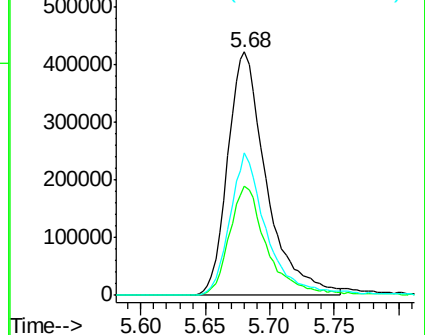
130 56.5 30.1 90.5



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: 0.58 ppbv

RT: 3.06 min Scan# 85

Delta R.T. 0.02 min

Lab File: VL038502.D

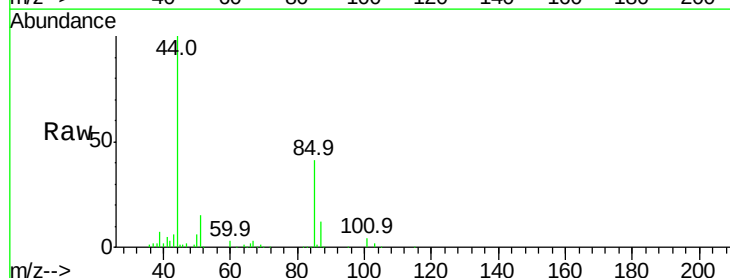
Acq: 3 Mar 2022 3:59

Tgt Ion: 85 Resp: 80255

Ion Ratio Lower Upper

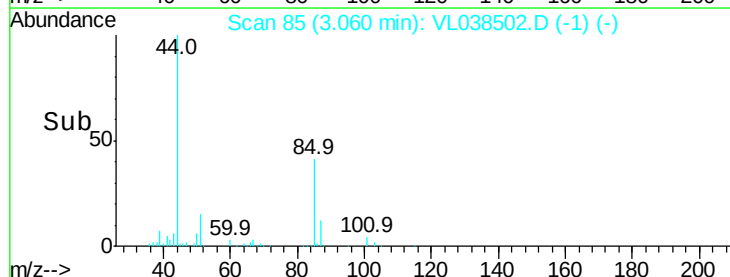
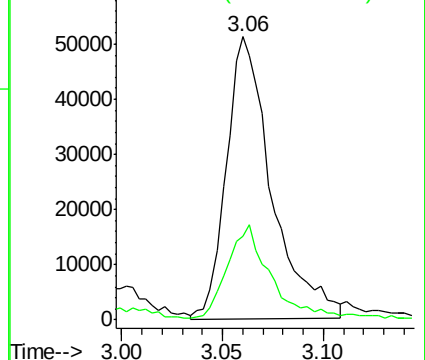
85 100

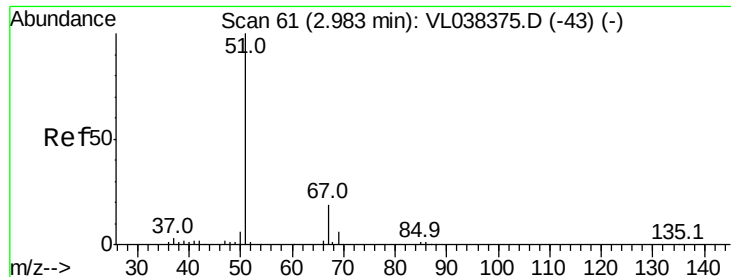
87 29.4 27.4 41.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 5.16 ppbv

RT: 3.00 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

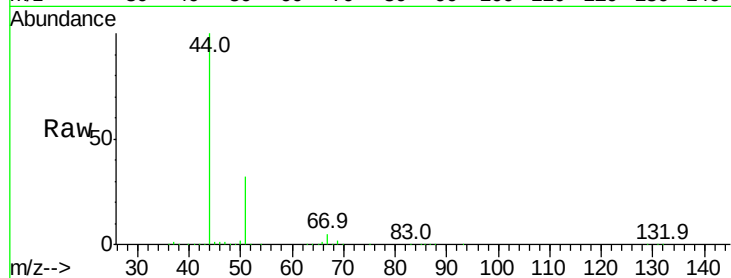
Acq: 3 Mar 2022 3:59

Tgt Ion: 51 Resp: 801500

Ion Ratio Lower Upper

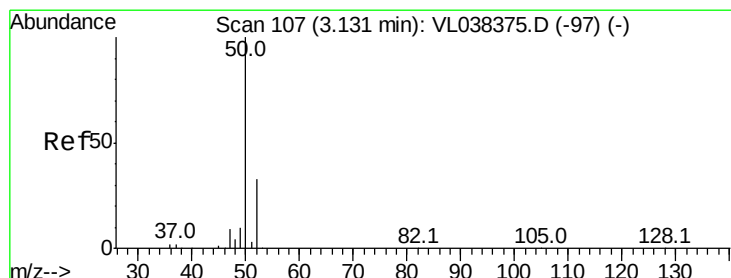
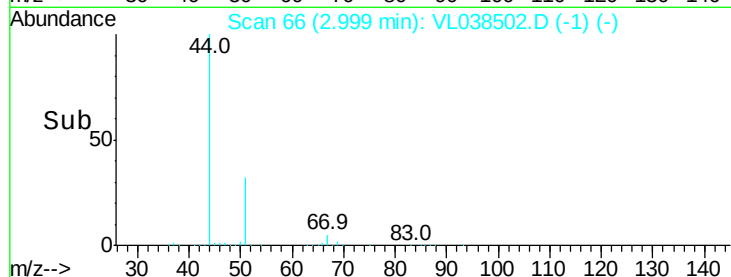
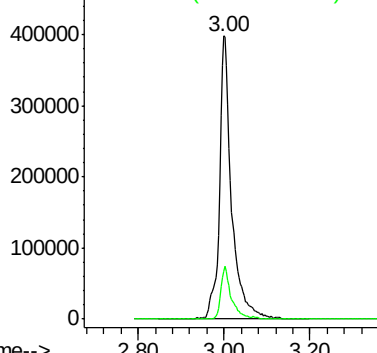
51 100

67 16.5 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: 0.52 ppbv

RT: 3.16 min Scan# 115

Delta R.T. 0.03 min

Lab File: VL038502.D

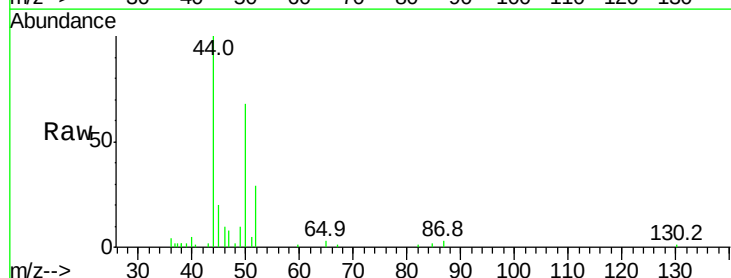
Acq: 3 Mar 2022 3:59

Tgt Ion: 50 Resp: 27771

Ion Ratio Lower Upper

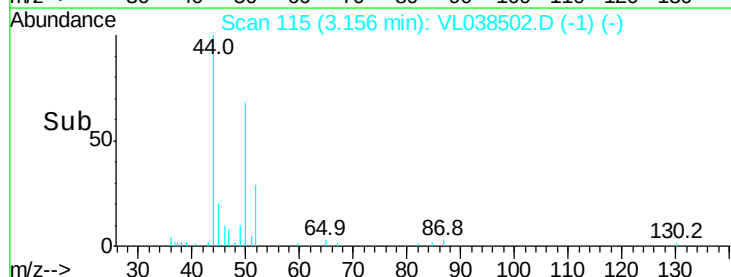
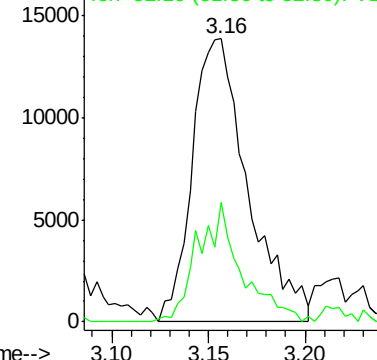
50 100

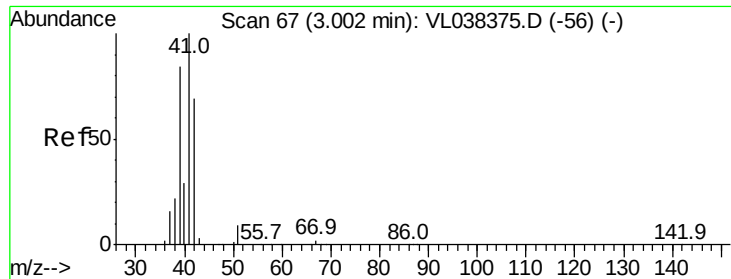
52 41.2 26.5 39.7#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 1.07 ppbv

RT: 3.03 Instrument: MSVOA_1

Delta R.T.

Lab File: ClientSampleId :

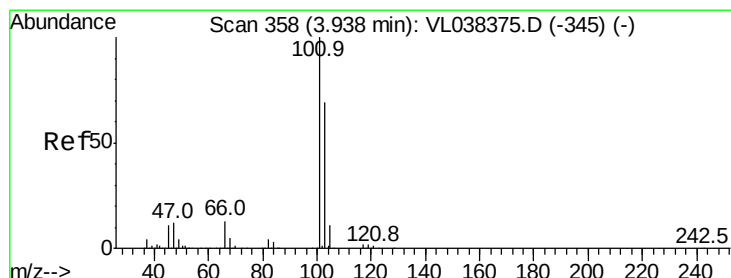
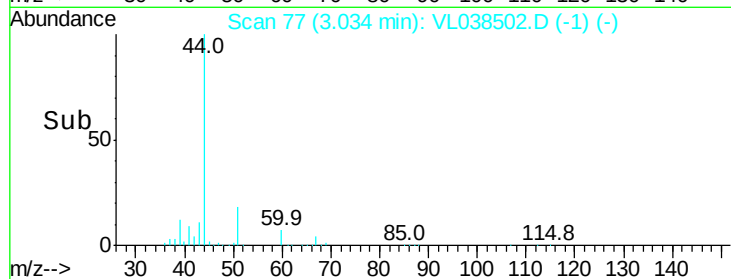
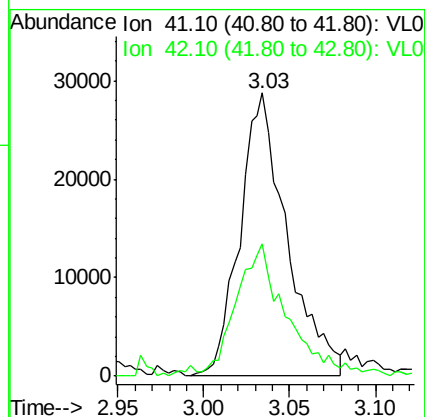
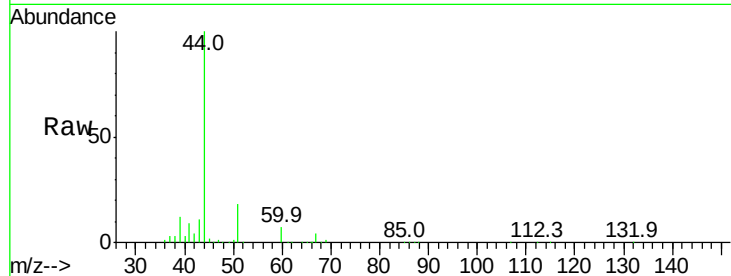
Acq: 3 Mar 2022 3:59

Tgt Ion: 41 Resp: 54579

Ion Ratio Lower Upper

41 100

42 48.4 54.6 82.0#



#11

Trichlorofluoromethane

Concen: 0.20 ppbv

RT: 3.97 min Scan# 367

Delta R.T. 0.03 min

Lab File: VL038502.D

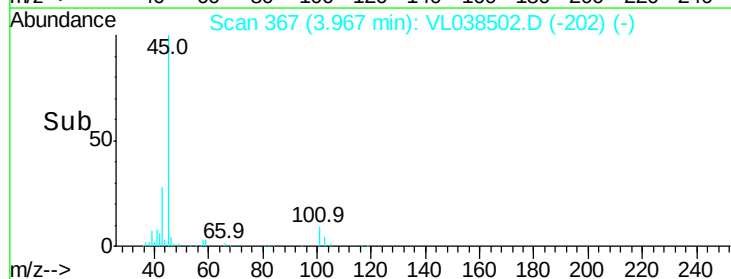
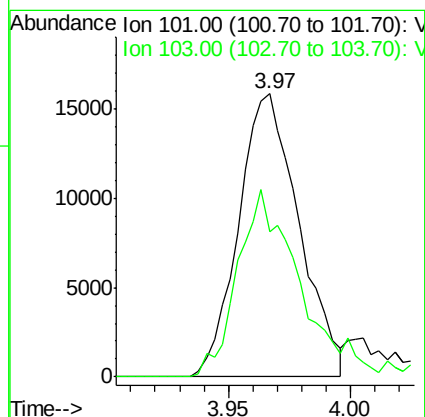
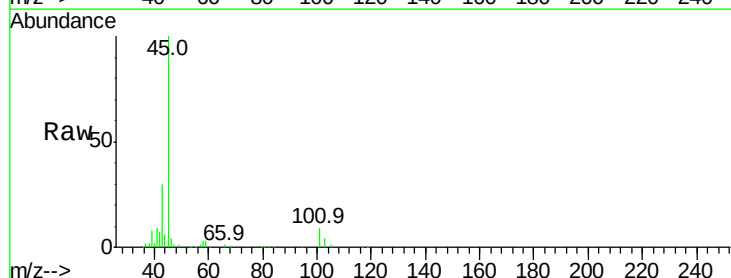
Acq: 3 Mar 2022 3:59

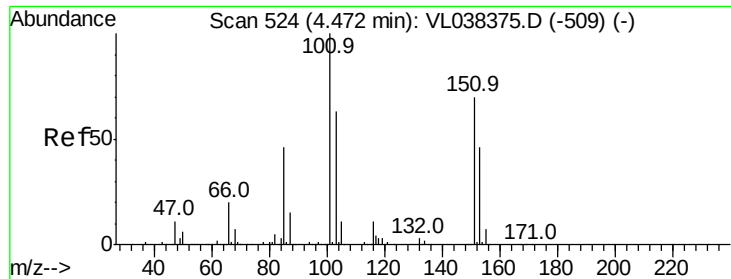
Tgt Ion: 101 Resp: 27175

Ion Ratio Lower Upper

101 100

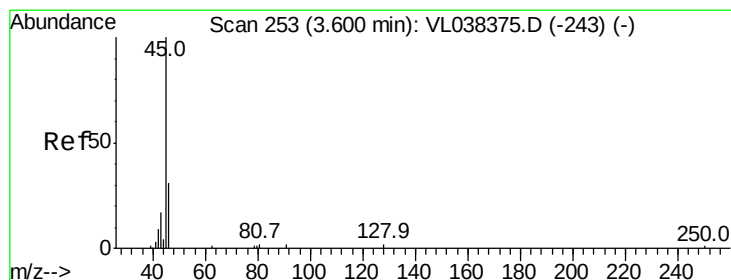
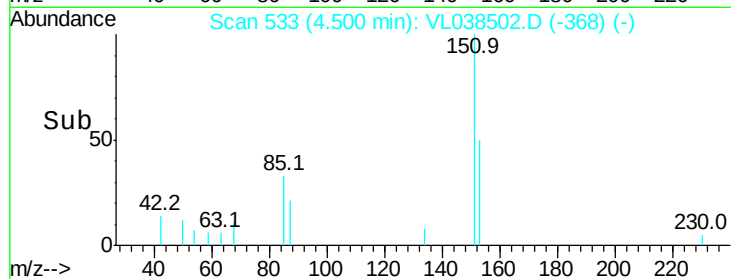
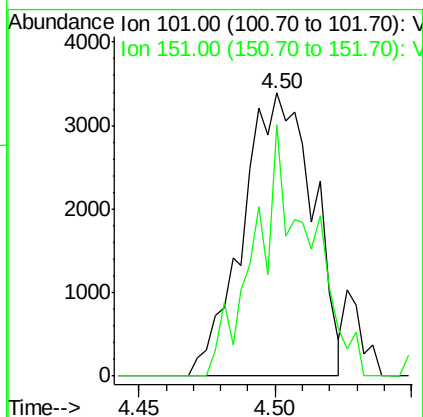
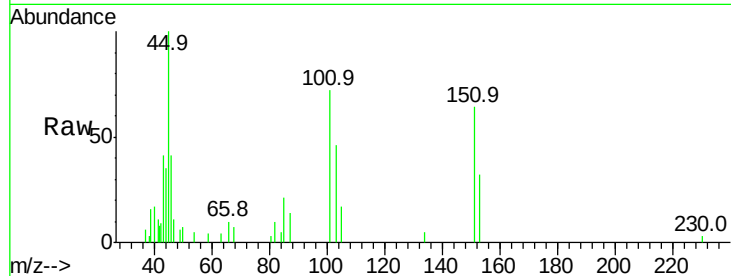
103 51.2 55.0 82.4#





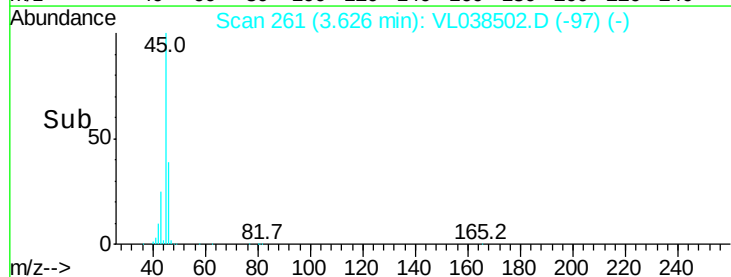
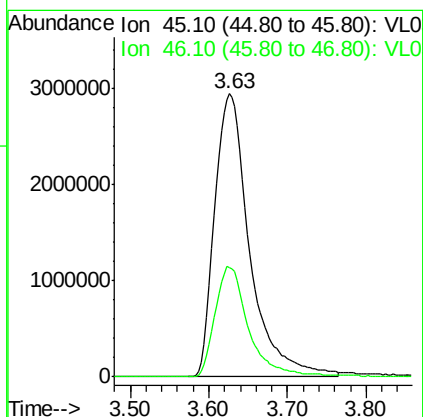
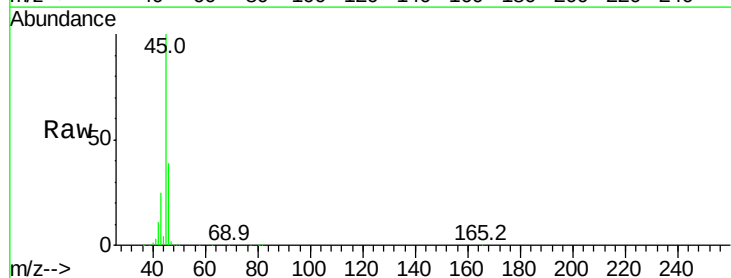
#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.06 ppbv
 RT: 4.50
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 3 Mar 2022 3:59

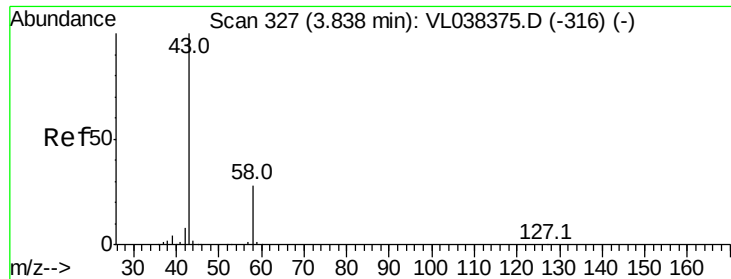
Tgt Ion: 101 Resp: 6058
 Ion Ratio Lower Upper
 101 100
 151 68.5 55.9 83.9



#13
 Ethanol
 Concen: 1772.78 ppbv
 RT: 3.63 min Scan# 261
 Delta R.T. 0.03 min
 Lab File: VL038502.D
 Acq: 3 Mar 2022 3:59

Tgt Ion: 45 Resp: 9064863
 Ion Ratio Lower Upper
 45 100
 46 38.1 18.2 72.8





#15

Acetone

Concen: 11.89 ppbv

RT: 3.86 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

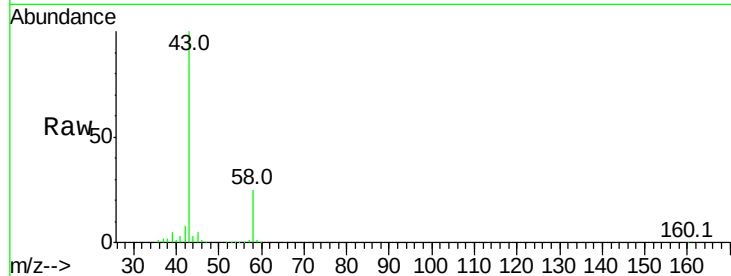
Acq: 3 Mar 2022 3:59

Tgt Ion: 43 Resp: 888777

Ion Ratio Lower Upper

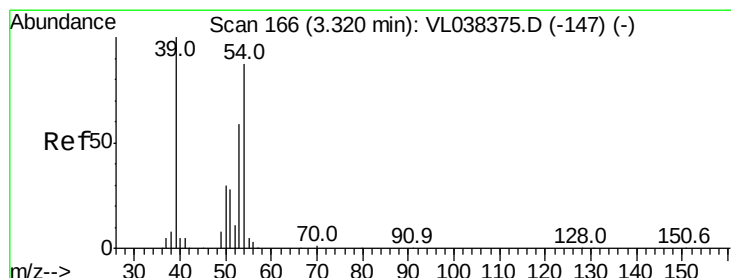
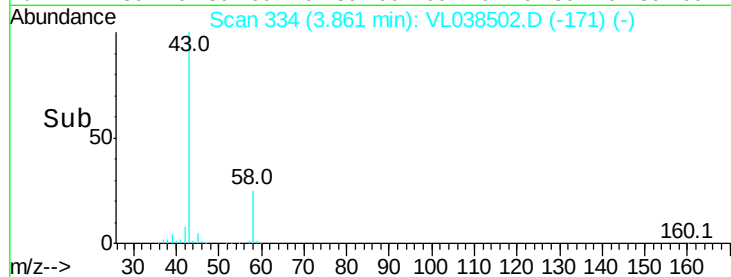
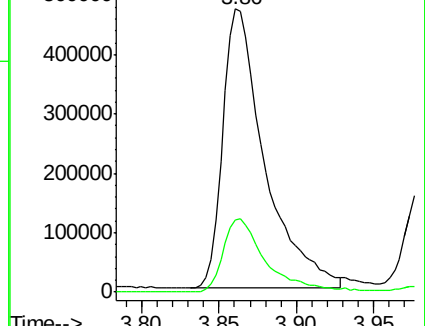
43 100

58 27.1 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: 0.03 ppbv

RT: 3.33 min Scan# 168

Delta R.T. 0.01 min

Lab File: VL038502.D

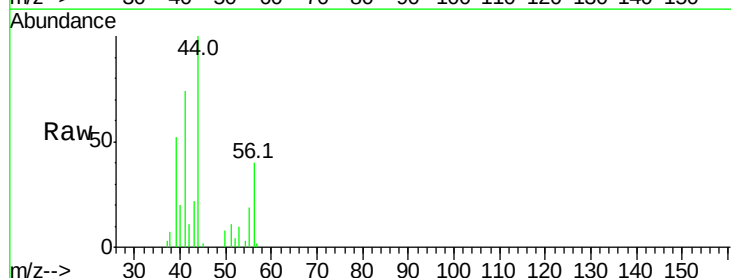
Acq: 3 Mar 2022 3:59

Tgt Ion: 39 Resp: 1637

Ion Ratio Lower Upper

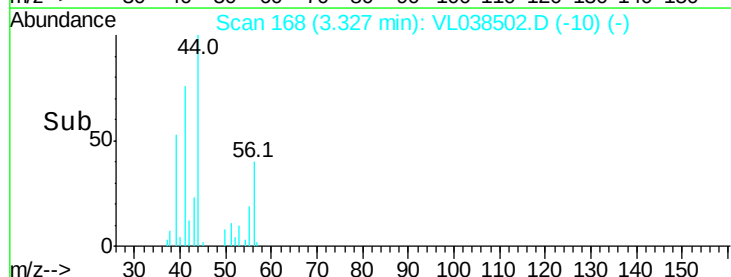
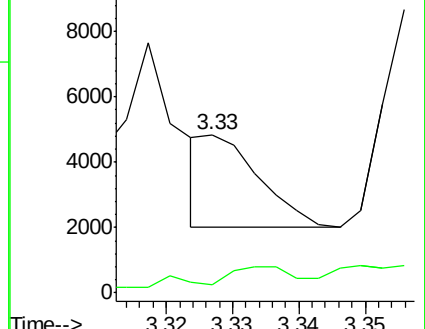
39 100

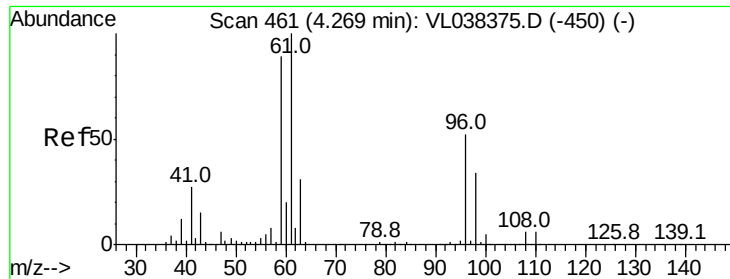
54 0.0 60.3 90.5#



Abundance Ion 39.10 (38.80 to 39.80): VL0

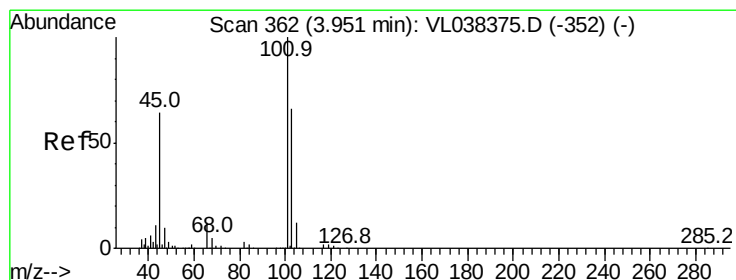
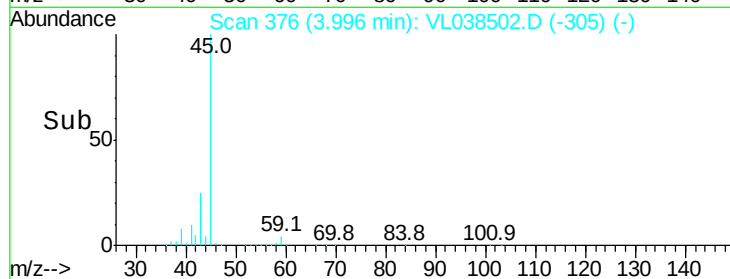
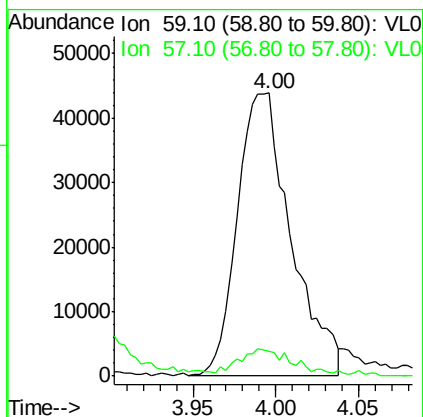
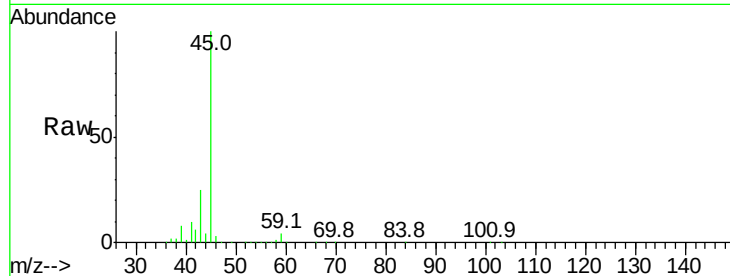
Ion 54.10 (53.80 to 54.80): VL0





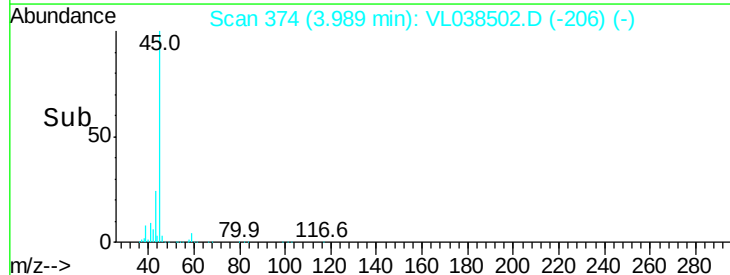
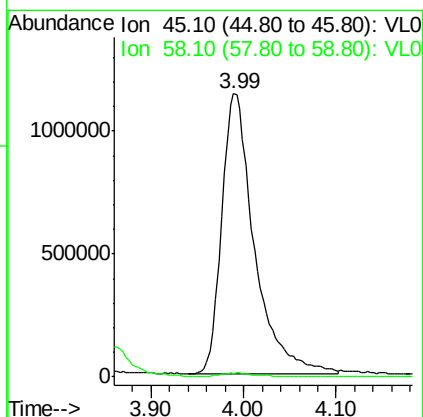
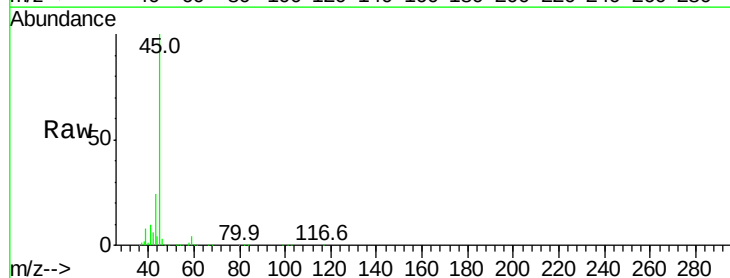
#17
tert-Butyl alcohol
Concen: 1.33 ppbv
RT: 4.00
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 3 Mar 2022 3:59

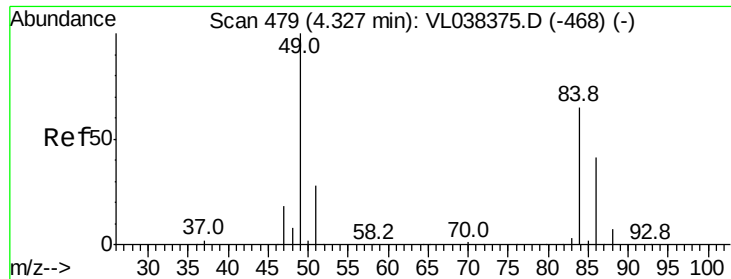
Tgt Ion: 59 Resp: 99131
Ion Ratio Lower Upper
59 100
57 11.0 8.4 12.6



#19
Isopropyl Alcohol
Concen: 64.41 ppbv
RT: 3.99 min Scan# 374
Delta R.T. 0.04 min
Lab File: VL038502.D
Acq: 3 Mar 2022 3:59

Tgt Ion: 45 Resp: 2787246
Ion Ratio Lower Upper
45 100
58 1.8 1.8 2.8#





#20

Methylene Chloride

Concen: 0.36 ppbv

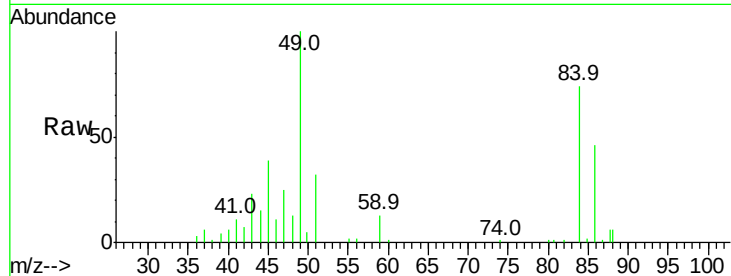
RT: 4.36

Delta R.T. MSVOA_L

Lab File: ClientSampleId : IA2

Acq: 3 Mar 2022 3:59

Tgt Ion:	84	Resp:	13272
Ion	Ratio	Lower	Upper
84	100		
49	138.8	122.4	183.6
51	43.3	33.3	49.9
86	60.5	50.7	76.1



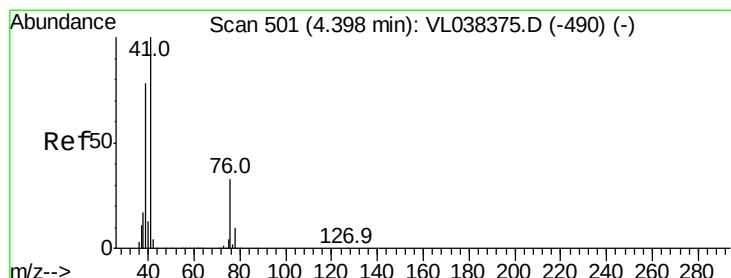
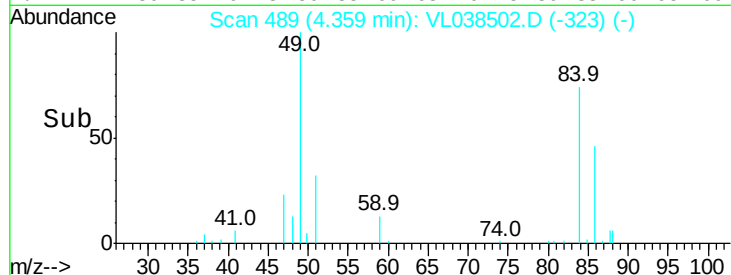
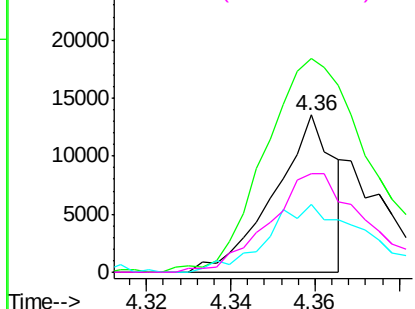
Abundance

Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0



#21

Allyl Chloride

Concen: 0.09 ppbv

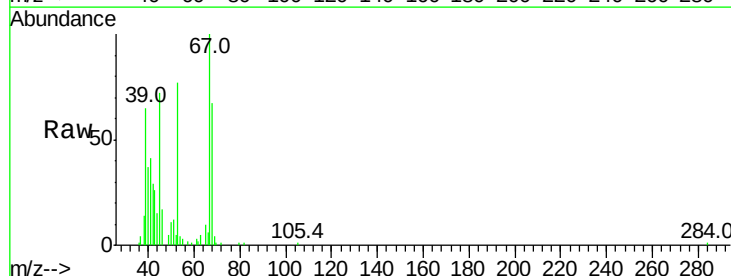
RT: 4.20 min Scan# 441

Delta R.T. -0.19 min

Lab File: VL038502.D

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Tgt Ion:	41	Resp:	5698
Ion	Ratio	Lower	Upper
41	100		
76	0.0	25.4	38.0#
39	416.4	63.0	94.6#

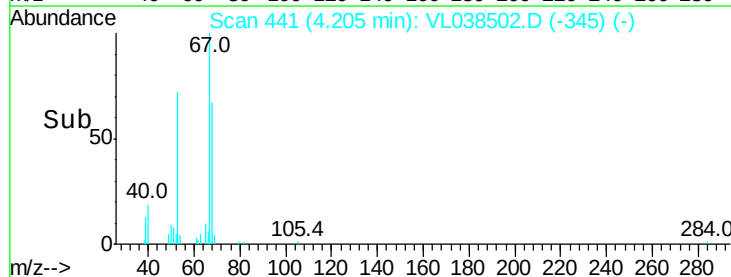
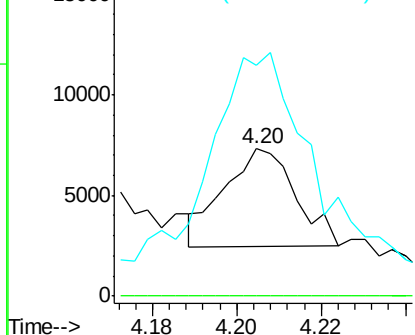


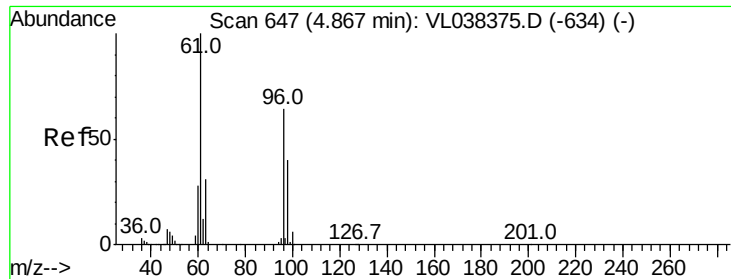
Abundance

Ion 41.10 (40.80 to 41.80): VL0

Ion 76.10 (75.80 to 76.80): VL0

Ion 39.10 (38.80 to 39.80): VL0





#22

trans-1,2-Dichloroethene

Concen: 0.17 ppbv

RT: 4.90 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

Acq: 3 Mar 2022 3:59

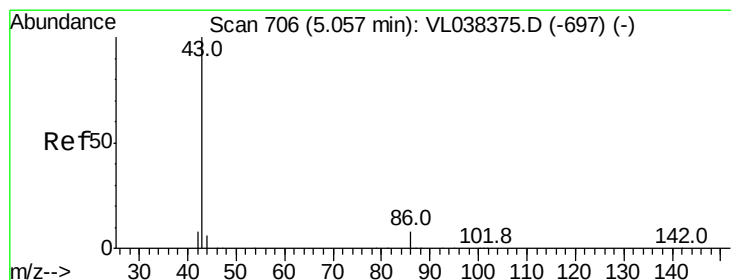
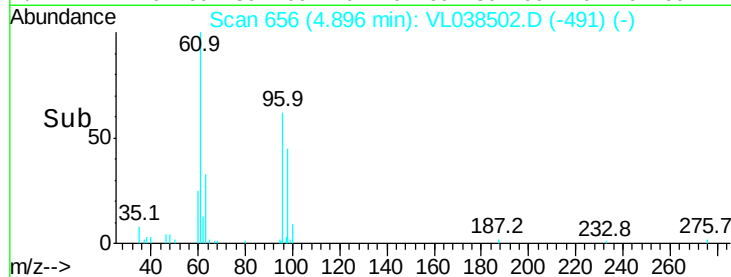
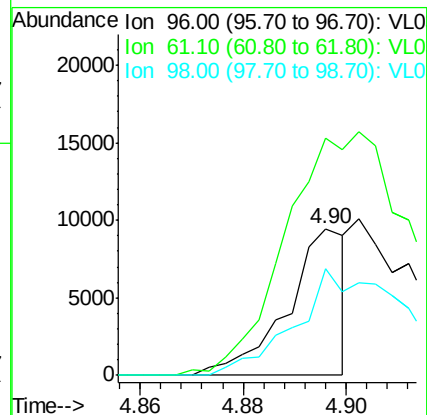
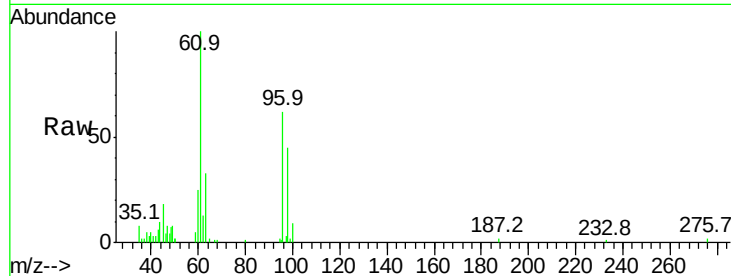
Tgt Ion: 96 Resp: 7511

Ion Ratio Lower Upper

96 100

61 158.1 124.2 186.4

98 72.8 49.1 73.7



#23

Vinyl Acetate

Concen: 0.16 ppbv

RT: 5.08 min Scan# 712

Delta R.T. 0.02 min

Lab File: VL038502.D

Acq: 3 Mar 2022 3:59

Tgt Ion: 43 Resp: 15572

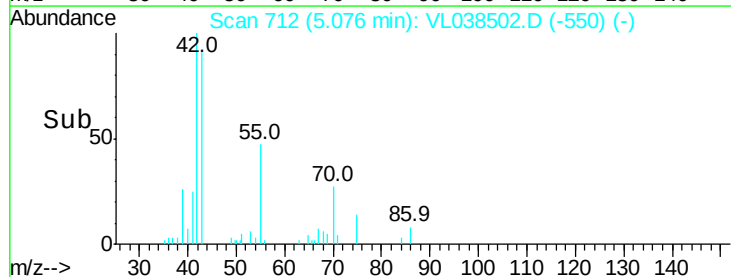
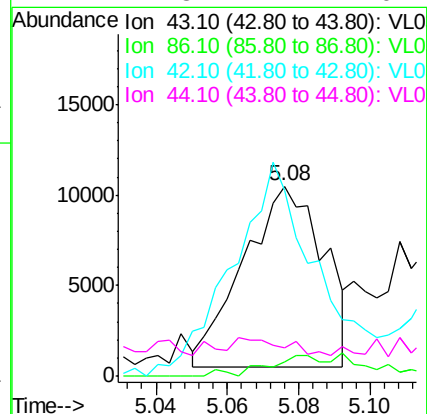
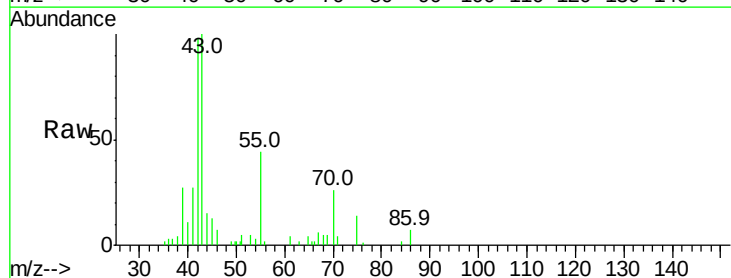
Ion Ratio Lower Upper

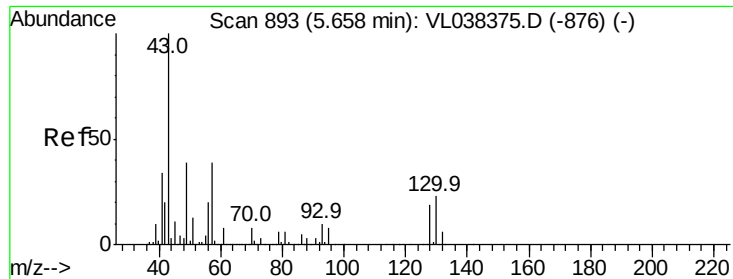
43 100

86 8.4 5.8 8.6

42 85.1 7.4 11.0#

44 4.8 4.2 6.2





#25

Ethyl Acetate

Concen: 0.86 ppbv

RT: 5.69

Delta R.T. MSVOA_L

Lab File:

Acq: 3 Mar 2022 3:59

Tgt Ion: 43 Resp: 173312

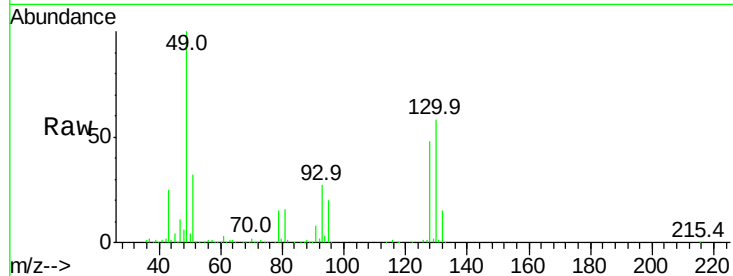
Ion Ratio Lower Upper

43 100

45 17.0 7.8 11.6#

61 12.7 7.5 11.3#

70 9.4 5.4 8.0#

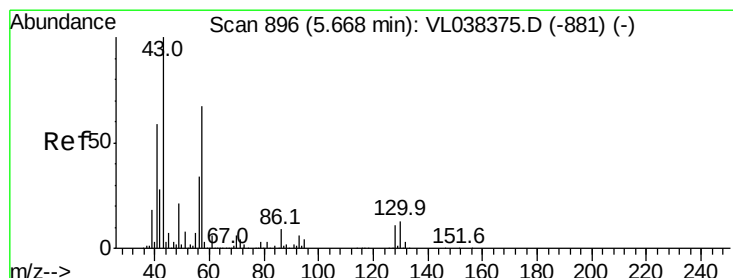
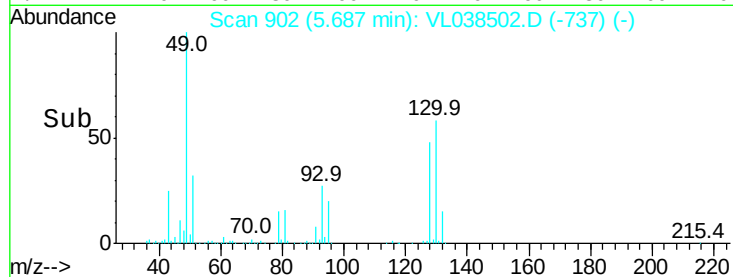
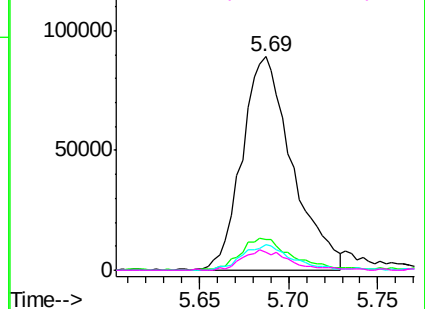


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 0.16 ppbv

RT: 5.70 min Scan# 906

Delta R.T. 0.03 min

Lab File: VL038502.D

Acq: 3 Mar 2022 3:59

Tgt Ion: 57 Resp: 14777

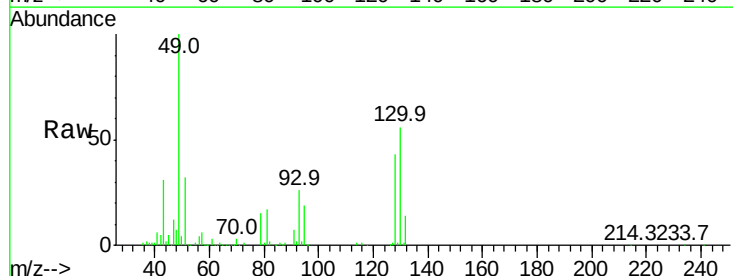
Ion Ratio Lower Upper

57 100

41 135.3 73.1 109.7#

43 1286.4 181.0 271.4#

56 65.6 43.4 65.0#

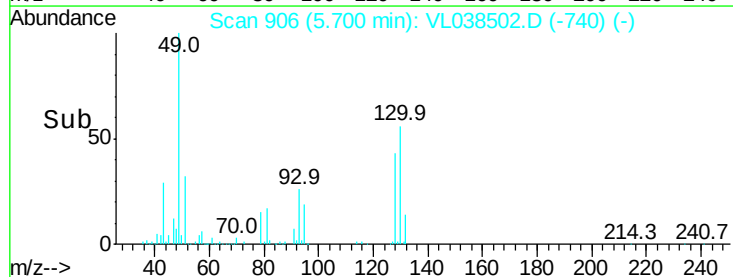
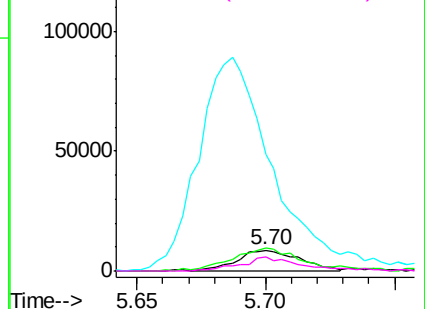


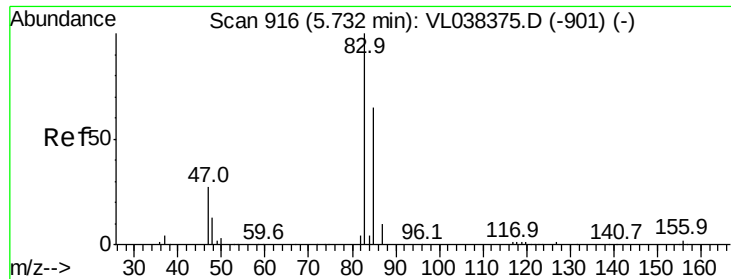
Abundance Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 43.10 (42.80 to 43.80): VL0

Ion 56.10 (55.80 to 56.80): VL0





#29

Chloroform

Concen: 0.03 ppbv

RT: 5.77 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

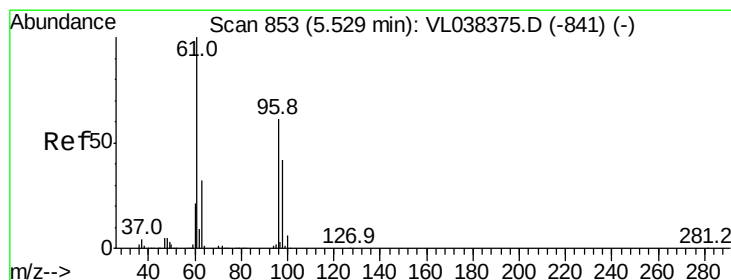
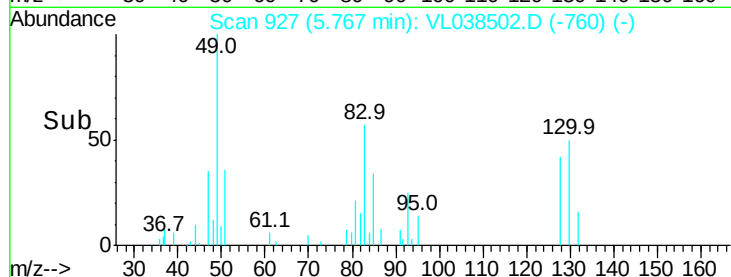
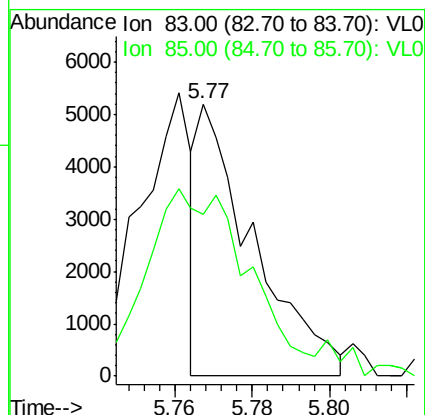
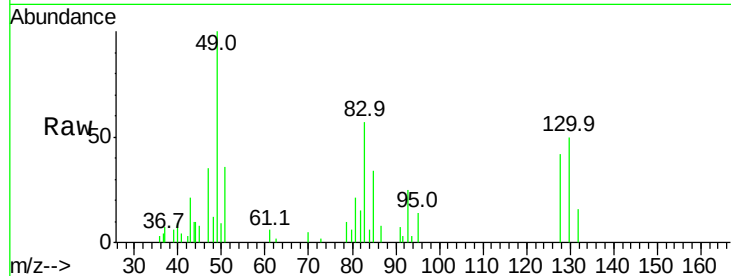
Acq: 3 Mar 2022 3:59

Tgt Ion: 83 Resp: 5119

Ion Ratio Lower Upper

83 100

85 59.1 51.6 77.4



#31

cis-1,2-Dichloroethene

Concen: 0.22 ppbv

RT: 5.69 min Scan# 902

Delta R.T. 0.16 min

Lab File: VL038502.D

Acq: 3 Mar 2022 3:59

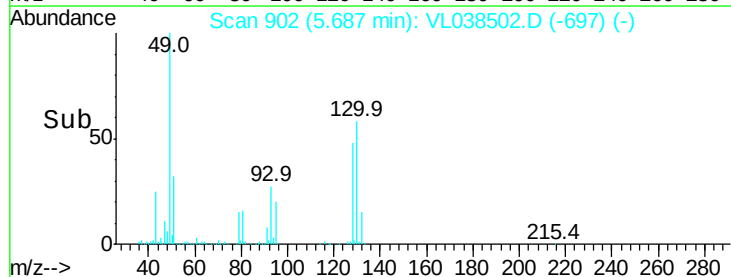
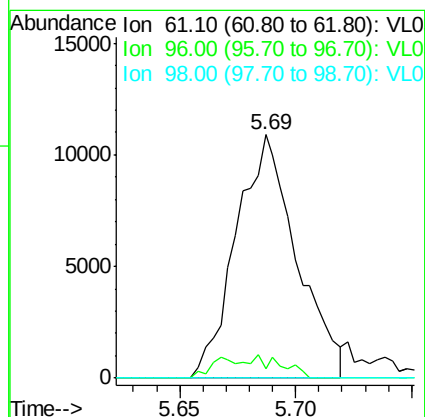
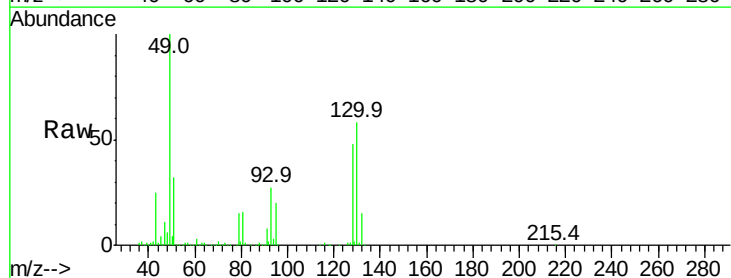
Tgt Ion: 61 Resp: 19762

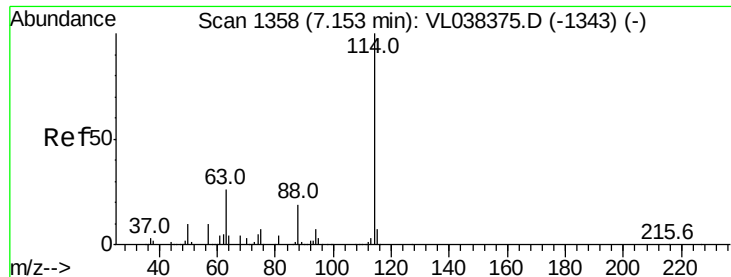
Ion Ratio Lower Upper

61 100

96 3.8 48.6 73.0#

98 0.0 33.2 49.8#

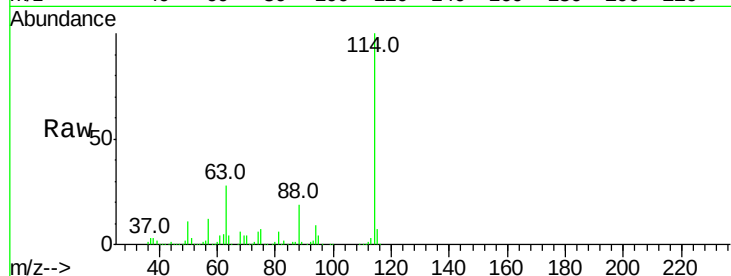




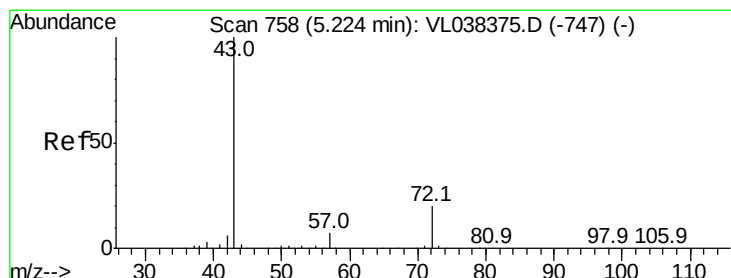
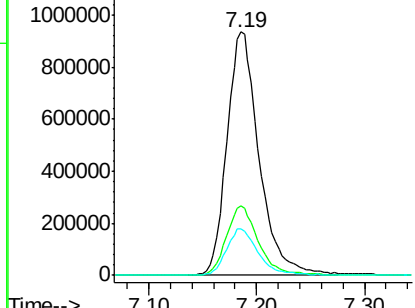
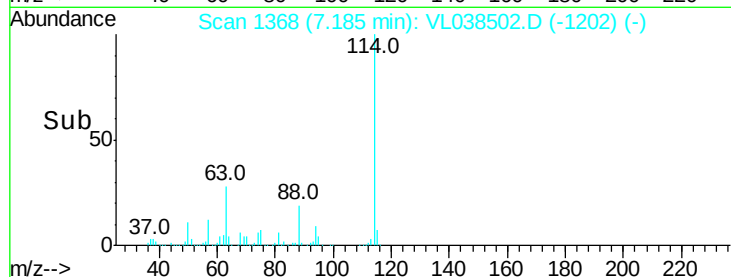
#33
 1,4-Difluorobenzene
 Concen: 10.00 ppbv
 RT: 7.19
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 3 Mar 2022 3:59

Tgt Ion: 114 Resp: 1945365

Ion	Ratio	Lower	Upper
114	100		
63	28.7	22.2	33.2
88	19.1	15.2	22.8



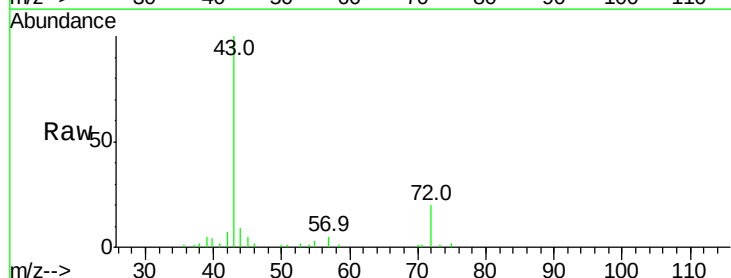
Abundance Ion 114.10 (113.80 to 114.80): VL0
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0



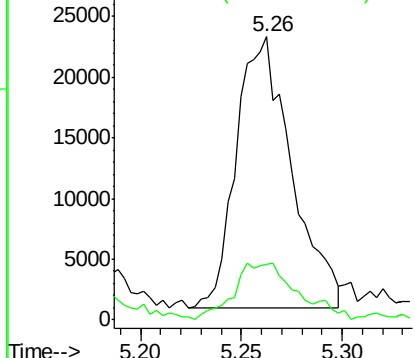
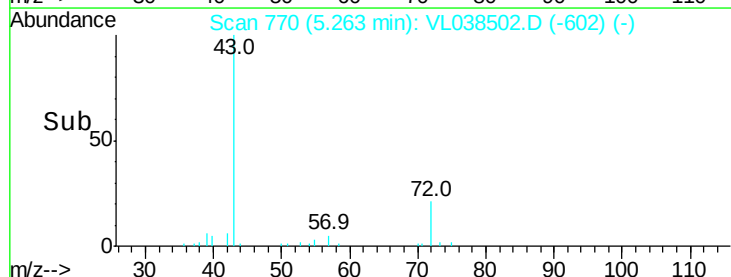
#34
 2-Butanone
 Concen: 0.70 ppbv
 RT: 5.26 min Scan# 770
 Delta R.T. 0.04 min
 Lab File: VL038502.D
 Acq: 3 Mar 2022 3:59

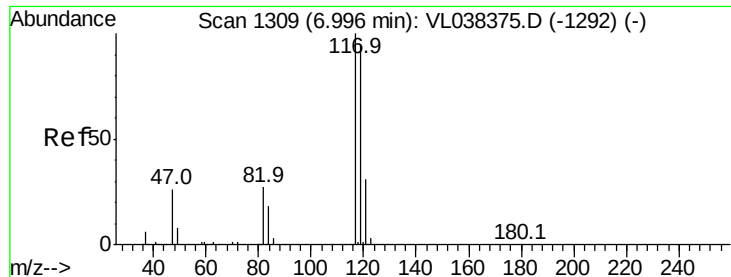
Tgt Ion: 43 Resp: 42955

Ion	Ratio	Lower	Upper
43	100		
72	25.4	17.4	26.2



Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 72.10 (71.80 to 72.80): VL0





#35

Carbon Tetrachloride

Concen: 0.16 ppbv

RT: 7.02 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: IA2

Acq: 3 Mar 2022 3:59

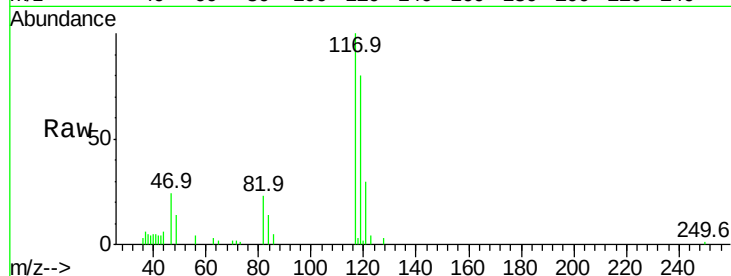
Tgt Ion: 117 Resp: 21977

Ion Ratio Lower Upper

117 100

119 78.3 74.9 112.3

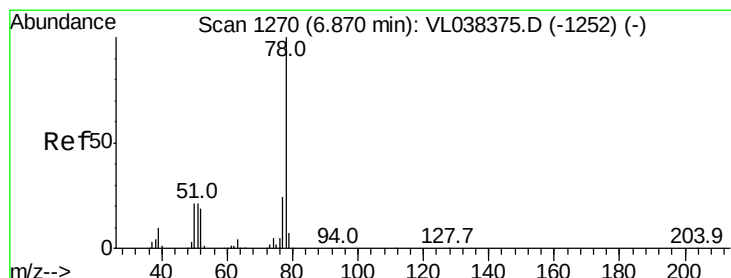
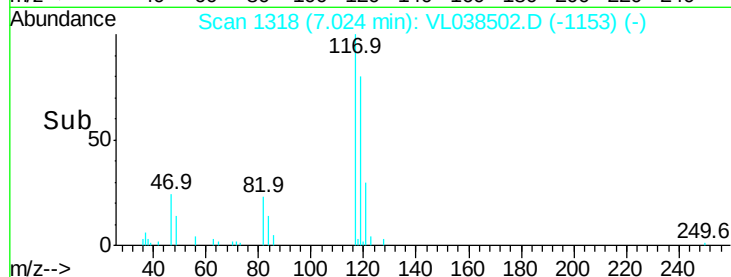
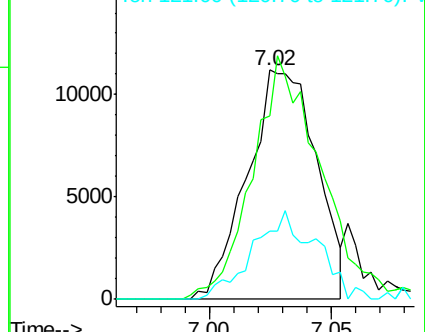
121 29.7 24.8 37.2



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

Ion 121.00 (120.70 to 121.70): V



#36

Benzene

Concen: 0.11 ppbv

RT: 6.90 min Scan# 1279

Delta R.T. 0.03 min

Lab File: VL038502.D

Acq: 3 Mar 2022 3:59

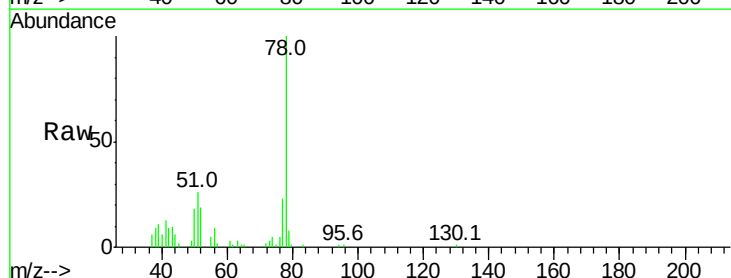
Tgt Ion: 78 Resp: 18867

Ion Ratio Lower Upper

78 100

77 22.7 19.0 28.6

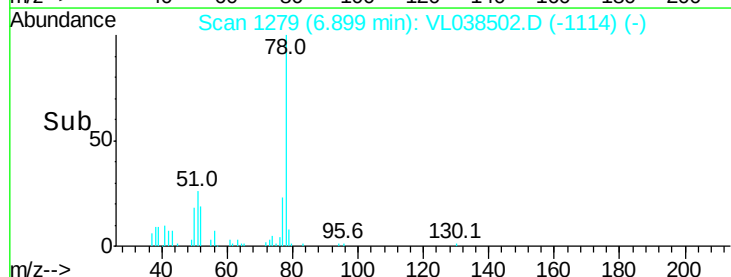
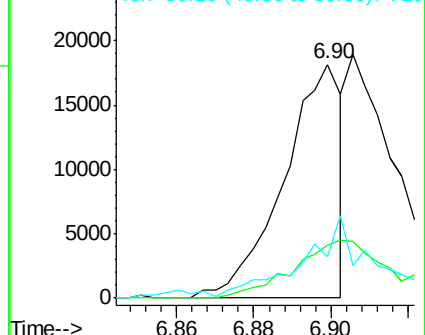
50 15.9 16.6 24.8#

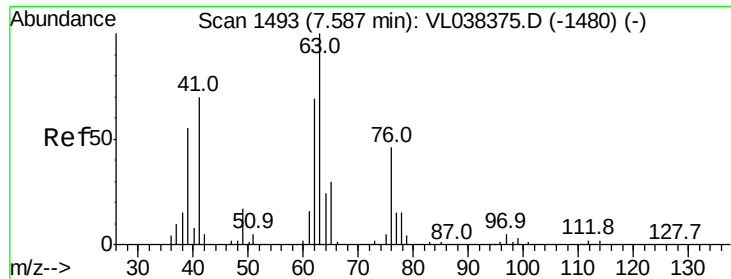


Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

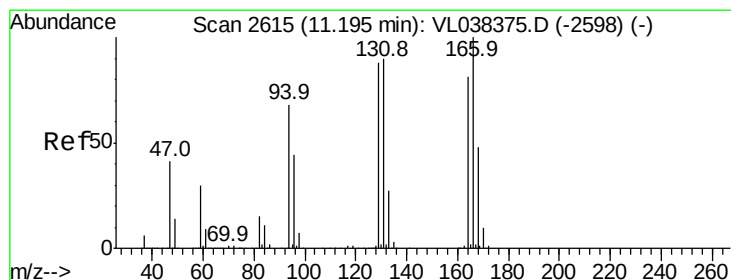
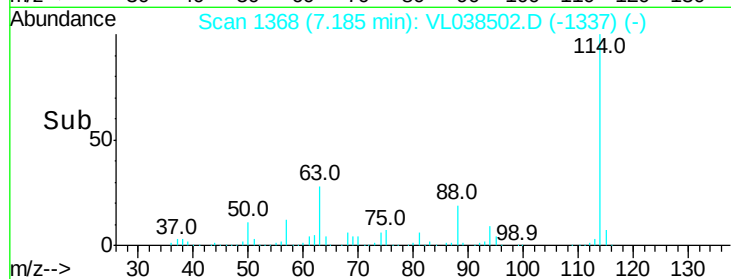
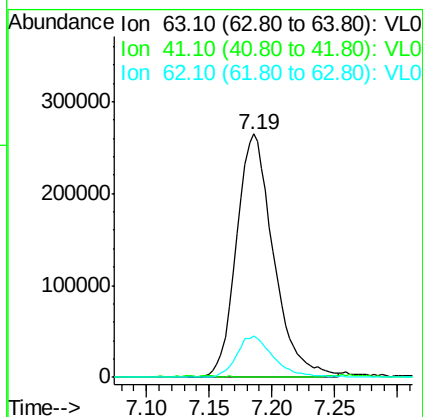
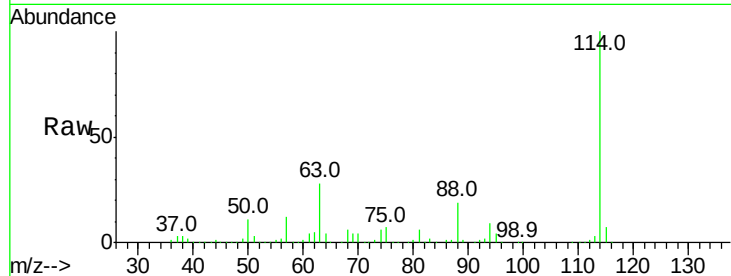
Ion 50.10 (49.80 to 50.80): VL0





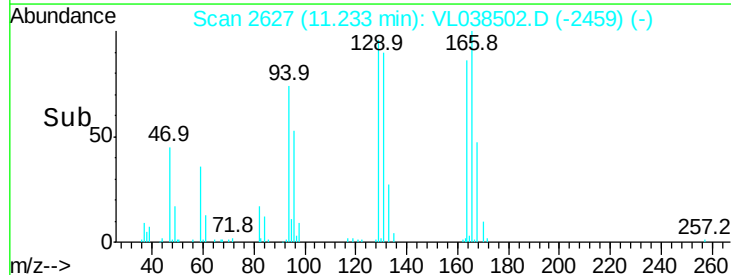
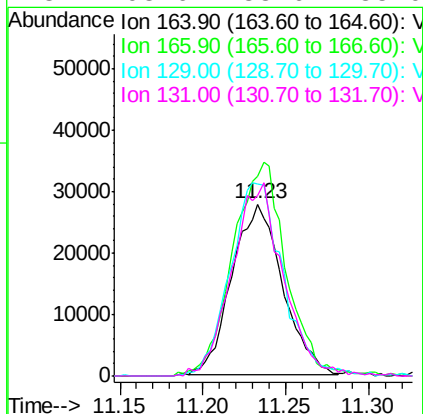
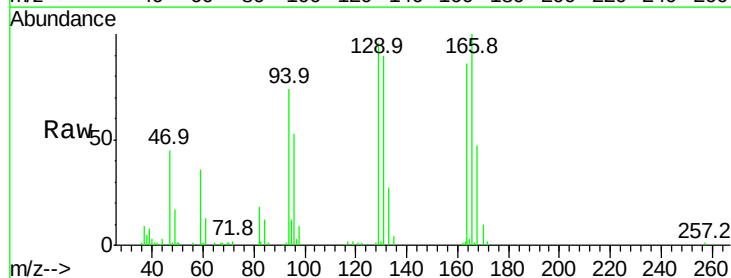
#39
 1,2-Dichloropropane
 Concen: 7.99 ppbv
 RT: 7.19
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 3 Mar 2022 3:59

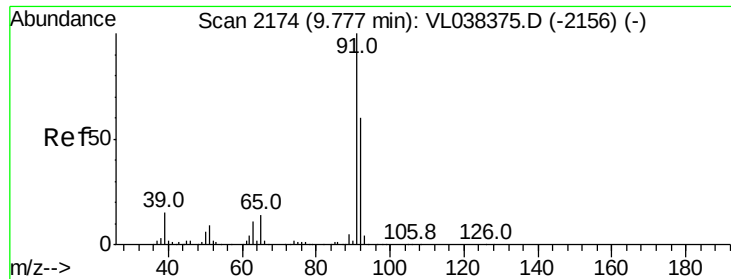
Tgt Ion	Ratio	Lower	Upper
63	100		
41	0.0	56.1	84.1#
62	16.8	55.5	83.3#



#52
 Tetrachloroethene
 Concen: 1.04 ppbv
 RT: 11.23 min Scan# 2627
 Delta R.T. 0.04 min
 Lab File: VL038502.D
 Acq: 3 Mar 2022 3:59

Tgt Ion	Ratio	Lower	Upper
164	100		
166	114.7	98.6	148.0
129	110.6	86.9	130.3
131	103.6	88.6	133.0





#53

Toluene

Concen: 2.49 ppbv

RT: 9.82 Instrument: MSVOA_1

Delta R.T. 0.04 min

Lab File: ClientSampleId: 1A2

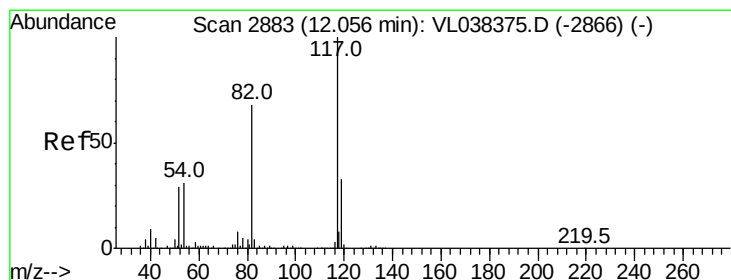
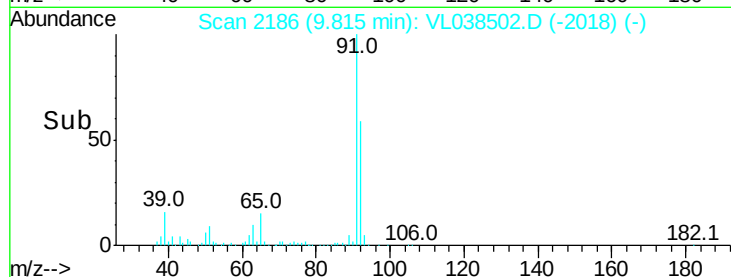
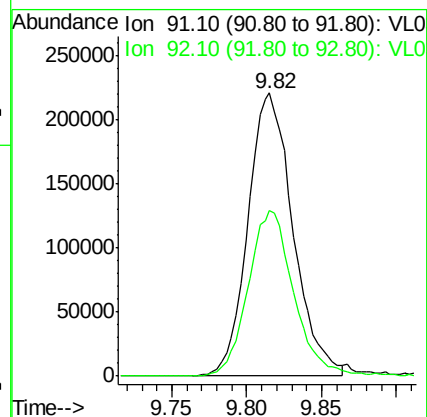
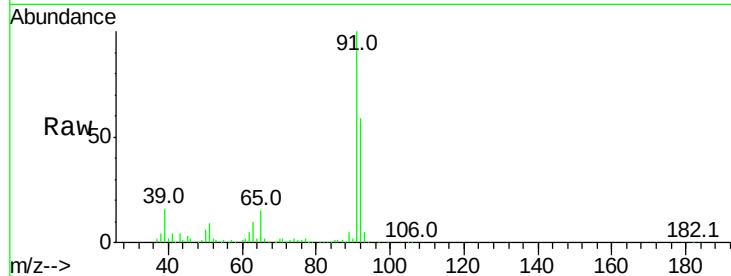
Acq: 3 Mar 2022 3:59

Tgt Ion: 91 Resp: 462460

Ion Ratio Lower Upper

91 100

92 59.8 48.2 72.4



#55

Chlorobenzene-d5

Concen: 10.00 ppbv

RT: 12.10 min Scan# 2895

Delta R.T. 0.04 min

Lab File: VL038502.D

Acq: 3 Mar 2022 3:59

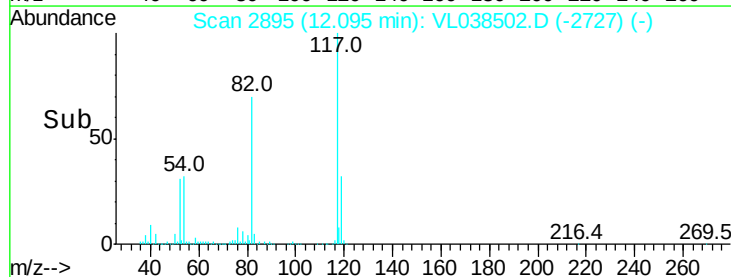
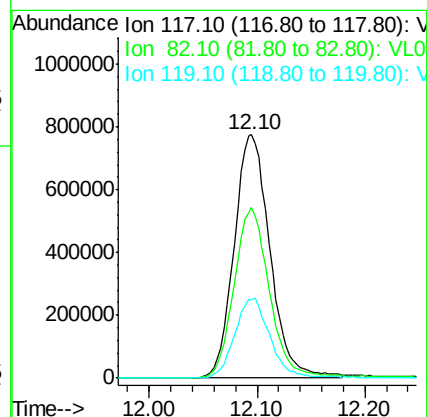
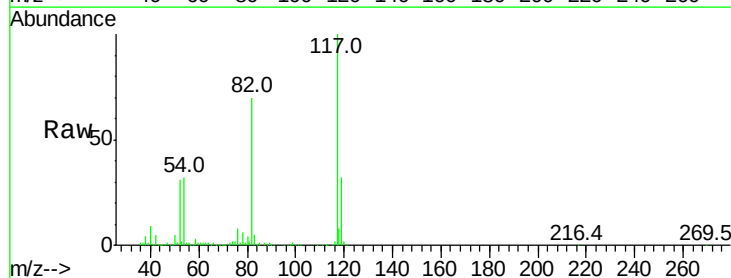
Tgt Ion: 117 Resp: 1800433

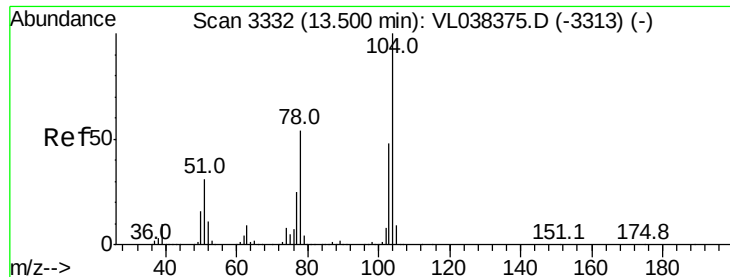
Ion Ratio Lower Upper

117 100

82 70.2 54.9 82.3

119 32.4 46.1 69.1#





#61

Styrene

Concen: 0.04 ppbv

RT: 13.55

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 3 Mar 2022 3:59

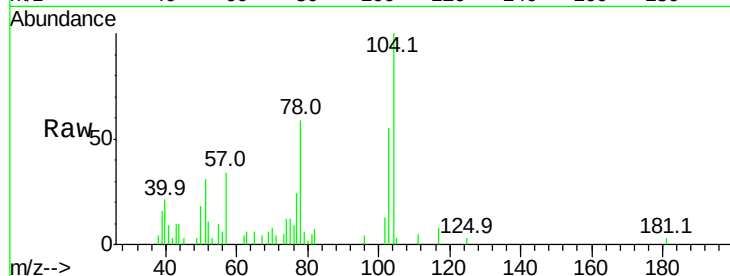
Tgt Ion: 104 Resp: 4125

Ion Ratio Lower Upper

104 100

78 0.0 44.2 66.4#

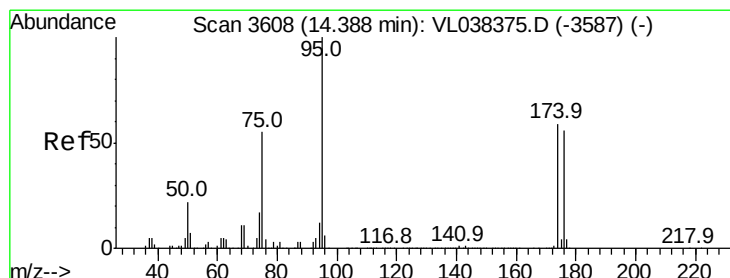
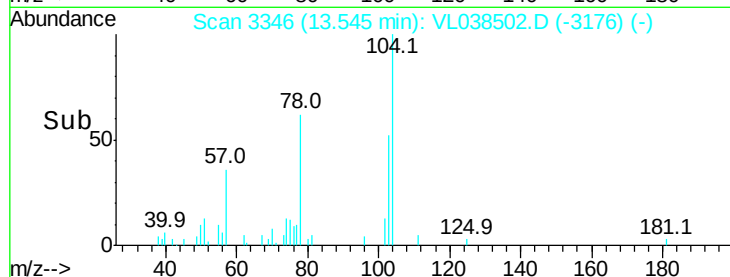
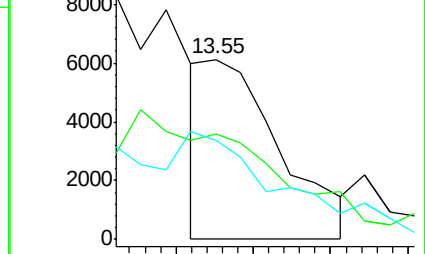
103 183.4 38.4 57.6#



Abundance Ion 104.10 (103.80 to 104.80): V

Ion 78.10 (77.80 to 78.80): VL0

Ion 103.10 (102.80 to 103.80): V



#68

1-Bromo-4-Fluorobenzene

Concen: 9.97 ppbv

RT: 14.42 min Scan# 3619

Delta R.T. 0.04 min

Lab File: VL038502.D

Acq: 3 Mar 2022 3:59

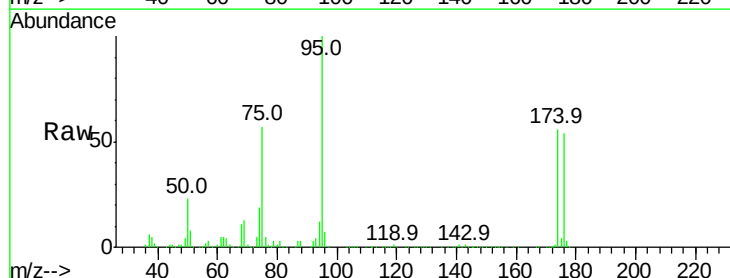
Tgt Ion: 95 Resp: 1485829

Ion Ratio Lower Upper

95 100

174 59.0 49.0 73.4

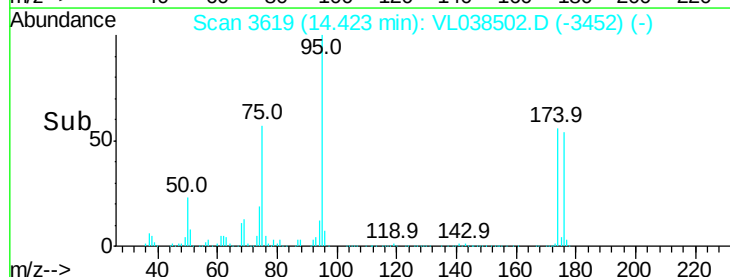
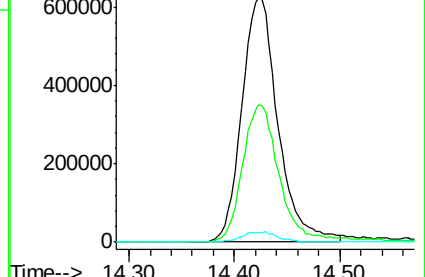
175 4.3 3.6 5.4

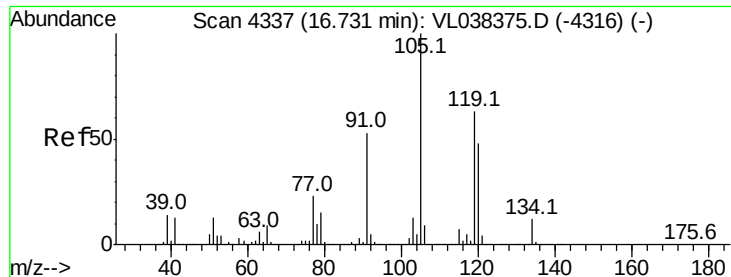


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

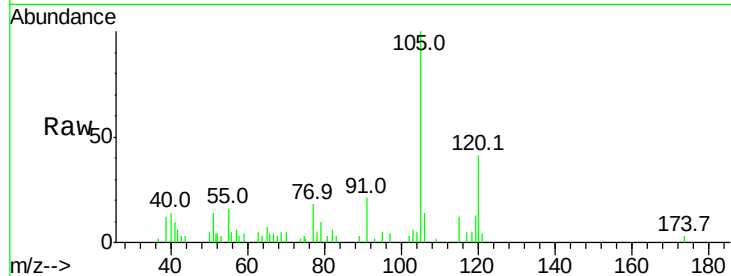
Ion 175.00 (174.70 to 175.70): V





#74
 1,2,4-Trimethylbenzene
 Concen: 0.11 ppbv
 RT: 16.77
 Delta R.T: MSVOA_L
 Lab File: ClientSampleId :
 Acq: 3 Mar 2022 3:59

Tgt Ion:	105	Resp:	23578
Ion Ratio	Lower	Upper	
105	100		
120	40.8	38.2	57.4
91	20.6	42.7	64.1#
77	17.5	18.5	27.7#



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

