

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL032322\
 Data File : VL038730.D
 Acq On : 24 Mar 2022 00:30
 Operator : SY/AP
 Sample : N2049-01
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Mar 24 04:36:24 2022
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032122AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Mar 21 17:09:26 2022
 QLast Update : Mon Mar 21 17:09:26 2022
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	791469	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	2066137	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.07	117	1860278	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.40	95	1334367	9.36	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	93.60%

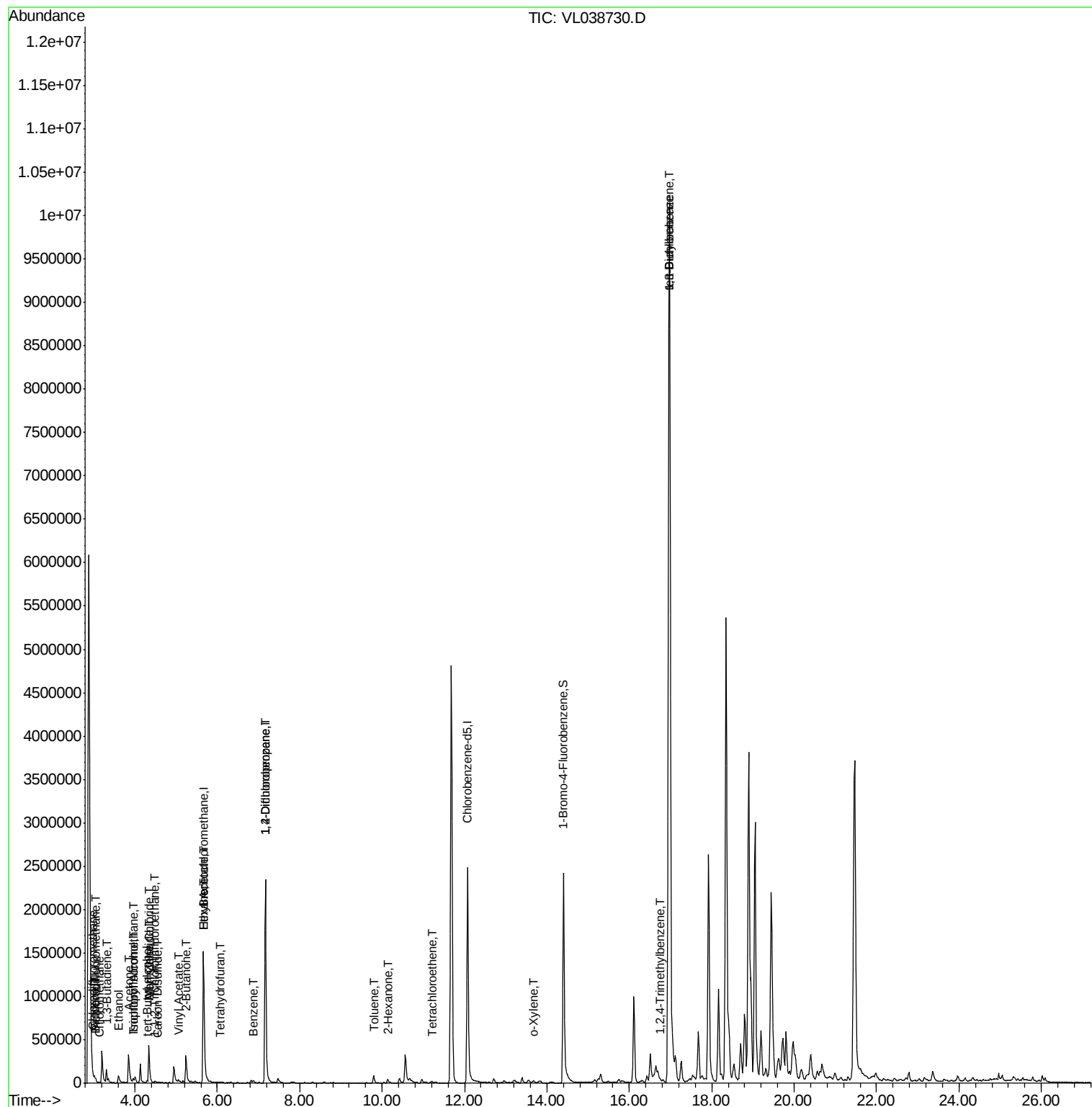
Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.05	85	31341	0.295	ppbv 89
3) Chlorodifluoromethane	2.99	51	26917	0.322	ppbv 98
4) Chloromethane	3.14	50	4465	0.097	ppbv 94
9) Propene	3.01	41	27256	0.675	ppbv 88
11) Trichlorofluoromethane	3.95	101	24455	0.260	ppbv 96
12) 1,1,2-Trichlorotrifluoroet	4.48	101	3860	0.053	ppbv # 49
13) Ethanol	3.60	45	114536	25.728	ppbv 90
15) Acetone	3.84	43	432058	6.326	ppbv # 87
16) 1,3-Butadiene	3.31	39	42590	1.099	ppbv # 15
17) tert-Butyl alcohol	4.30	59	15906	0.267	ppbv # 76
19) Isopropyl Alcohol	3.98	45	15679	0.414	ppbv # 91
20) Methylene Chloride	4.34	84	192603	6.696	ppbv 97
21) Allyl Chloride	4.35	41	1549	0.032	ppbv # 82
23) Vinyl Acetate	5.06	43	10140	0.153	ppbv # 48
25) Ethyl Acetate	5.68	43	86803	0.505	ppbv # 81
26) Hexane	5.68	57	126614	1.645	ppbv # 40
27) Carbon Disulfide	4.55	76	4807	0.064	ppbv # 67
34) 2-Butanone	5.24	43	439790	5.378	ppbv 96
36) Benzene	6.88	78	10549	0.066	ppbv # 94
39) 1,2-Dichloropropane	7.17	63	480973	7.715	ppbv # 28
41) Tetrahydrofuran	6.05	42	2159	0.035	ppbv # 1
51) 2-Hexanone	10.14	43	38818	0.355	ppbv # 99
52) Tetrachloroethene	11.21	164	2715	0.047	ppbv 89
53) Toluene	9.80	91	70238	0.410	ppbv 98
60) o-Xylene	13.68	91	11056	0.061	ppbv 100
65) tert-Butylbenzene	16.98	119	207963	0.852	ppbv # 24
74) 1,2,4-Trimethylbenzene	16.75	105	7937	0.038	ppbv # 81
75) 1,3-Dichlorobenzene	16.99	146	29001	0.215	ppbv # 1

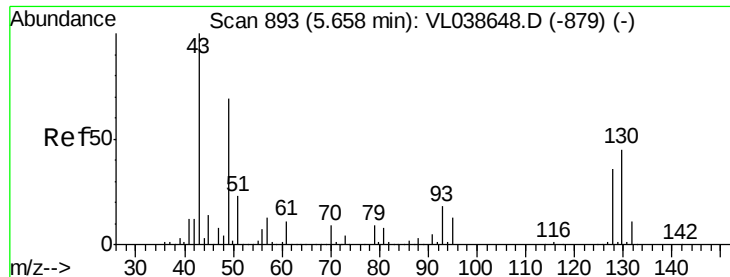
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL032322\
Data File : VL038730.D
Acq On : 24 Mar 2022 00:30
Operator : SY/AP
Sample : N2049-01
Misc : 400mL/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :

Quant Time: Mar 24 04:36:24 2022
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL032122AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Mar 21 17:09:26 2022
QLast Update : Mon Mar 21 17:09:26 2022
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 24 Mar 2022 00:30

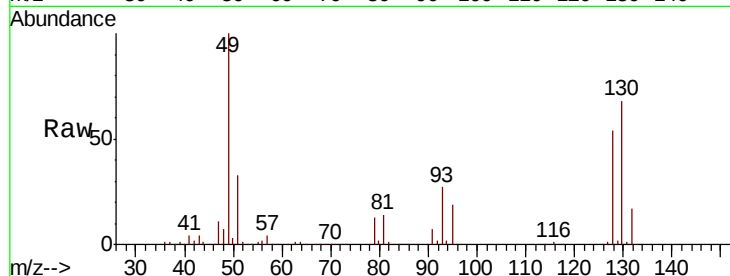
Tot Ion: 49 Resp: 791469

Ion Ratio Lower Upper

49 100

128 54.9 26.2 78.6

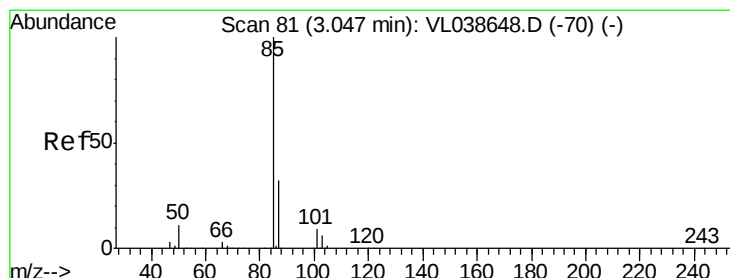
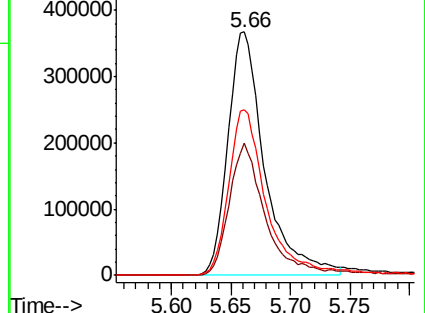
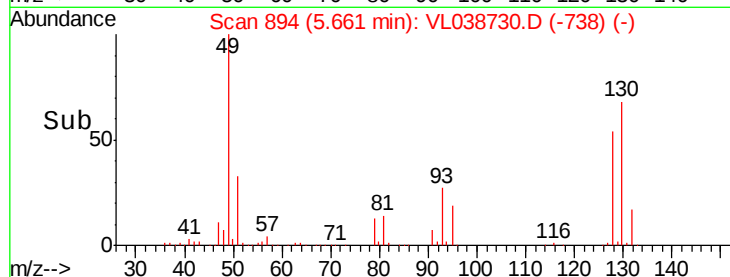
130 70.4 33.7 101.1



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: 0.295 ppbv

RT: 3.05 min Scan# 81

Delta R.T. -0.00 min

Lab File: VL038730.D

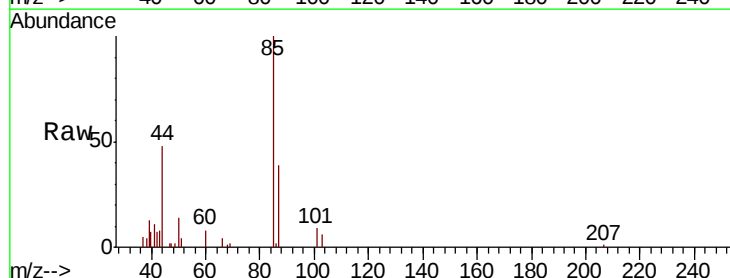
Acq: 24 Mar 2022 00:30

Tgt Ion: 85 Resp: 31341

Ion Ratio Lower Upper

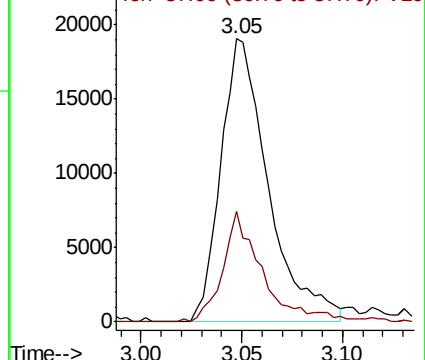
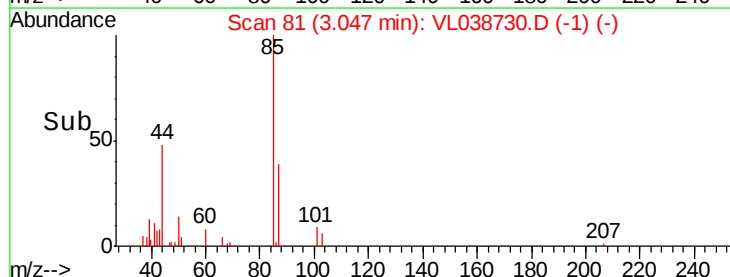
85 100

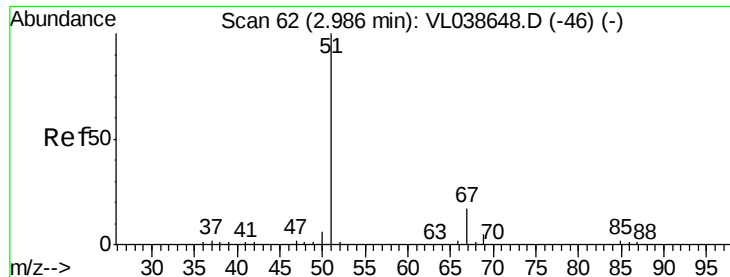
87 38.9 26.0 39.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.322 ppbv

RT: 2.99 Instrument:

Delta R.T. MSVOA.L

Lab File: ClientSampleId:

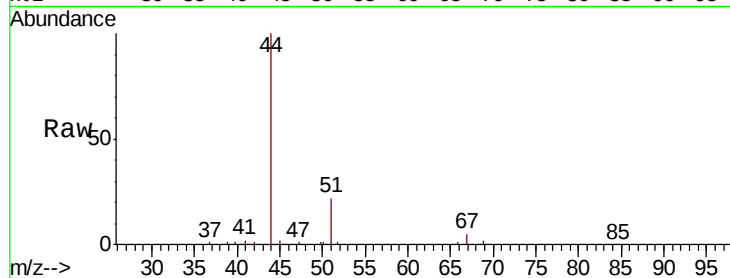
Acq: 24 Mar 2022 00:30

Tot Ion: 51 Resp: 26917

Ion Ratio Lower Upper

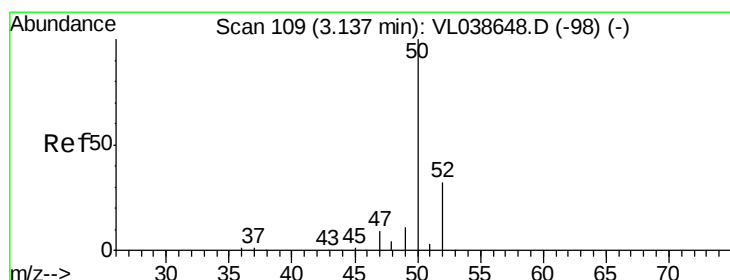
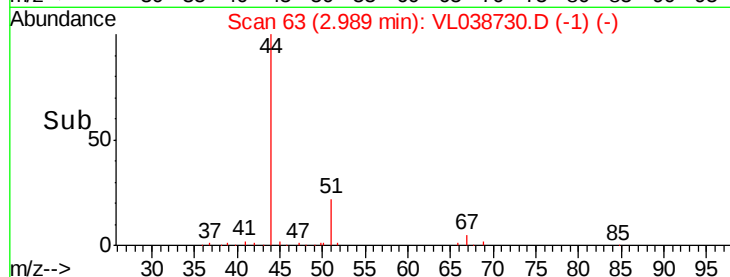
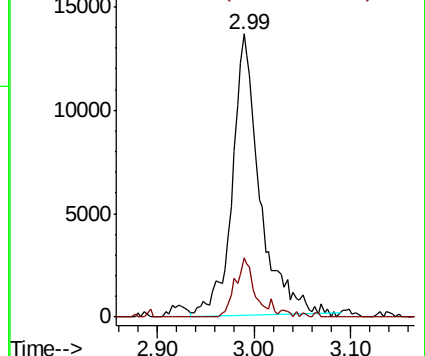
51 100

67 16.9 14.1 21.1



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.097 ppbv

RT: 3.14 min Scan# 110

Delta R.T. 0.00 min

Lab File: VL038730.D

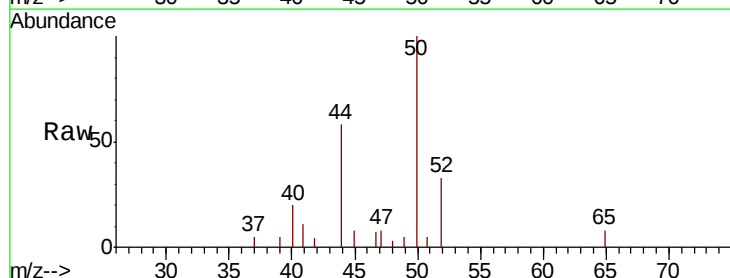
Acq: 24 Mar 2022 00:30

Tgt Ion: 50 Resp: 4465

Ion Ratio Lower Upper

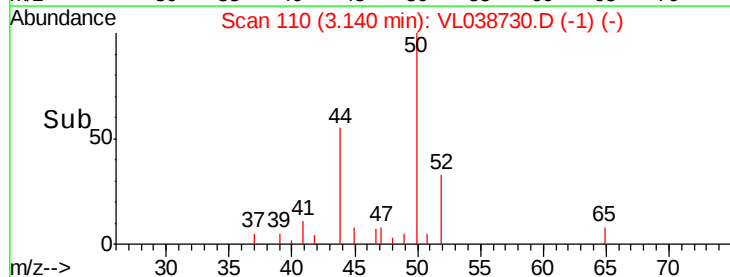
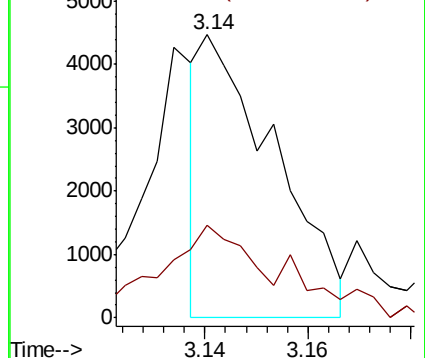
50 100

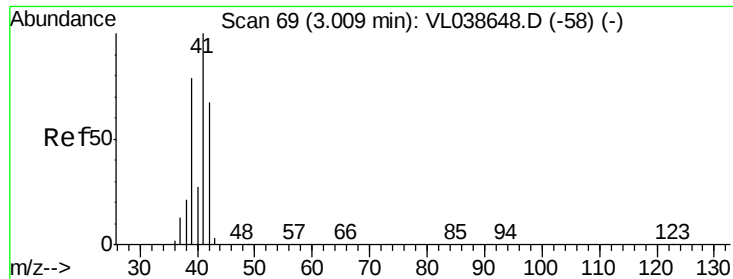
52 28.7 25.5 38.3



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 0.675 ppbv

RT: 3.01 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

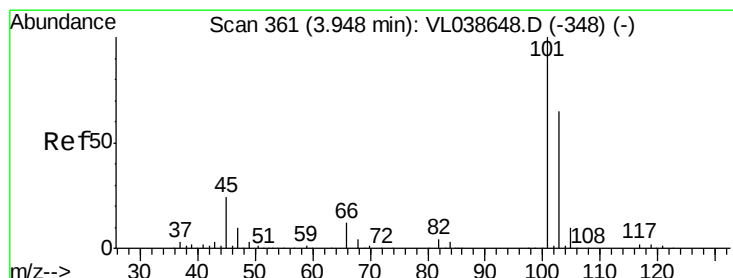
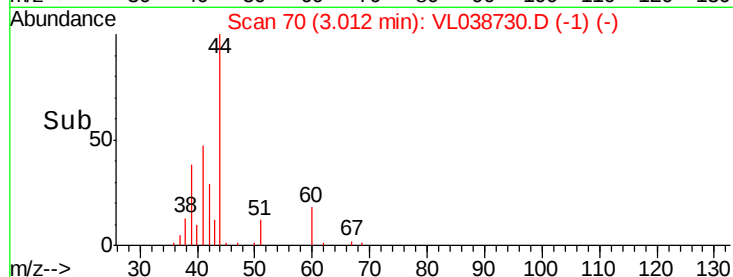
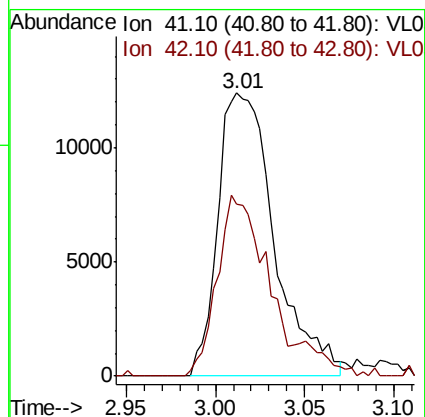
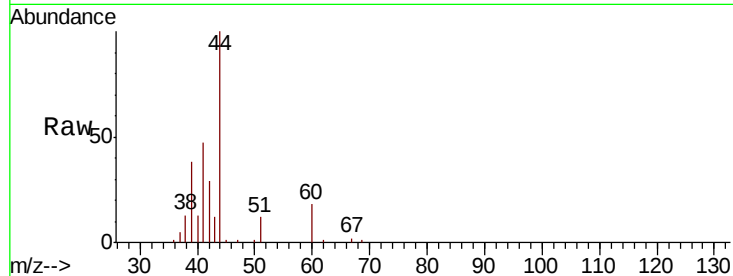
Acq: 24 Mar 2022 00:30

Tot Ion: 41 Resp: 27256

Ion Ratio Lower Upper

41 100

42 60.8 56.2 84.4



#11

Trichlorofluoromethane

Concen: 0.260 ppbv

RT: 3.95 min Scan# 362

Delta R.T. 0.00 min

Lab File: VL038730.D

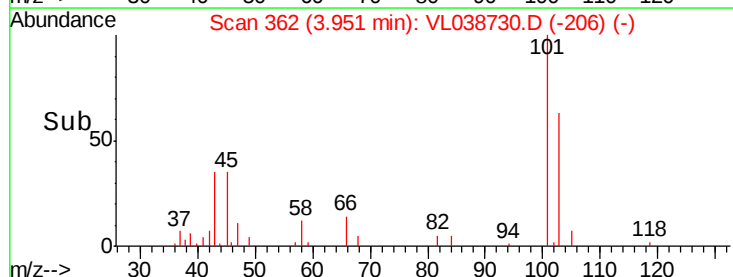
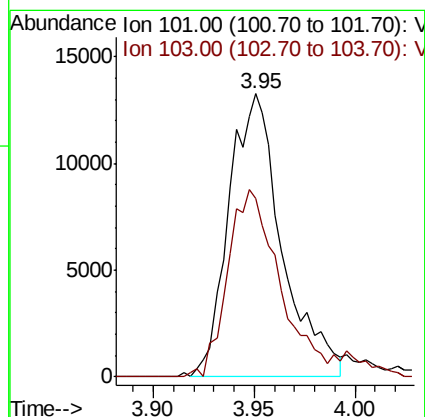
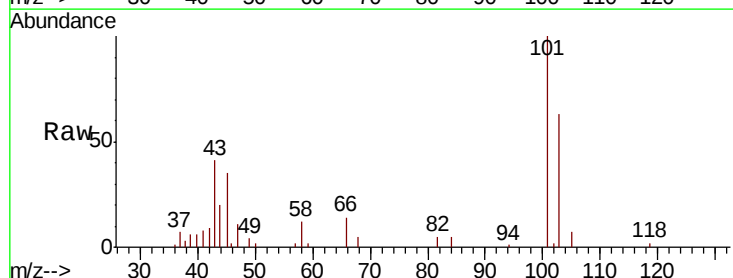
Acq: 24 Mar 2022 00:30

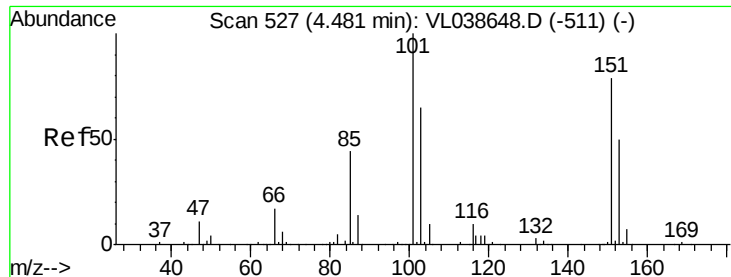
Tgt Ion:101 Resp: 24455

Ion Ratio Lower Upper

101 100

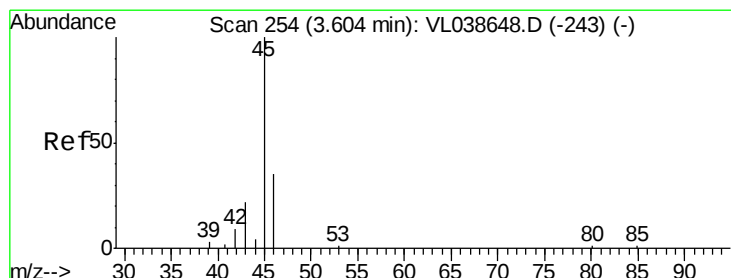
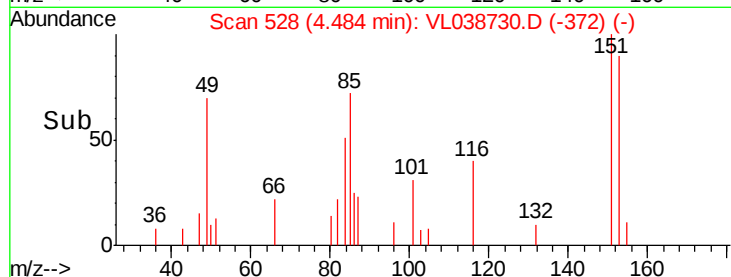
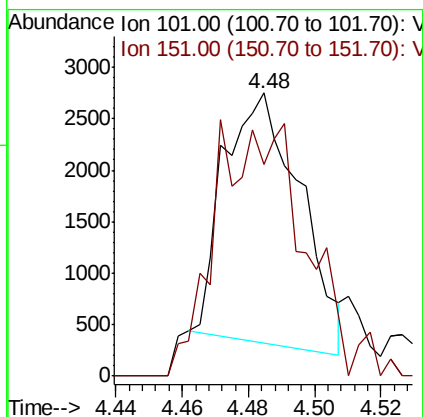
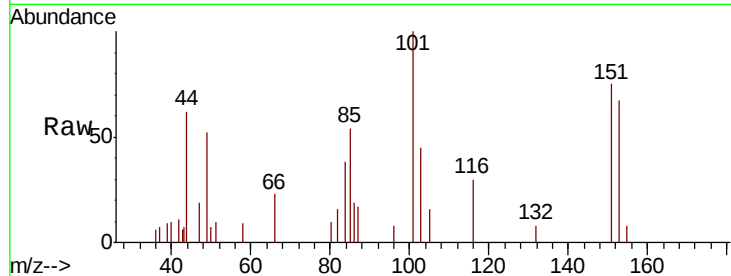
103 61.5 51.9 77.9





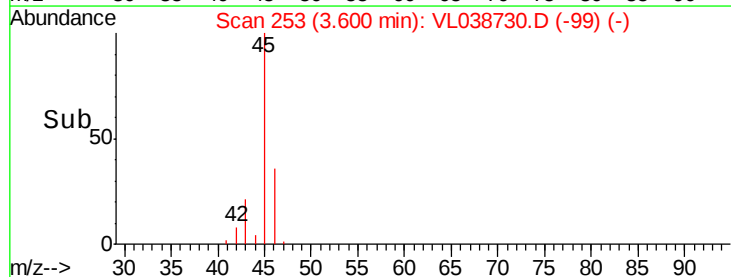
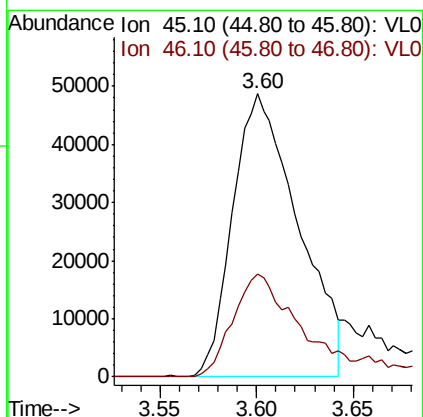
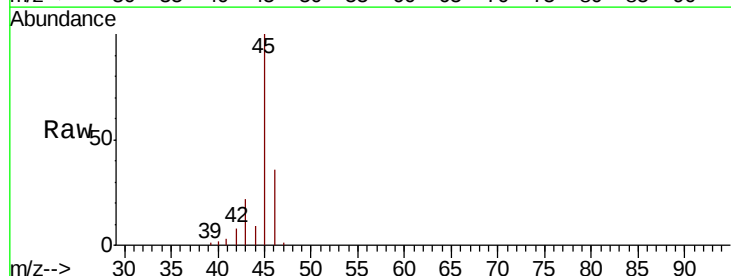
#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.053 ppbv
 RT: 4.48
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId:
 Acq: 24 Mar 2022 00:30

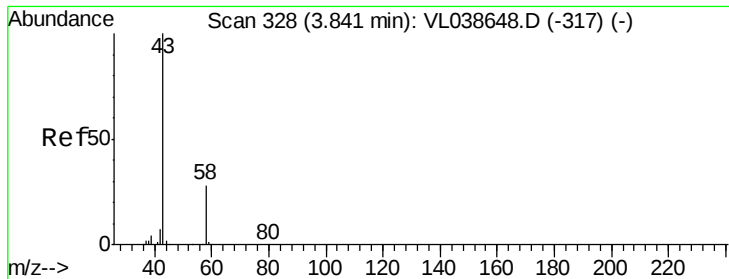
Tot Ion: 101 Resp: 3860
 Ion Ratio Lower Upper
 101 100
 151 123.0 62.9 94.3#



#13
 Ethanol
 Concen: 25.728 ppbv
 RT: 3.60 min Scan# 253
 Delta R.T. -0.00 min
 Lab File: VL038730.D
 Acq: 24 Mar 2022 00:30

Tgt Ion: 45 Resp: 114536
 Ion Ratio Lower Upper
 45 100
 46 44.0 15.1 60.5





#15

Acetone

Concen: 6.326 ppbv

RT: 3.84 Instrument :

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

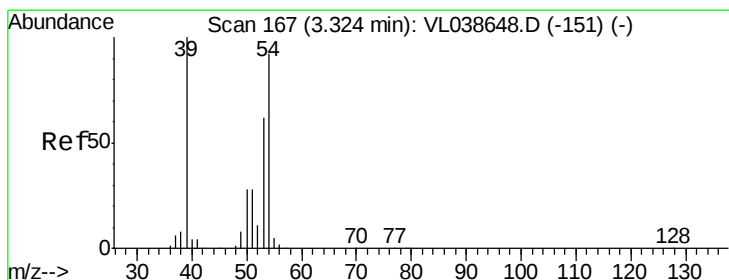
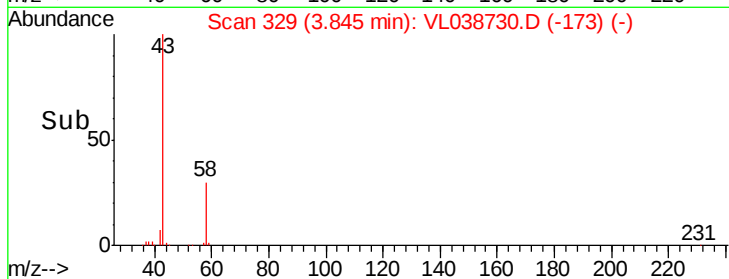
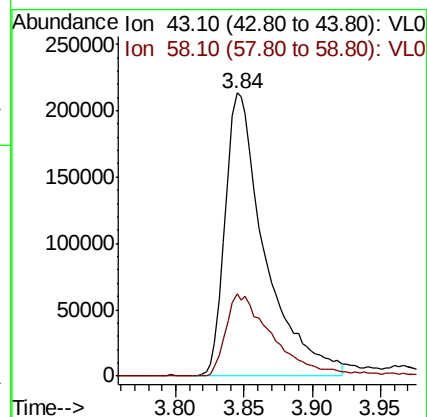
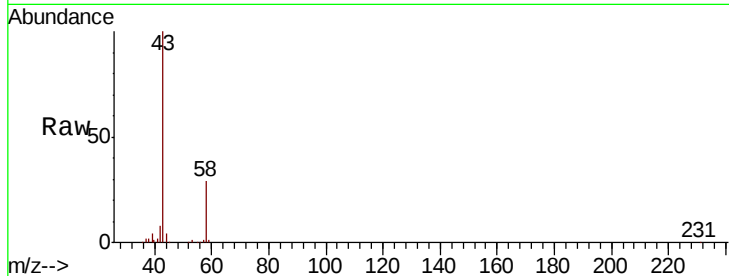
Acq: 24 Mar 2022 00:30

Tot Ion: 43 Resp: 432058

Ion Ratio Lower Upper

43 100

58 36.2 23.3 34.9#



#16

1,3-Butadiene

Concen: 1.099 ppbv

RT: 3.31 min Scan# 162

Delta R.T. -0.02 min

Lab File: VL038730.D

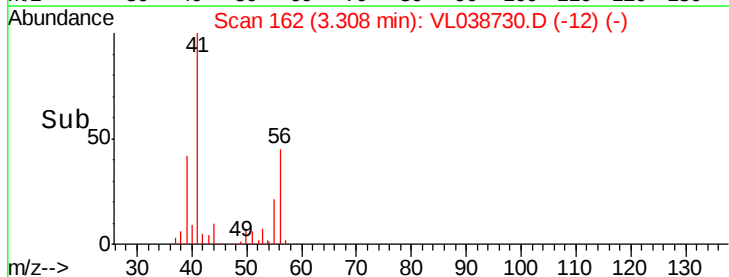
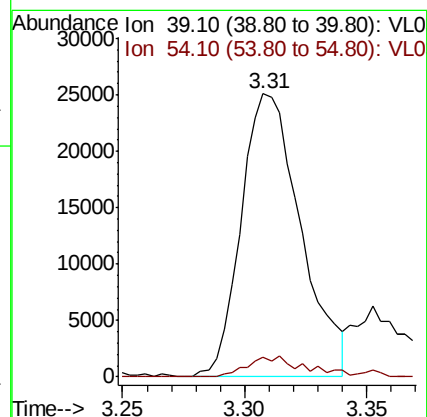
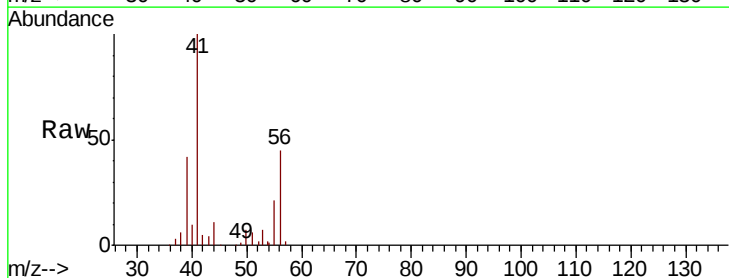
Acq: 24 Mar 2022 00:30

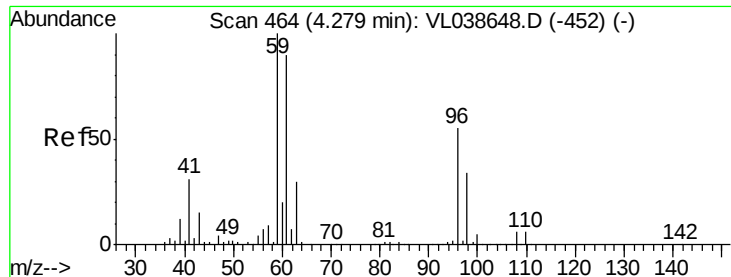
Tgt Ion: 39 Resp: 42590

Ion Ratio Lower Upper

39 100

54 7.7 69.1 103.7#





#17

tert-Butyl alcohol

Concen: 0.267 ppbv

RT: 4.30 Instrument:

Delta R.T. MSVOA.L

Lab File: ClientSampleId:

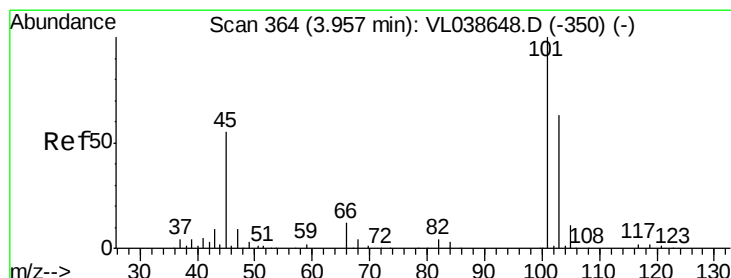
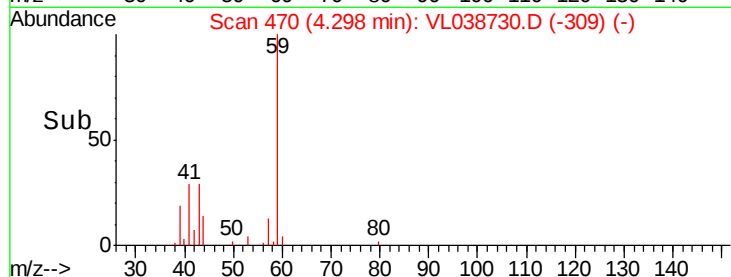
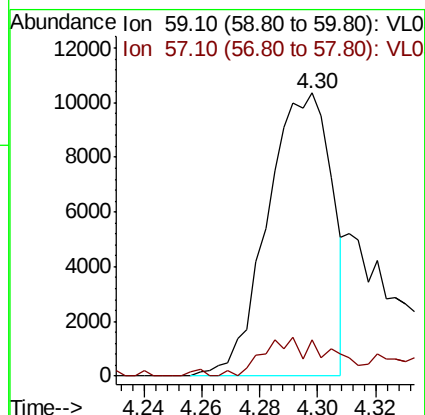
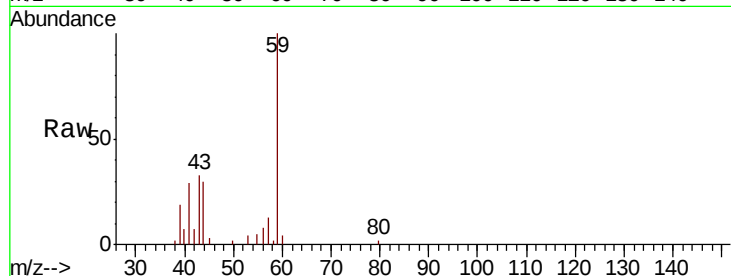
Acq: 24 Mar 2022 00:30

Tot Ion: 59 Resp: 15906

Ion Ratio Lower Upper

59 100

57 19.2 8.2 12.2#



#19

Isopropyl Alcohol

Concen: 0.414 ppbv

RT: 3.98 min Scan# 370

Delta R.T. 0.02 min

Lab File: VL038730.D

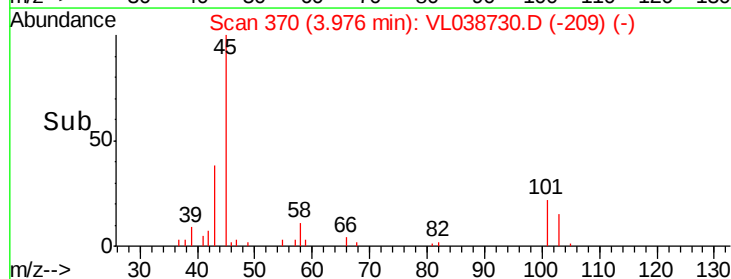
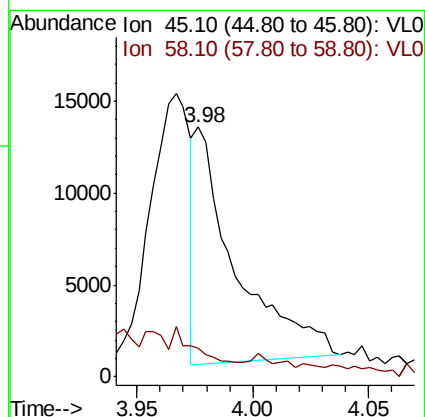
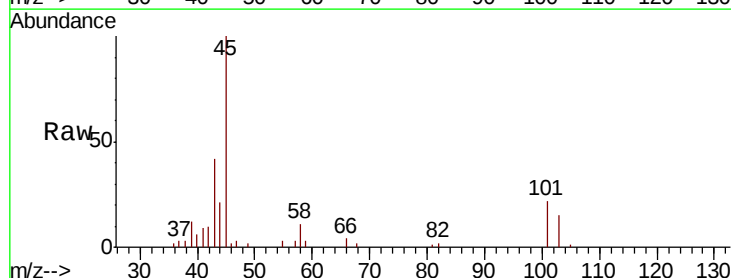
Acq: 24 Mar 2022 00:30

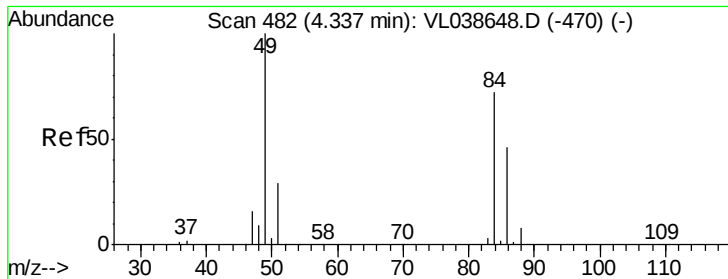
Tgt Ion: 45 Resp: 15679

Ion Ratio Lower Upper

45 100

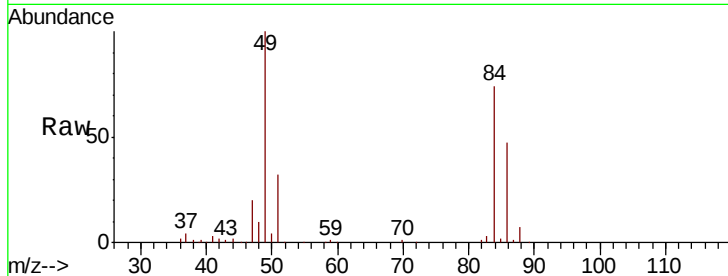
58 0.0 2.3 3.5#





#20
Methvlene Chloride
Concen: 6.696 ppbv
RT: 4.34 min
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 24 Mar 2022 00:30

Tot Ion:	84	Resp:	192603
Ion	Ratio	Lower	Upper
84	100		
49	134.5	111.2	166.8
51	42.3	32.8	49.2
86	63.3	51.4	77.0



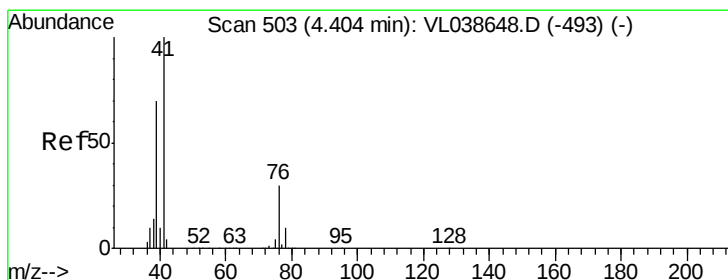
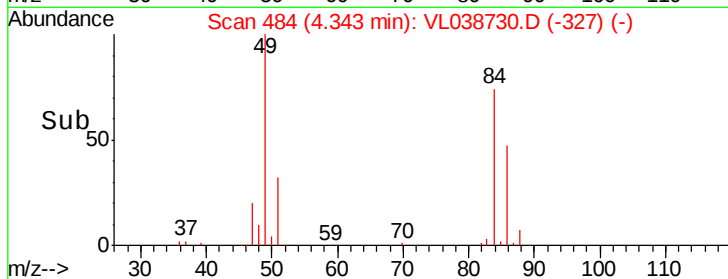
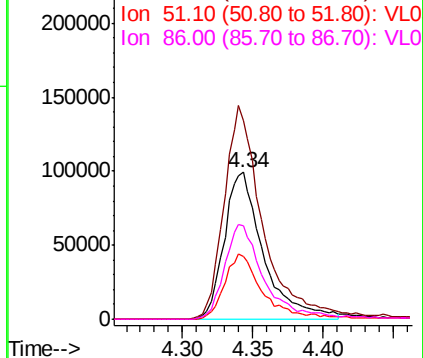
Abundance

Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

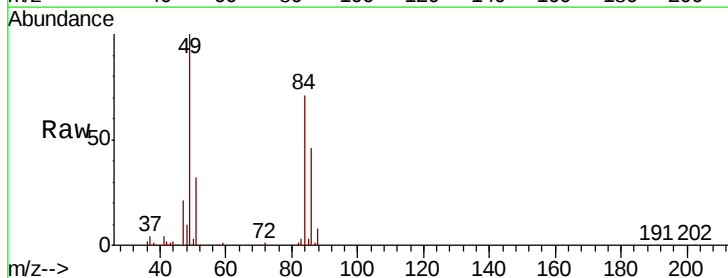
Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0



#21
Allyl Chloride
Concen: 0.032 ppbv
RT: 4.35 min Scan# 485
Delta R.T. -0.06 min
Lab File: VL038730.D
Acq: 24 Mar 2022 00:30

Tgt Ion:	41	Resp:	1549
Ion	Ratio	Lower	Upper
41	100		
76	0.0	25.0	37.6#
39	70.1	56.6	85.0

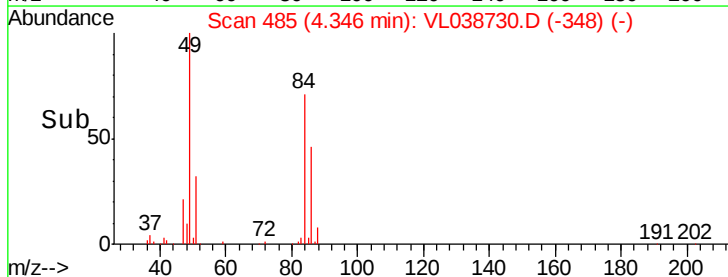
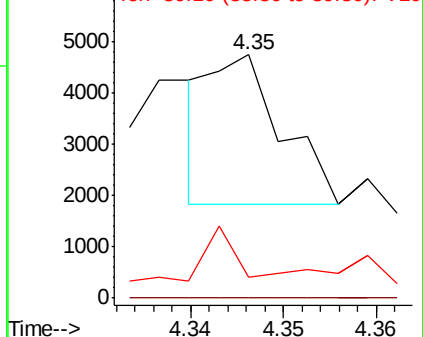


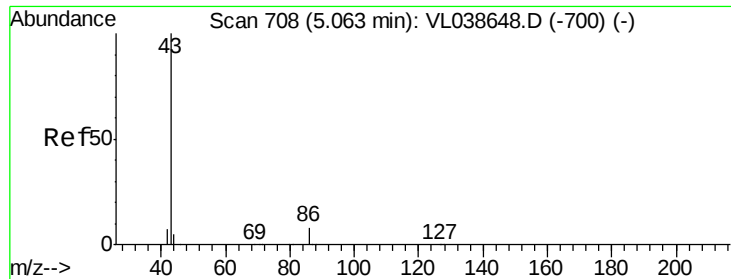
Abundance

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





#23

Vinyl Acetate

Concen: 0.153 ppbv

RT: 5.06 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 24 Mar 2022 00:30

Tot Ion: 43 Resp: 10140

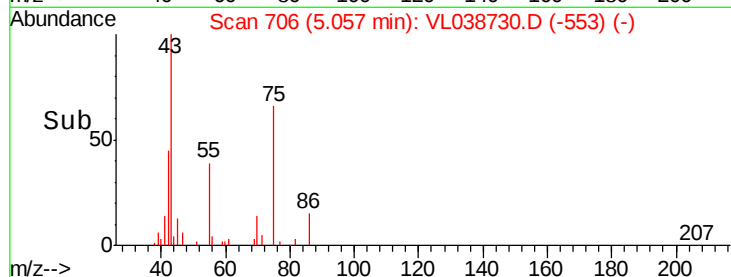
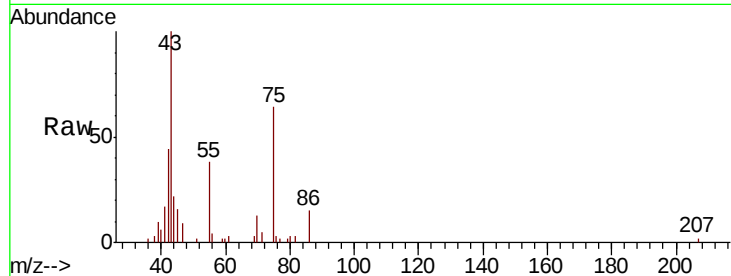
Ion Ratio Lower Upper

43 100

86 16.0 5.6 8.4#

42 42.3 6.8 10.2#

44 10.7 4.2 6.2#

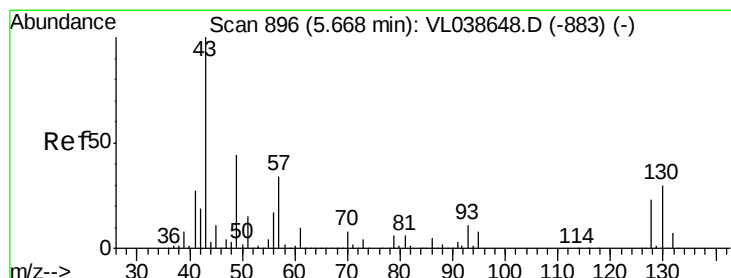
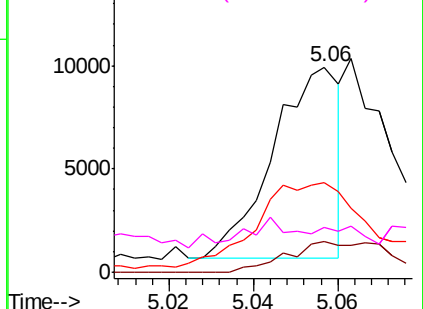


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 0.505 ppbv

RT: 5.68 min Scan# 900

Delta R.T. 0.01 min

Lab File: VL038730.D

Acq: 24 Mar 2022 00:30

Tgt Ion: 43 Resp: 86803

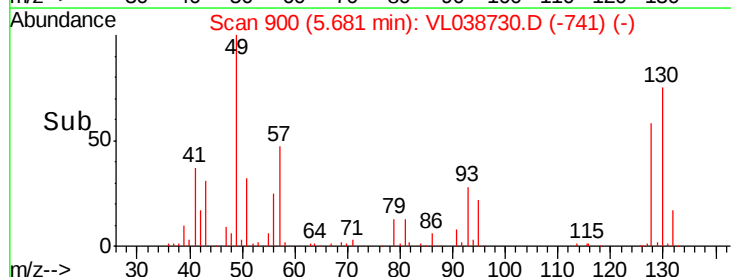
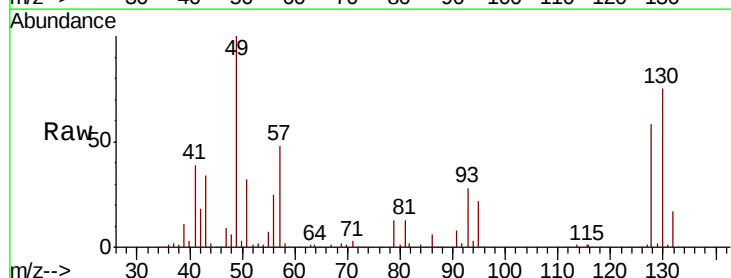
Ion Ratio Lower Upper

43 100

45 4.1 8.2 12.4#

61 1.1 8.3 12.5#

70 2.5 5.6 8.4#

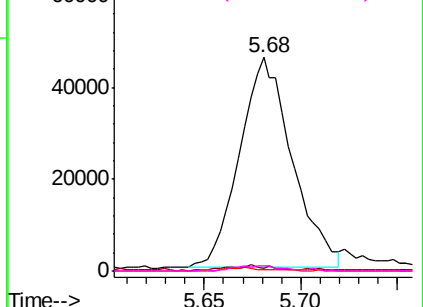


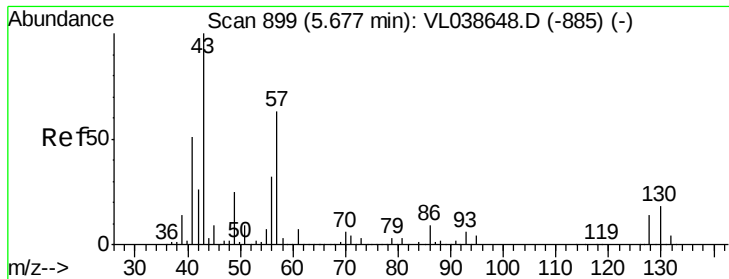
Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

Ion 61.10 (60.80 to 61.80): VL0

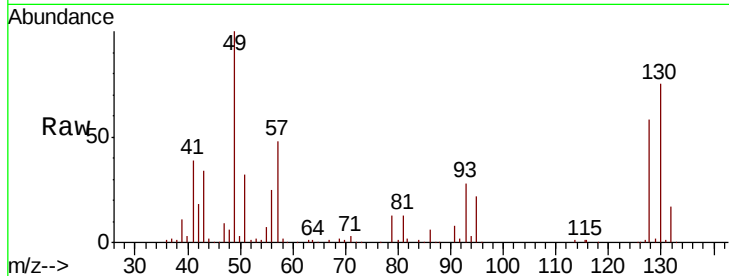
Ion 70.10 (69.80 to 70.80): VL0





#26
Hexane
Concen: 1.645 ppbv
RT: 5.68
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 24 Mar 2022 00:30

Tot Ion	57	Resp	126614
Ion Ratio	Lower	Upper	
57	100		
41	88.3	67.0	100.4
43	77.3	184.2	276.2#
56	58.2	42.6	64.0



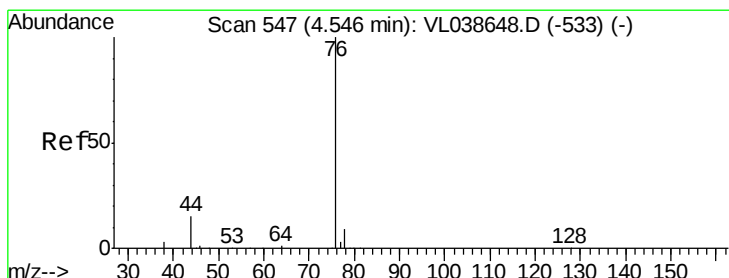
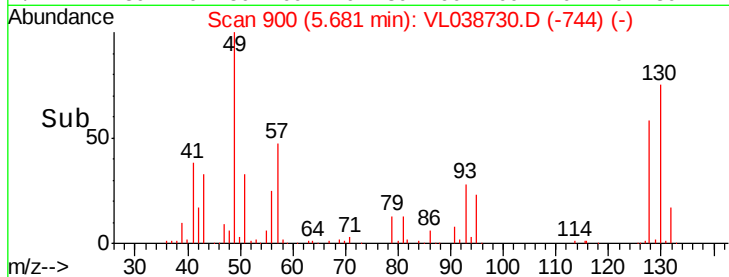
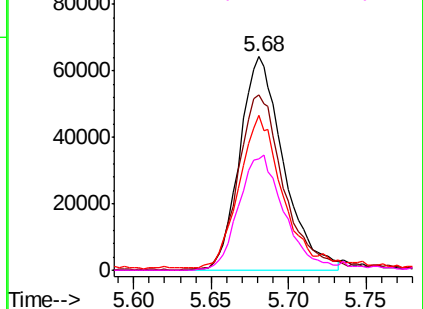
Abundance

Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

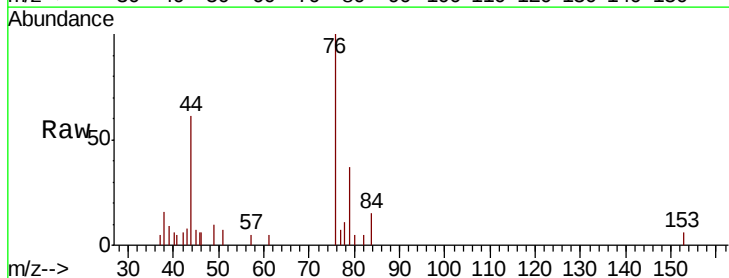
Ion 43.10 (42.80 to 43.80): VL0

Ion 56.10 (55.80 to 56.80): VL0



#27
Carbon Disulfide
Concen: 0.064 ppbv
RT: 4.55 min Scan# 549
Delta R.T. 0.01 min
Lab File: VL038730.D
Acq: 24 Mar 2022 00:30

Tgt Ion	76	Resp	4807
Ion Ratio	Lower	Upper	
76	100		
44	0.0	12.4	18.6#
78	0.0	7.8	11.8#

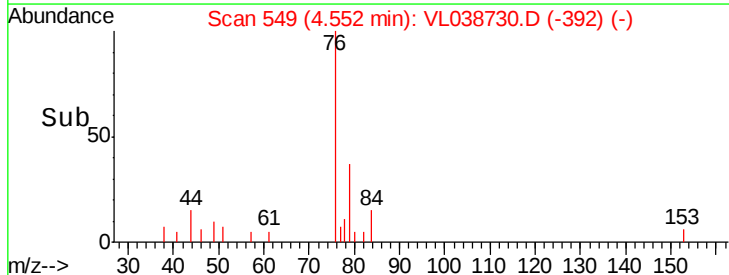
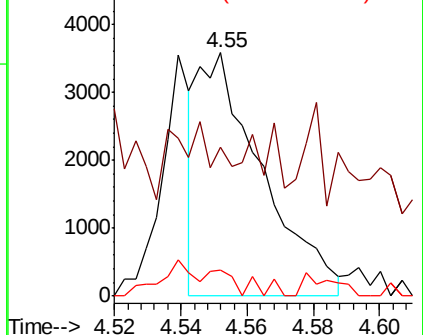


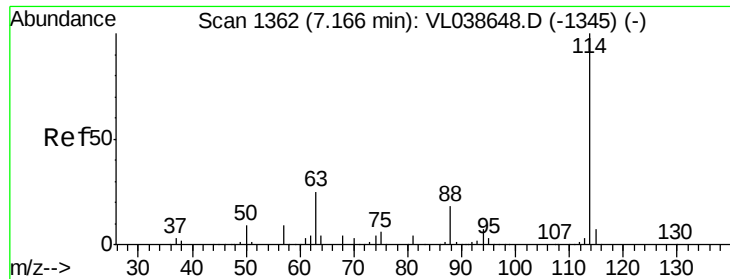
Abundance

Ion 76.00 (75.70 to 76.70): VL0

Ion 44.10 (43.80 to 44.80): VL0

Ion 78.00 (77.70 to 78.70): VL0





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.17 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 24 Mar 2022 00:30

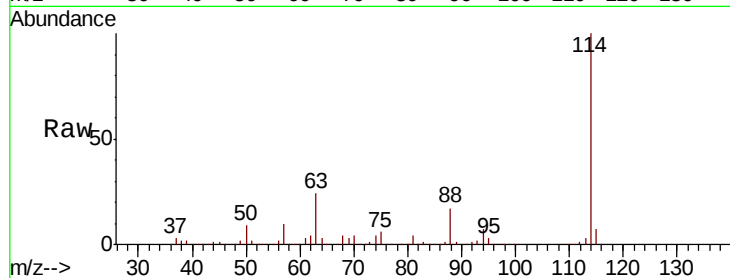
Tot Ion:114 Resp: 2066137

Ion Ratio Lower Upper

114 100

63 23.7 19.4 29.0

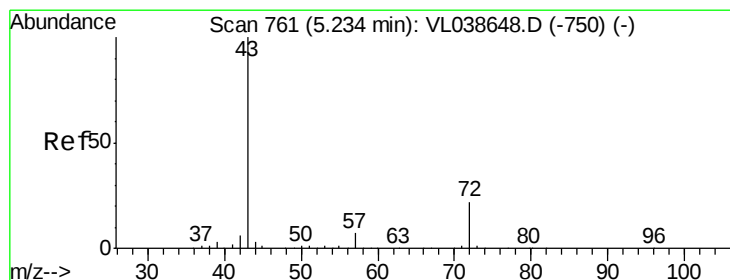
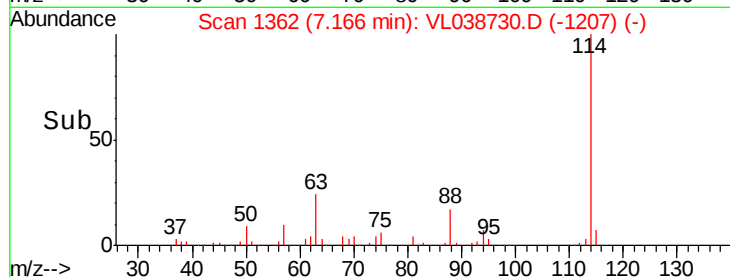
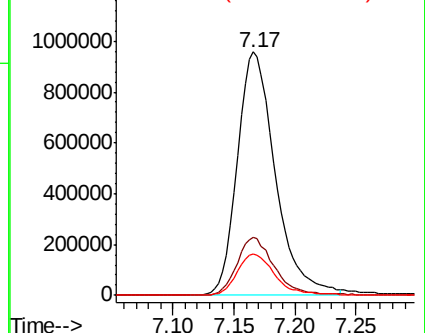
88 17.3 13.9 20.9



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: 5.378 ppbv

RT: 5.24 min Scan# 762

Delta R.T. 0.00 min

Lab File: VL038730.D

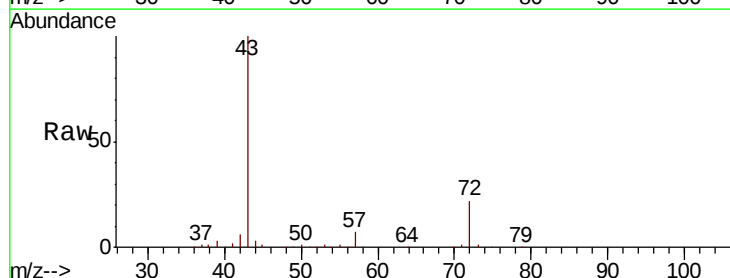
Acq: 24 Mar 2022 00:30

Tgt Ion: 43 Resp: 439790

Ion Ratio Lower Upper

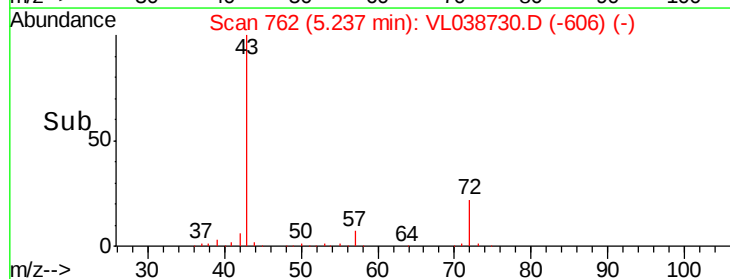
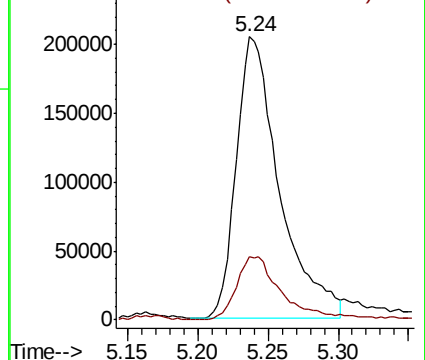
43 100

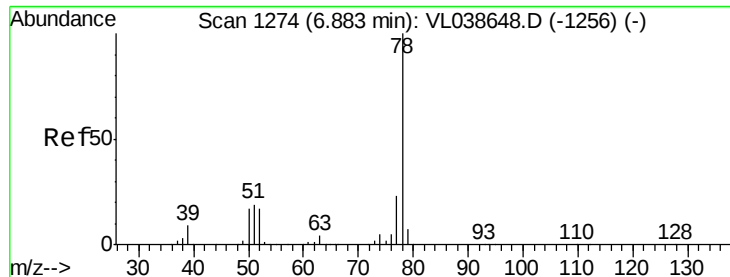
72 24.2 17.8 26.8



Abundance Ion 43.10 (42.80 to 43.80): VL0

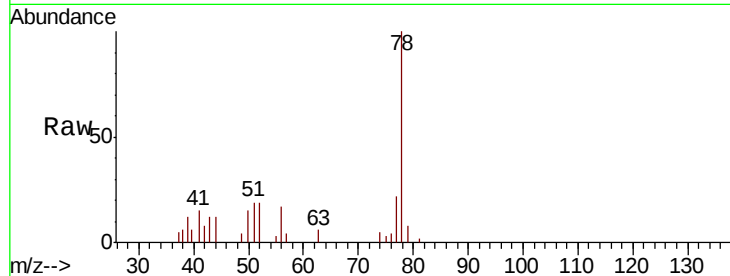
Ion 72.10 (71.80 to 72.80): VL0



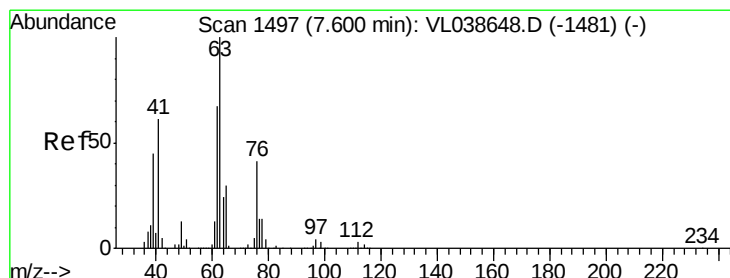
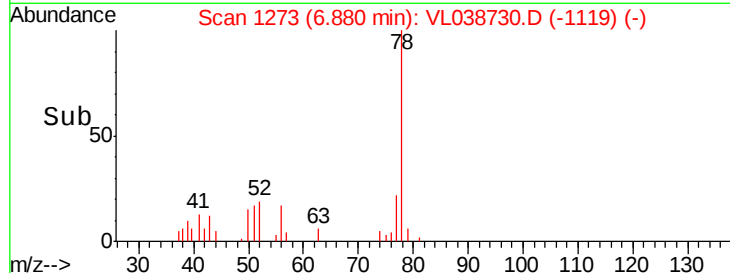
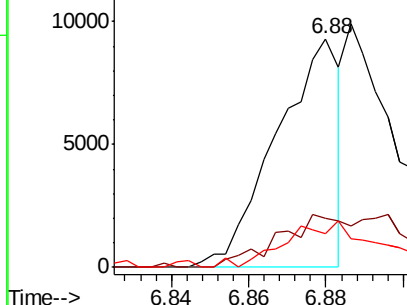


#36
Benzene
Concen: 0.066 ppbv
RT: 6.88
Instrument: MSVOA_L
Delta R.T.:
Lab File: ClientSampleId:
Acq: 24 Mar 2022 00:30

Tot Ion	78	Resp	10549
Ion Ratio	Lower	Upper	
78	100		
77	21.7	18.1	27.1
50	12.3	13.6	20.4

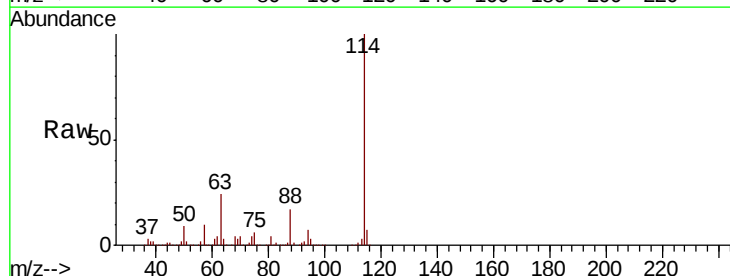


Abundance Ion 78.10 (77.80 to 78.80): VL0
Ion 77.10 (76.80 to 77.80): VL0
Ion 50.10 (49.80 to 50.80): VL0

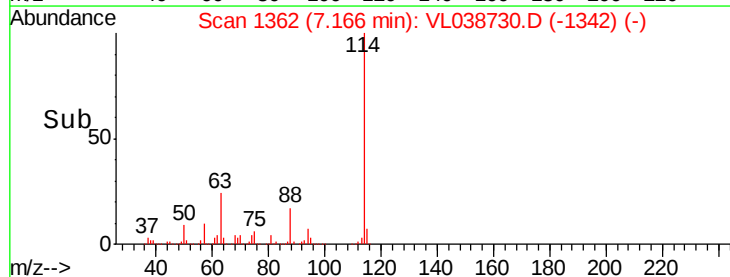
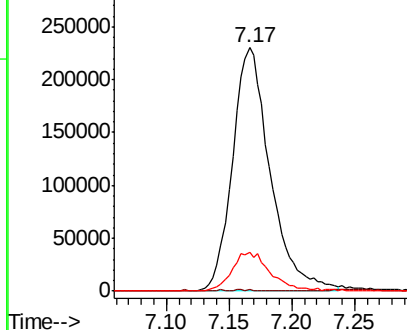


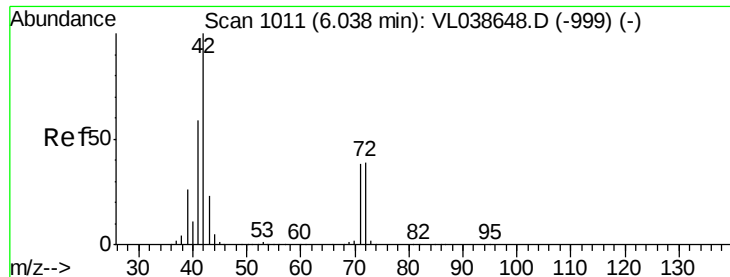
#39
1,2-Dichloropropane
Concen: 7.715 ppbv
RT: 7.17 min Scan# 1362
Delta R.T. -0.43 min
Lab File: VL038730.D
Acq: 24 Mar 2022 00:30

Tgt Ion	63	Resp	480973
Ion Ratio	Lower	Upper	
63	100		
41	0.4	49.0	73.6
62	15.7	53.9	80.9



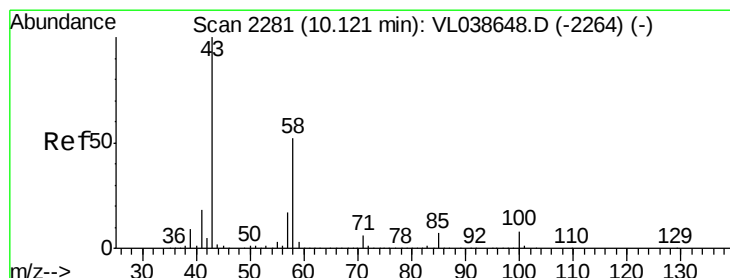
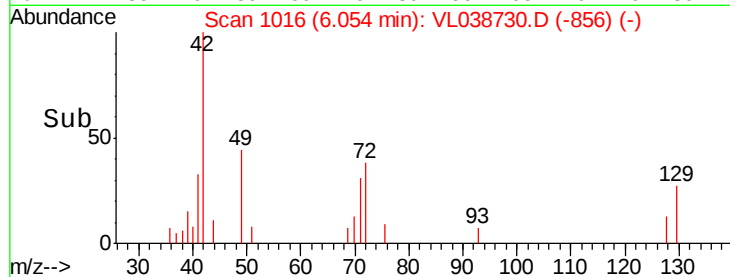
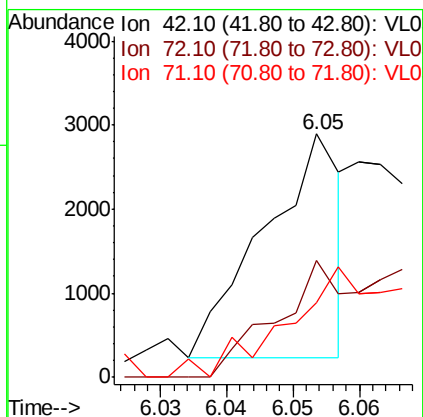
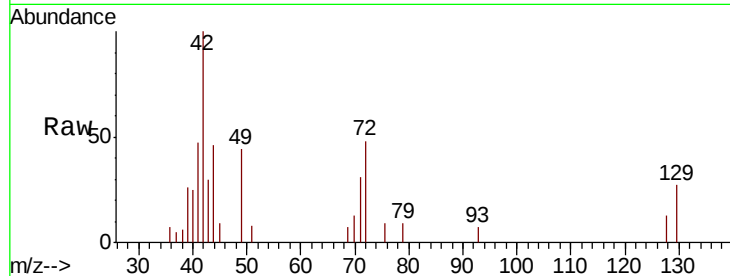
Abundance Ion 63.10 (62.80 to 63.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 62.10 (61.80 to 62.80): VL0





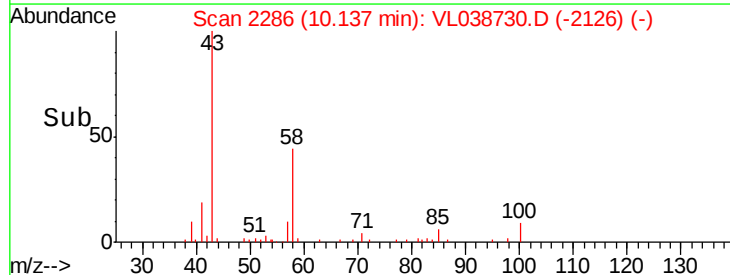
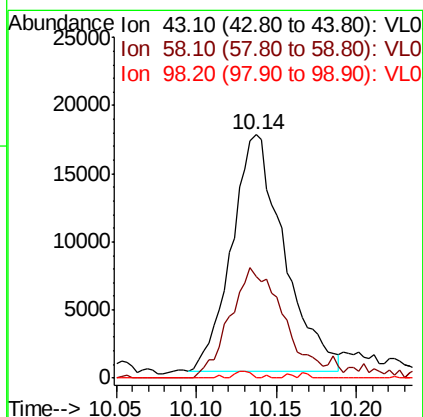
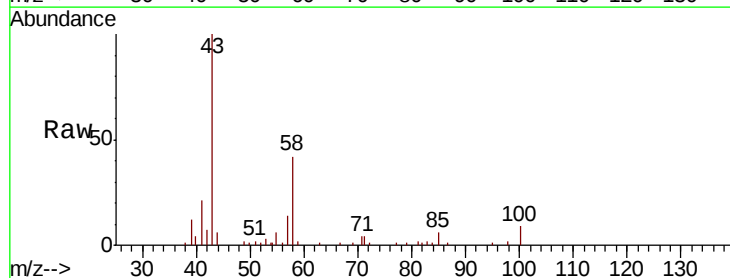
#41
Tetrahydrofuran
Concen: 0.035 ppbv
RT: 6.05
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 24 Mar 2022 00:30

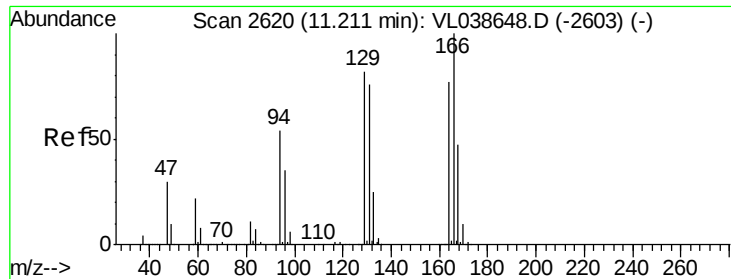
Tot Ion: 42 Resp: 2159
Ion Ratio Lower Upper
42 100
72 132.6 32.5 48.7#
71 0.0 31.4 47.2#



#51
2-Hexanone
Concen: 0.355 ppbv
RT: 10.14 min Scan# 2286
Delta R.T. 0.02 min
Lab File: VL038730.D
Acq: 24 Mar 2022 00:30

Tgt Ion: 43 Resp: 38818
Ion Ratio Lower Upper
43 100
58 52.3 41.2 61.8
98 1.1 0.2 0.4#





#52

Tetrachloroethene

Concen: 0.047 ppbv

RT: 11.21

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 24 Mar 2022 00:30

Tot Ion:164 Resp: 2715

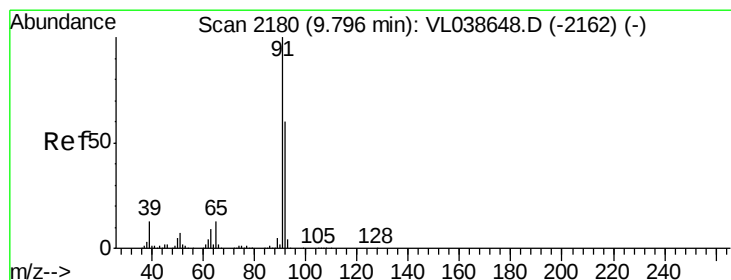
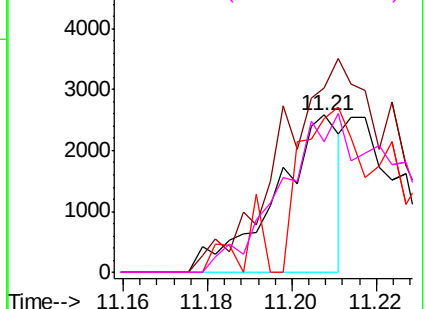
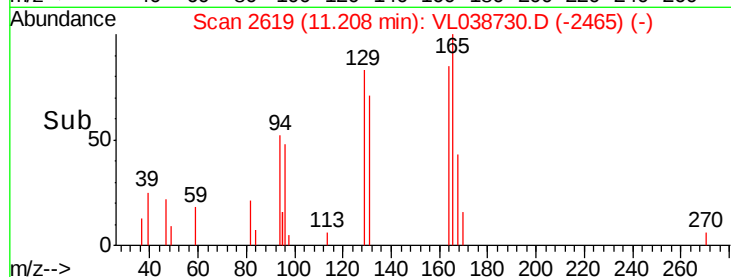
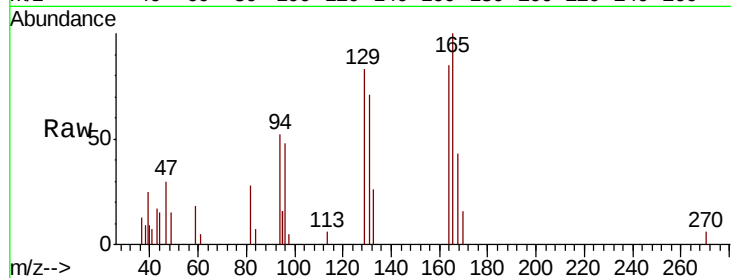
Ion Ratio Lower Upper

164 100

166 117.2 103.3 154.9

129 97.6 85.2 127.8

131 83.2 78.3 117.5



#53

Toluene

Concen: 0.410 ppbv

RT: 9.80 min Scan# 2180

Delta R.T. -0.00 min

Lab File: VL038730.D

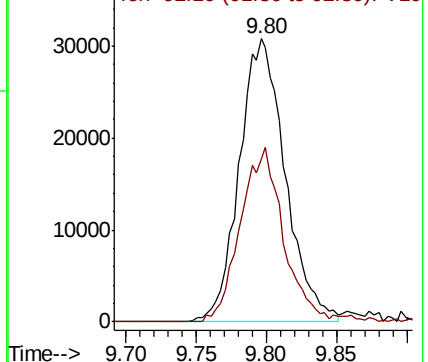
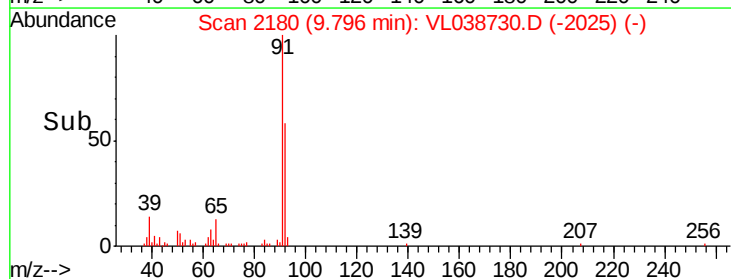
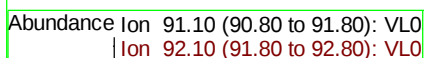
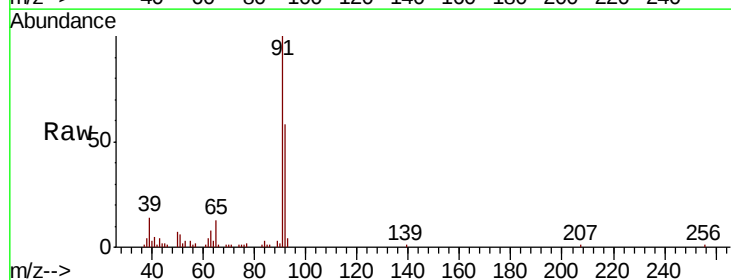
Acq: 24 Mar 2022 00:30

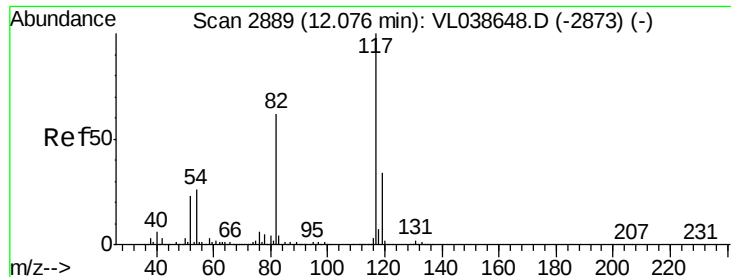
Tgt Ion: 91 Resp: 70238

Ion Ratio Lower Upper

91 100

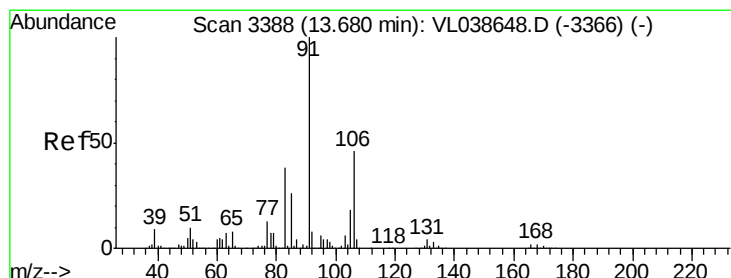
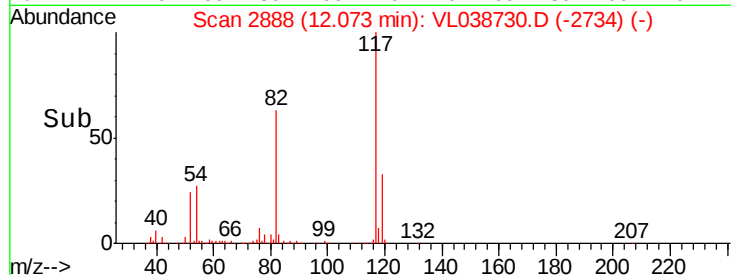
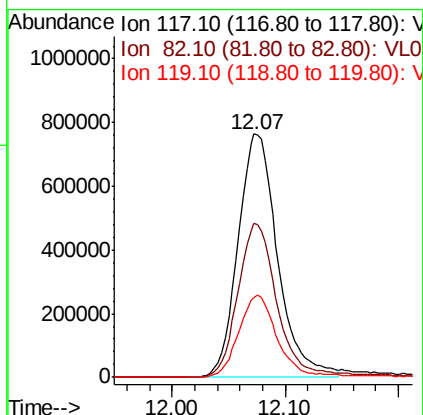
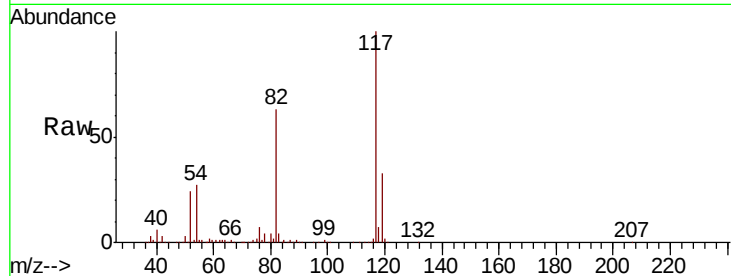
92 59.4 48.7 73.1





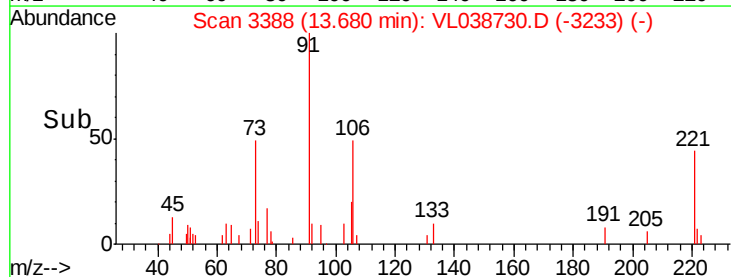
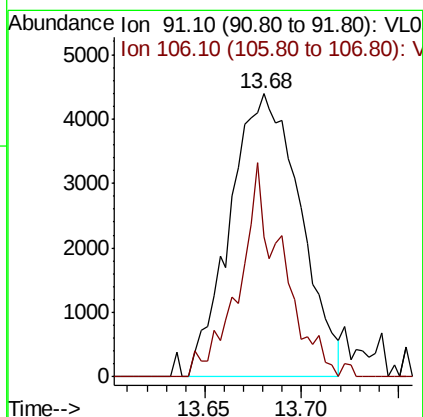
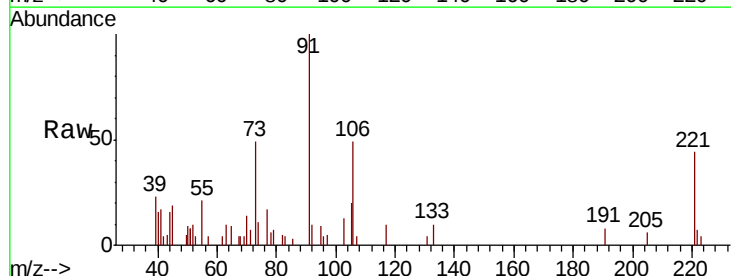
#55
 Chlorobenzene-d5
 Concen: 10.000 ppbv
 RT: 12.07 min
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId:
 Acq: 24 Mar 2022 00:30

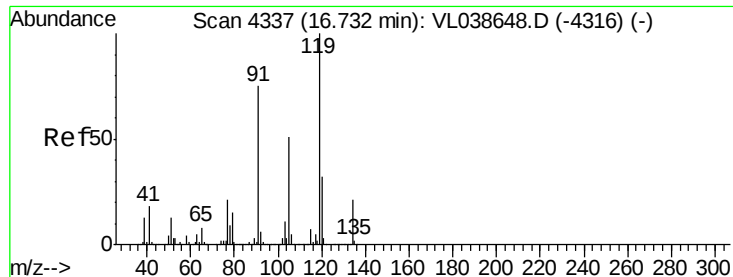
Tot Ion: 117 Resp: 1860278
 Ion Ratio Lower Upper
 117 100
 82 64.9 51.6 77.4
 119 34.7 26.9 40.3



#60
 o-Xylene
 Concen: 0.061 ppbv
 RT: 13.68 min Scan# 3388
 Delta R.T.: -0.00 min
 Lab File: VL038730.D
 Acq: 24 Mar 2022 00:30

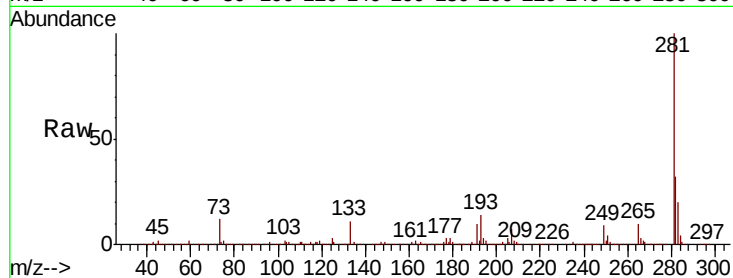
Tgt Ion: 91 Resp: 11056
 Ion Ratio Lower Upper
 91 100
 106 47.0 23.5 70.5



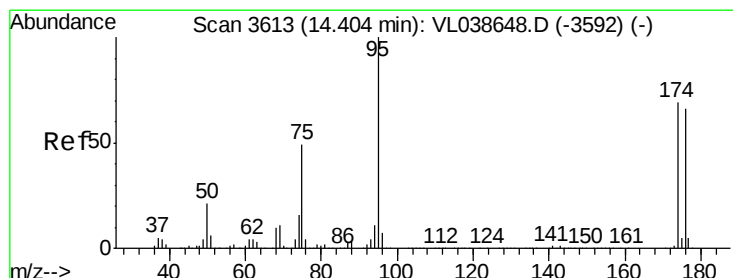
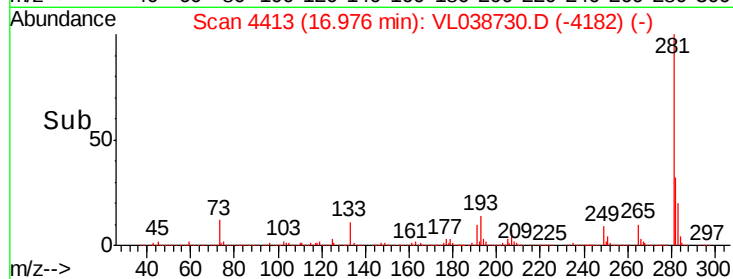
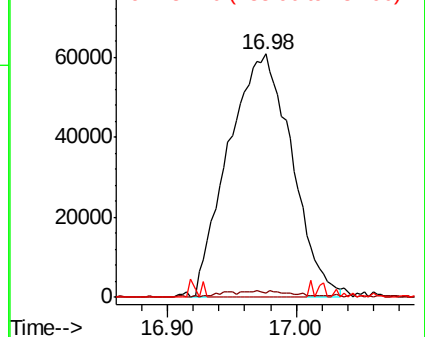


#65
 tert-Butylbenzene
 Concen: 0.852 ppbv
 RT: 16.98
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId:
 Acq: 24 Mar 2022 00:30

Tot Ion	Ratio	Lower	Upper
119	100		
91	3.2	61.2	91.8#
134	1.5	16.3	24.5#

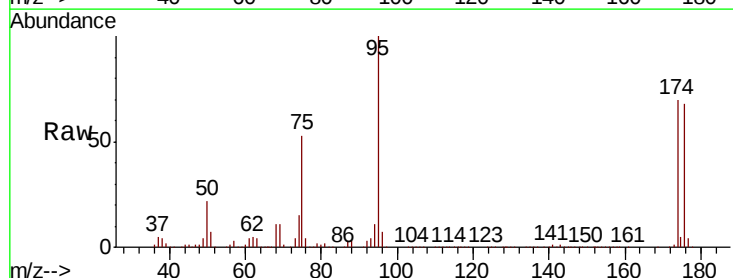


Abundance Ion 119.20 (118.90 to 119.90): V
 Ion 91.10 (90.80 to 91.80): VL0
 Ion 134.20 (133.90 to 134.90): V

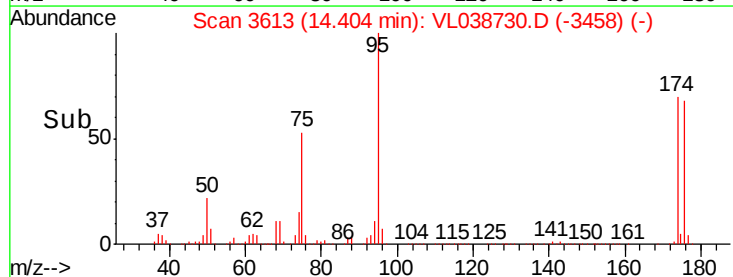
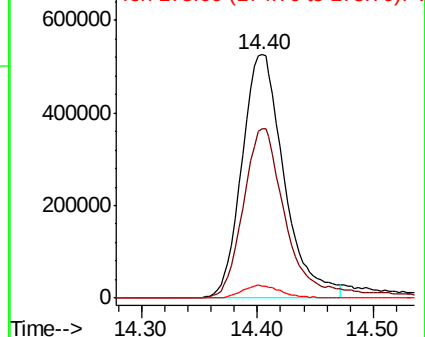


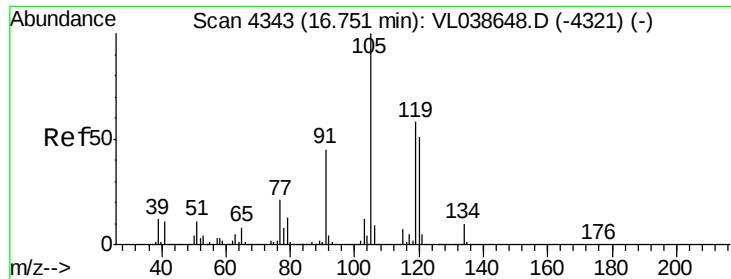
#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.356 ppbv
 RT: 14.40 min Scan# 3613
 Delta R.T.: -0.00 min
 Lab File: VL038730.D
 Acq: 24 Mar 2022 00:30

Tgt Ion	Ratio	Lower	Upper
95	100		
174	73.6	56.1	84.1
175	4.9	4.2	6.2



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: 0.038 ppbv

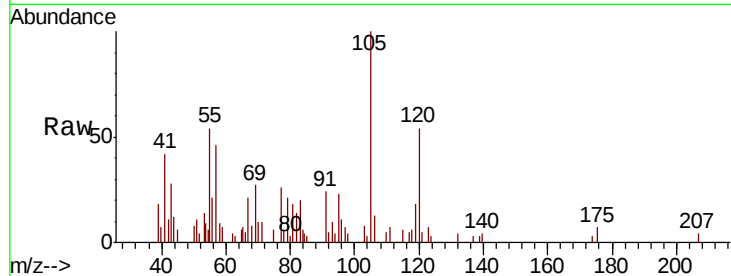
RT: 16.75

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 24 Mar 2022 00:30

Tot Ion:	105	Resp:	7937
Ion	Ratio	Lower	Upper
105	100		
120	58.8	40.5	60.7
91	23.7	35.9	53.9#
77	17.7	16.6	25.0

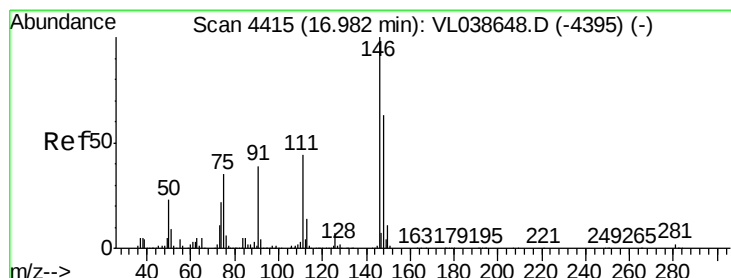
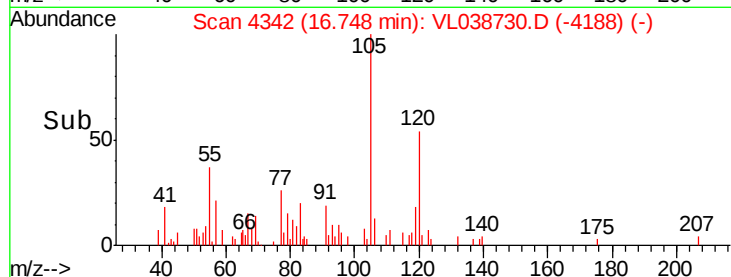
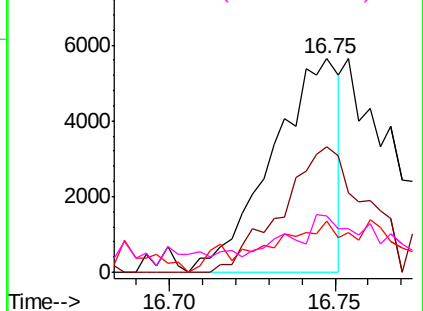


Abundance Ion 105.10 (104.80 to 105.80): V

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



#75

1,3-Dichlorobenzene

Concen: 0.215 ppbv

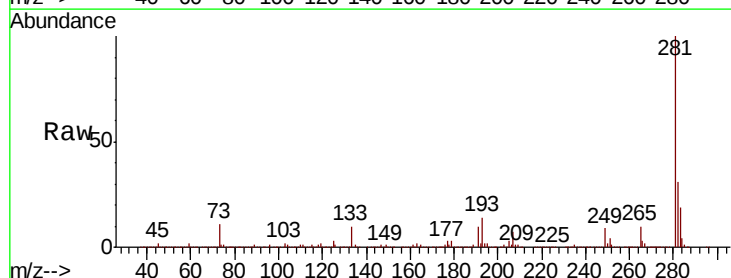
RT: 16.99 min Scan# 4416

Delta R.T. 0.00 min

Lab File: VL038730.D

Acq: 24 Mar 2022 00:30

Tgt Ion:	146	Resp:	29001
Ion	Ratio	Lower	Upper
146	100		
111	259.5	22.2	66.6#
148	130.1	32.5	97.5#



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V

