

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL040522\
 Data File : VL038828.D
 Acq On : 6 Apr 2022 11:06
 Operator : SY/AP
 Sample : N2235-01
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Apr 07 03:10:57 2022
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL040522AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Apr 06 06:12:53 2022
 QLast Update : Wed Apr 06 06:12:53 2022
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.68	49	1417577	10.00	ppbv	0.02
33) 1,4-Difluorobenzene	7.19	114	3637292	10.00	ppbv	0.01
55) Chlorobenzene-d5	12.10	117	3159901	10.00	ppbv	0.02

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.42	95	2474955	10.33	ppbv	0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.30%

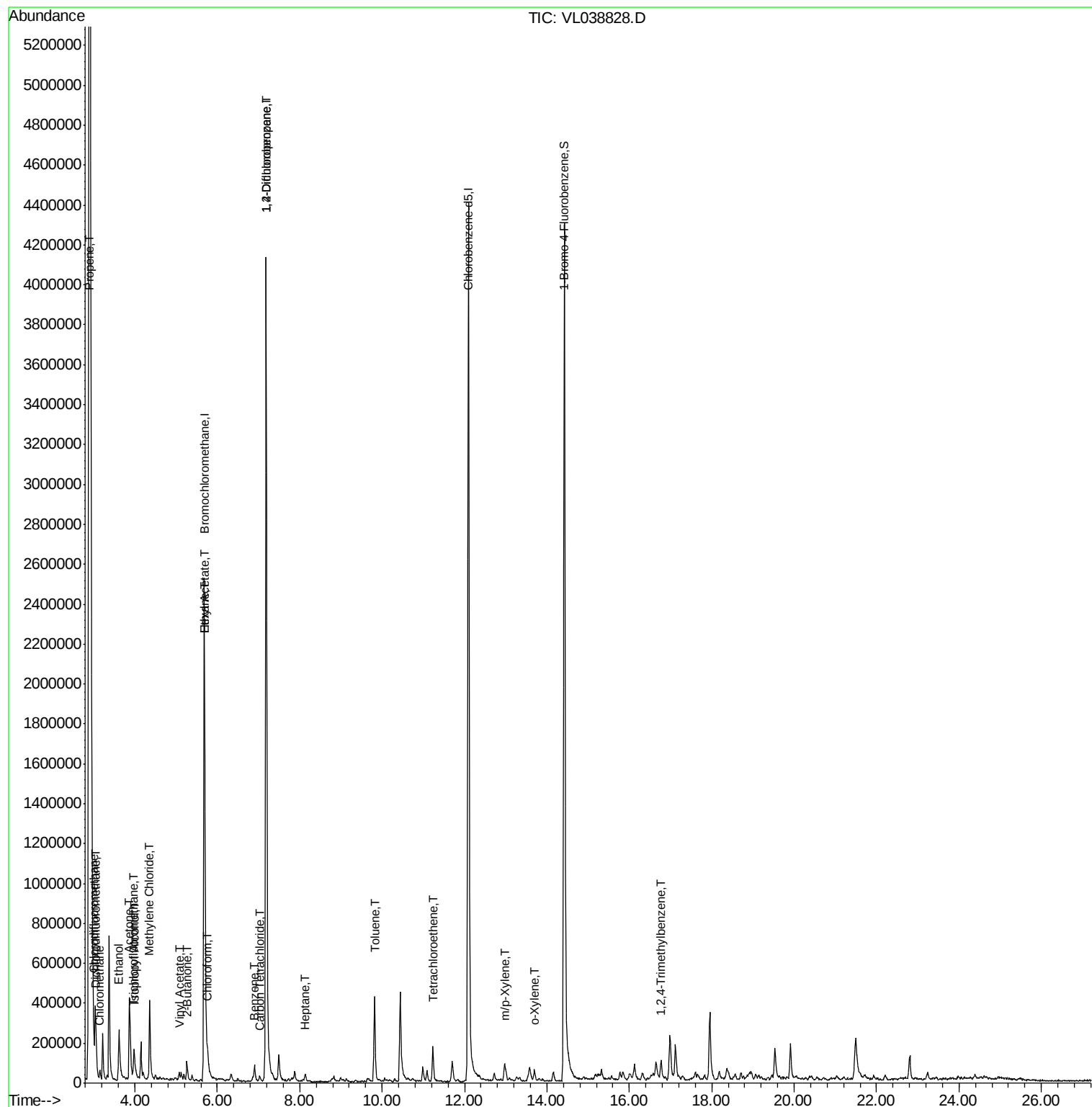
Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.06	85	124916	0.621	ppbv	99
3) Chlorodifluoromethane	3.00	51	98016	0.567	ppbv #	83
4) Chloromethane	3.15	50	15525	0.173	ppbv	100
9) Propene	2.90	41	6063	0.066	ppbv	85
10) Heptane	8.14	43	9672	0.042	ppbv #	20
11) Trichlorofluoromethane	3.96	101	37284	0.231	ppbv	85
13) Ethanol	3.61	45	399753	71.865	ppbv #	100
15) Acetone	3.86	43	578884	4.102	ppbv	98
19) Isopropyl Alcohol	3.98	45	167459	2.322	ppbv #	100
20) Methylene Chloride	4.36	84	164530	3.214	ppbv	93
23) Vinyl Acetate	5.08	43	13742	0.100	ppbv #	24
25) Ethyl Acetate	5.70	43	190626	0.532	ppbv #	90
26) Hexane	5.70	57	186684	1.145	ppbv #	53
29) Chloroform	5.77	83	49581	0.217	ppbv	92
34) 2-Butanone	5.26	43	124464	0.866	ppbv	95
35) Carbon Tetrachloride	7.03	117	11055	0.051	ppbv #	73
36) Benzene	6.90	78	64739	0.196	ppbv #	90
39) 1,2-Dichloropropane	7.19	63	892286	7.050	ppbv #	26
52) Tetrachloroethene	11.23	164	22805	0.197	ppbv	90
53) Toluene	9.82	91	372670	0.976	ppbv	97
59) m/p-Xylene	12.99	91	35531	0.090	ppbv #	30
60) o-Xylene	13.71	91	11582	0.031	ppbv #	29
74) 1,2,4-Trimethylbenzene	16.77	105	69696	0.166	ppbv #	73

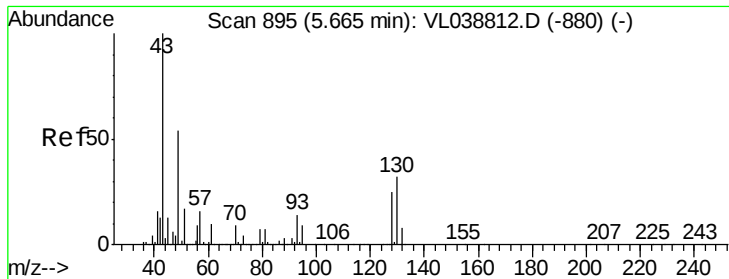
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Wed Apr 06 06:12:53 2022
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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.68 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 6 Apr 2022 11:00

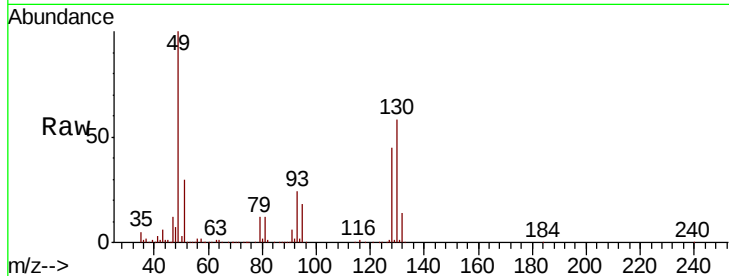
Tot Ion: 49 Resp: 1417577

Ion Ratio Lower Upper

49 100

128 46.8 24.1 72.3

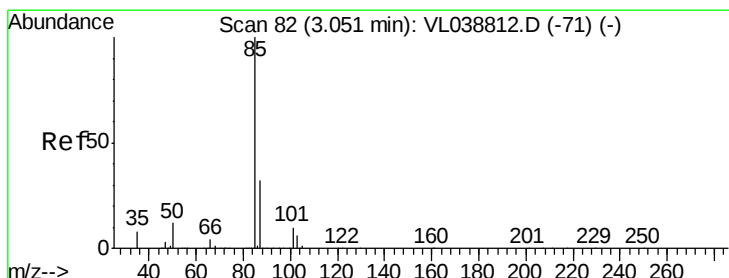
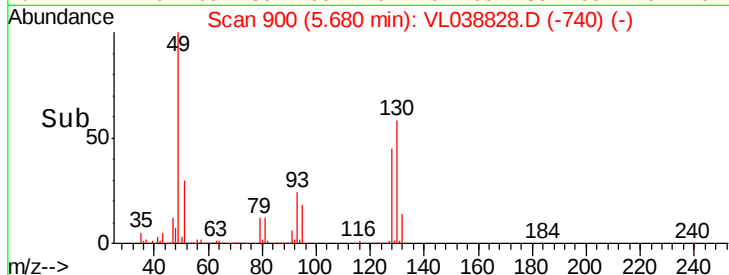
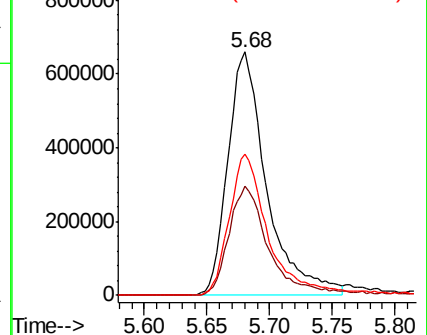
130 61.0 30.9 92.8



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.621 ppbv

RT: 3.06 min Scan# 85

Delta R.T. 0.01 min

Lab File: VL038828.D

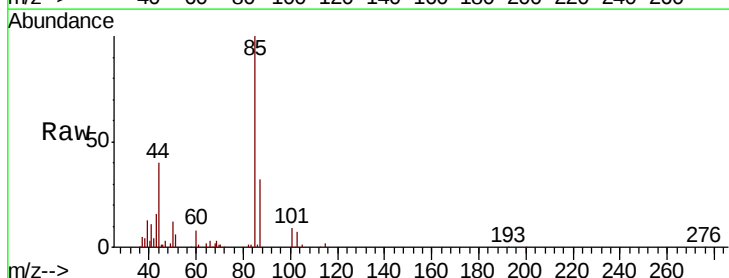
Acq: 6 Apr 2022 11:06

Tgt Ion: 85 Resp: 124916

Ion Ratio Lower Upper

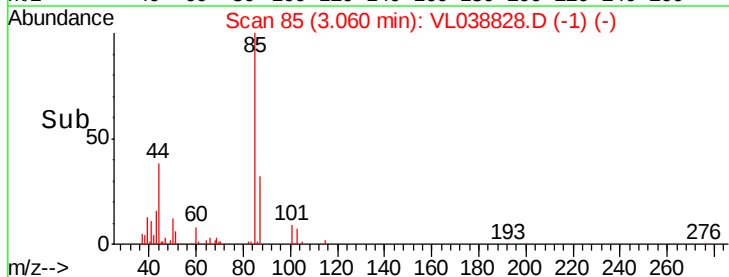
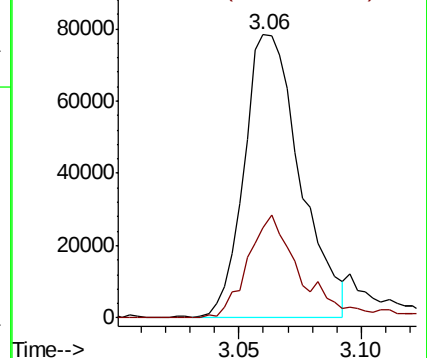
85 100

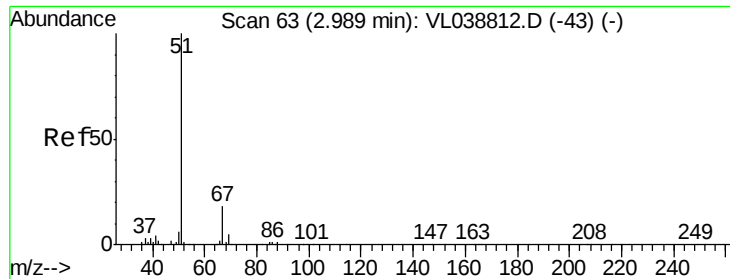
87 31.7 25.9 38.9



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.567 ppbv

RT: 3.00 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

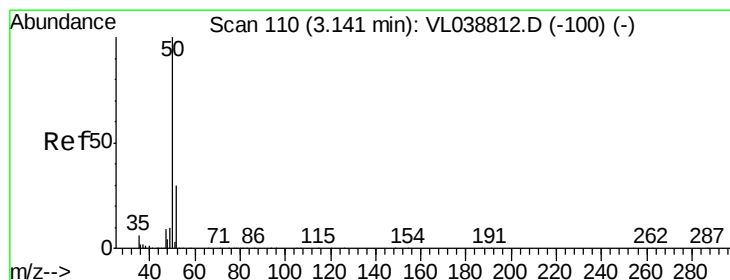
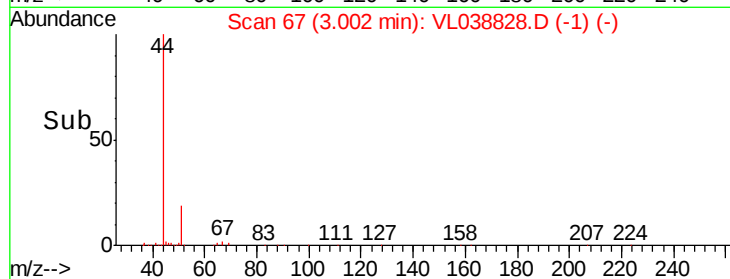
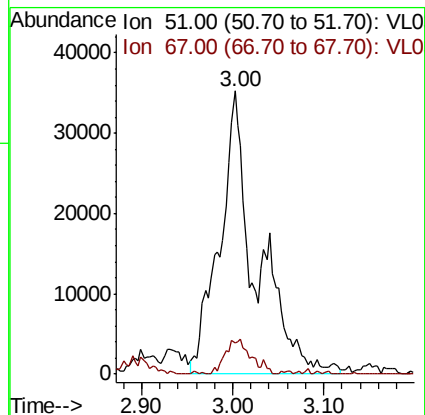
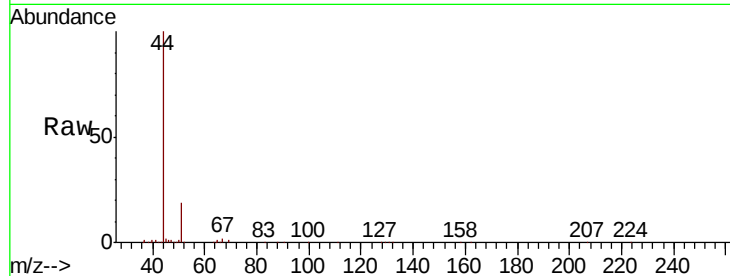
Acq: 6 Apr 2022 11:00

Tot Ion: 51 Resp: 98016

Ion Ratio Lower Upper

51 100

67 9.4 13.4 20.0#



#4

Chloromethane

Concen: 0.173 ppbv

RT: 3.15 min Scan# 112

Delta R.T. 0.01 min

Lab File: VL038828.D

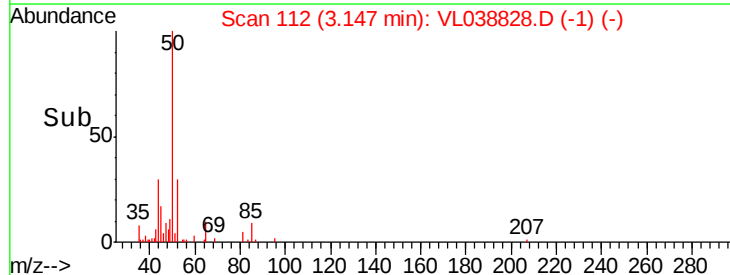
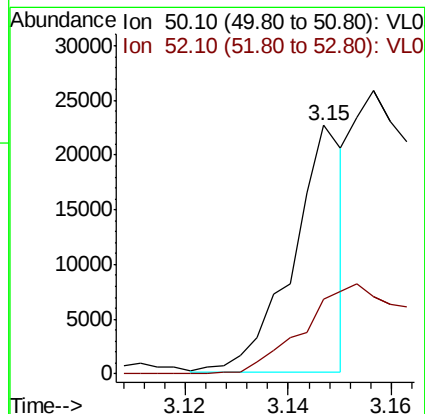
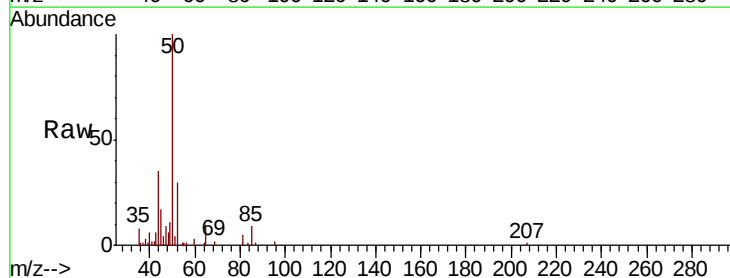
Acq: 6 Apr 2022 11:06

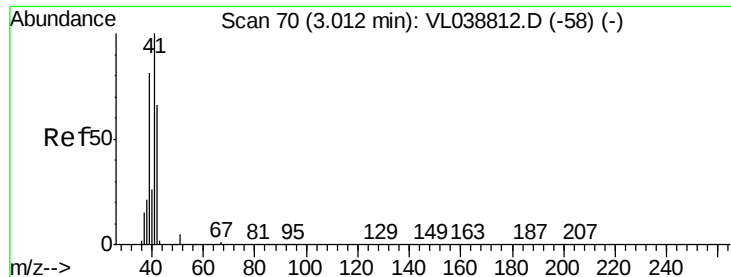
Tgt Ion: 50 Resp: 15525

Ion Ratio Lower Upper

50 100

52 30.5 24.3 36.5





#9

Propene

Concen: 0.066 ppbv

RT: 2.90 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

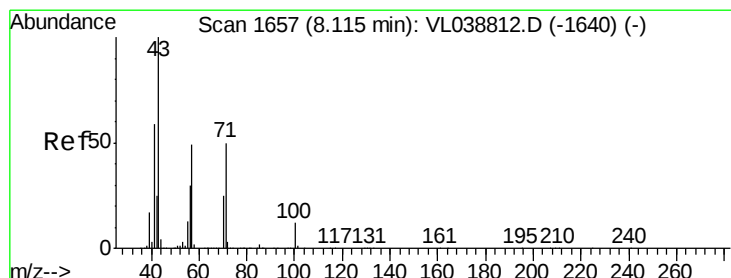
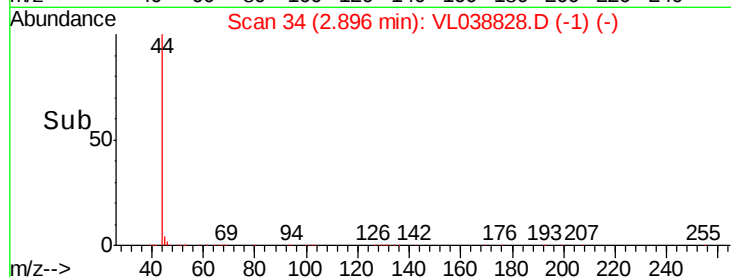
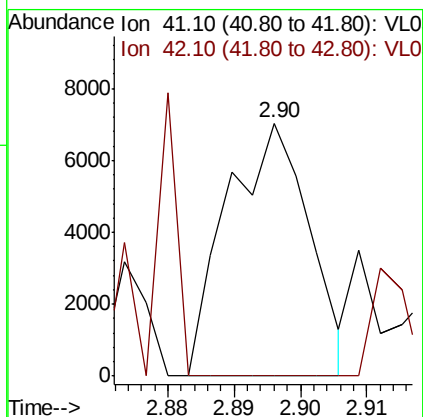
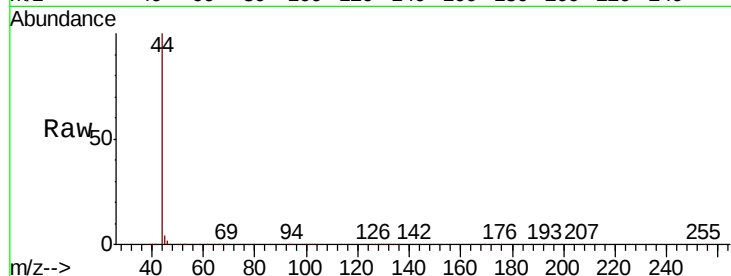
Acq: 6 Apr 2022 11:00

Tot Ion: 41 Resp: 6063

Ion Ratio Lower Upper

41 100

42 55.4 54.2 81.4



#10

Heptane

Concen: 0.042 ppbv

RT: 8.14 min Scan# 1665

Delta R.T. 0.03 min

Lab File: VL038828.D

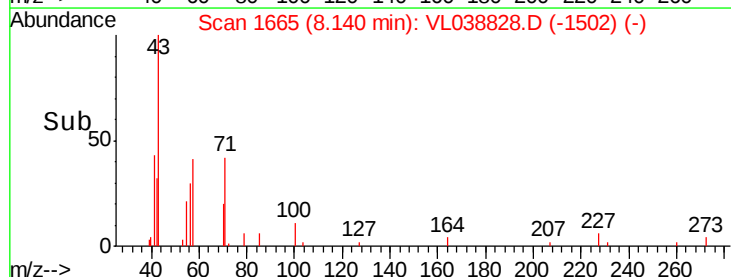
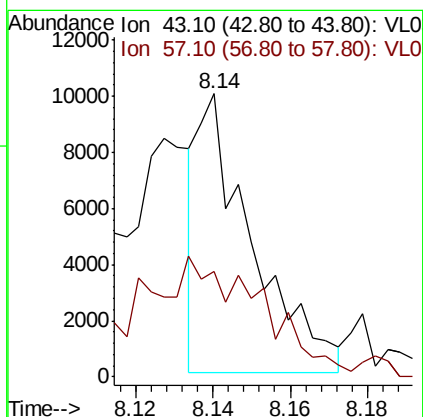
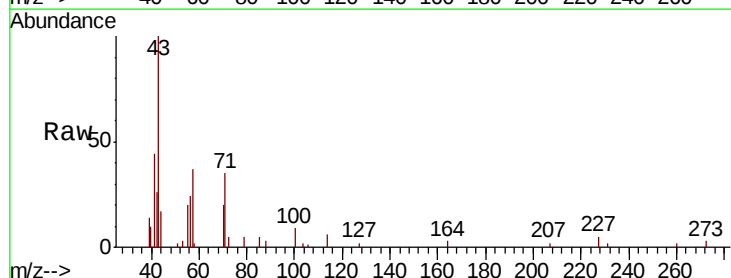
Acq: 6 Apr 2022 11:06

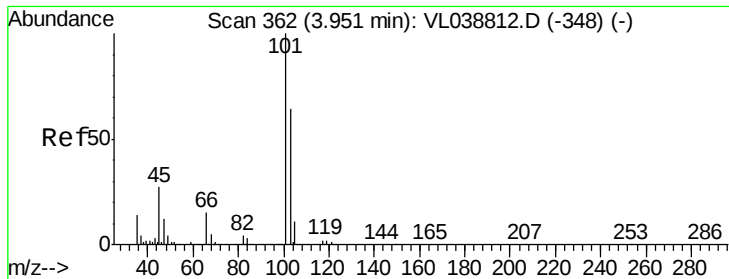
Tgt Ion: 43 Resp: 9672

Ion Ratio Lower Upper

43 100

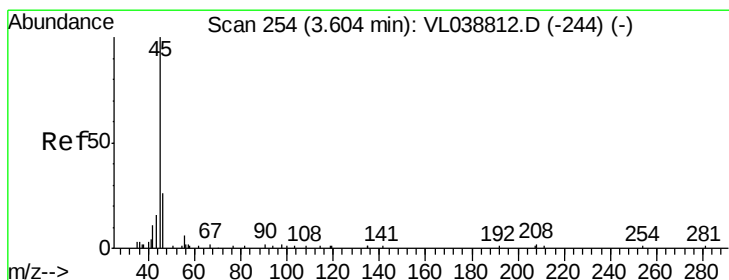
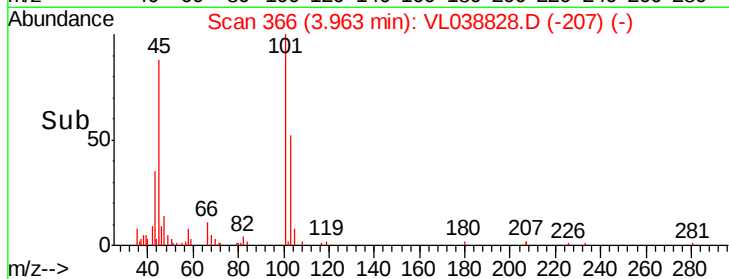
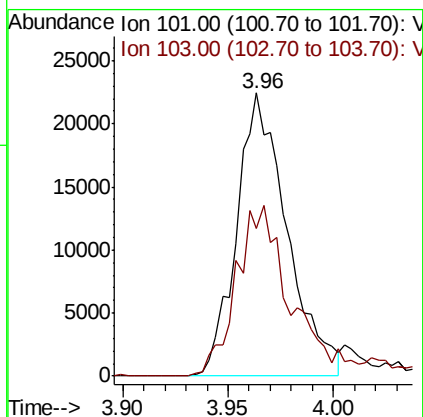
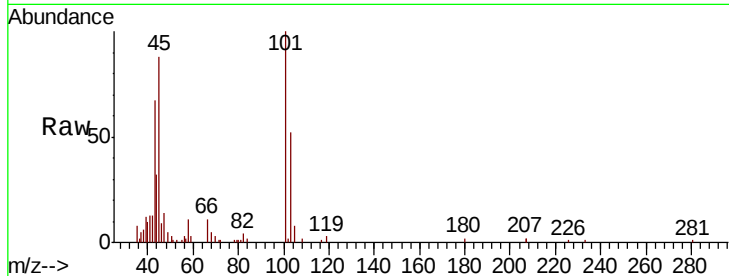
57 104.0 39.3 58.9#





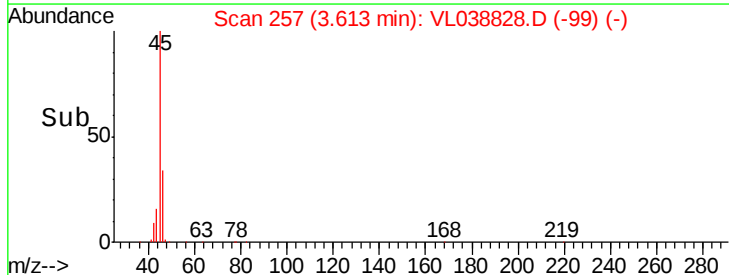
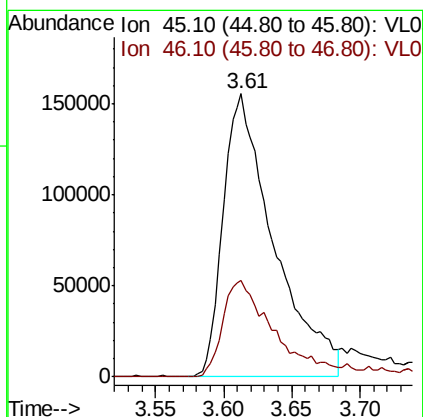
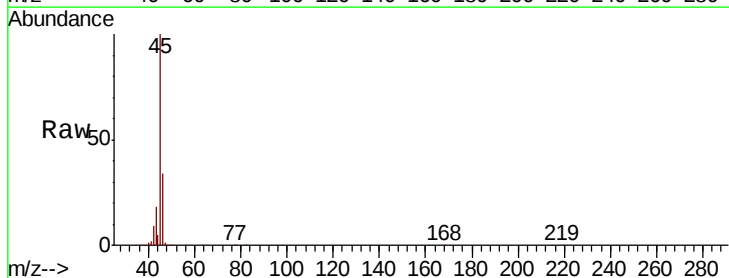
#11
 Trichlorofluoromethane
 Concen: 0.231 ppbv
 RT: 3.96
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 6 Apr 2022 11:00

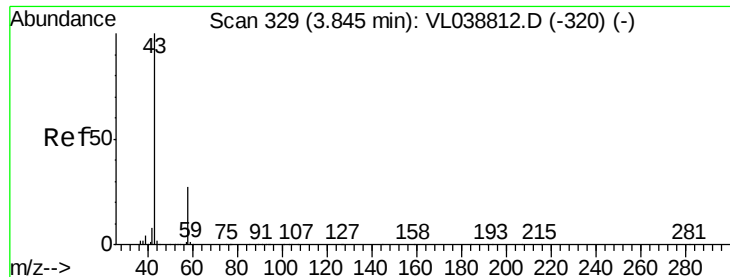
Tot Ion: 101 Resp: 37284
 Ion Ratio Lower Upper
 101 100
 103 52.4 51.4 77.0



#13
 Ethanol
 Concen: 71.865 ppbv
 RT: 3.61 min Scan# 257
 Delta R.T. 0.01 min
 Lab File: VL038828.D
 Acq: 6 Apr 2022 11:06

Tgt Ion: 45 Resp: 399753
 Ion Ratio Lower Upper
 45 100
 46 38.4 0.0 0.0#





#15

Acetone

Concen: 4.102 ppbv

RT: 3.86 Instrument :

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

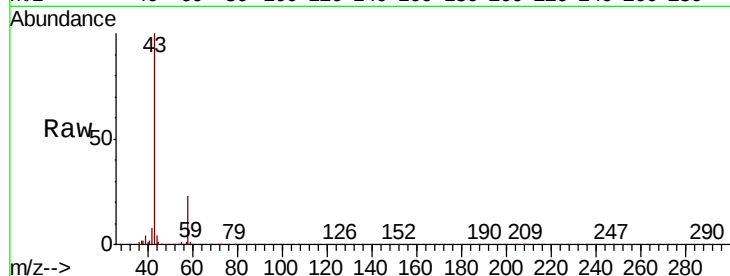
Acq: 6 Apr 2022 11:00

Tot Ion: 43 Resp: 578884

Ion Ratio Lower Upper

43 100

58 28.9 22.5 33.7



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

3.86

250000

200000

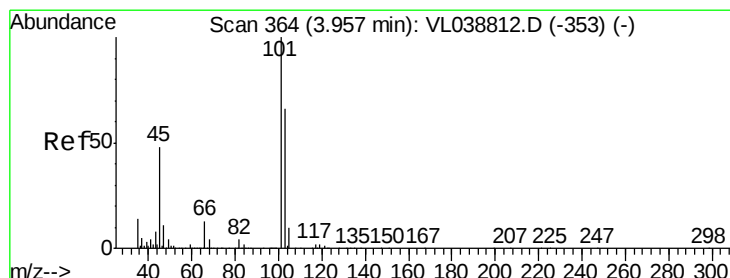
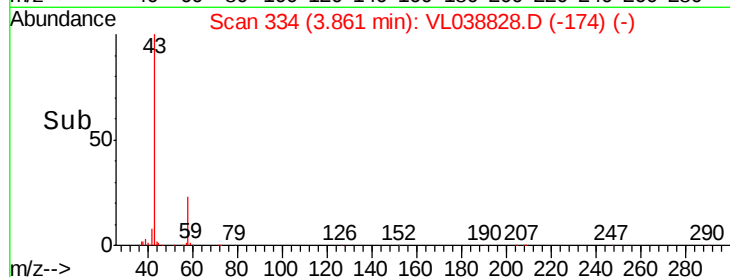
150000

100000

50000

0

Time-->



#19

Isopropyl Alcohol

Concen: 2.322 ppbv

RT: 3.98 min Scan# 372

Delta R.T. 0.03 min

Lab File: VL038828.D

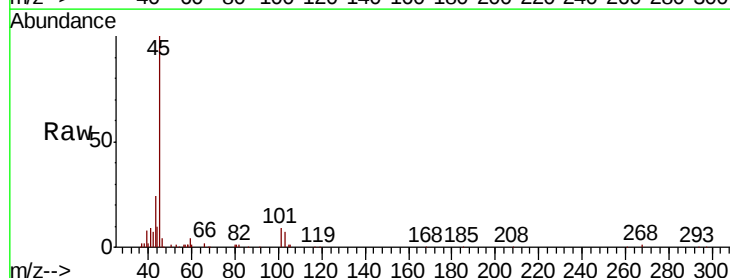
Acq: 6 Apr 2022 11:06

Tgt Ion: 45 Resp: 167459

Ion Ratio Lower Upper

45 100

58 99.9 0.0 0.0#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

3.98

80000

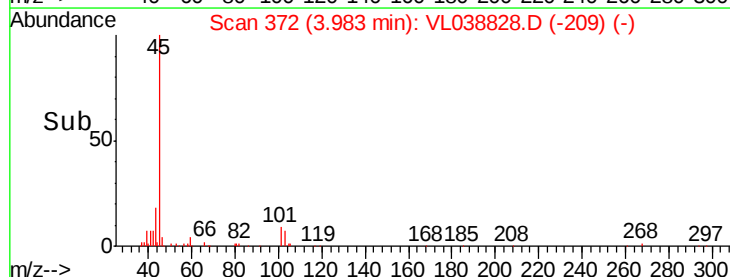
60000

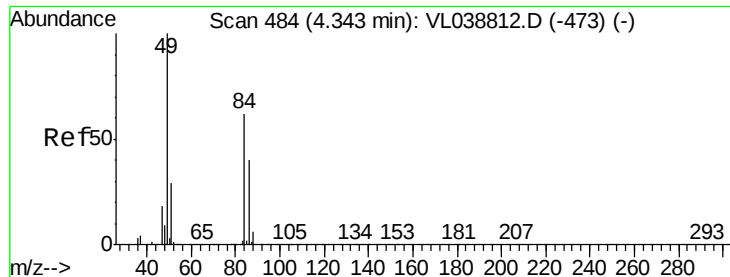
40000

20000

0

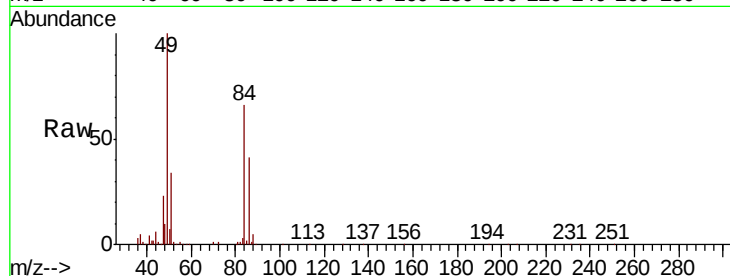
Time-->





#20
Methylene Chloride
Concen: 3.214 ppbv
RT: 4.36
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 6 Apr 2022 11:00

Tot Ion:	84	Resp:	164530
Ion	Ratio	Lower	Upper
84	100		
49	150.2	129.4	194.0
51	51.0	37.4	56.2
86	61.3	51.4	77.2



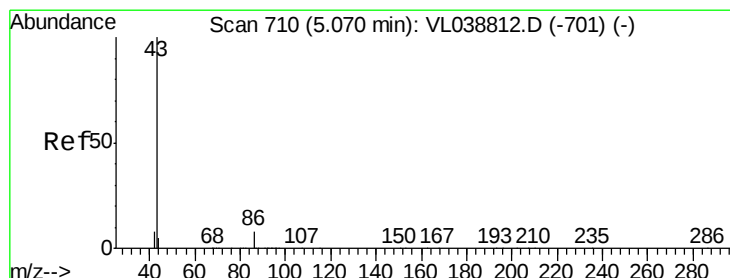
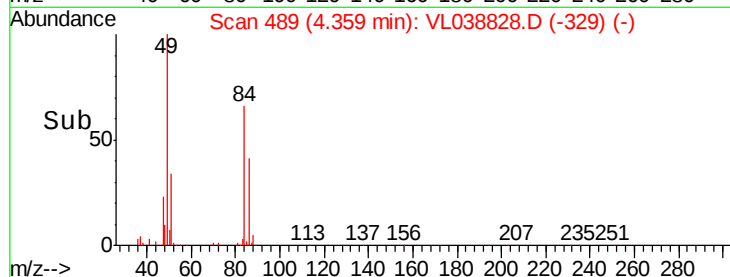
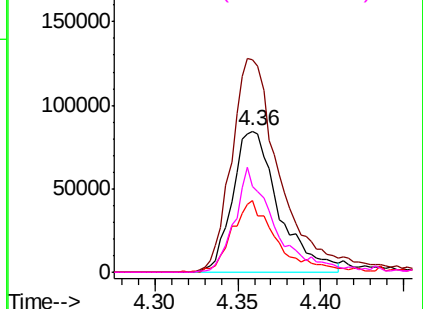
Abundance

Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

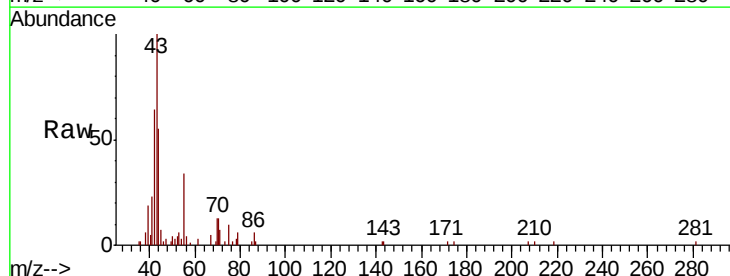
Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0



#23
Vinyl Acetate
Concen: 0.100 ppbv
RT: 5.08 min Scan# 712
Delta R.T. 0.01 min
Lab File: VL038828.D
Acq: 6 Apr 2022 11:06

Tgt Ion:	43	Resp:	13742
Ion	Ratio	Lower	Upper
43	100		
86	6.4	5.8	8.6
42	64.9	7.8	11.6#
44	16.4	3.6	5.4#



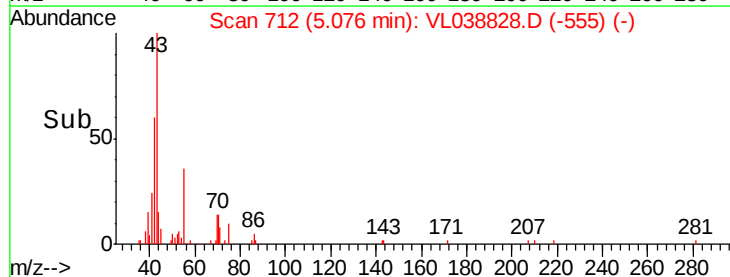
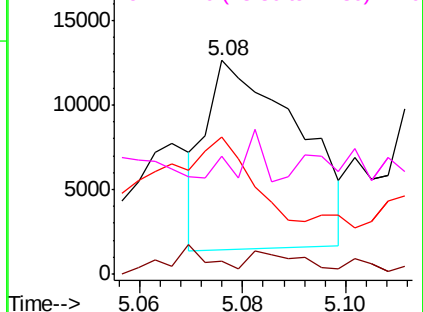
Abundance

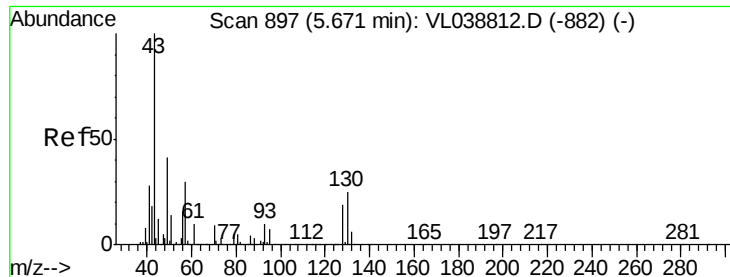
Ion 43.10 (42.80 to 43.80): VL0

Ion 86.10 (85.80 to 86.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

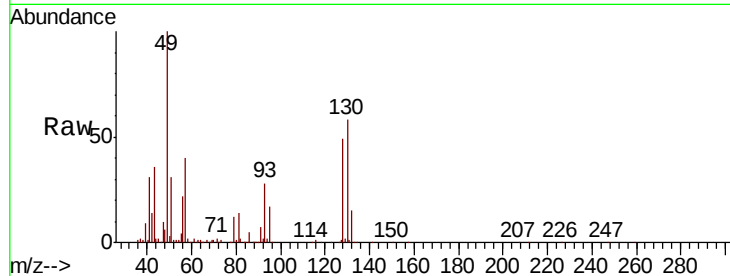
Ion 44.10 (43.80 to 44.80): VL0



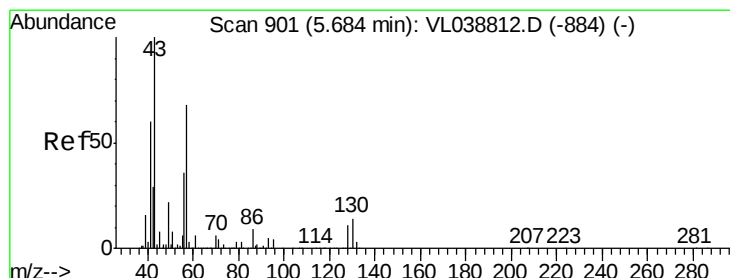
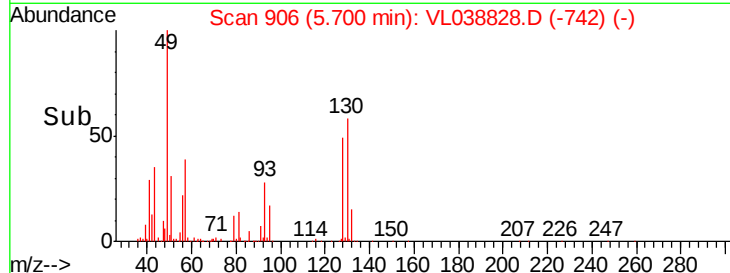
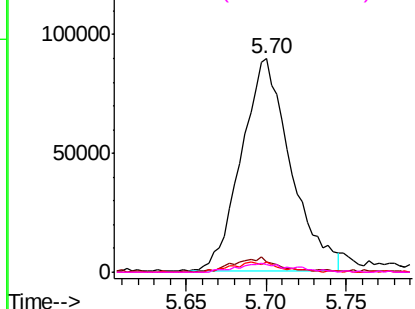


#25
Ethyl Acetate
Concen: 0.532 ppbv
RT: 5.70 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 6 Apr 2022 11:00

Tot Ion:	43	Resp:	190626
Ion	Ratio	Lower	Upper
43	100		
45	6.8	8.4	12.6#
61	4.9	7.9	11.9#
70	4.8	5.6	8.4#

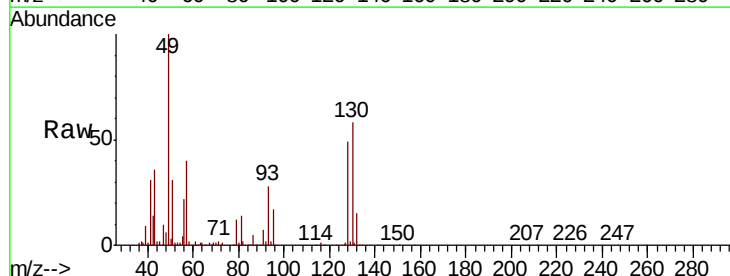


Abundance Ion 43.10 (42.80 to 43.80): VL0
Ion 45.10 (44.80 to 45.80): VL0
Ion 61.10 (60.80 to 61.80): VL0
Ion 70.10 (69.80 to 70.80): VL0

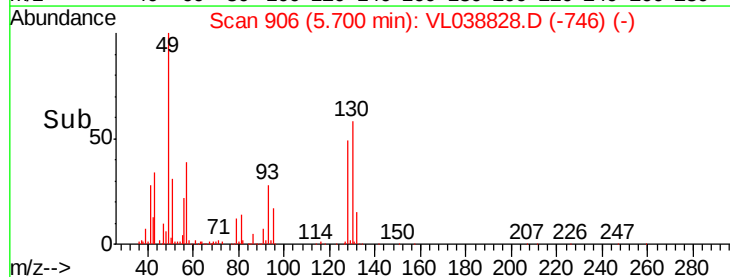
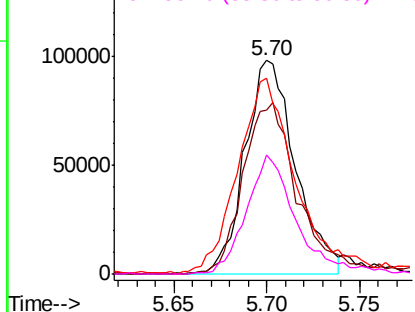


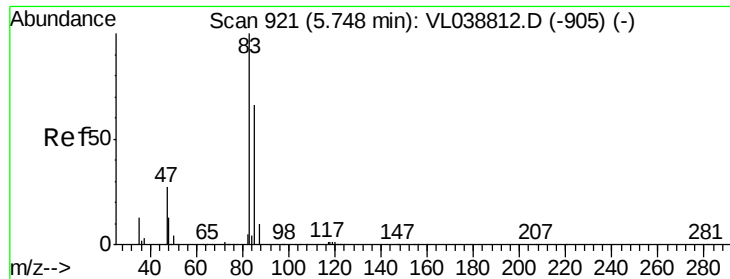
#26
Hexane
Concen: 1.145 ppbv
RT: 5.70 min Scan# 906
Delta R.T.: 0.02 min
Lab File: VL038828.D
Acq: 6 Apr 2022 11:06

Tgt Ion:	57	Resp:	186684
Ion	Ratio	Lower	Upper
57	100		
41	89.4	72.0	108.0
43	106.7	186.6	280.0#
56	54.9	42.8	64.2



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: 0.217 ppbv

RT: 5.77 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

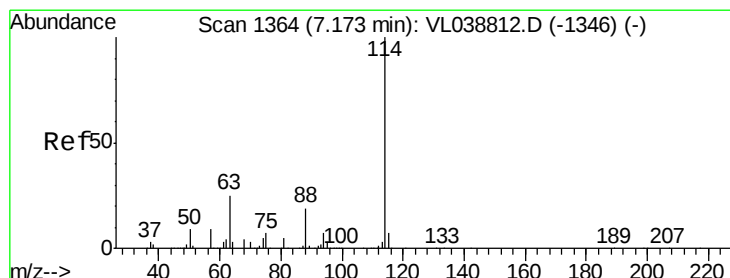
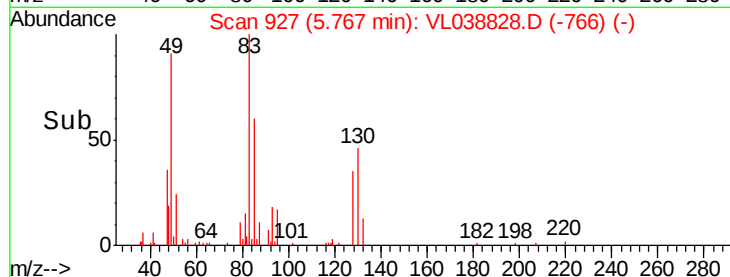
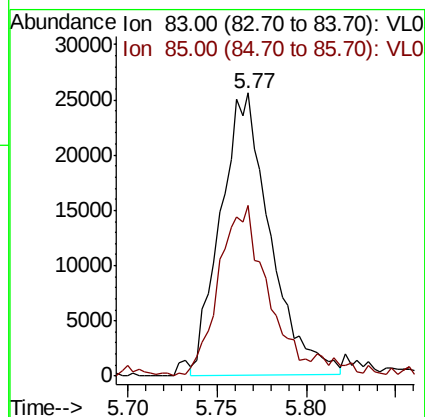
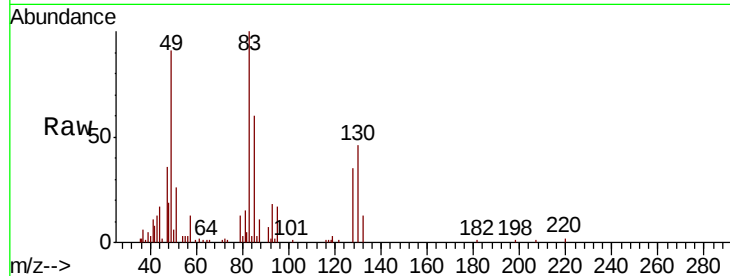
Acq: 6 Apr 2022 11:06

Tot Ion: 83 Resp: 49581

Ion Ratio Lower Upper

83 100

85 59.4 52.5 78.7



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.19 min Scan# 1368

Delta R.T. 0.01 min

Lab File: VL038828.D

Acq: 6 Apr 2022 11:06

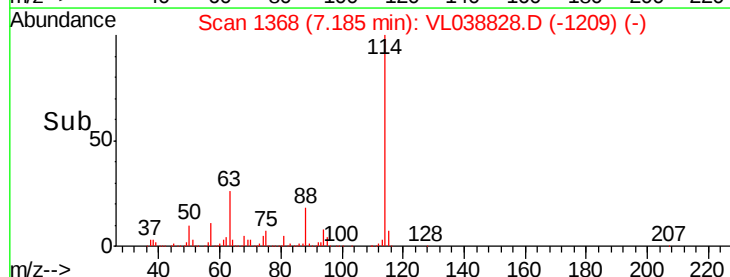
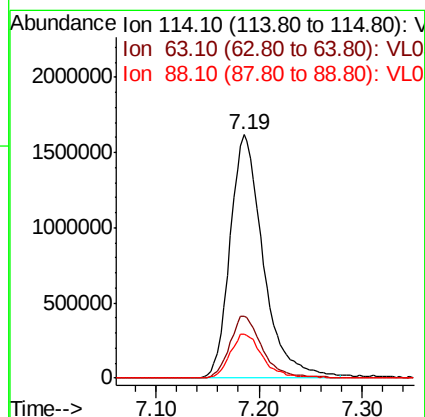
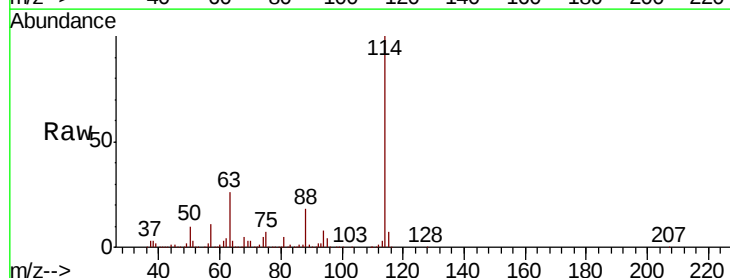
Tgt Ion: 114 Resp: 3637292

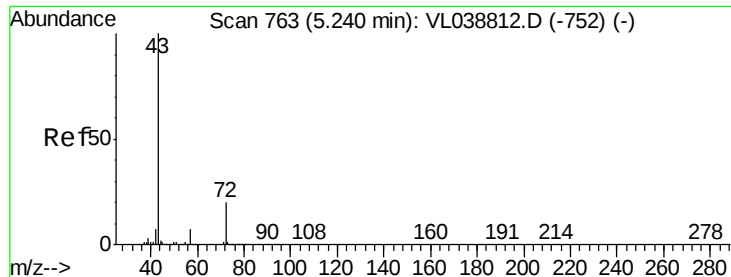
Ion Ratio Lower Upper

114 100

63 25.2 19.8 29.8

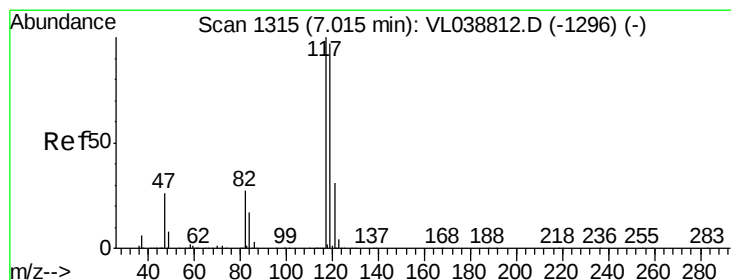
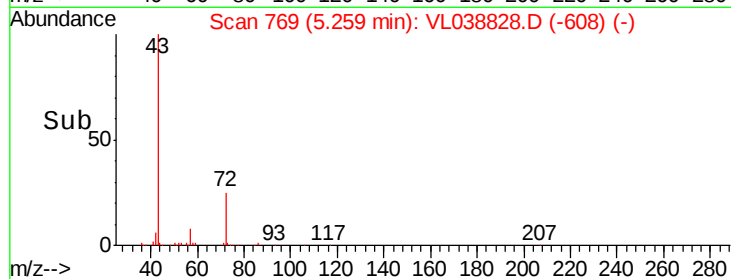
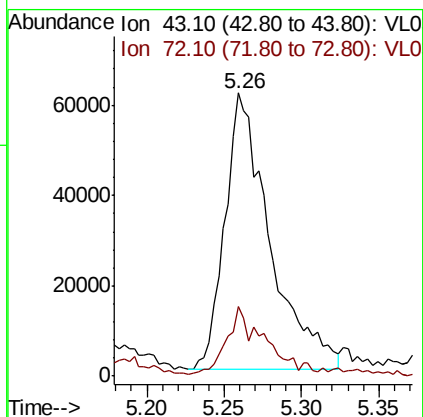
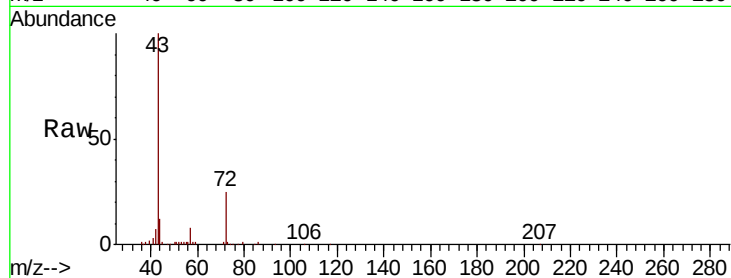
88 18.1 14.2 21.4





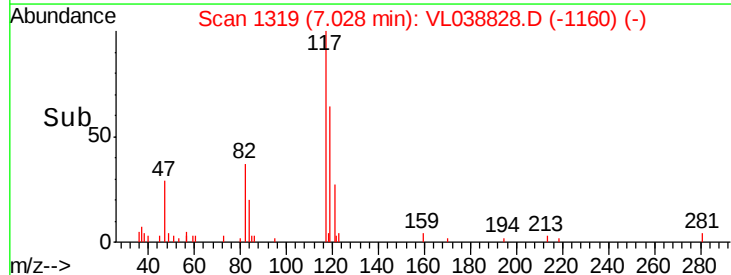
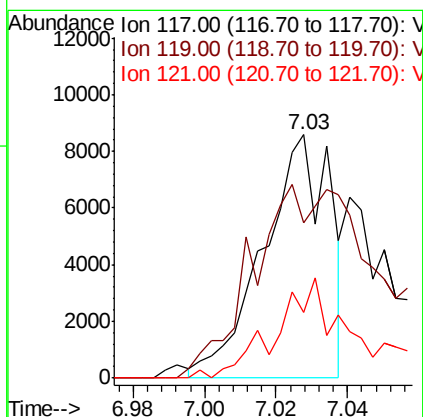
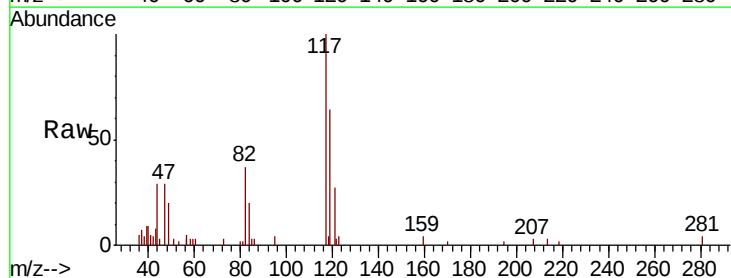
#34
 2-Butanone
 Concen: 0.866 ppbv
 RT: 5.26
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 6 Apr 2022 11:00

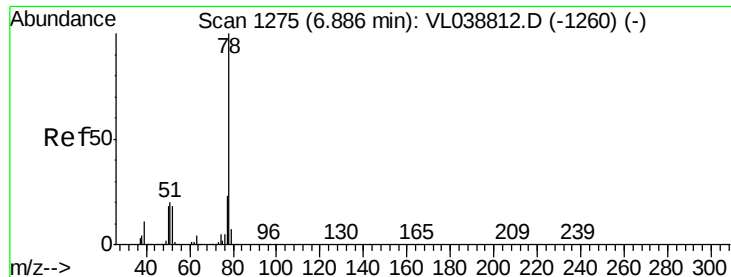
Tot Ion: 43 Resp: 124464
 Ion Ratio Lower Upper
 43 100
 72 23.6 16.9 25.3



#35
 Carbon Tetrachloride
 Concen: 0.051 ppbv
 RT: 7.03 min Scan# 1319
 Delta R.T. 0.01 min
 Lab File: VL038828.D
 Acq: 6 Apr 2022 11:06

Tgt Ion: 117 Resp: 11055
 Ion Ratio Lower Upper
 117 100
 119 62.0 77.7 116.5#
 121 31.5 24.5 36.7





#36

Benzene

Concen: 0.196 ppbv

RT: 6.90 Instrument:

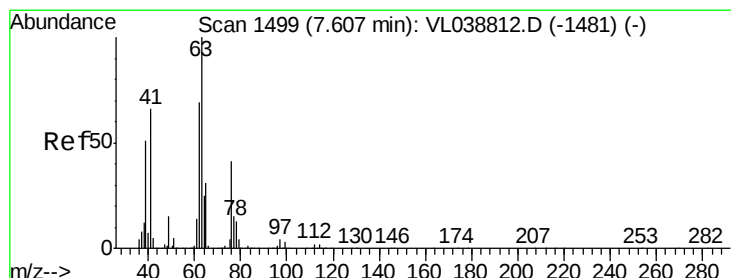
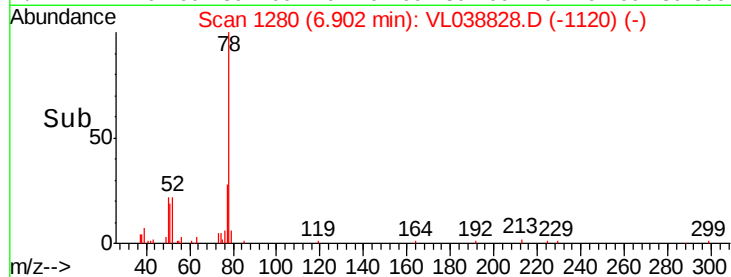
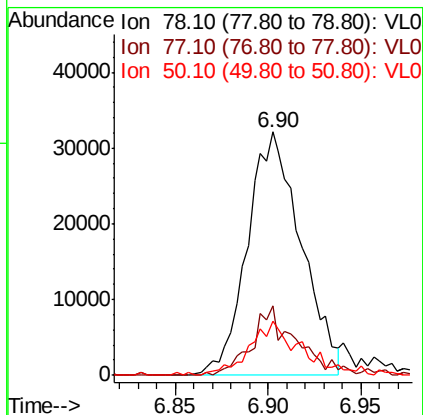
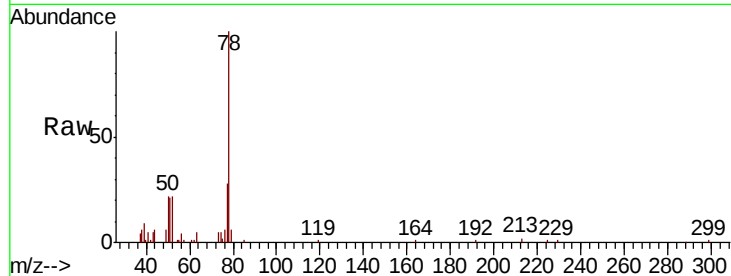
Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 6 Apr 2022 11:00

Tot Ion: 78 Resp: 64739

Ion	Ratio	Lower	Upper
78	100		
77	28.5	18.2	27.2#
50	21.2	14.0	21.0#



#39

1,2-Dichloropropane

Concen: 7.050 ppbv

RT: 7.19 min Scan# 1368

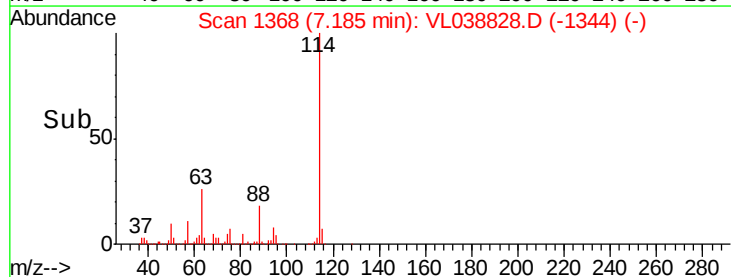
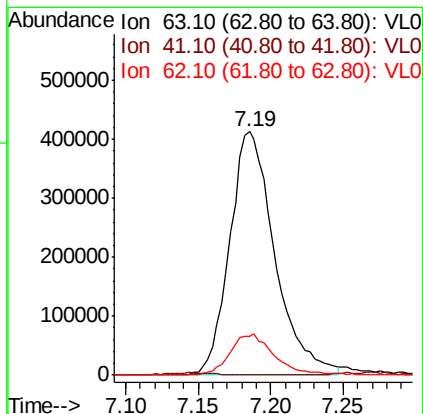
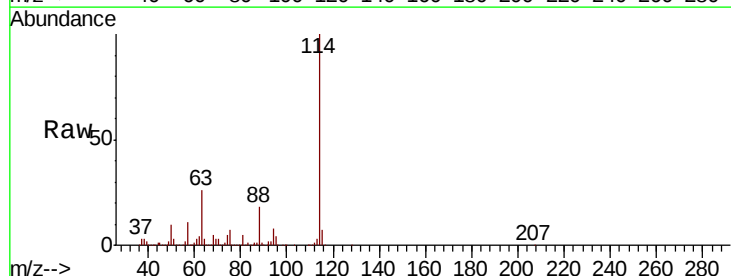
Delta R.T. -0.42 min

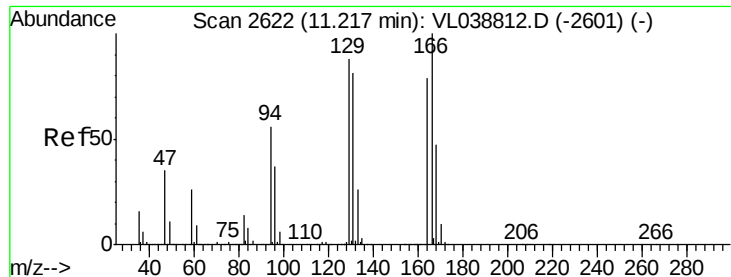
Lab File: VL038828.D

Acq: 6 Apr 2022 11:06

Tgt Ion: 63 Resp: 892286

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





#52

Tetrachloroethene

Concen: 0.197 ppbv

RT: 11.23

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 6 Apr 2022 11:06

Tot Ion:164 Resp: 22805

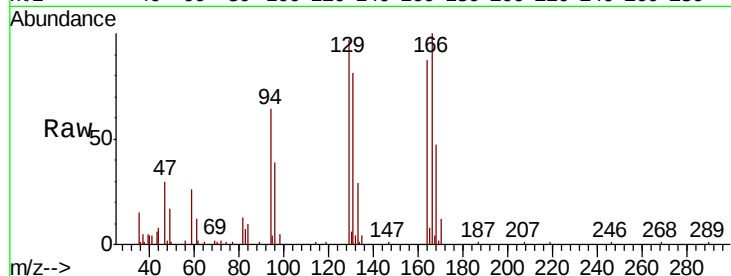
Ion Ratio Lower Upper

164 100

166 111.4 101.0 151.6

129 107.9 88.7 133.1

131 89.2 81.8 122.6

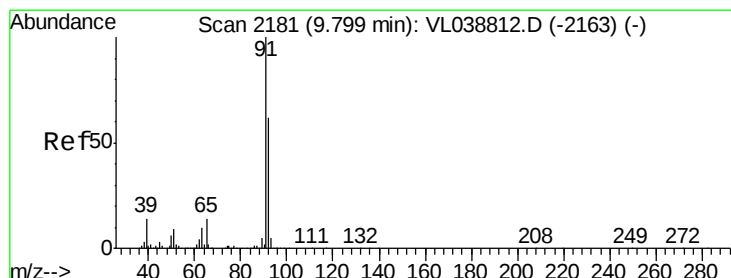
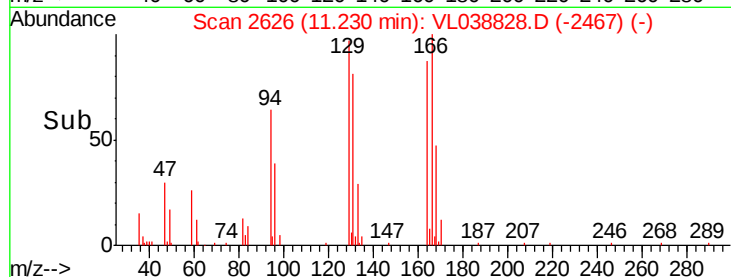
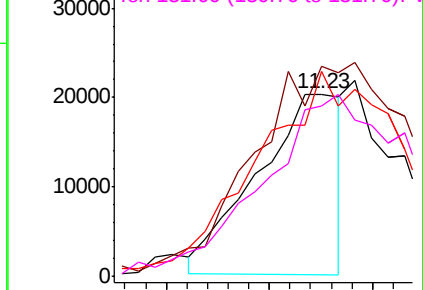


Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V



#53

Toluene

Concen: 0.976 ppbv

RT: 9.82 min Scan# 2187

Delta R.T. 0.02 min

Lab File: VL038828.D

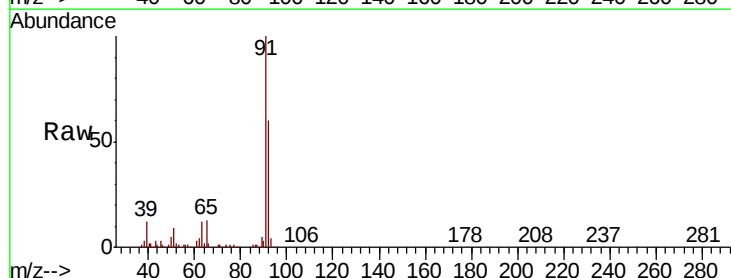
Acq: 6 Apr 2022 11:06

Tgt Ion: 91 Resp: 372670

Ion Ratio Lower Upper

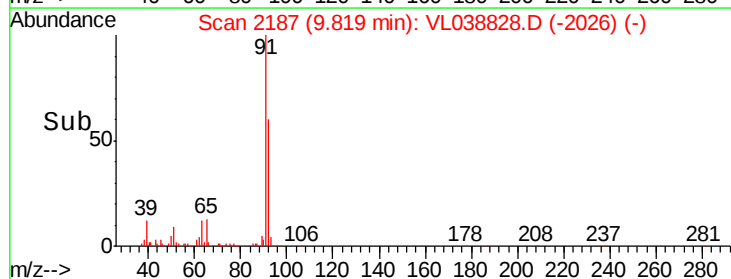
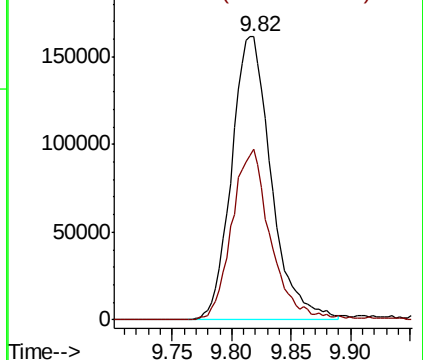
91 100

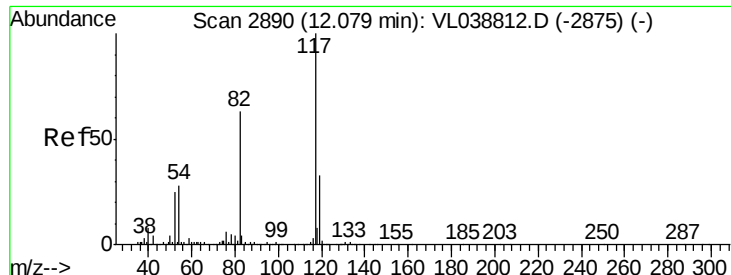
92 59.0 49.2 73.8



Abundance Ion 91.10 (90.80 to 91.80): VL0

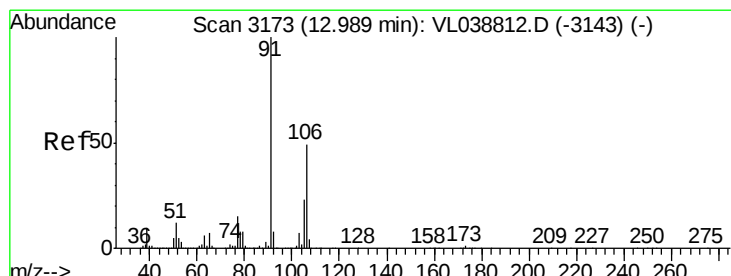
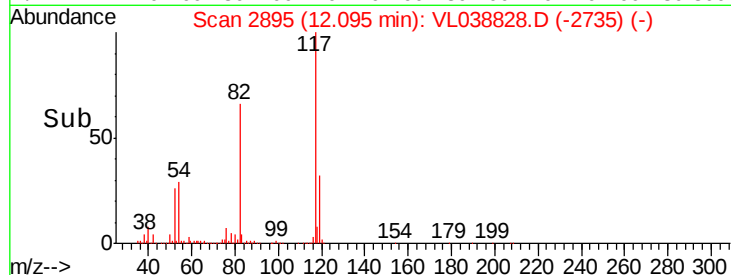
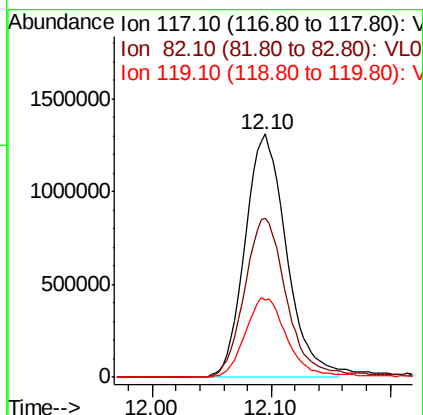
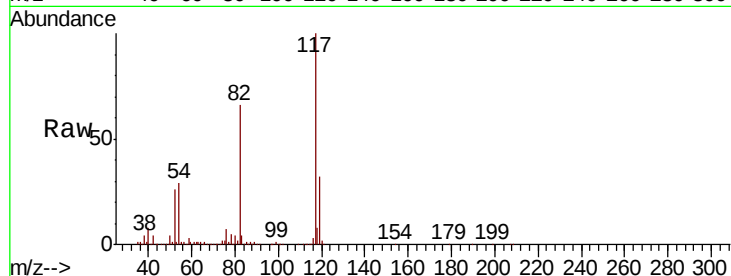
Ion 92.10 (91.80 to 92.80): VL0





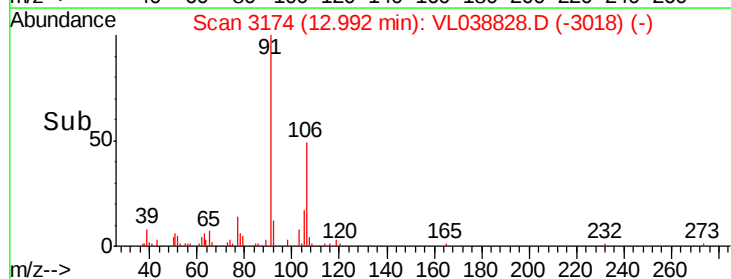
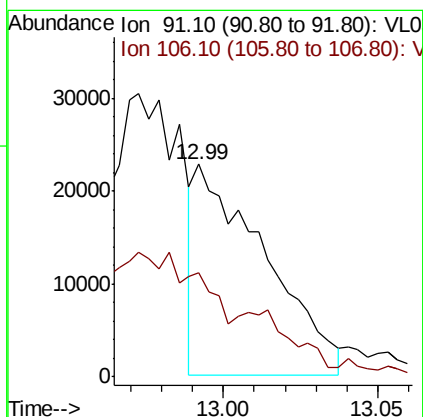
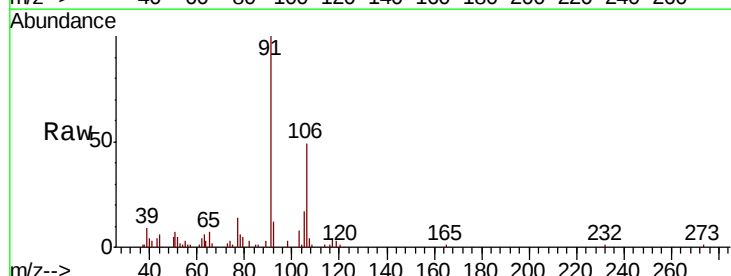
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.10 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 6 Apr 2022 11:00

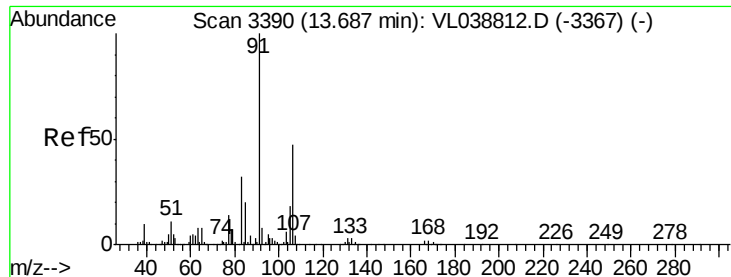
Tot Ion: 117 Resp: 3159901
Ion Ratio Lower Upper
117 100
82 69.2 53.0 79.6
119 34.1 24.9 37.3



#59
m/p-Xylene
Concen: 0.090 ppbv
RT: 12.99 min Scan# 3174
Delta R.T.: 0.00 min
Lab File: VL038828.D
Acq: 6 Apr 2022 11:06

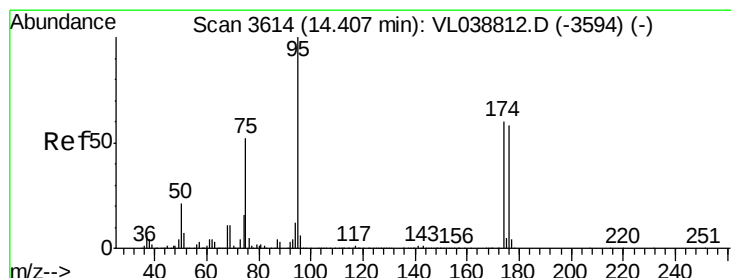
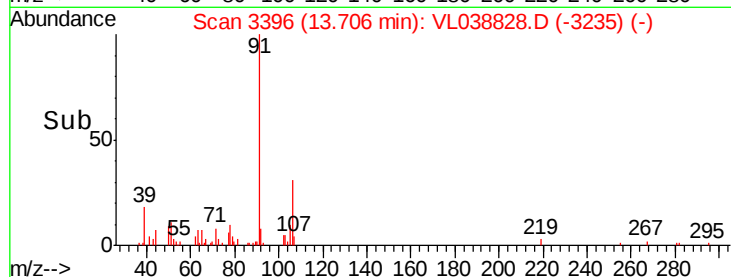
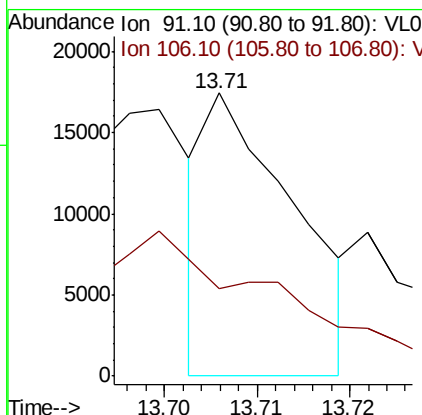
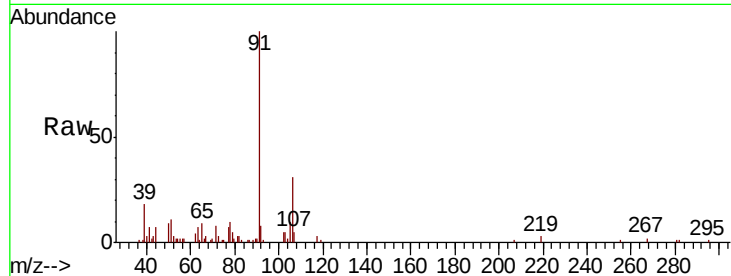
Tgt Ion: 91 Resp: 35531
Ion Ratio Lower Upper
91 100
106 0.0 37.1 55.7#





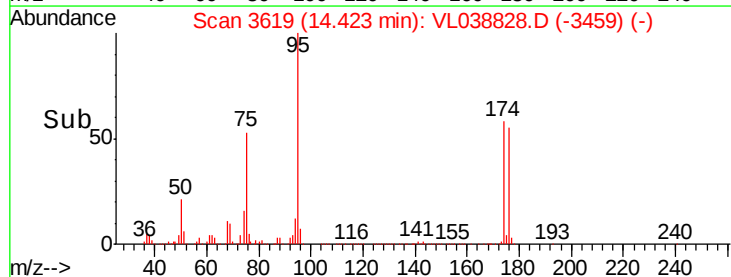
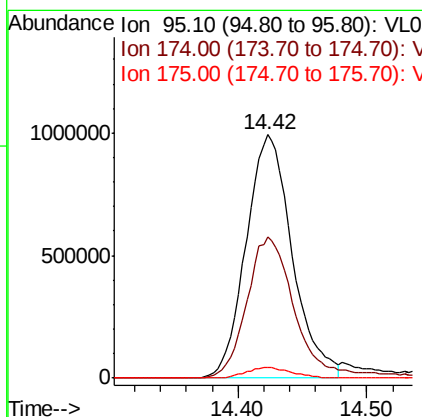
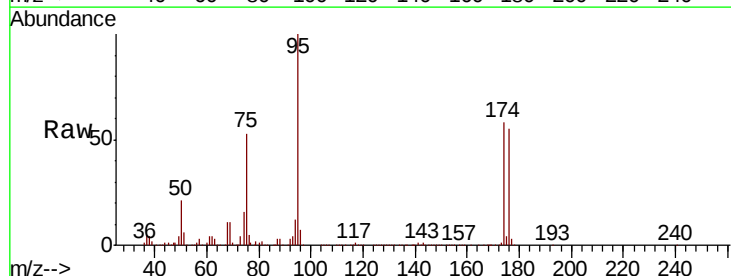
#60
o-Xylene
Concen: 0.031 ppbv
RT: 13.71 min
Delta R.T. MSVOA_L
Lab File: ClientSampled :
Acq: 6 Apr 2022 11:00

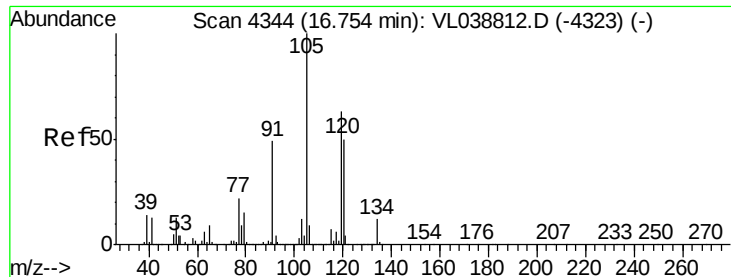
Tot Ion: 91 Resp: 11582
Ion Ratio Lower Upper
91 100
106 0.0 23.8 71.4#



#68
1-Bromo-4-Fluorobenzene
Concen: 10.326 ppbv
RT: 14.42 min Scan# 3619
Delta R.T. 0.02 min
Lab File: VL038828.D
Acq: 6 Apr 2022 11:06

Tgt Ion: 95 Resp: 2474955
Ion Ratio Lower Upper
95 100
174 62.9 52.0 78.0
175 4.7 4.0 6.0





#74

1,2,4-Trimethylbenzene

Concen: 0.166 ppbv

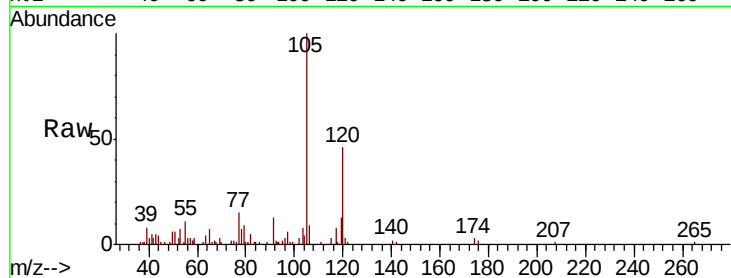
RT: 16.77 Instrument:

Delta R.T: MSVOA_L

Lab File: ClientSampleId:

Acq: 6 Apr 2022 11:00

Tot Ion:	105	Resp:	69696
Ion Ratio	Lower	Upper	
105	100		
120	46.4	39.8	59.8
91	12.0	39.4	59.0#
77	15.4	17.3	25.9#



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

