

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL081621\
 Data File : VL037470.D
 Acq On : 16 Aug 2021 20:42
 Operator : SY/AP
 Sample : L3510-01
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Aug 17 02:22:58 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL081621AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Aug 17 02:13:47 2021
 QLast Update : Tue Aug 17 02:13:47 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1284563	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.16	114	3898063	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.07	117	3965354	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.40	95	3636643	12.91	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	129.10%

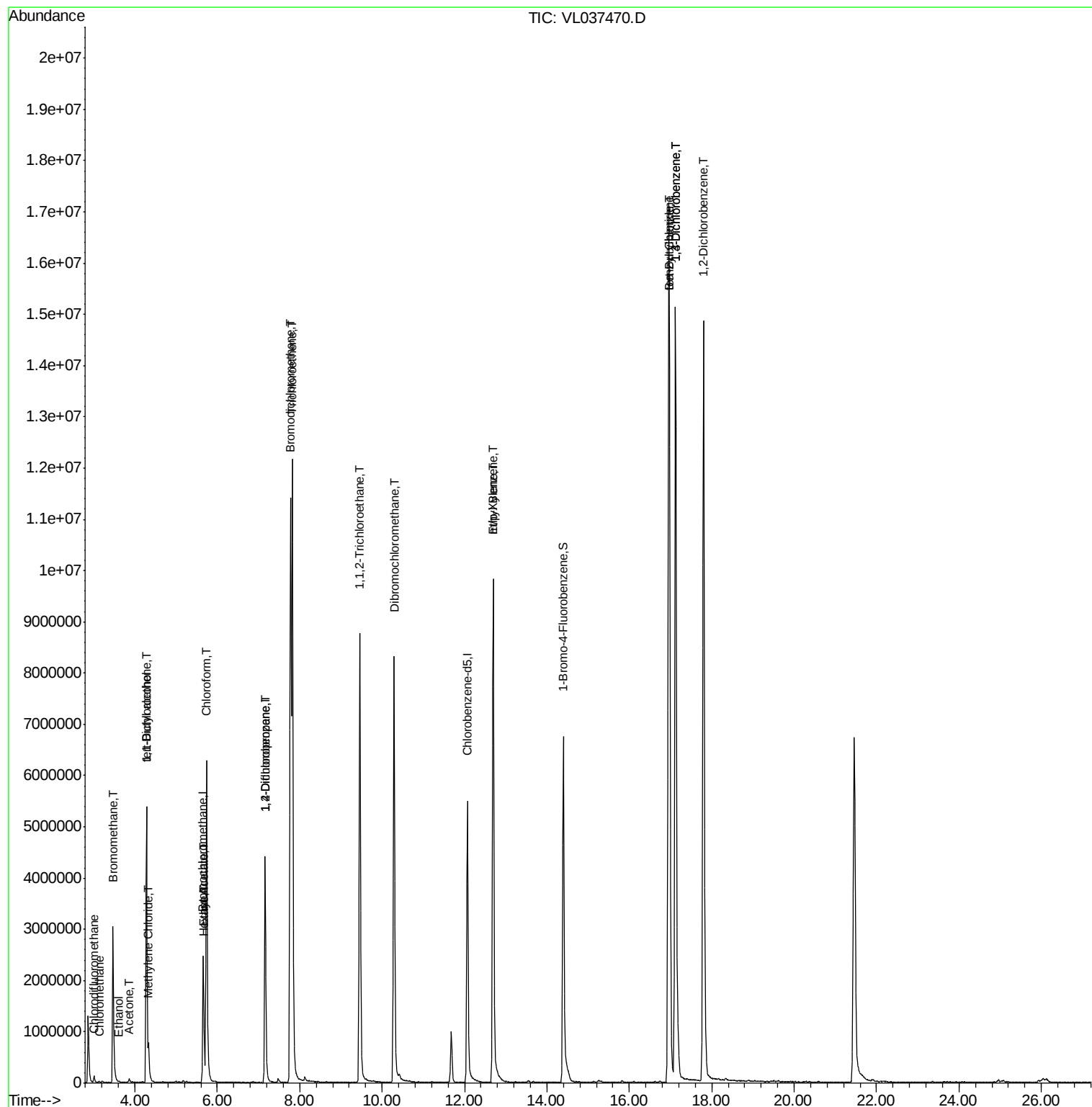
Target Compounds					Ovalue
3) Chlorodifluoromethane	2.99	51	10613	0.043 ppbv #	76
4) Chloromethane	3.13	50	6942	0.079 ppbv	97
6) Bromomethane	3.47	94	2117548	42.926 ppbv	98
13) Ethanol	3.60	45	2817	0.329 ppbv #	39
15) Acetone	3.86	43	81430	0.623 ppbv #	81
17) tert-Butyl alcohol	4.28	59	73430	0.615 ppbv #	73
18) 1,1-Dichloroethene	4.28	96	2013515	31.222 ppbv	96
20) Methylene Chloride	4.33	84	200714	3.066 ppbv	95
25) Ethyl Acetate	5.67	43	48853	0.147 ppbv #	76
26) Hexane	5.67	57	130867	0.806 ppbv #	47
29) Chloroform	5.74	83	5237802	22.777 ppbv	98
38) Trichloroethene	7.82	130	4399243	32.721 ppbv	96
39) 1,2-Dichloropropane	7.16	63	916773	7.281 ppbv #	28
42) Bromodichloromethane	7.78	83	9001076	37.924 ppbv	93
47) 1,1,2-Trichloroethane	9.46	97	3611953	26.547 ppbv	96
48) Dibromochloromethane	10.29	129	5882112	30.043 ppbv	99
58) Ethyl Benzene	12.70	91	10082914	18.323 ppbv	98
59) m/p-Xylene	12.70	91	10082914	21.136 ppbv #	81
65) tert-Butylbenzene	16.96	119	187477	0.328 ppbv #	25
66) Benzyl Chloride	16.98	91	1245	0.048 ppbv #	63
75) 1,3-Dichlorobenzene	17.12	146	9755064	30.937 ppbv	98
76) 1,4-Dichlorobenzene	17.12	146	9755064	30.710 ppbv	99
77) 1,2-Dichlorobenzene	17.80	146	9376753	30.198 ppbv	99

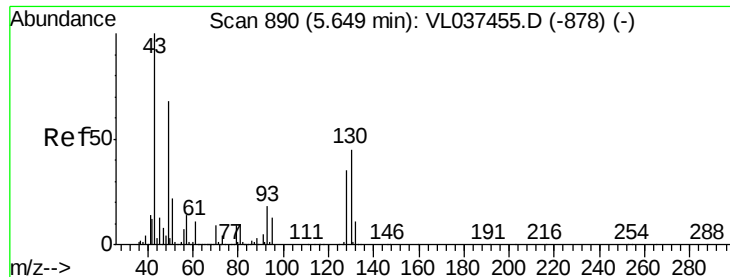
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL081621\
Data File : VL037470.D
Acq On : 16 Aug 2021 20:42
Operator : SY/AP
Sample : L3510-01
Misc : 400mL/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :

Quant Time: Aug 17 02:22:58 2021
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL081621AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Aug 17 02:13:47 2021
QLast Update : Tue Aug 17 02:13:47 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 892

Delta R.T. 0.01 min

Lab File: VL037470.D

Acq: 16 Aug 2021 20:42

Instrument :

MSVOA_L

ClientSampleId :

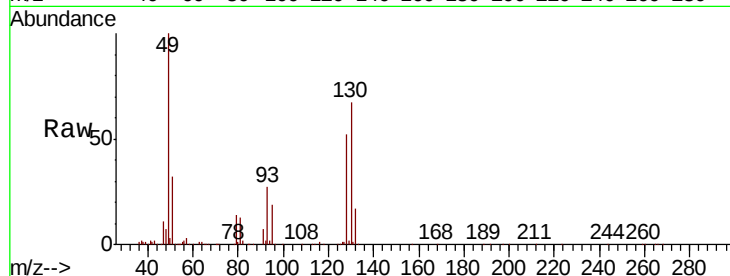
Tot Ion: 49 Resp: 1284563

Ion Ratio Lower Upper

49 100

128 55.7 27.5 82.4

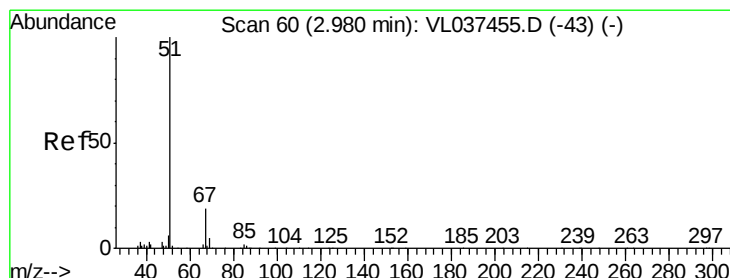
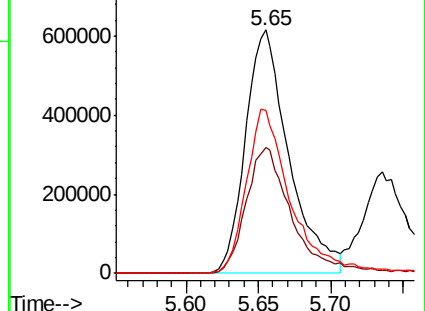
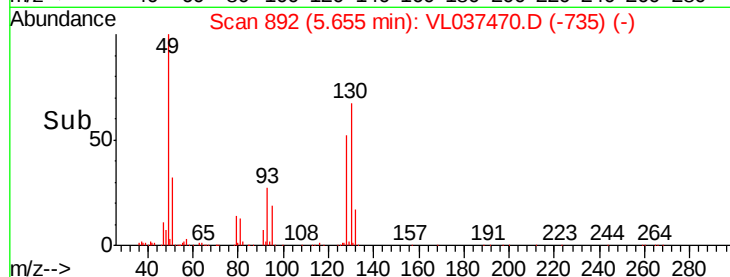
130 69.9 34.0 101.8



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



#3

Chlorodifluoromethane

Concen: 0.043 ppbv

RT: 2.99 min Scan# 62

Delta R.T. 0.01 min

Lab File: VL037470.D

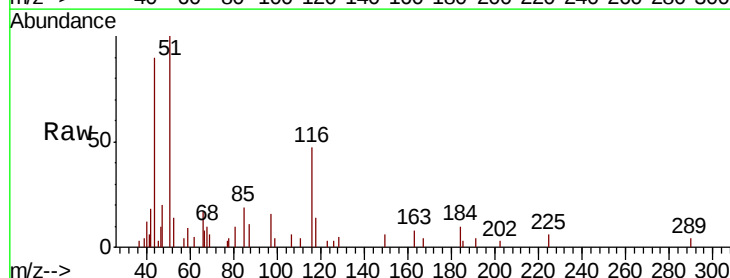
Acq: 16 Aug 2021 20:42

Tgt Ion: 51 Resp: 10613

Ion Ratio Lower Upper

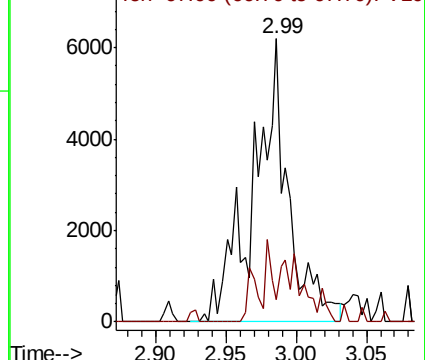
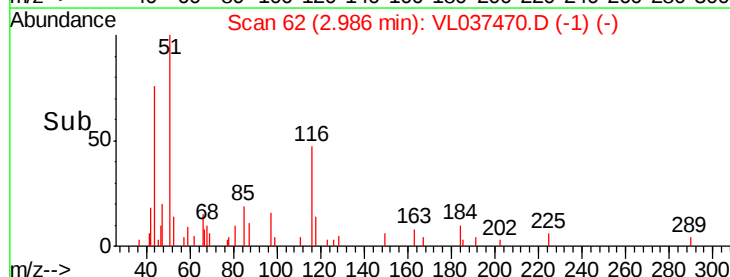
51 100

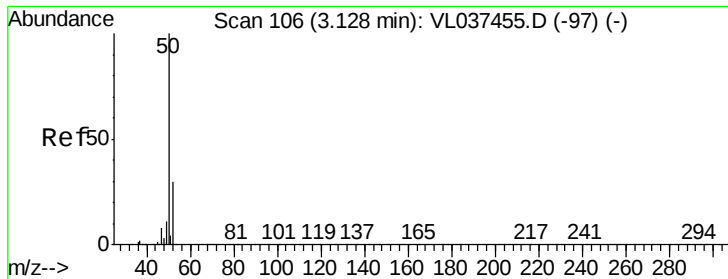
67 28.1 14.2 21.2#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0





#4

Chloromethane

Concen: 0.079 ppbv

RT: 3.13 min Scan# 107

Delta R.T. 0.00 min

Lab File: VL037470.D

Acq: 16 Aug 2021 20:42

Instrument :

MSVOA_L

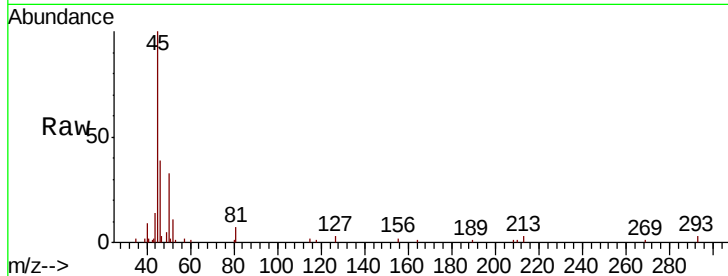
ClientSampled :

Tot Ion: 50 Resp: 6942

Ion Ratio Lower Upper

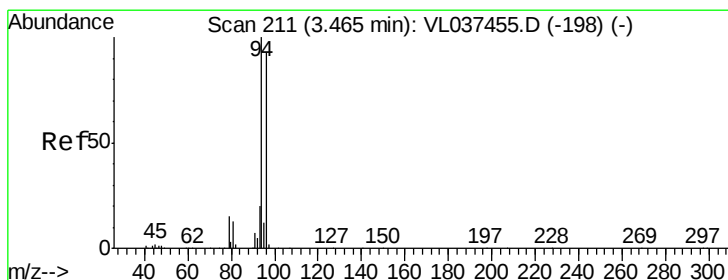
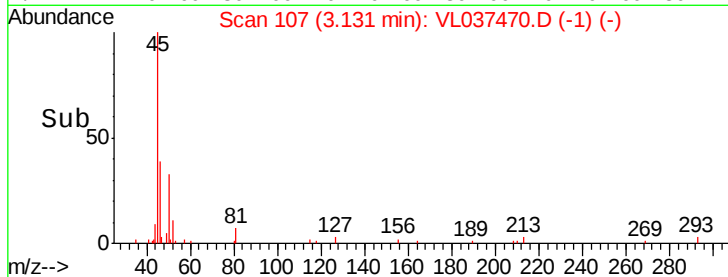
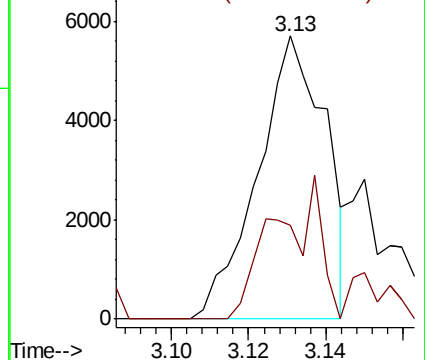
50 100

52 31.5 24.0 36.0



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0



#6

Bromomethane

Concen: 42.926 ppbv

RT: 3.47 min Scan# 211

Delta R.T. -0.00 min

Lab File: VL037470.D

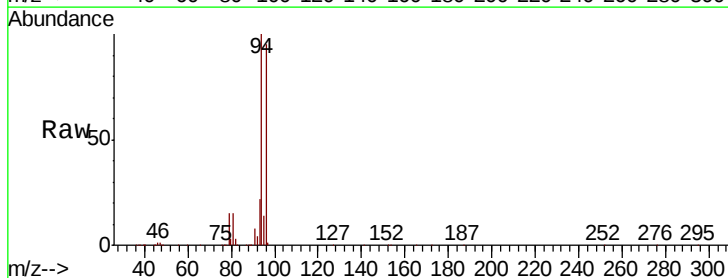
Acq: 16 Aug 2021 20:42

Tgt Ion: 94 Resp: 2117548

Ion Ratio Lower Upper

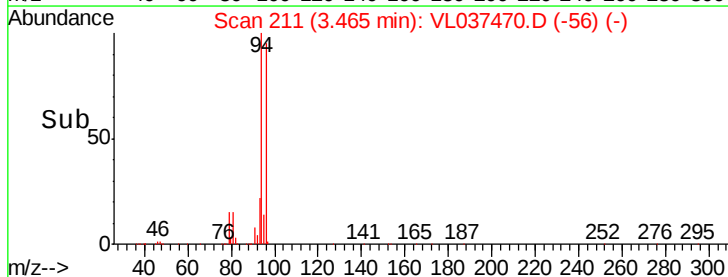
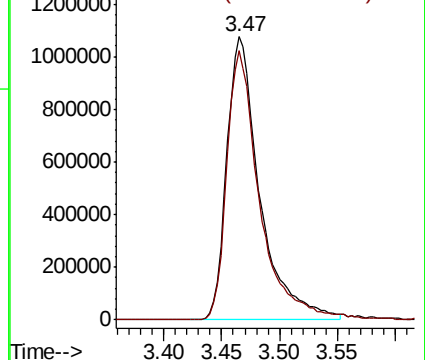
94 100

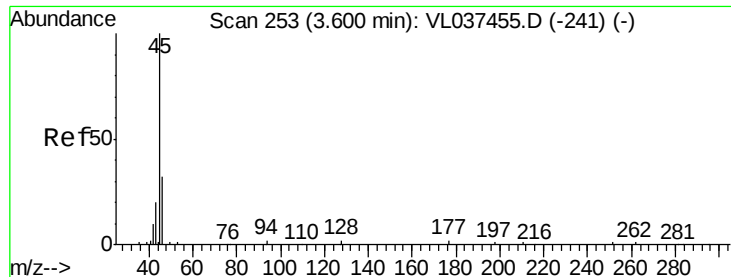
96 95.3 74.5 111.7



Abundance Ion 94.00 (93.70 to 94.70): VL0

Ion 96.00 (95.70 to 96.70): VL0





#13

Ethanol

Concen: 0.329 ppbv

RT: 3.60 min Scan# 254

Delta R.T. 0.00 min

Lab File: VL037470.D

Acq: 16 Aug 2021 20:42

Instrument :

MSVOA_L

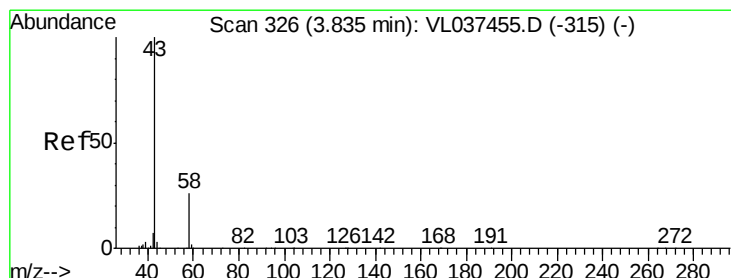
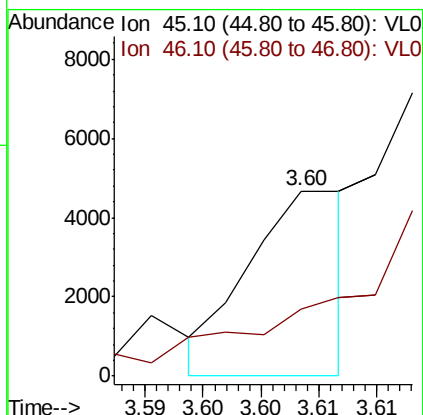
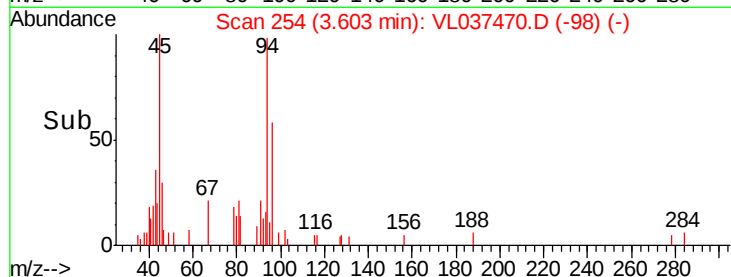
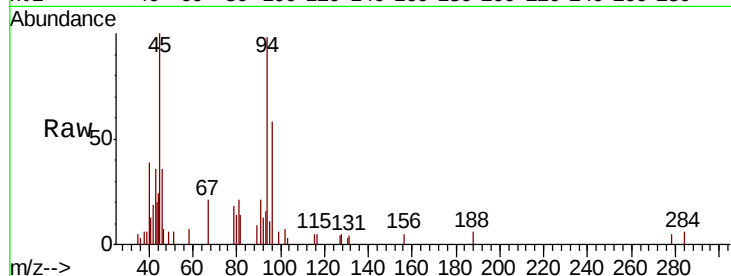
ClientSampleId :

Tot Ion: 45 Resp: 2817

Ion Ratio Lower Upper

45 100

46 0.0 14.1 56.5#



#15

Acetone

Concen: 0.623 ppbv

RT: 3.86 min Scan# 333

Delta R.T. 0.02 min

Lab File: VL037470.D

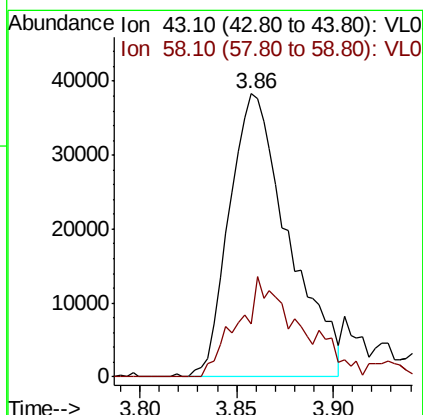
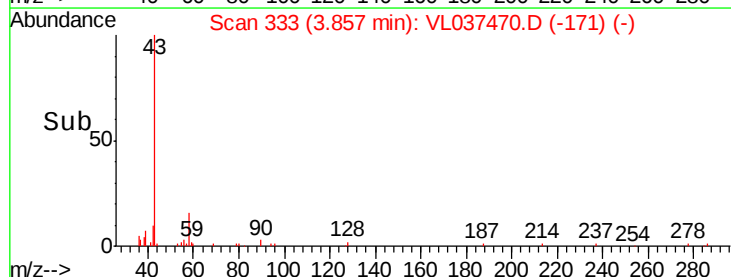
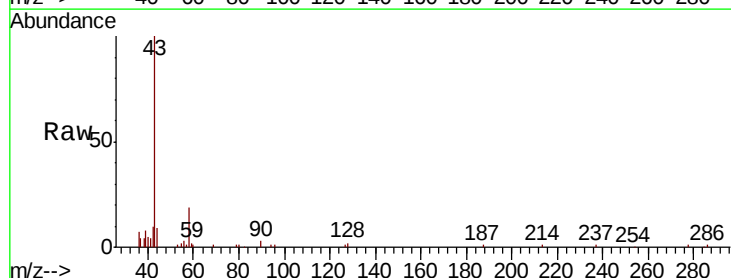
Acq: 16 Aug 2021 20:42

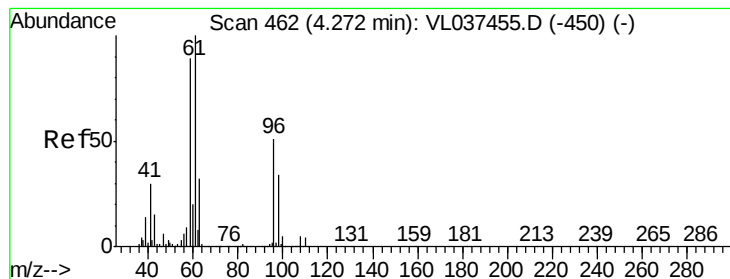
Tgt Ion: 43 Resp: 81430

Ion Ratio Lower Upper

43 100

58 41.6 24.8 37.2#





#17

tert-Butyl alcohol

Concen: 0.615 ppbv

RT: 4.28 min Scan# 465

Delta R.T. 0.01 min

Lab File: VL037470.D

Acq: 16 Aug 2021 20:42

Instrument :

MSVOA_L

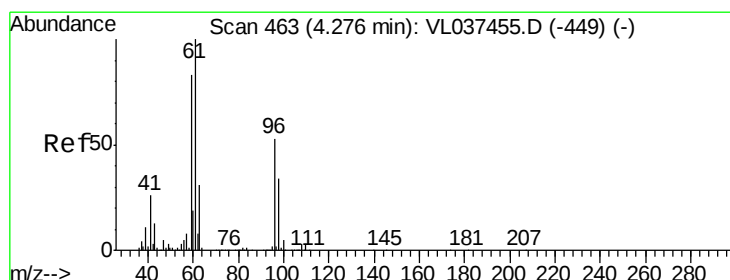
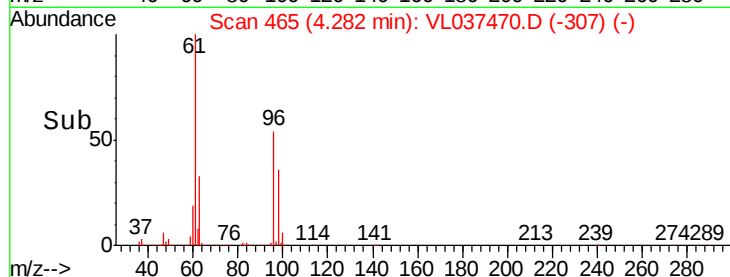
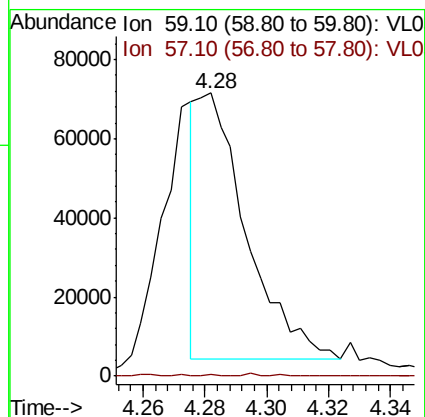
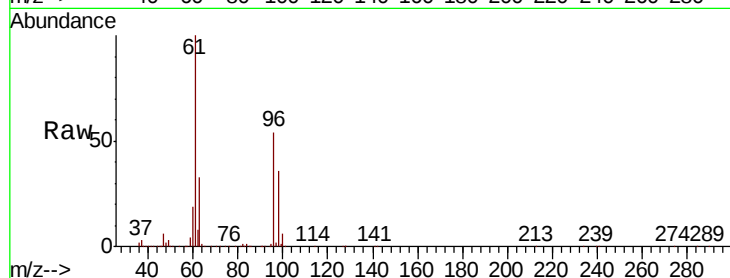
ClientSampleId :

Tot Ion: 59 Resp: 73430

Ion Ratio Lower Upper

59 100

57 0.4 8.3 12.5#



#18

1,1-Dichloroethene

Concen: 31.222 ppbv

RT: 4.28 min Scan# 464

Delta R.T. 0.00 min

Lab File: VL037470.D

Acq: 16 Aug 2021 20:42

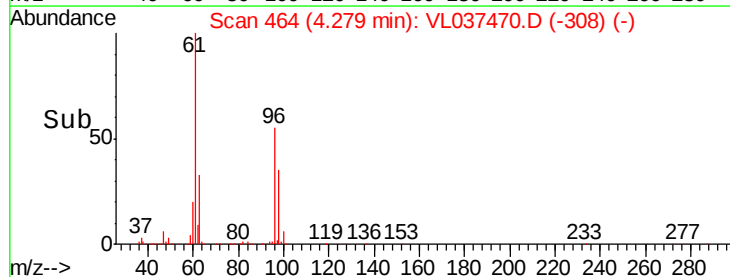
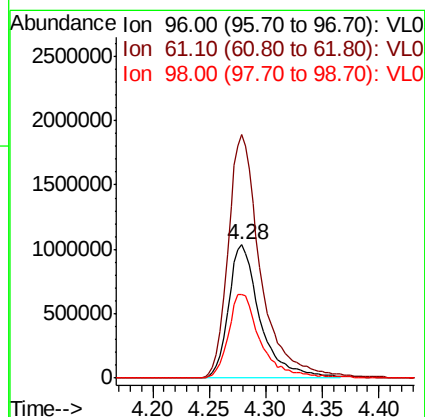
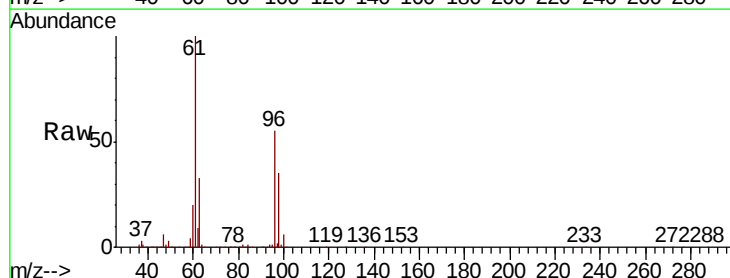
Tgt Ion: 96 Resp: 2013515

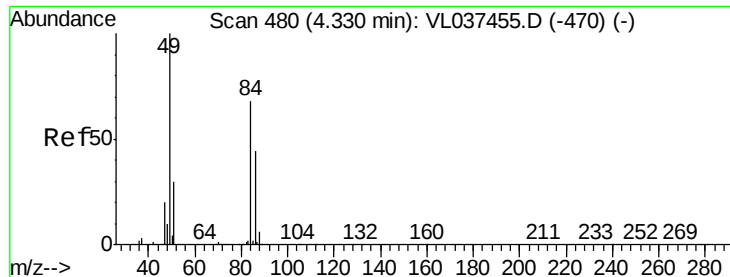
Ion Ratio Lower Upper

96 100

61 182.7 151.1 226.7

98 63.1 51.8 77.8

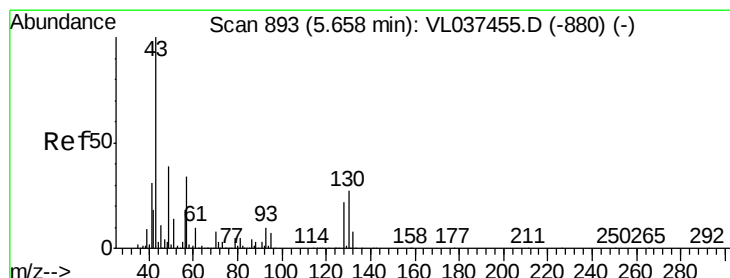
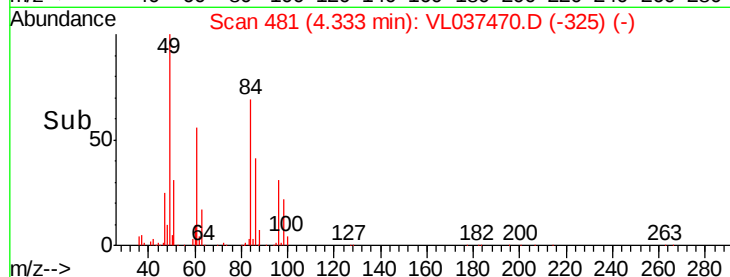
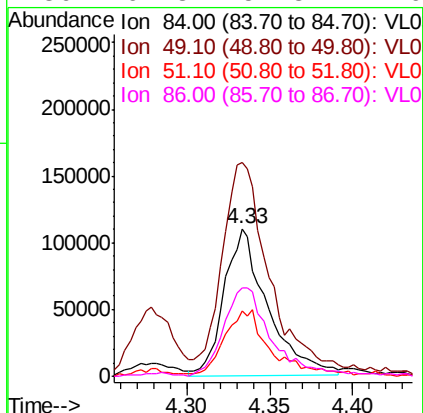
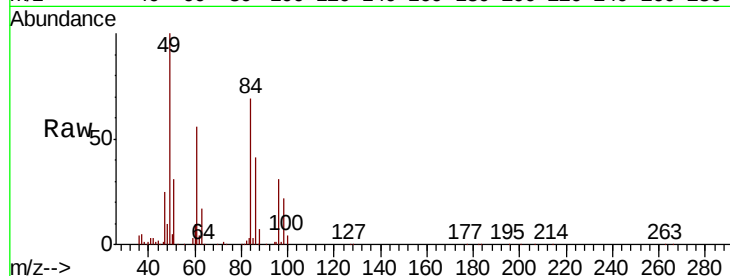




#20
Methylene Chloride
Concen: 3.066 ppbv
RT: 4.33 min Scan# 481
Delta R.T. 0.00 min
Lab File: VL037470.D
Acq: 16 Aug 2021 20:42

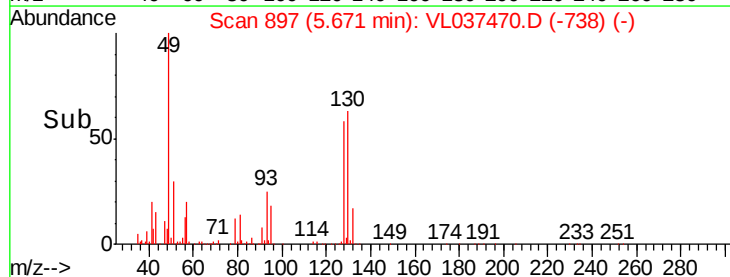
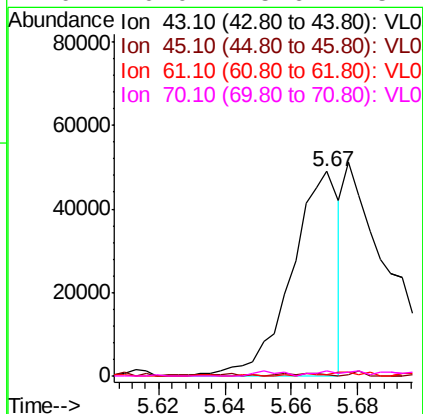
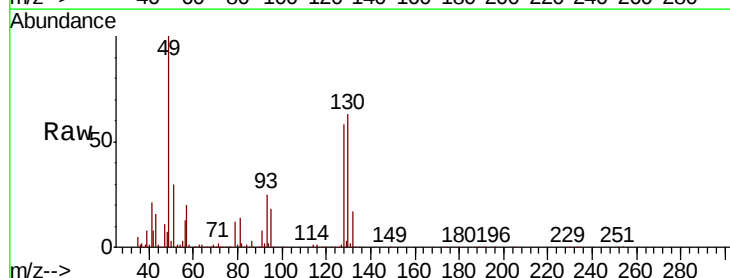
Instrument :
MSVOA_L
ClientSampled :

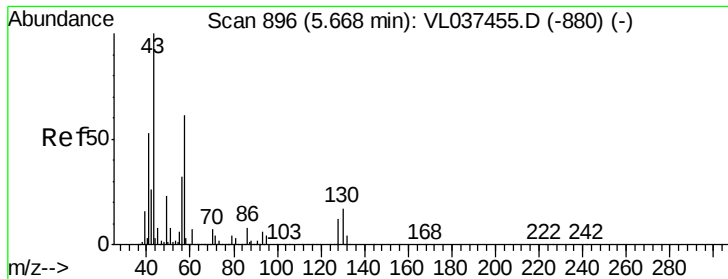
Tot Ion:	84	Resp:	200714
Ion	Ratio	Lower	Upper
84	100		
49	140.7	118.2	177.2
51	44.2	36.6	55.0
86	61.3	51.8	77.6



#25
Ethyl Acetate
Concen: 0.147 ppbv
RT: 5.67 min Scan# 897
Delta R.T. 0.01 min
Lab File: VL037470.D
Acq: 16 Aug 2021 20:42

Tgt Ion:	43	Resp:	48853
Ion	Ratio	Lower	Upper
43	100		
45	1.7	8.0	12.0#
61	0.0	8.0	12.0#
70	0.0	5.6	8.4#





#26

Hexane

Concen: 0.806 ppbv

RT: 5.67 min Scan# 898

Delta R.T. 0.01 min

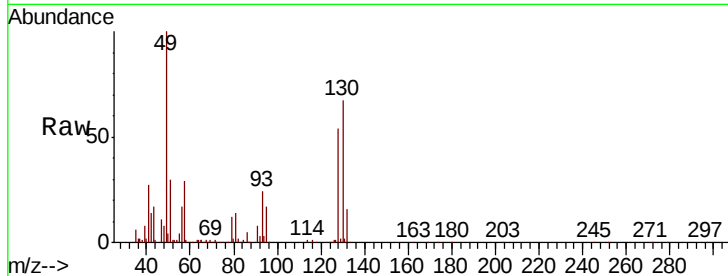
Lab File: VL037470.D

Acq: 16 Aug 2021 20:42

Instrument :
MSVOA_L
ClientSampled :

Tot Ion: 57 Resp: 130867

Ion	Ratio	Lower	Upper
57	100		
41	94.4	72.3	108.5
43	80.4	172.3	258.5#
56	59.4	42.8	64.2



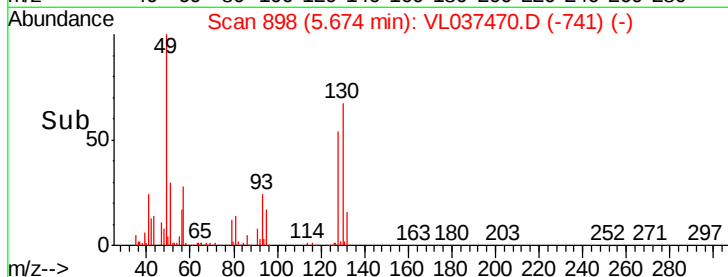
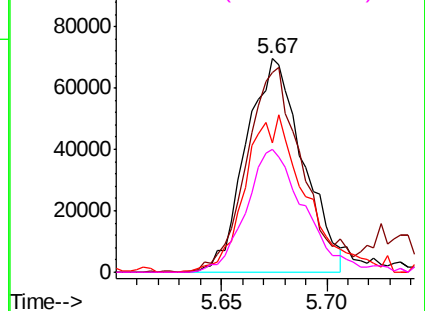
Abundance

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: 22.777 ppbv

RT: 5.74 min Scan# 918

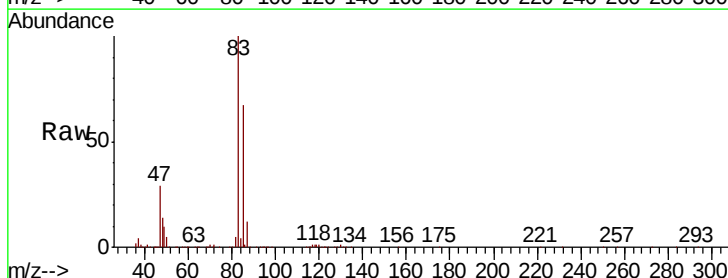
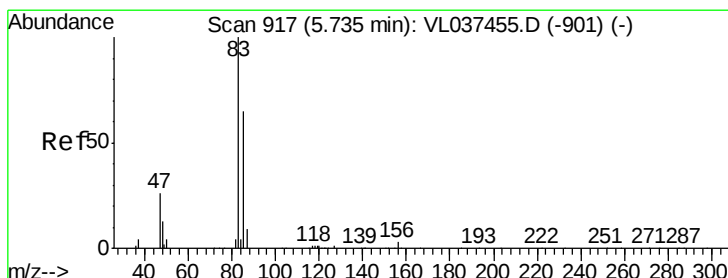
Delta R.T. 0.00 min

Lab File: VL037470.D

Acq: 16 Aug 2021 20:42

Tgt Ion: 83 Resp: 5237802

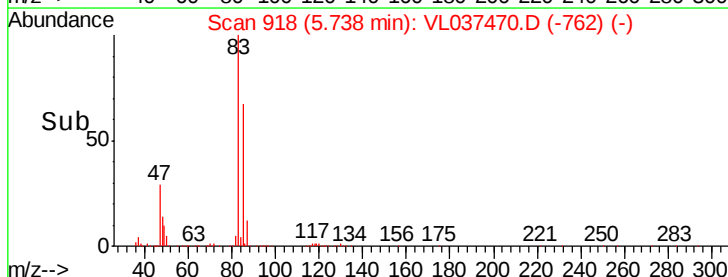
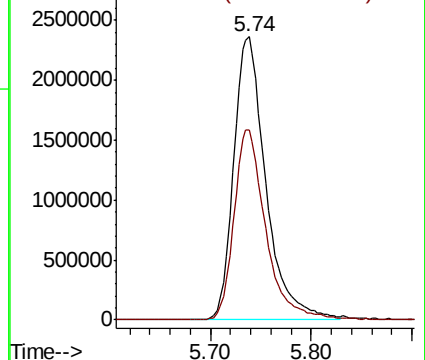
Ion	Ratio	Lower	Upper
83	100		
85	67.0	52.3	78.5

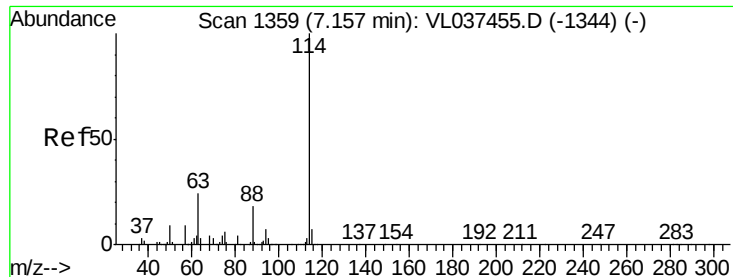


Abundance

Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0

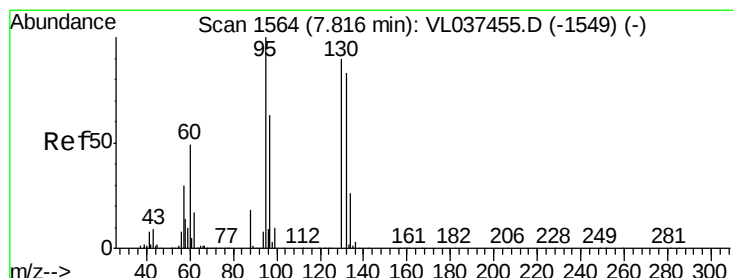
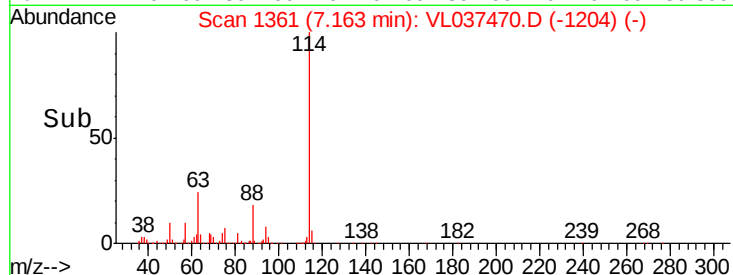
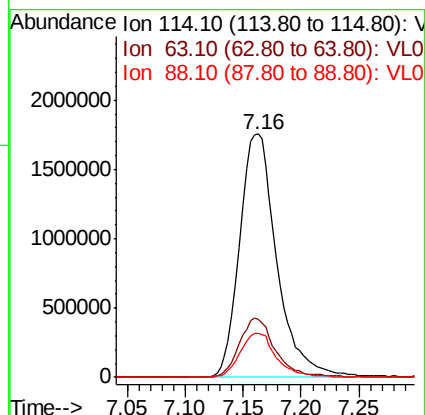
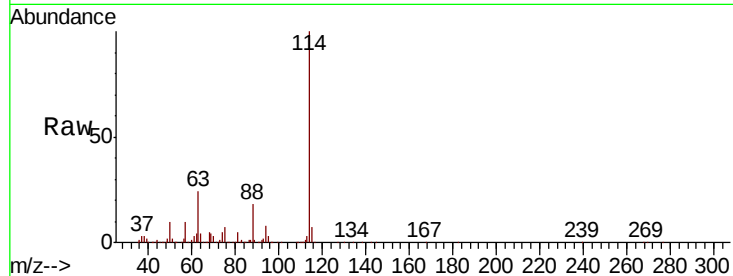




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.16 min Scan# 1361
Delta R.T. 0.01 min
Lab File: VL037470.D
Acq: 16 Aug 2021 20:42

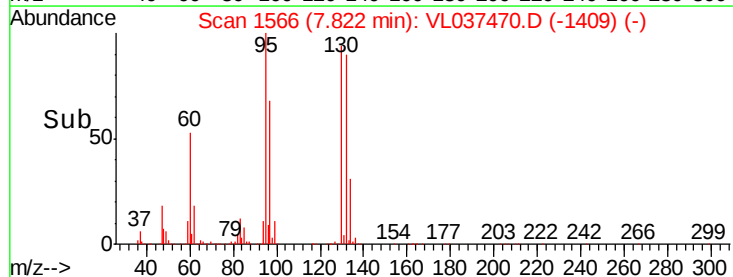
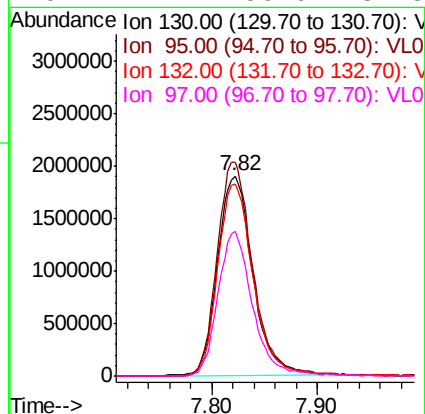
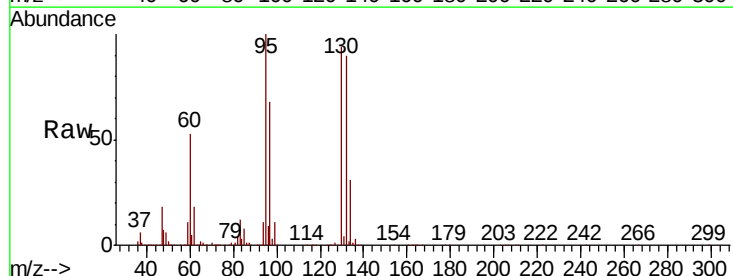
Instrument :
MSVOA_L
ClientSampleId :

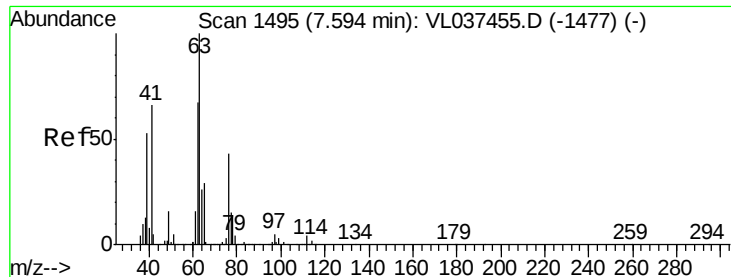
Tot Ion:114 Resp: 3898063
Ion Ratio Lower Upper
114 100
63 24.0 19.3 28.9
88 18.0 14.2 21.4



#38
Trichloroethene
Concen: 32.721 ppbv
RT: 7.82 min Scan# 1566
Delta R.T. 0.01 min
Lab File: VL037470.D
Acq: 16 Aug 2021 20:42

Tgt Ion:130 Resp: 4399243
Ion Ratio Lower Upper
130 100
95 106.8 89.2 133.8
132 96.1 74.0 111.0
97 72.4 56.6 84.8

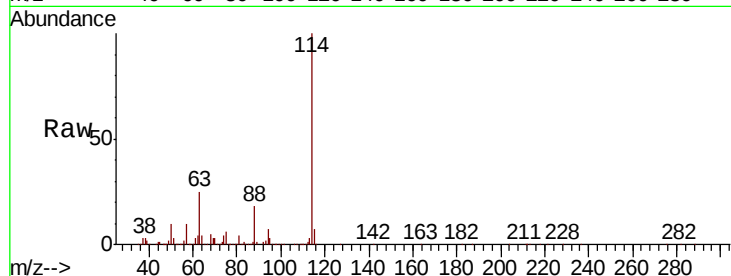




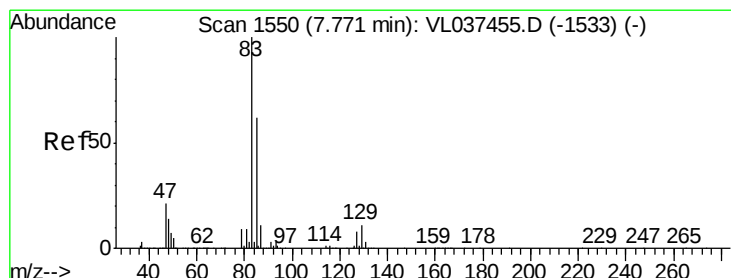
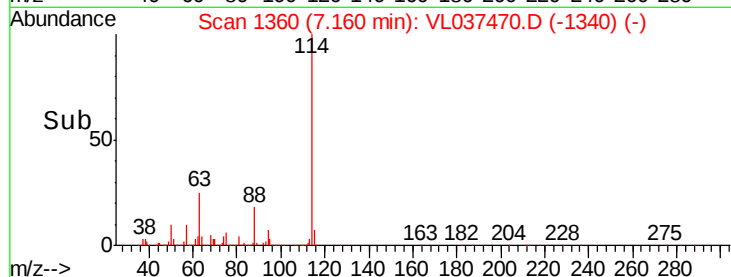
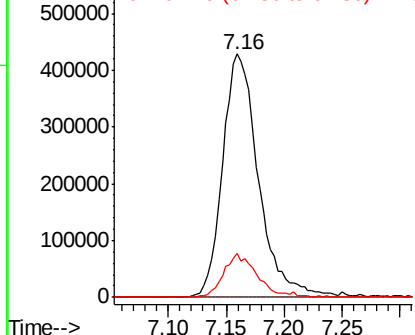
#39
 1,2-Dichloropropane
 Concen: 7.281 ppbv
 RT: 7.16 min Scan# 1360
 Delta R.T. -0.43 min
 Lab File: VL037470.D
 Acq: 16 Aug 2021 20:42

Instrument :
 MSVOA_L
 ClientSampleId :

Tot Ion	Ratio	Lower	Upper
63	100		
41	0.0	52.4	78.6#
62	18.2	53.6	80.4#

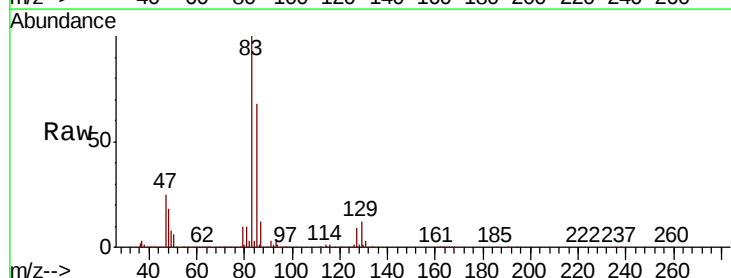


Abundance Ion 63.10 (62.80 to 63.80): VL0
 Ion 41.10 (40.80 to 41.80): VL0
 Ion 62.10 (61.80 to 62.80): VL0

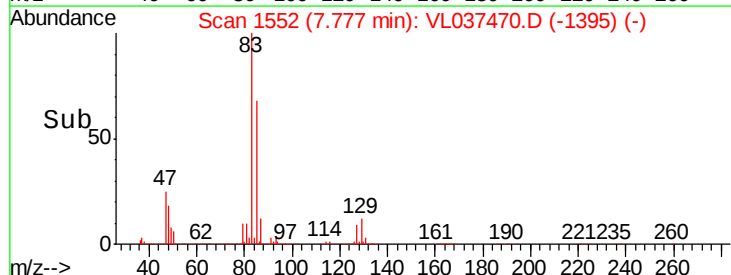
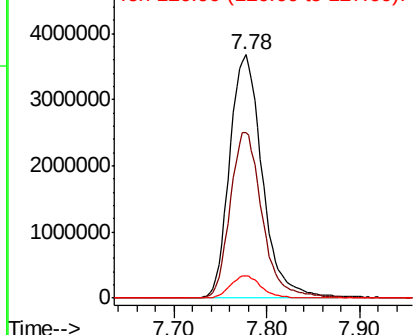


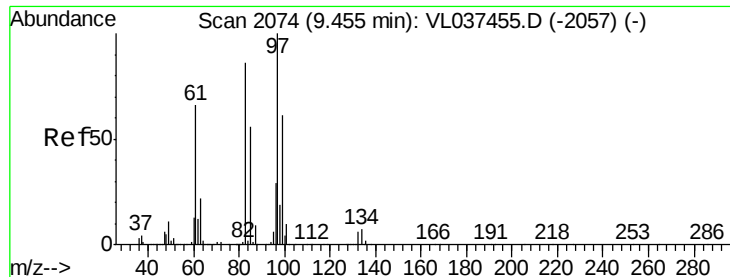
#42
 Bromodichloromethane
 Concen: 37.924 ppbv
 RT: 7.78 min Scan# 1552
 Delta R.T. 0.01 min
 Lab File: VL037470.D
 Acq: 16 Aug 2021 20:42

Tgt Ion	Ratio	Lower	Upper
83	100		
85	67.8	49.5	74.3
127	9.2	6.3	9.5



Abundance Ion 83.00 (82.70 to 83.70): VL0
 Ion 85.00 (84.70 to 85.70): VL0
 Ion 126.90 (126.60 to 127.60): V





#47

1,1,2-Trichloroethane

Concen: 26.547 ppbv

RT: 9.46 min Scan# 2076

Delta R.T. 0.01 min

Lab File: VL037470.D

Acq: 16 Aug 2021 20:42

Instrument :

MSVOA_L

ClientSampleId :

Tot Ion: 97 Resp: 3611953

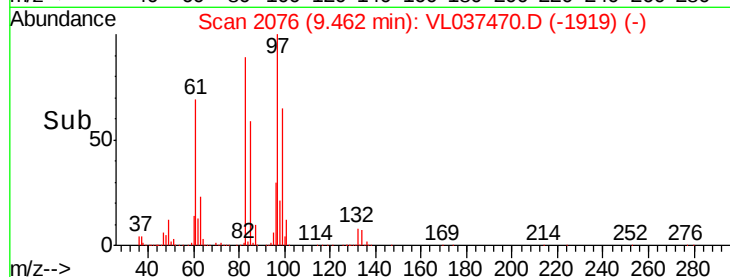
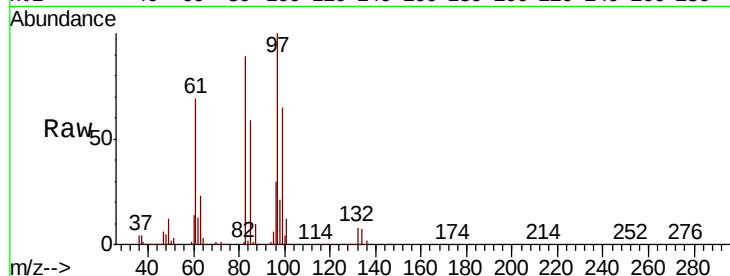
Ion	Ratio	Lower	Upper
97	100		
83	89.1	68.7	103.1
85	58.9	44.7	67.1
99	64.9	48.6	72.8

97 100

83 89.1 68.7 103.1

85 58.9 44.7 67.1

99 64.9 48.6 72.8

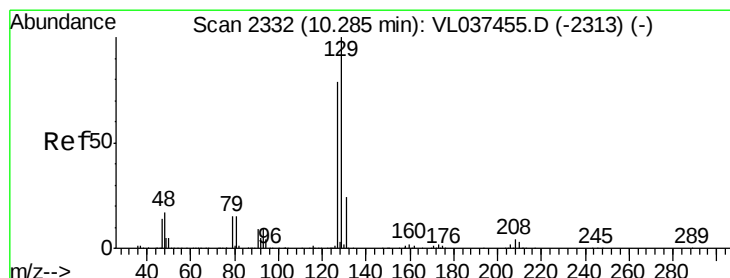
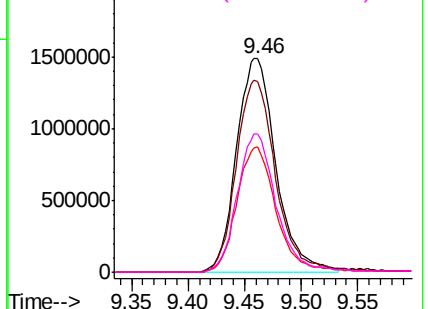


Abundance Ion 97.00 (96.70 to 97.70): VL0

Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0

Ion 99.00 (98.70 to 99.70): VL0



#48

Dibromochloromethane

Concen: 30.043 ppbv

RT: 10.29 min Scan# 2333

Delta R.T. 0.00 min

Lab File: VL037470.D

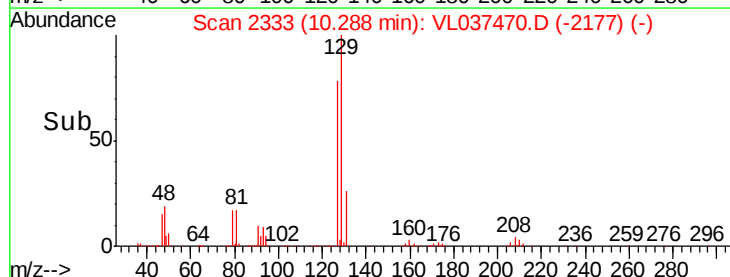
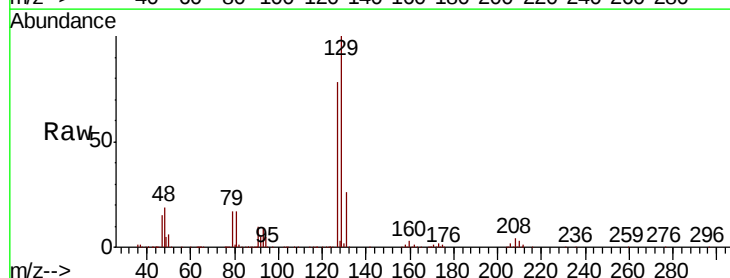
Acq: 16 Aug 2021 20:42

Tgt Ion: 129 Resp: 5882112

Ion	Ratio	Lower	Upper
129	100		
127	81.1	40.0	120.0

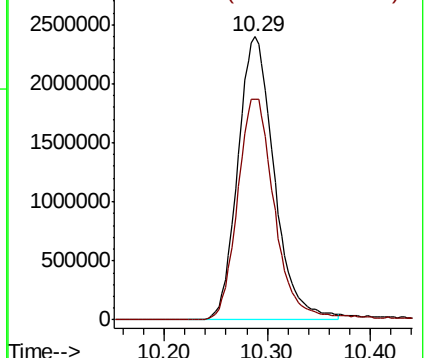
129 100

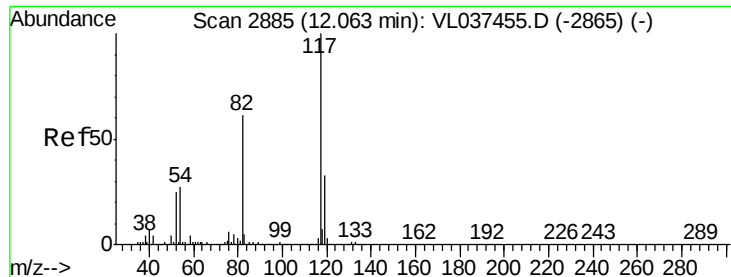
127 81.1 40.0 120.0



Abundance Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.07 min Scan# 2887

Delta R.T. 0.01 min

Lab File: VL037470.D

Acq: 16 Aug 2021 20:42

Instrument :

MSVOA_L

ClientSampleId :

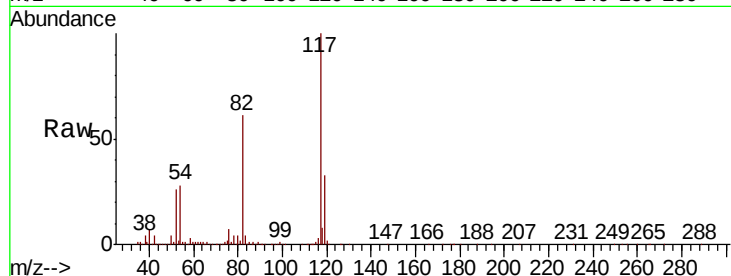
Tot Ion:117 Resp: 3965354

Ion Ratio Lower Upper

117 100

82 65.5 52.9 79.3

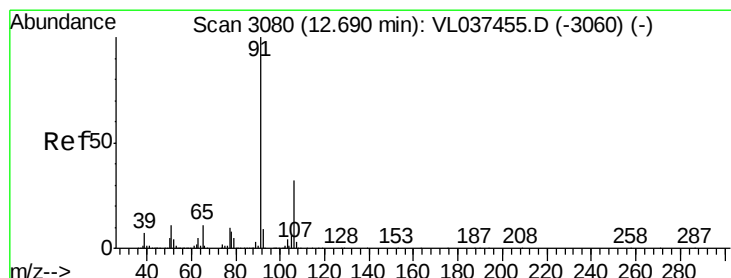
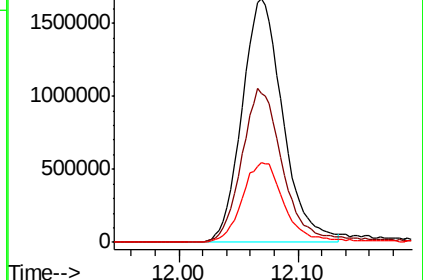
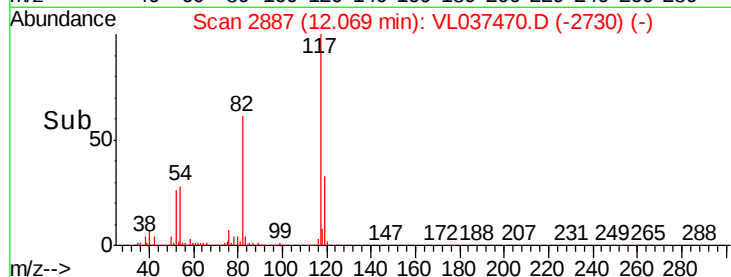
119 34.7 24.8 37.2



Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V



#58

Ethyl Benzene

Concen: 18.323 ppbv

RT: 12.70 min Scan# 3082

Delta R.T. 0.01 min

Lab File: VL037470.D

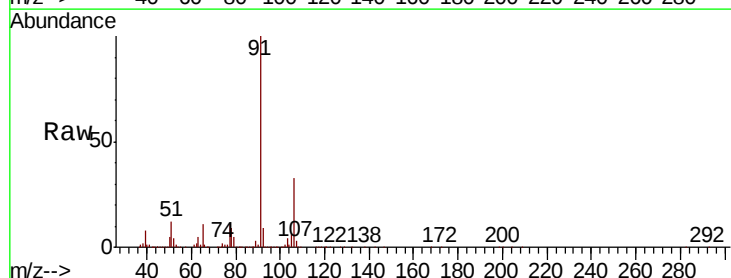
Acq: 16 Aug 2021 20:42

Tgt Ion: 91 Resp:10082914

Ion Ratio Lower Upper

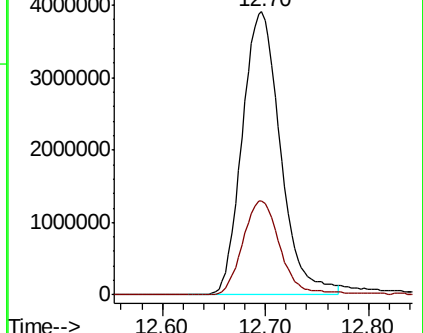
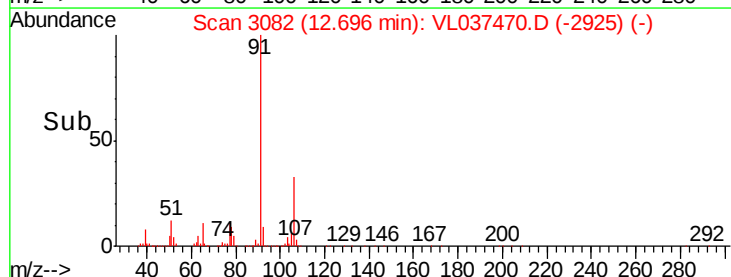
91 100

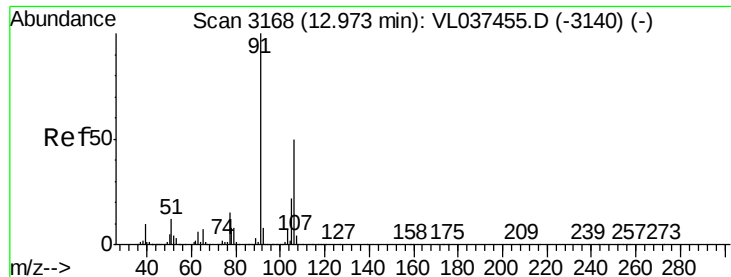
106 33.4 25.7 38.5



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





#59

m/p-Xylene

Concen: 21.136 ppbv

RT: 12.70 min Scan# 3082

Delta R.T. -0.28 min

Lab File: VL037470.D

Acq: 16 Aug 2021 20:42

Instrument :

MSVOA_L

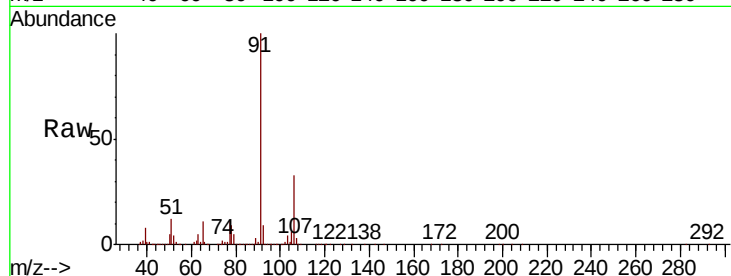
ClientSampleId :

Tot Ion: 91 Resp: 10082914

Ion Ratio Lower Upper

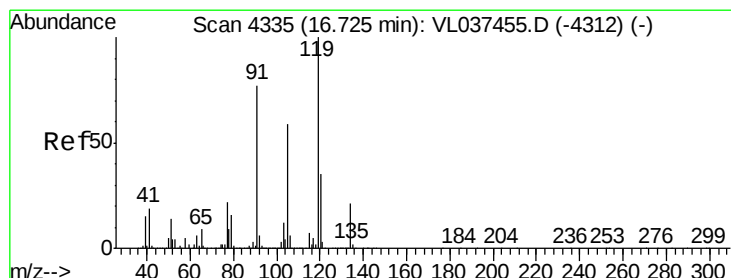
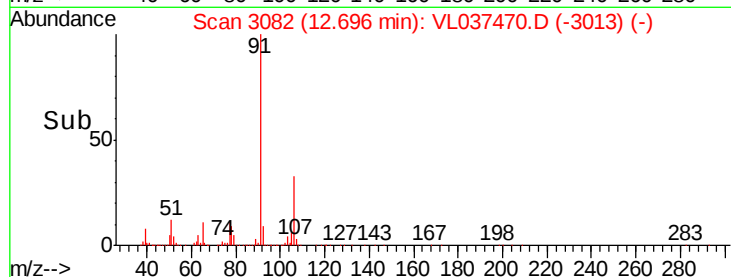
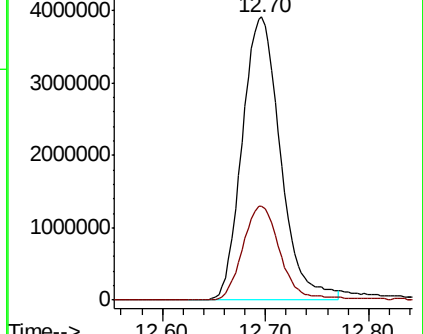
91 100

106 33.7 36.9 55.3#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



#65

tert-Butylbenzene

Concen: 0.328 ppbv

RT: 16.96 min Scan# 4408

Delta R.T. 0.23 min

Lab File: VL037470.D

Acq: 16 Aug 2021 20:42

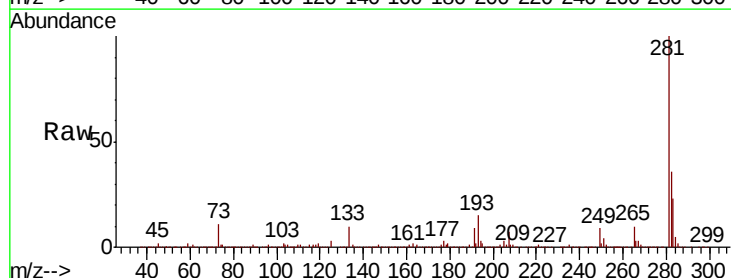
Tgt Ion: 119 Resp: 187477

Ion Ratio Lower Upper

119 100

91 0.4 62.9 94.3#

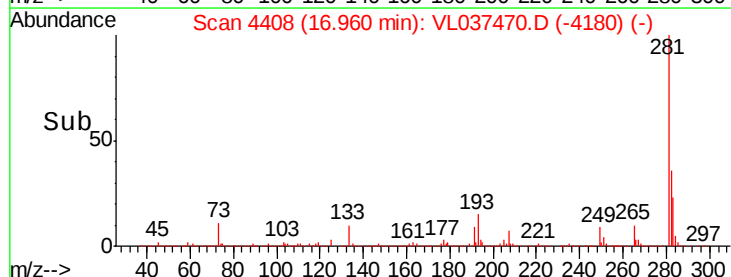
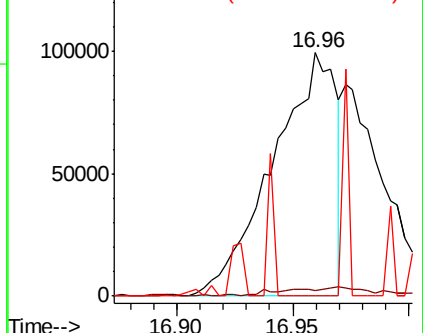
134 11.4 16.4 24.6#

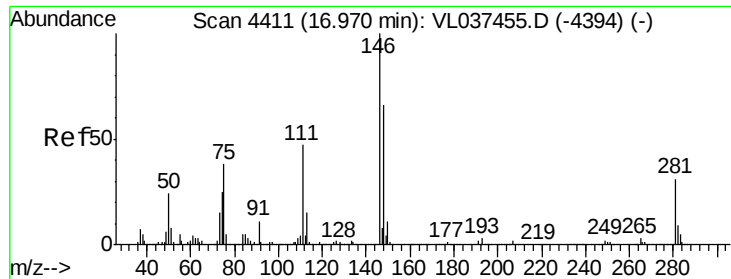


Abundance Ion 119.20 (118.90 to 119.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 134.20 (133.90 to 134.90): V

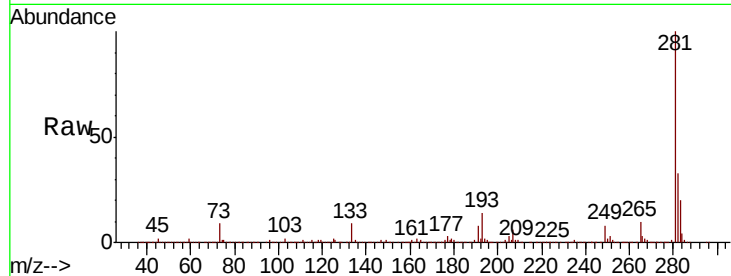




#66
Benzyl Chloride
Concen: 0.048 ppbv
RT: 16.98 min Scan# 4414
Delta R.T. 0.01 min
Lab File: VL037470.D
Acq: 16 Aug 2021 20:42

Instrument :
MSVOA_L
ClientSampled :

Tot Ion	91	Resp	1245
Ion	Ratio	Lower	Upper
91	100		
126	0.0	15.9	23.9#
128	0.0	5.4	8.0#

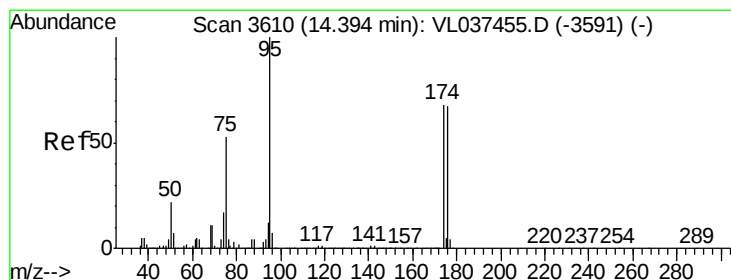
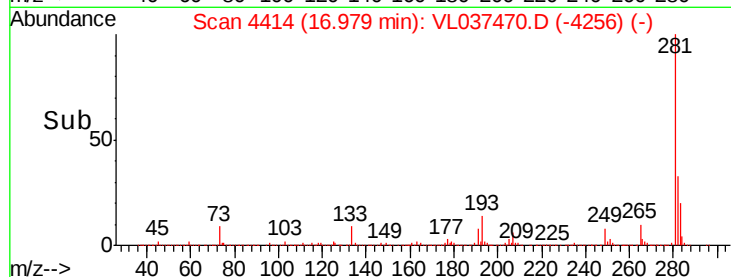
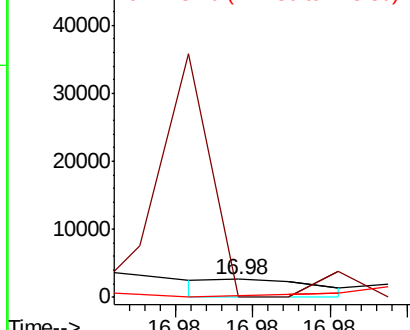


Abundance

Ion 91.10 (90.80 to 91.80): VL0

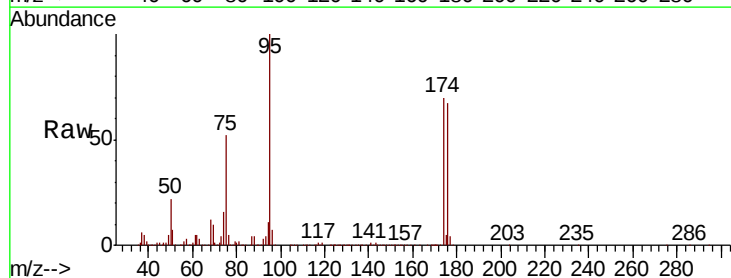
Ion 126.10 (125.80 to 126.80): V

Ion 128.10 (127.80 to 128.80): V



#68
1-Bromo-4-Fluorobenzene
Concen: 12.909 ppbv
RT: 14.40 min Scan# 3612
Delta R.T. 0.01 min
Lab File: VL037470.D
Acq: 16 Aug 2021 20:42

Tgt Ion	95	Resp	3636643
Ion	Ratio	Lower	Upper
95	100		
174	75.7	59.6	89.4
175	5.8	4.6	7.0

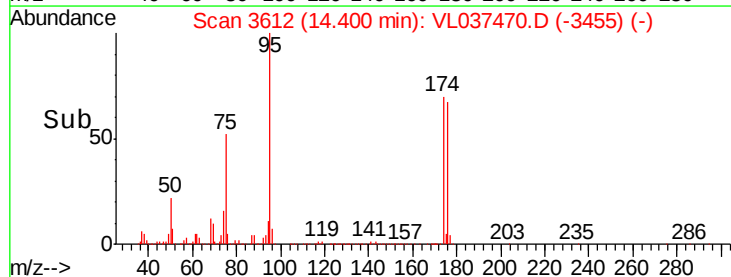
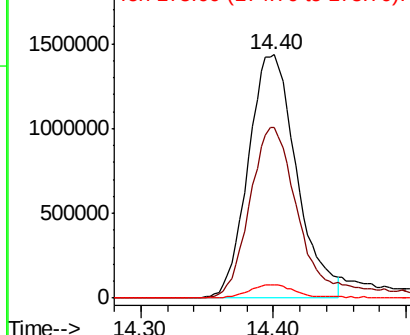


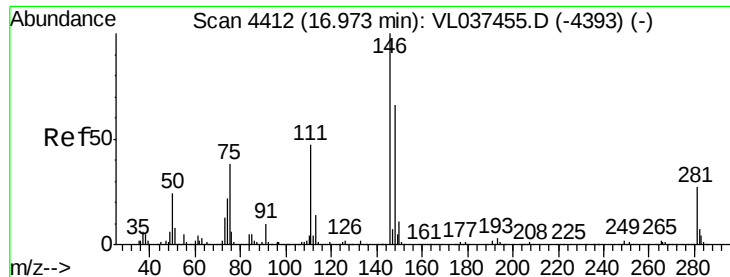
Abundance

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





#75

1,3-Dichlorobenzene

Concen: 30.937 ppbv

RT: 17.12 min Scan# 4459

Delta R.T. 0.15 min

Lab File: VL037470.D

Acq: 16 Aug 2021 20:42

Instrument :

MSVOA_L

ClientSampleId :

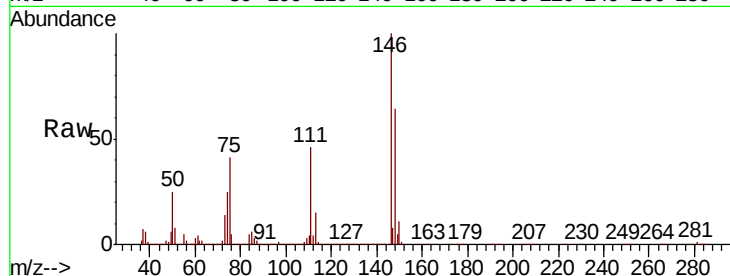
Tot Ion:146 Resp: 9755064

Ion Ratio Lower Upper

146 100

111 45.3 23.4 70.0

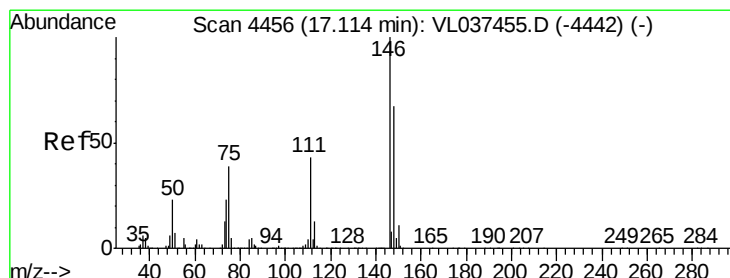
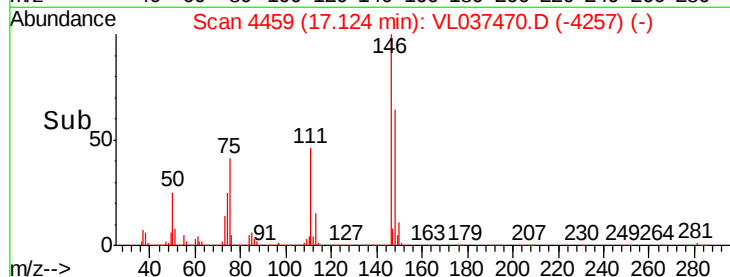
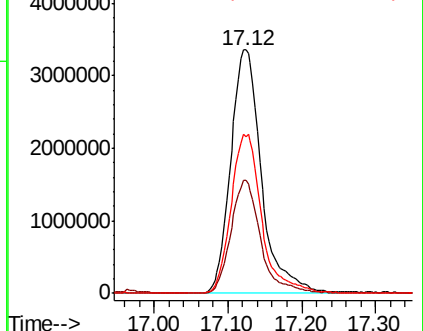
148 65.1 33.1 99.5



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



#76

1,4-Dichlorobenzene

Concen: 30.710 ppbv

RT: 17.12 min Scan# 4459

Delta R.T. 0.01 min

Lab File: VL037470.D

Acq: 16 Aug 2021 20:42

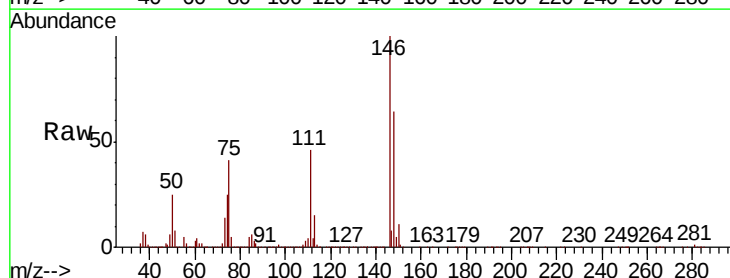
Tgt Ion:146 Resp: 9755064

Ion Ratio Lower Upper

146 100

111 45.1 22.1 66.5

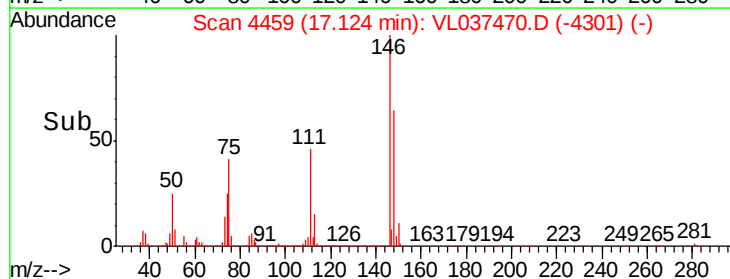
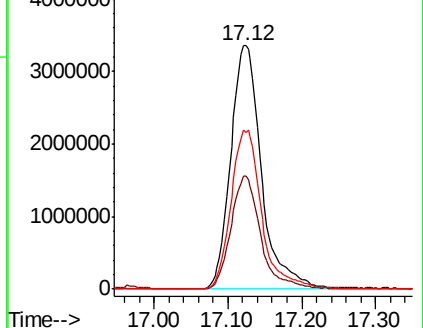
148 65.5 32.4 97.0

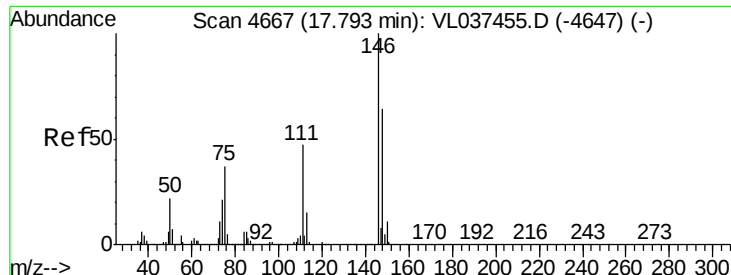


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V





#77

1,2-Dichlorobenzene

Concen: 30.198 ppbv

RT: 17.80 min Scan# 4670

Delta R.T. 0.01 min

Lab File: VL037470.D

Acq: 16 Aug 2021 20:42

Instrument :

MSVOA_L

ClientSampleId :

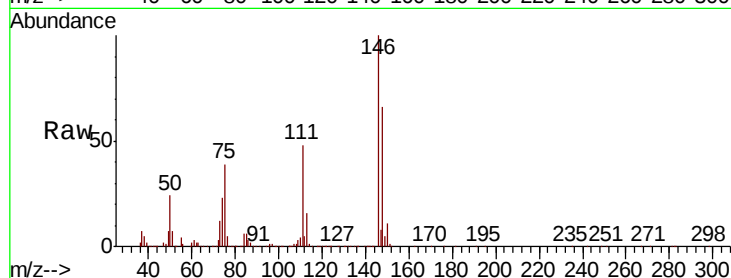
Tot Ion:146 Resp: 9376753

Ion Ratio Lower Upper

146 100

111 48.0 23.4 70.3

148 65.6 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

