

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL121621\
 Data File : VL038192.D
 Acq On : 16 Dec 2021 16:52
 Operator : SY/AP
 Sample : M5117-03
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Dec 17 05:08:47 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL111821AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Nov 18 13:16:09 2021
 QLast Update : Thu Nov 18 13:16:09 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	959229	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	2568740	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	2215362	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.41	95	1655580	10.36	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.60%

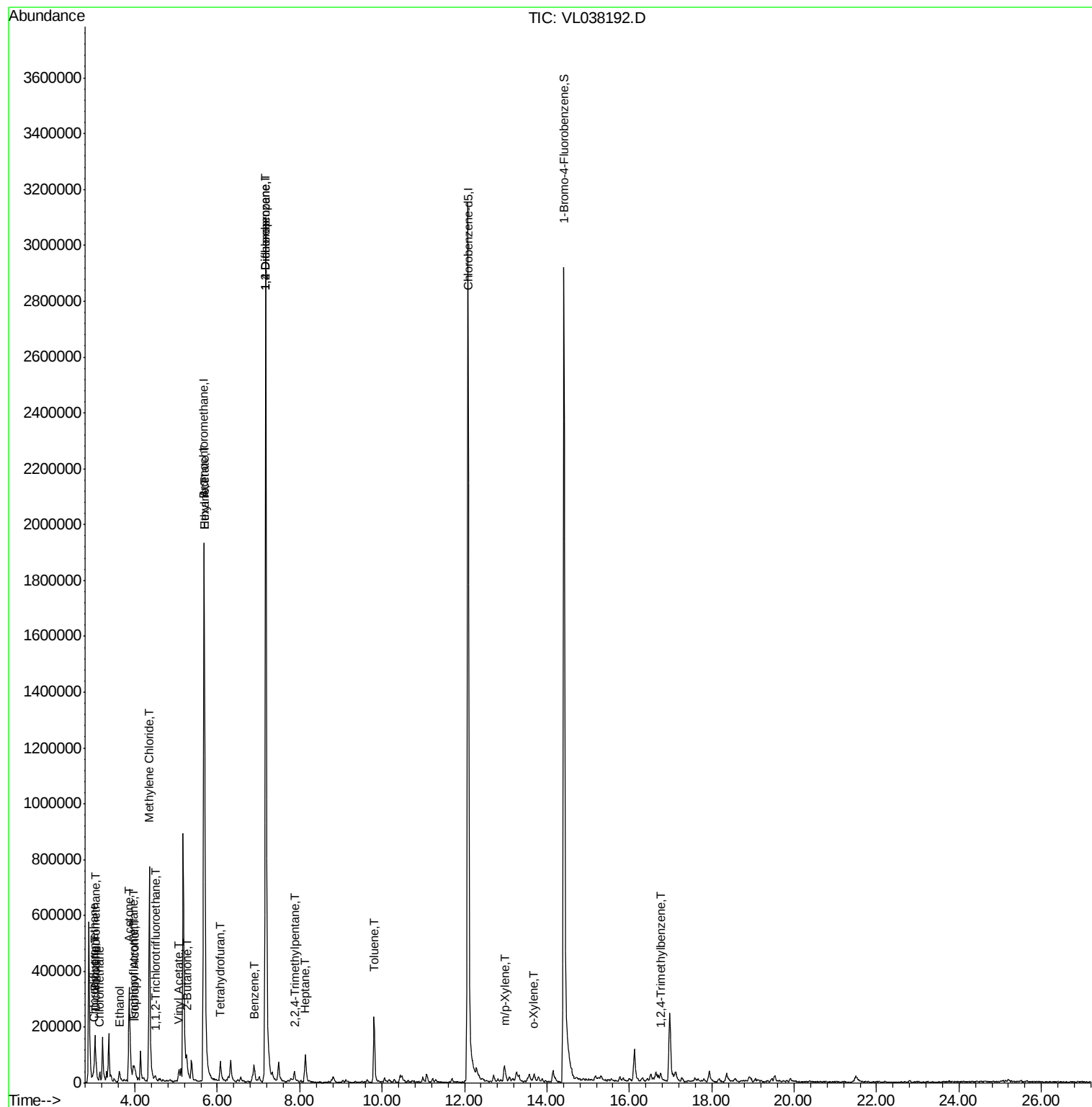
Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.05	85	38128	0.241 ppbv	92
3) Chlorodifluoromethane	3.00	51	61460	0.305 ppbv #	87
4) Chloromethane	3.15	50	31522	0.460 ppbv	99
9) Propene	3.03	41	49010	0.661 ppbv #	82
10) Heptane	8.12	43	16746	0.091 ppbv #	85
11) Trichlorofluoromethane	3.95	101	29971	0.199 ppbv	99
12) 1,1,2-Trichlorotrifluoroet	4.50	101	4059	0.038 ppbv #	53
13) Ethanol	3.61	45	14126	1.970 ppbv #	32
15) Acetone	3.86	43	480976	5.783 ppbv	98
19) Isopropyl Alcohol	3.99	45	64004	1.065 ppbv #	81
20) Methylene Chloride	4.35	84	343040	7.364 ppbv	95
23) Vinyl Acetate	5.07	43	33150	0.275 ppbv #	56
25) Ethyl Acetate	5.69	43	283518	1.026 ppbv #	79
26) Hexane	5.69	57	370504	2.781 ppbv #	46
34) 2-Butanone	5.25	43	53967	0.521 ppbv #	52
36) Benzene	6.89	78	49576	0.193 ppbv	97
39) 1,2-Dichloropropane	7.18	63	686098	6.980 ppbv #	27
41) Tetrahydrofuran	6.07	42	26423	0.411 ppbv #	45
44) 2,2,4-Trimethylpentane	7.87	57	13288	0.031 ppbv #	14
53) Toluene	9.81	91	190947	0.648 ppbv	95
59) m/p-Xylene	13.00	91	11166	0.036 ppbv #	29
60) o-Xylene	13.70	91	9797	0.034 ppbv #	25
74) 1,2,4-Trimethylbenzene	16.76	105	9464	0.030 ppbv #	72

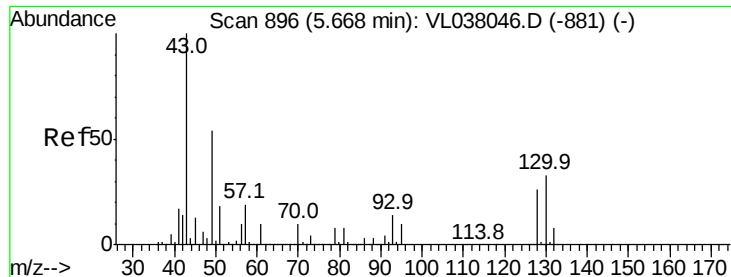
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL121621\
Data File : VL038192.D
Acq On : 16 Dec 2021 16:52
Operator : SY/AP
Sample : M5117-03
Misc : 400mL/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :

Quant Time: Dec 17 05:08:47 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL111821AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Nov 18 13:16:09 2021
QLast Update : Thu Nov 18 13:16:09 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 16 Dec 2021 16:52

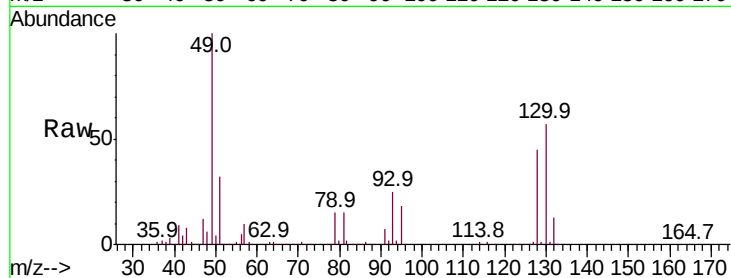
Tot Ion: 49 Resp: 959229

Ion Ratio Lower Upper

49 100

128 47.4 26.5 79.5

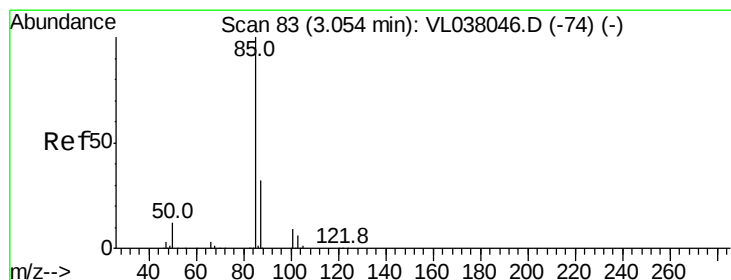
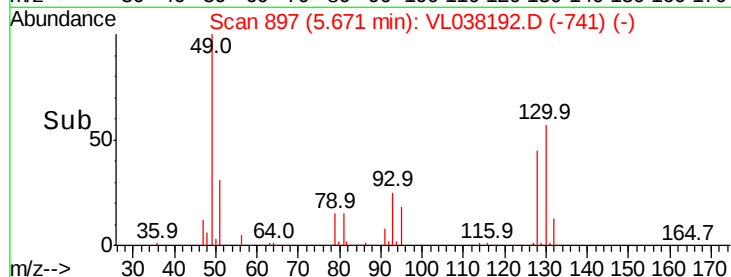
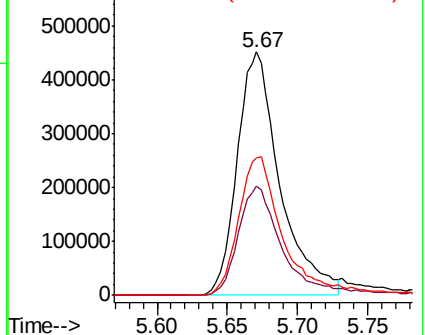
130 61.1 32.5 97.4



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: 0.241 ppbv

RT: 3.05 min Scan# 83

Delta R.T. -0.00 min

Lab File: VL038192.D

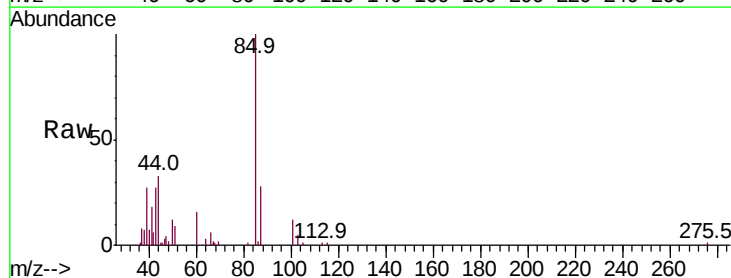
Acq: 16 Dec 2021 16:52

Tgt Ion: 85 Resp: 38128

Ion Ratio Lower Upper

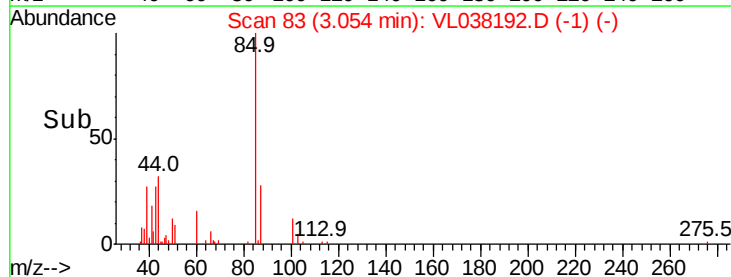
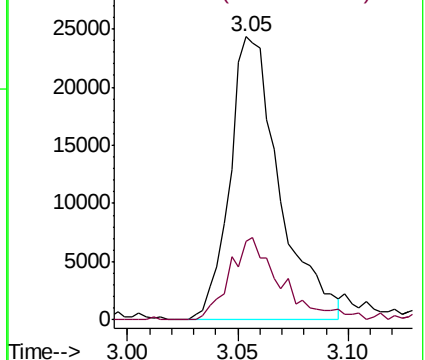
85 100

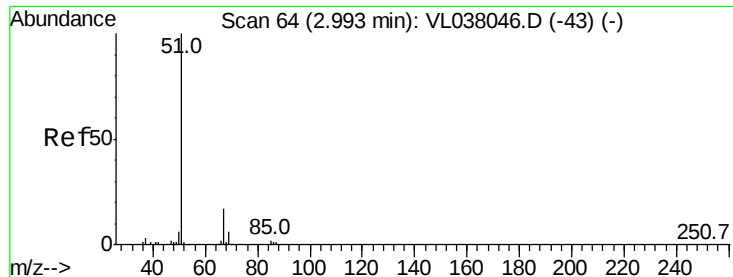
87 27.9 25.8 38.6



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.305 ppbv

RT: 3.00 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

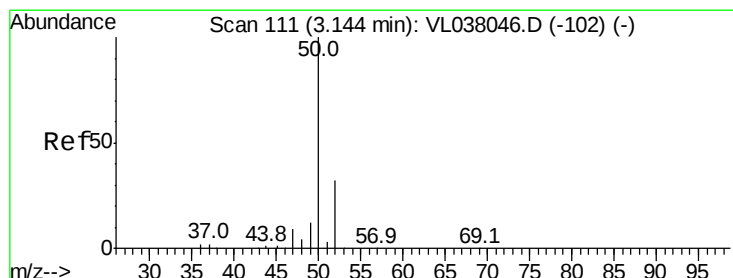
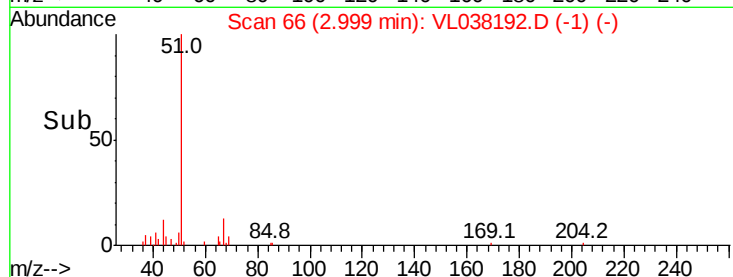
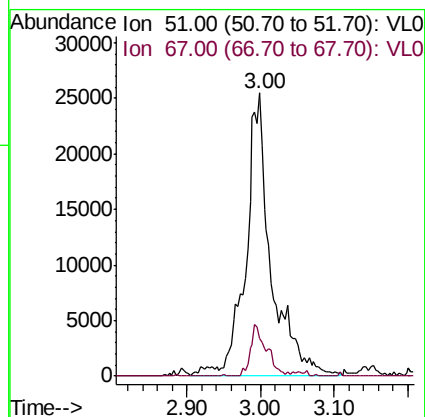
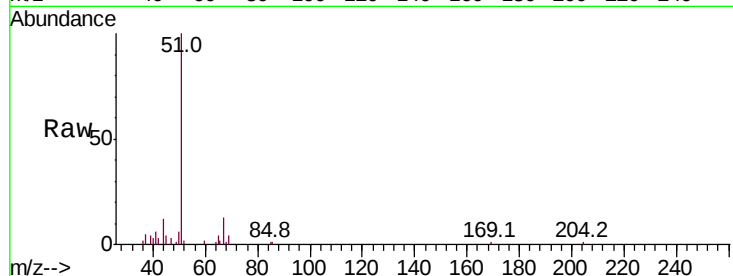
Acq: 16 Dec 2021 16:52

Tot Ion: 51 Resp: 61460

Ion Ratio Lower Upper

51 100

67 11.5 13.8 20.8#



#4

Chloromethane

Concen: 0.460 ppbv

RT: 3.15 min Scan# 112

Delta R.T. 0.00 min

Lab File: VL038192.D

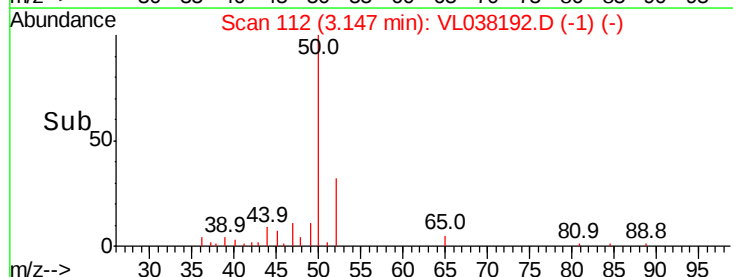
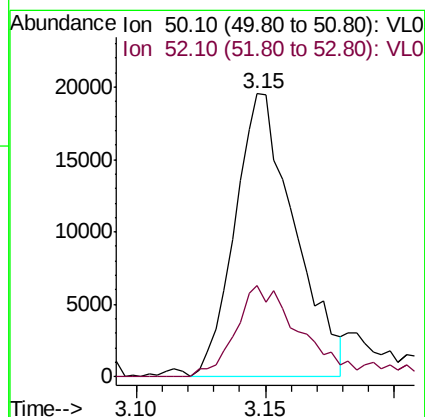
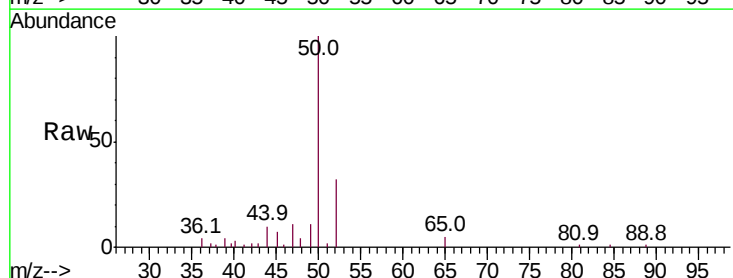
Acq: 16 Dec 2021 16:52

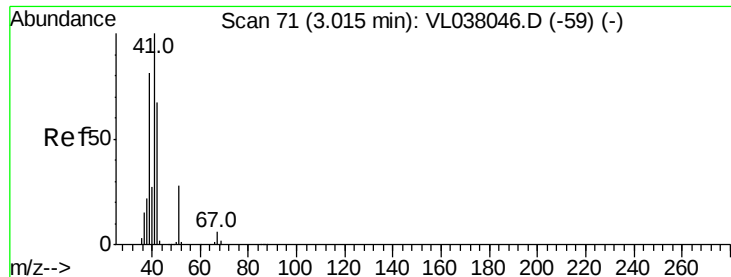
Tgt Ion: 50 Resp: 31522

Ion Ratio Lower Upper

50 100

52 32.1 25.4 38.0





#9

Propene

Concen: 0.661 ppbv

RT: 3.03 Instrument :

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

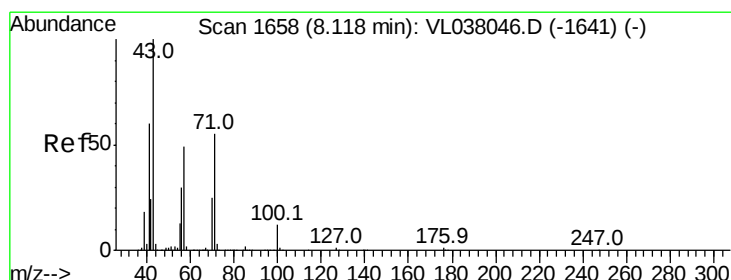
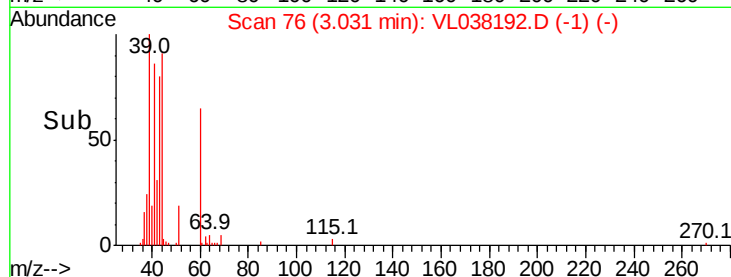
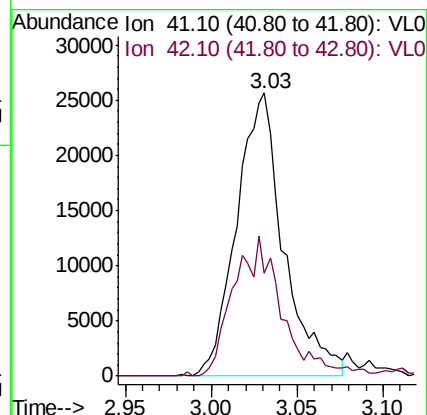
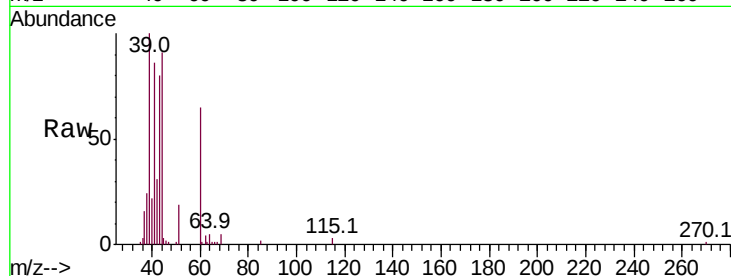
Acq: 16 Dec 2021 16:52

Tot Ion: 41 Resp: 49010

Ion Ratio Lower Upper

41 100

42 52.9 53.8 80.8#



#10

Heptane

Concen: 0.091 ppbv

RT: 8.12 min Scan# 1659

Delta R.T. 0.00 min

Lab File: VL038192.D

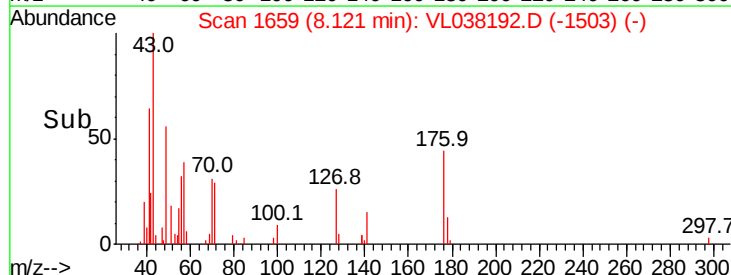
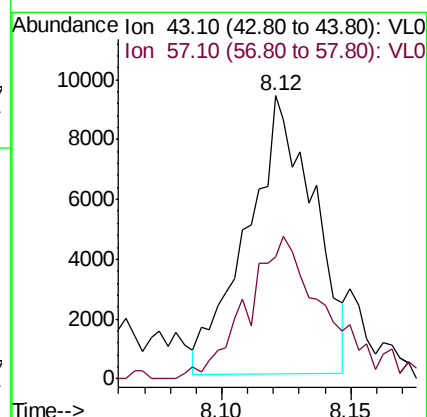
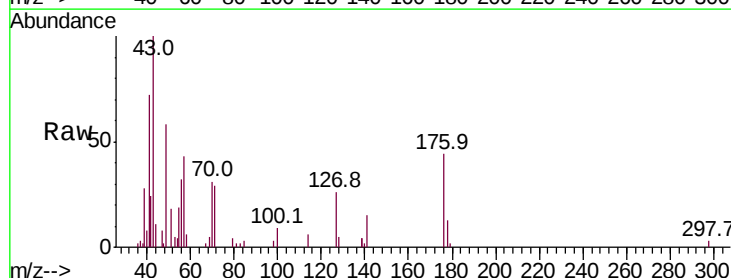
Acq: 16 Dec 2021 16:52

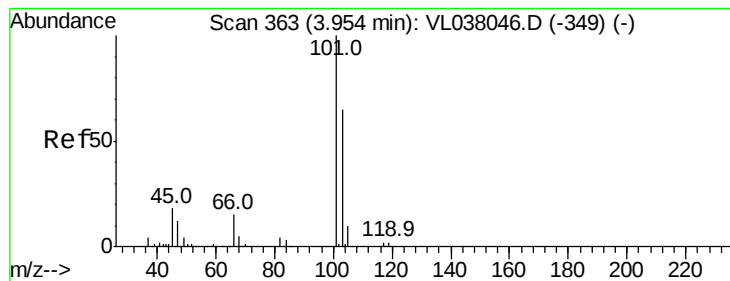
Tgt Ion: 43 Resp: 16746

Ion Ratio Lower Upper

43 100

57 61.1 40.4 60.6#





#11

Trichlorofluoromethane

Concen: 0.199 ppbv

RT: 3.95 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

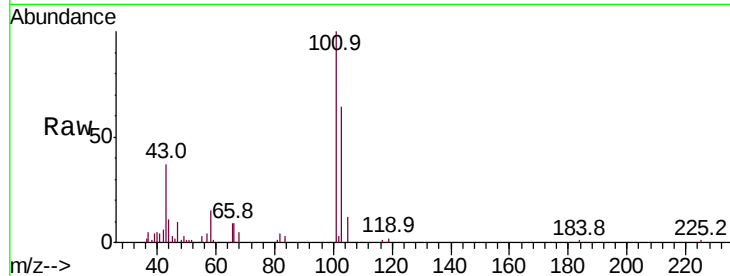
Acq: 16 Dec 2021 16:52

Tot Ion:101 Resp: 29971

Ion Ratio Lower Upper

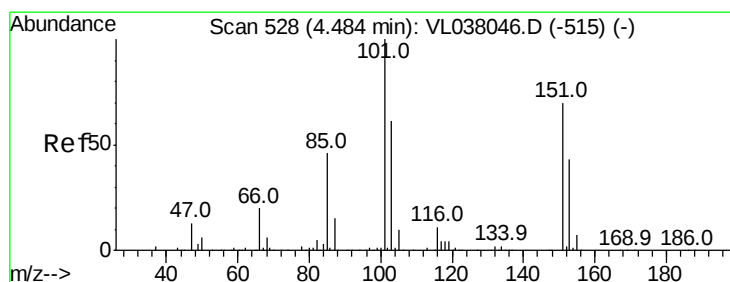
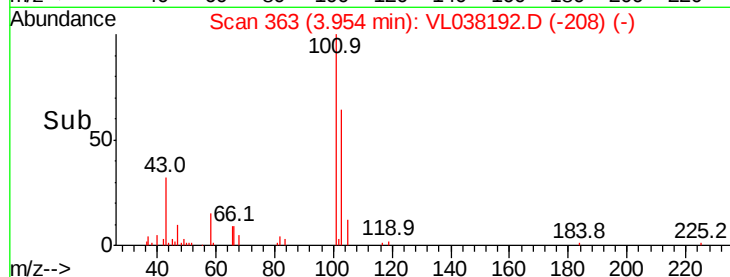
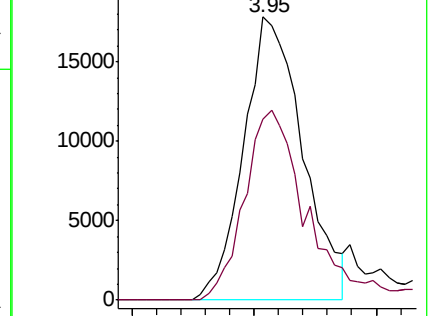
101 100

103 63.9 51.8 77.6



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.038 ppbv

RT: 4.50 min Scan# 532

Delta R.T. 0.01 min

Lab File: VL038192.D

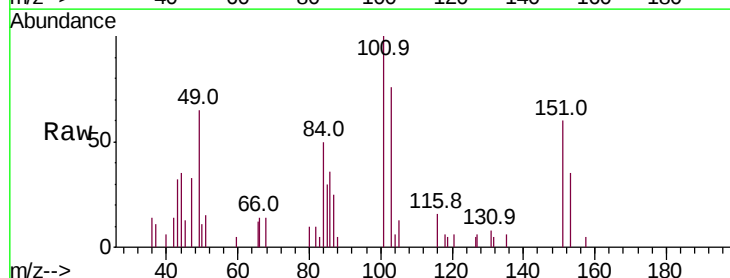
Acq: 16 Dec 2021 16:52

Tgt Ion:101 Resp: 4059

Ion Ratio Lower Upper

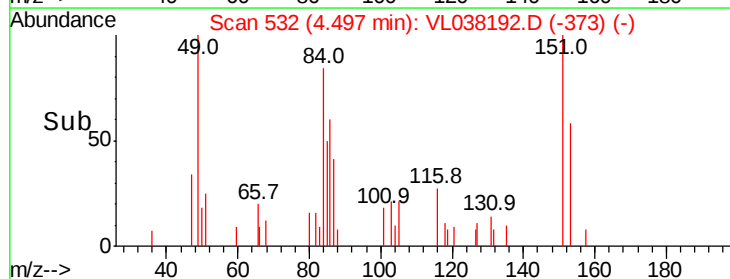
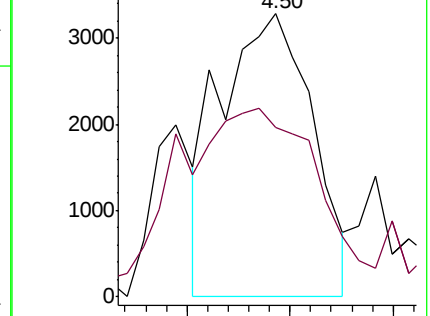
101 100

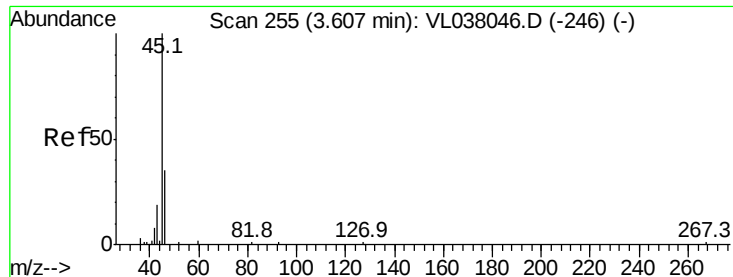
151 113.2 59.0 88.4#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V





#13

Ethanol

Concen: 1.970 ppbv

RT: 3.61 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

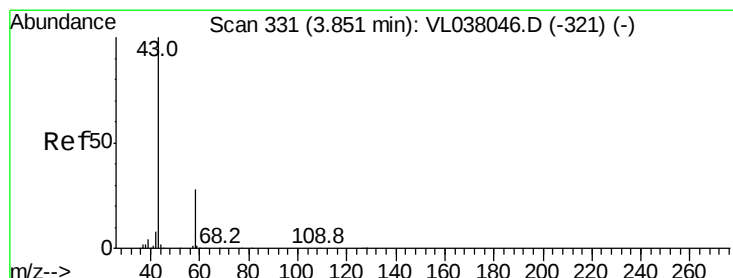
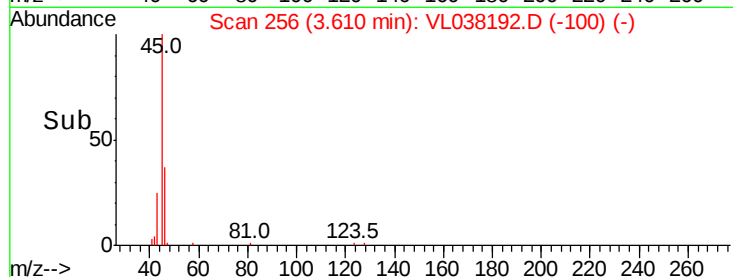
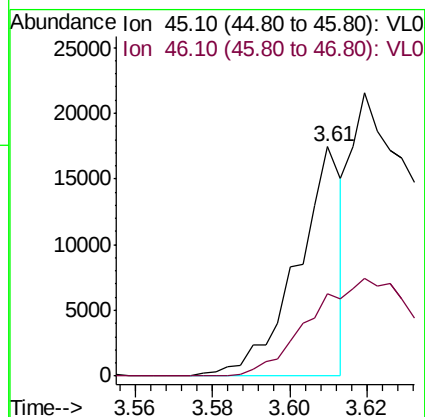
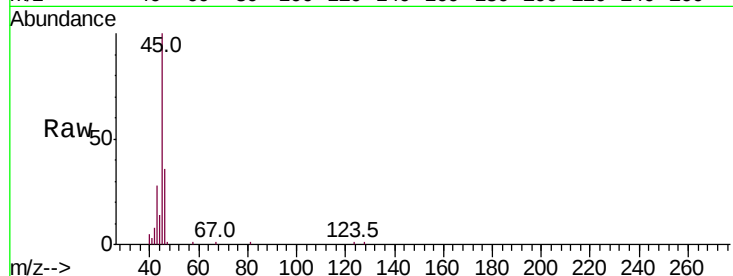
Acq: 16 Dec 2021 16:52

Tot Ion: 45 Resp: 14126

Ion Ratio Lower Upper

45 100

46 0.0 17.6 70.2#



#15

Acetone

Concen: 5.783 ppbv

RT: 3.86 min Scan# 333

Delta R.T. 0.01 min

Lab File: VL038192.D

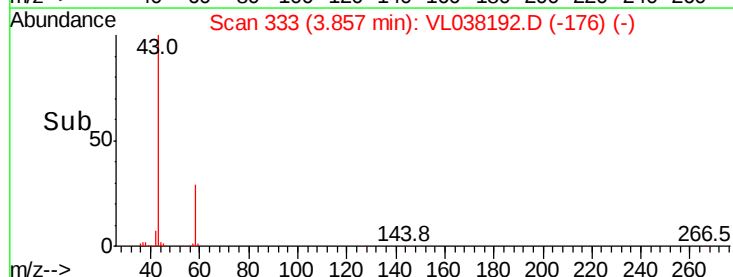
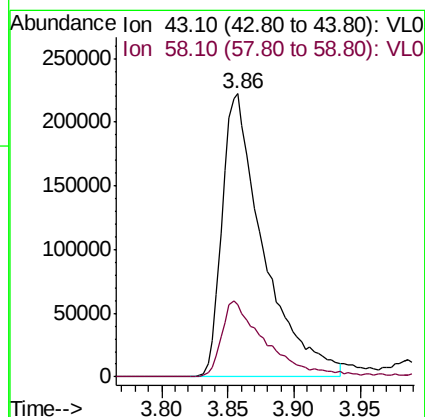
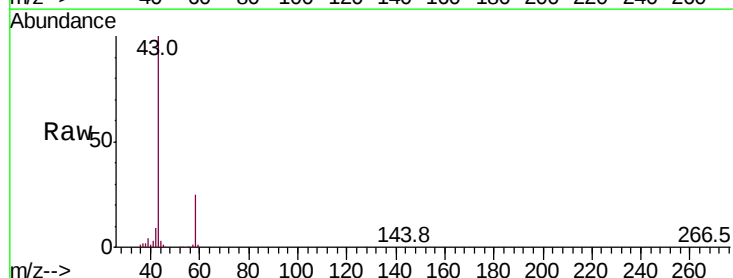
Acq: 16 Dec 2021 16:52

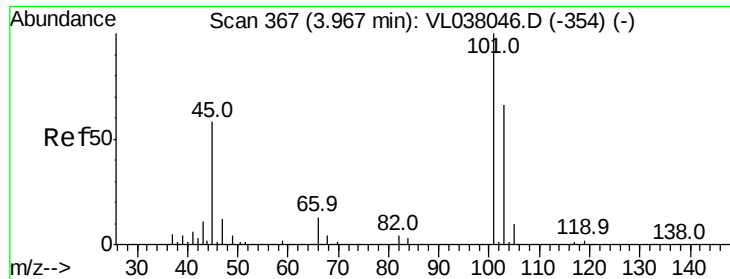
Tgt Ion: 43 Resp: 480976

Ion Ratio Lower Upper

43 100

58 29.3 22.4 33.6





#19

Isopropyl Alcohol

Concen: 1.065 ppbv

RT: 3.99 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

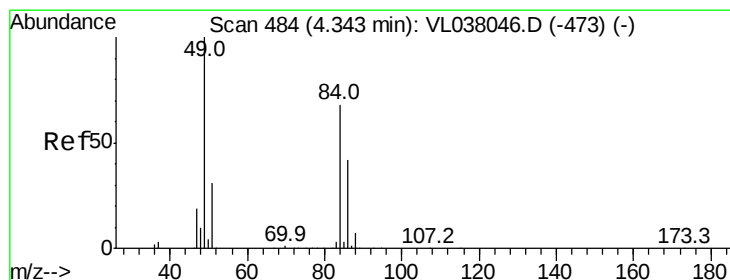
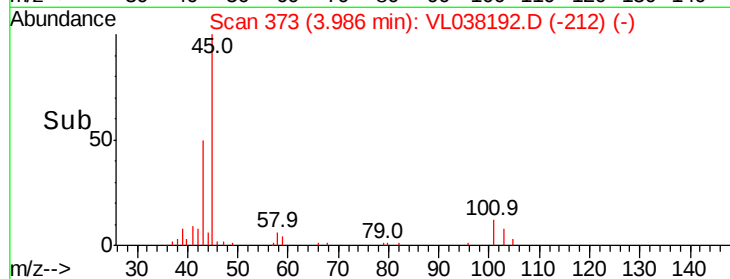
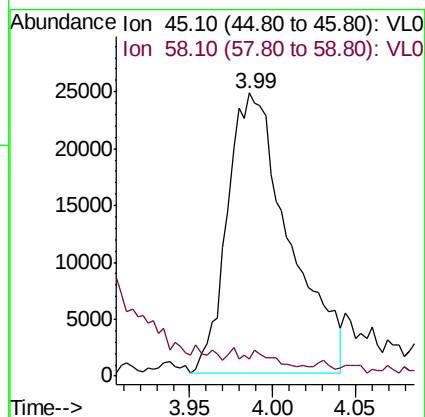
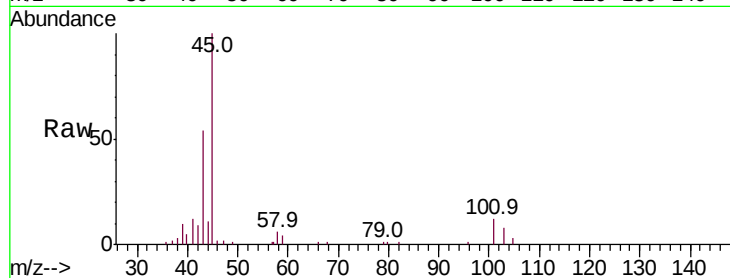
Acq: 16 Dec 2021 16:52

Tot Ion: 45 Resp: 64004

Ion Ratio Lower Upper

45 100

58 8.8 1.4 2.0#



#20

Methylene Chloride

Concen: 7.364 ppbv

RT: 4.35 min Scan# 486

Delta R.T. 0.01 min

Lab File: VL038192.D

Acq: 16 Dec 2021 16:52

Tgt Ion: 84 Resp: 343040

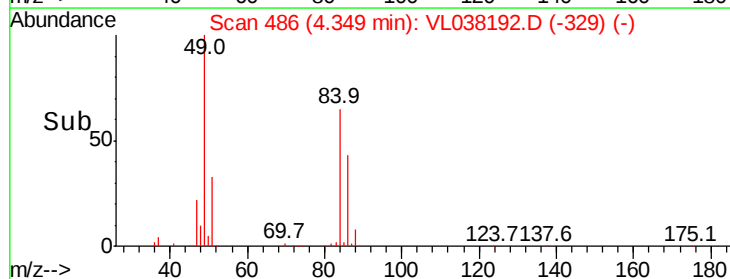
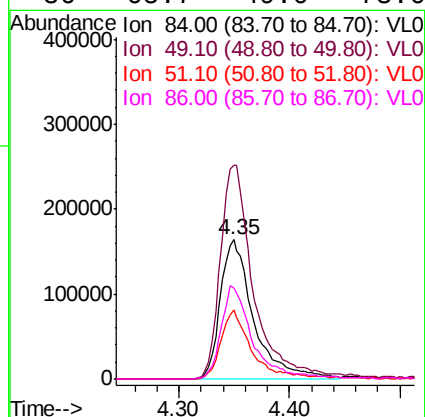
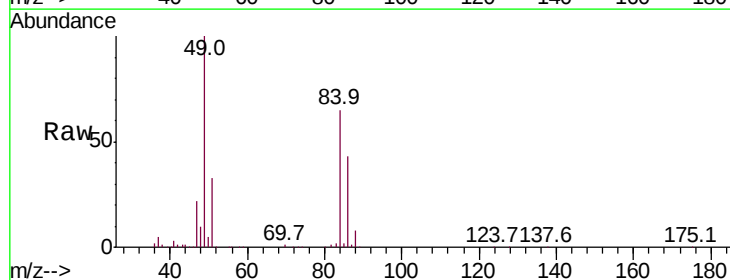
Ion Ratio Lower Upper

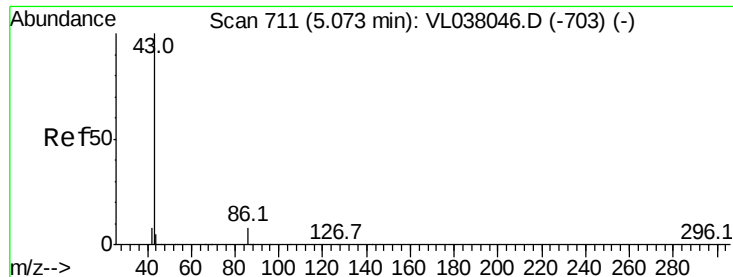
84 100

49 152.9 118.2 177.2

51 49.8 36.8 55.2

86 65.7 49.0 73.6





#23

Vinyl Acetate

Concen: 0.275 ppbv

RT: 5.07 Instrument:

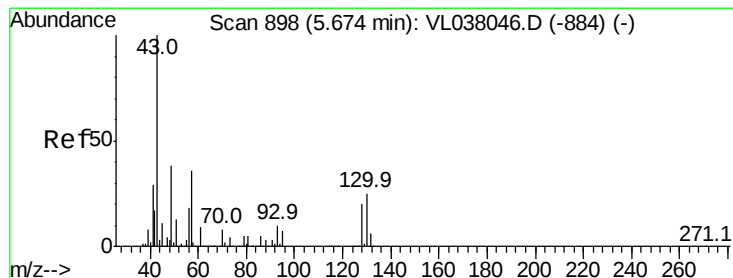
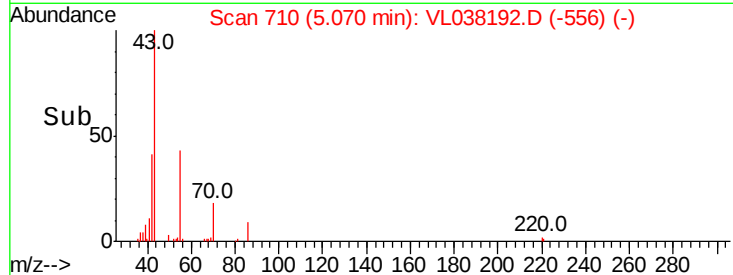
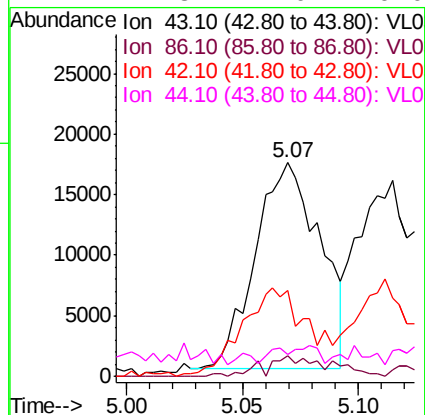
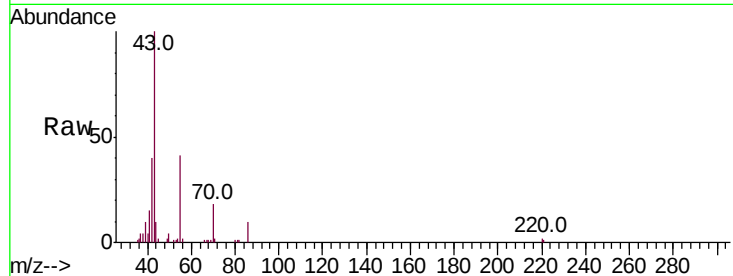
Delta R.T. MSVOA_L

Lab File:

Acq: 16 Dec 2021 16:52

Tot Ion: 43 Resp: 33150

Ion	Ratio	Lower	Upper
43	100		
86	10.0	5.3	7.9#
42	40.7	7.0	10.6#
44	2.3	4.0	6.0#



#25

Ethyl Acetate

Concen: 1.026 ppbv

RT: 5.69 min Scan# 903

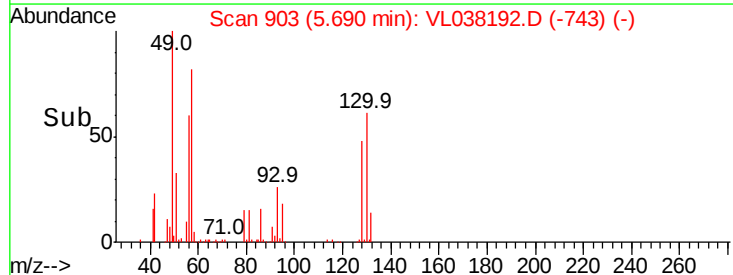
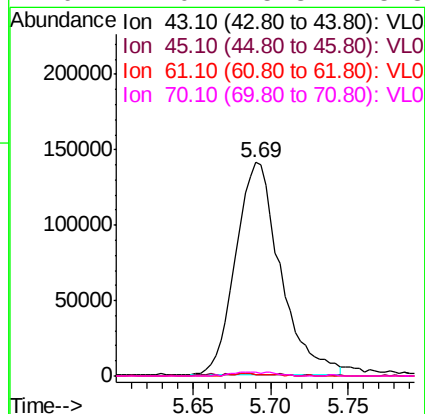
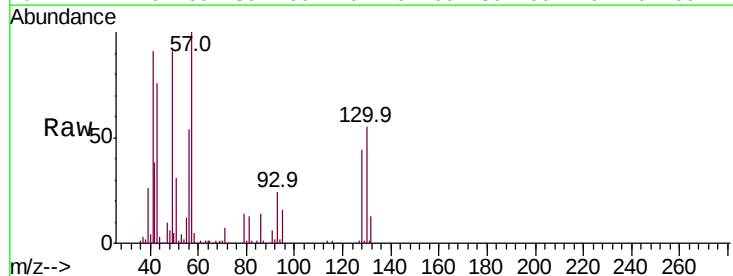
Delta R.T. 0.02 min

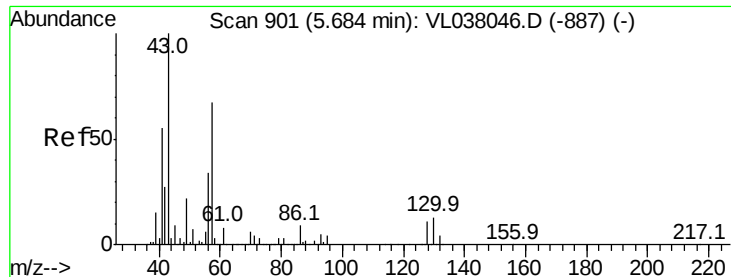
Lab File: VL038192.D

Acq: 16 Dec 2021 16:52

Tgt Ion: 43 Resp: 283518

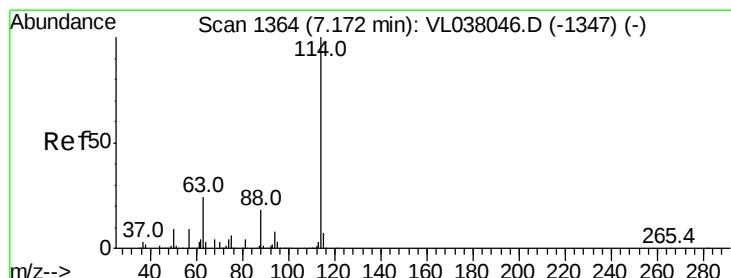
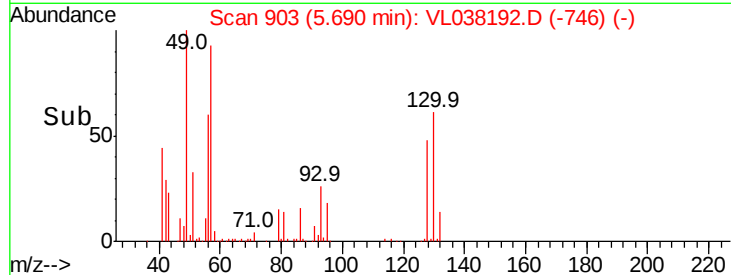
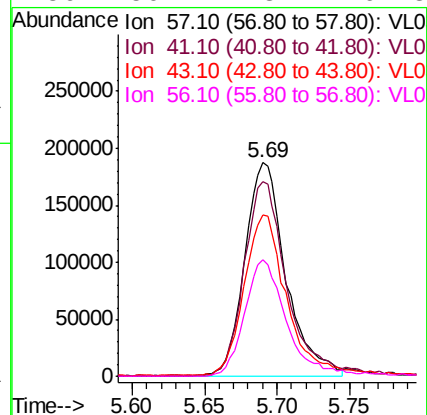
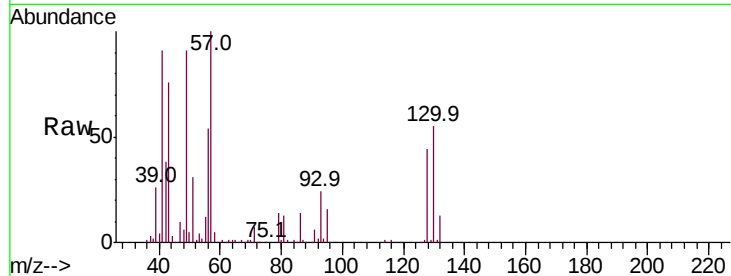
Ion	Ratio	Lower	Upper
43	100		
45	1.7	7.9	11.9#
61	1.1	7.8	11.6#
70	2.0	5.8	8.8#





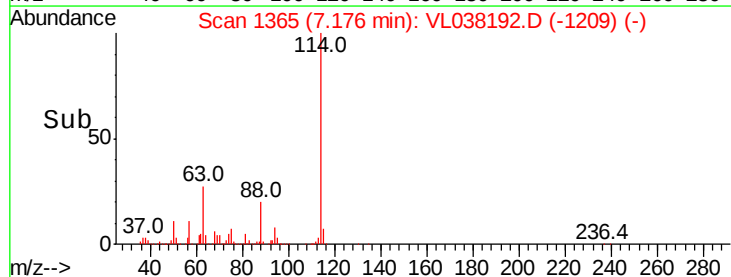
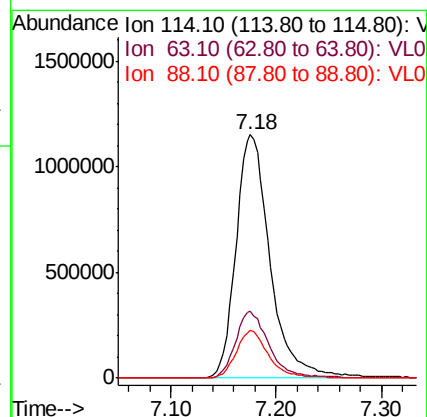
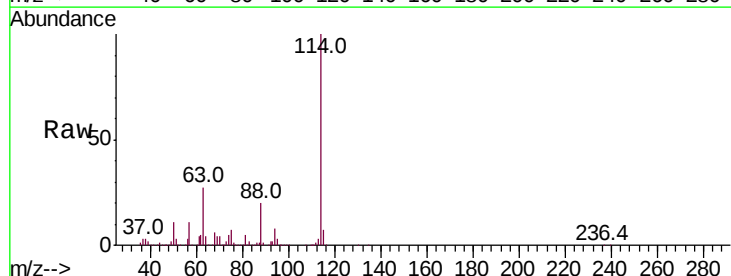
#26
Hexane
Concen: 2.781 ppbv
RT: 5.69
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 16 Dec 2021 16:52

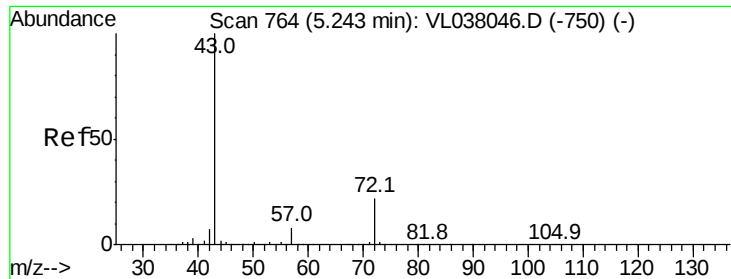
Tot Ion:	57	Resp:	370504
Ion	Ratio	Lower	Upper
57	100		
41	95.7	71.4	107.2
43	80.4	174.6	261.8#
56	56.4	43.2	64.8



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.18 min Scan# 1365
Delta R.T. 0.00 min
Lab File: VL038192.D
Acq: 16 Dec 2021 16:52

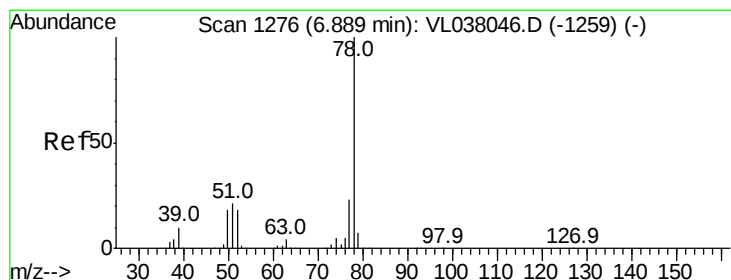
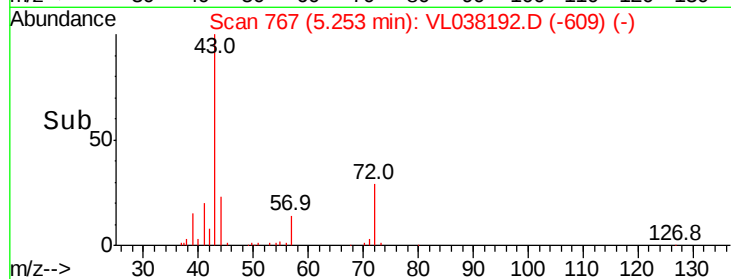
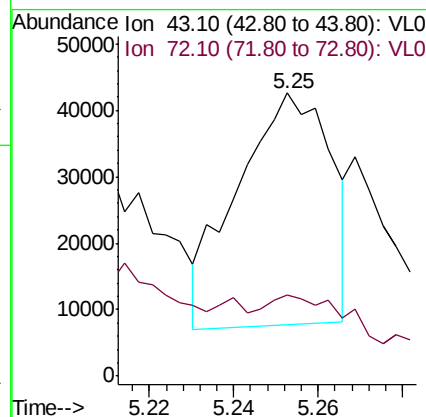
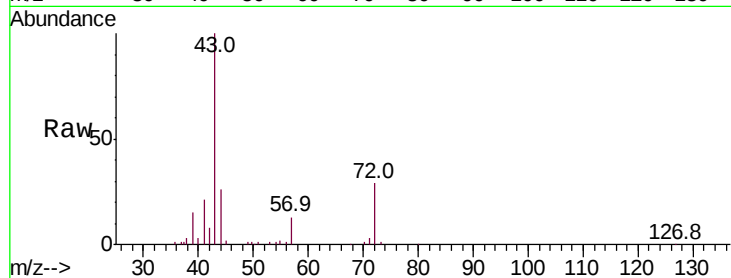
Tgt Ion:	114	Resp:	2568740
Ion	Ratio	Lower	Upper
114	100		
63	27.3	19.7	29.5
88	18.9	14.4	21.6





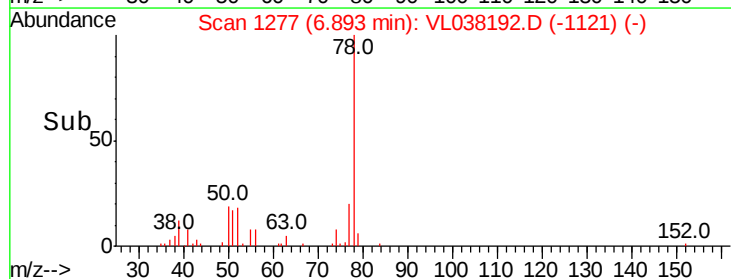
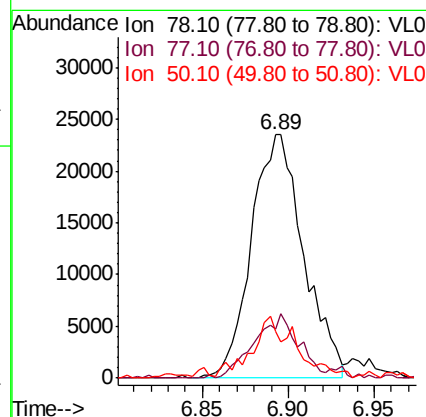
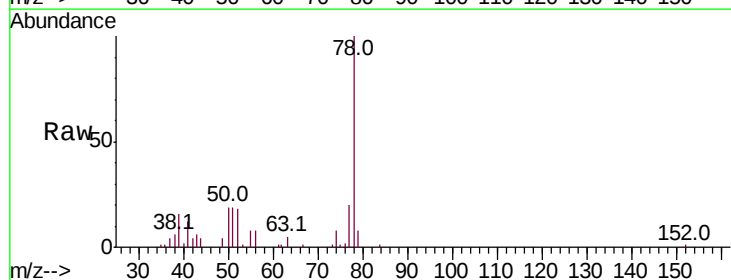
#34
2-Butanone
Concen: 0.521 ppbv
RT: 5.25
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 16 Dec 2021 16:52

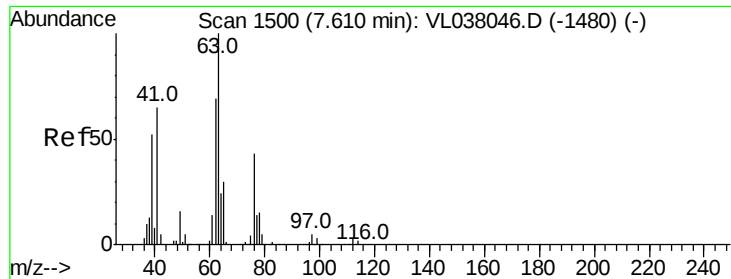
Tot Ion: 43 Resp: 53967
Ion Ratio Lower Upper
43 100
72 0.0 18.8 28.2#



#36
Benzene
Concen: 0.193 ppbv
RT: 6.89 min Scan# 1277
Delta R.T.: 0.00 min
Lab File: VL038192.D
Acq: 16 Dec 2021 16:52

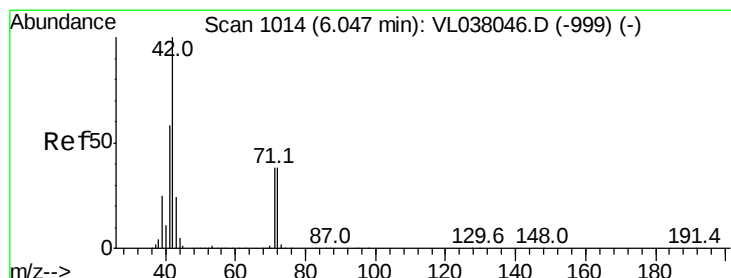
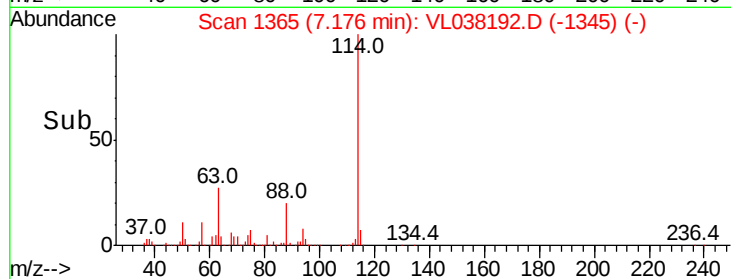
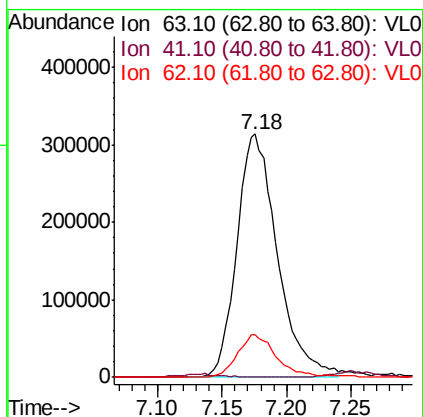
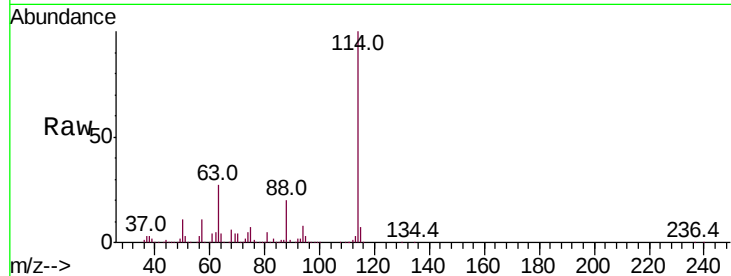
Tgt Ion: 78 Resp: 49576
Ion Ratio Lower Upper
78 100
77 20.1 18.2 27.4
50 18.6 14.7 22.1





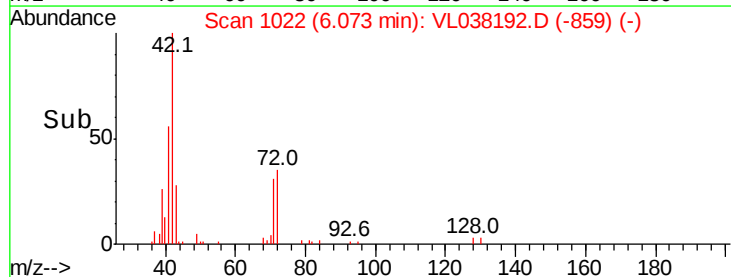
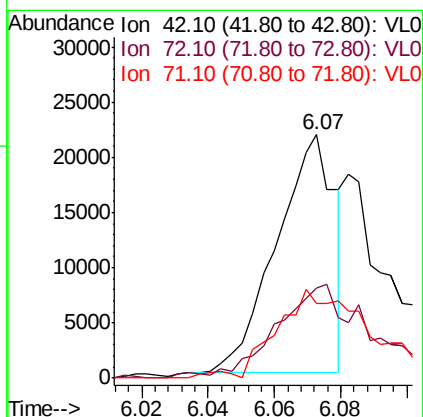
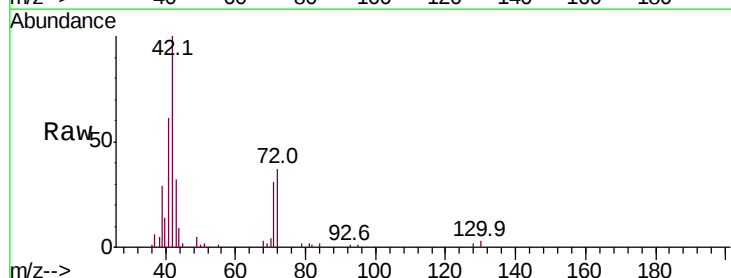
#39
 1,2-Dichloropropane
 Concen: 6.980 ppbv
 RT: 7.18
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId:
 Acq: 16 Dec 2021 16:52

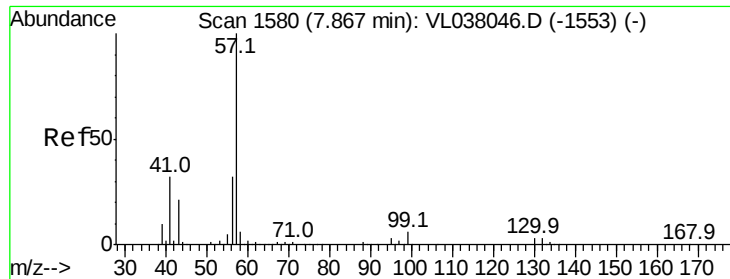
Tot Ion: 63 Resp: 686098
 Ion Ratio Lower Upper
 63 100
 41 0.0 52.3 78.5#
 62 17.4 55.1 82.7#



#41
 Tetrahydrofuran
 Concen: 0.411 ppbv
 RT: 6.07 min Scan# 1022
 Delta R.T.: 0.03 min
 Lab File: VL038192.D
 Acq: 16 Dec 2021 16:52

Tgt Ion: 42 Resp: 26423
 Ion Ratio Lower Upper
 42 100
 72 73.7 31.7 47.5#
 71 71.6 30.6 46.0#





#44

2,2,4-Trimethylpentane

Concen: 0.031 ppbv

RT: 7.87 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 16 Dec 2021 16:52

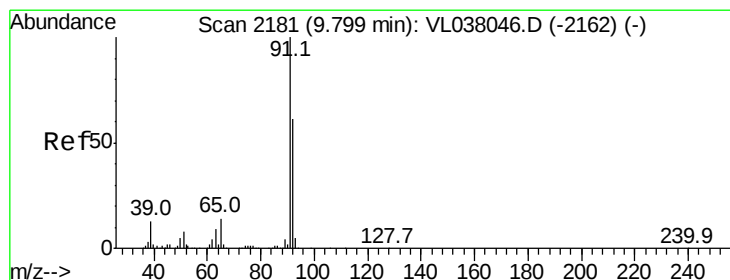
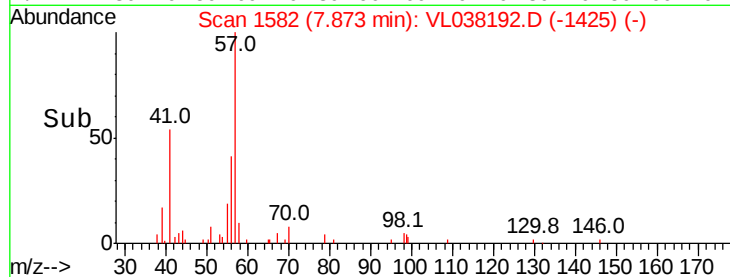
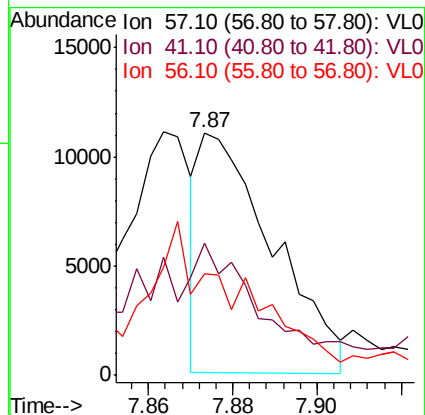
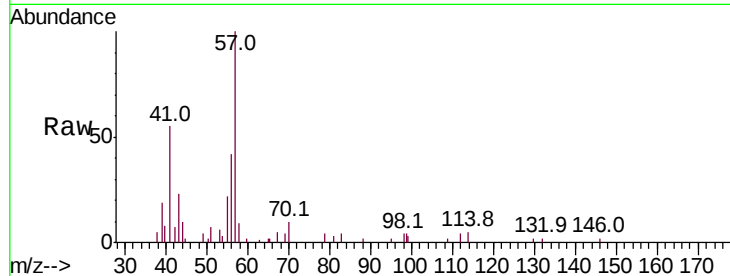
Tot Ion: 57 Resp: 13288

Ion Ratio Lower Upper

57 100

41 96.4 25.8 38.6#

56 0.0 25.6 38.4#



#53

Toluene

Concen: 0.648 ppbv

RT: 9.81 min Scan# 2184

Delta R.T. 0.01 min

Lab File: VL038192.D

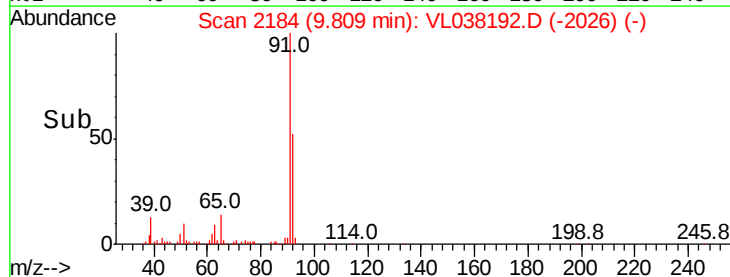
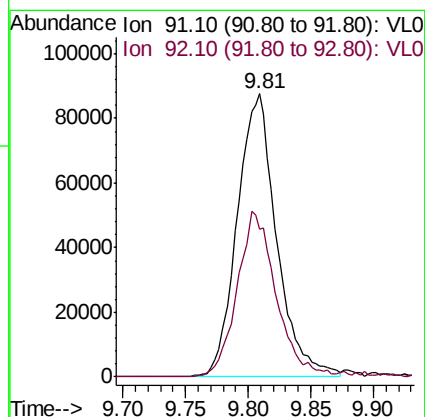
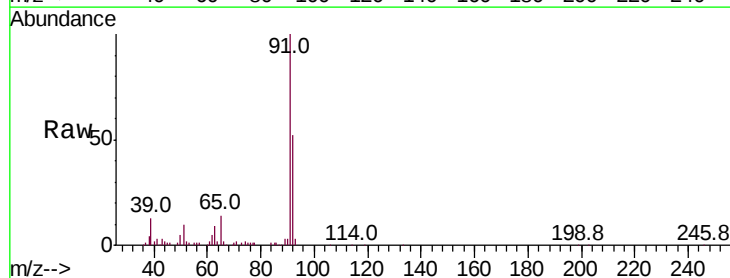
Acq: 16 Dec 2021 16:52

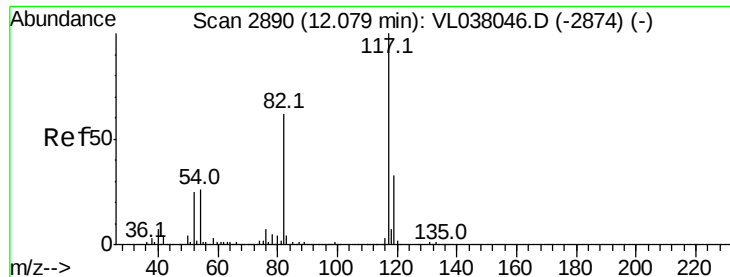
Tgt Ion: 91 Resp: 190947

Ion Ratio Lower Upper

91 100

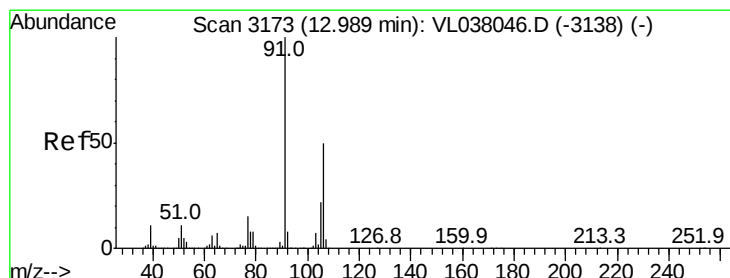
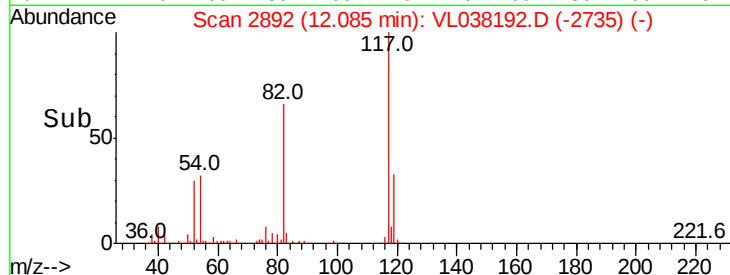
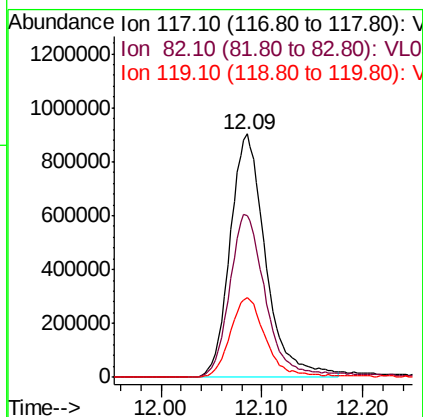
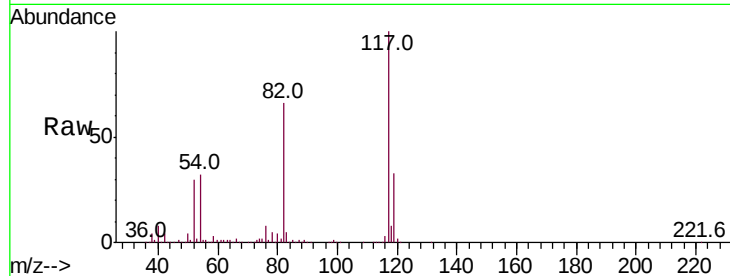
92 58.3 49.7 74.5





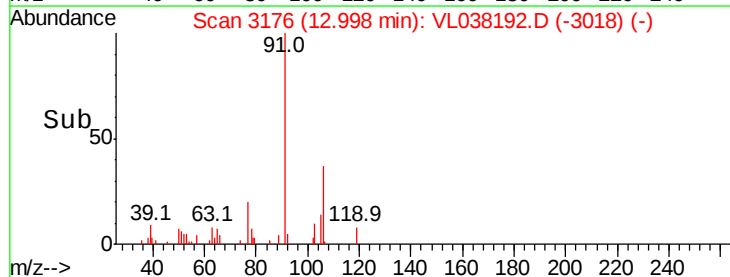
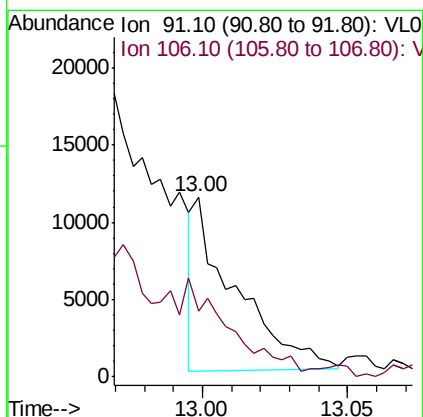
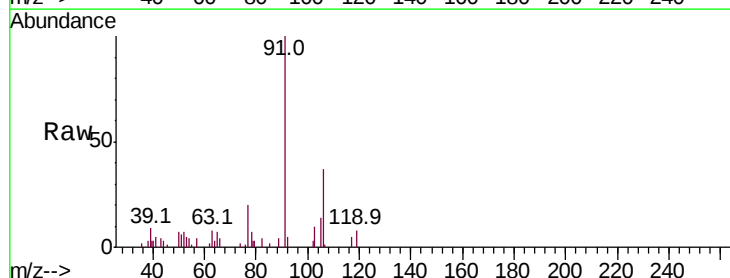
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.09 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 16 Dec 2021 16:52

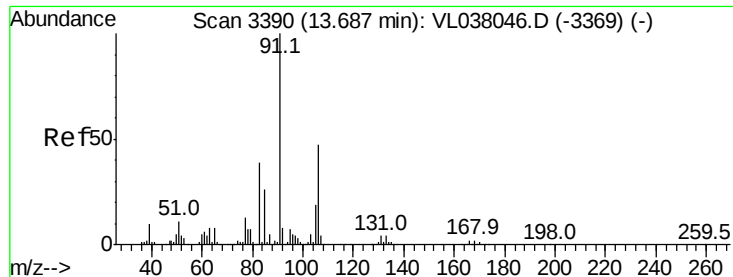
Tot Ion: 117 Resp: 2215362
Ion Ratio Lower Upper
117 100
82 70.4 52.8 79.2
119 33.2 26.8 40.2



#59
m/p-Xylene
Concen: 0.036 ppbv
RT: 13.00 min Scan# 3176
Delta R.T.: 0.01 min
Lab File: VL038192.D
Acq: 16 Dec 2021 16:52

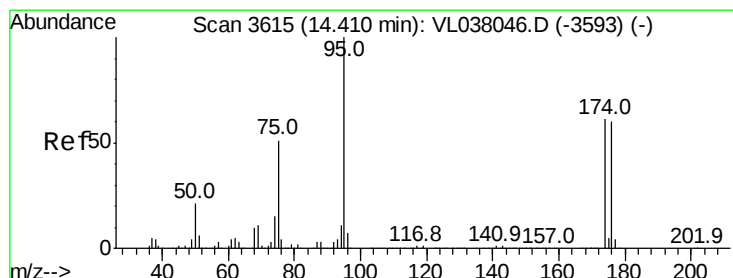
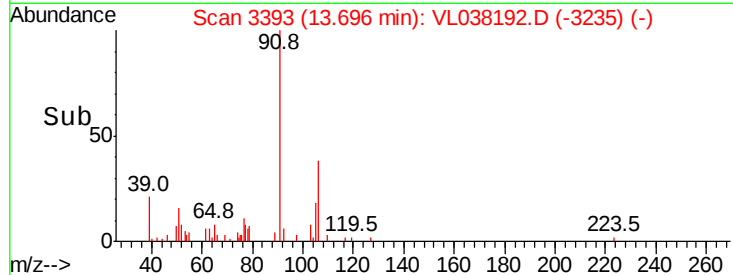
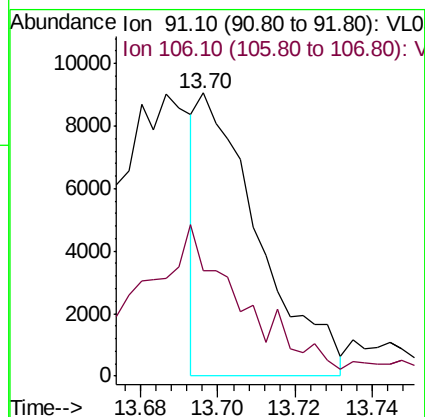
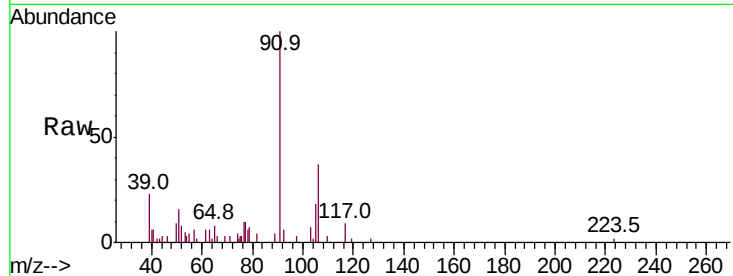
Tgt Ion: 91 Resp: 11166
Ion Ratio Lower Upper
91 100
106 0.0 38.1 57.1#





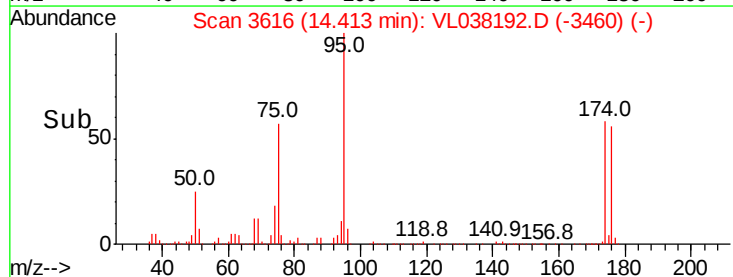
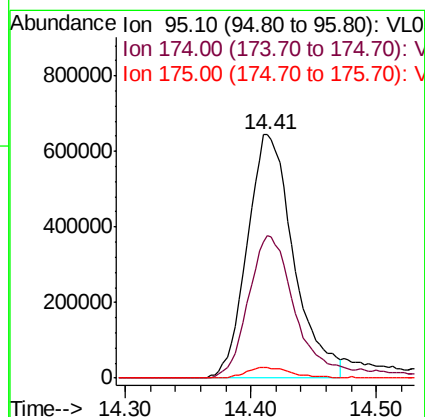
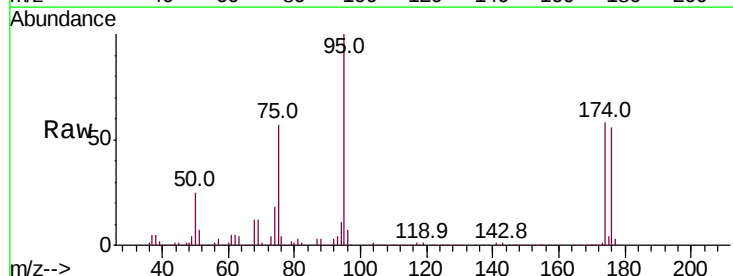
#60
o-Xylene
Concen: 0.034 ppbv
RT: 13.70 min
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 16 Dec 2021 16:52

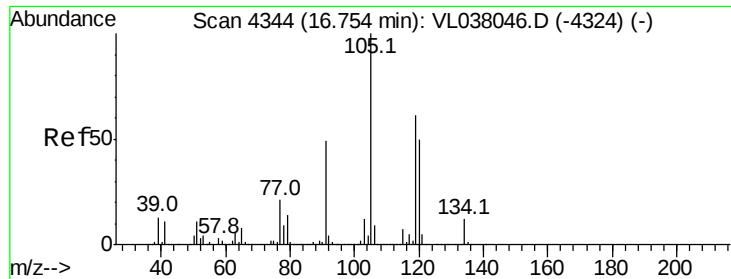
Tot Ion: 91 Resp: 9797
Ion Ratio Lower Upper
91 100
106 99.2 24.2 72.6#



#68
1-Bromo-4-Fluorobenzene
Concen: 10.361 ppbv
RT: 14.41 min Scan# 3616
Delta R.T. 0.00 min
Lab File: VL038192.D
Acq: 16 Dec 2021 16:52

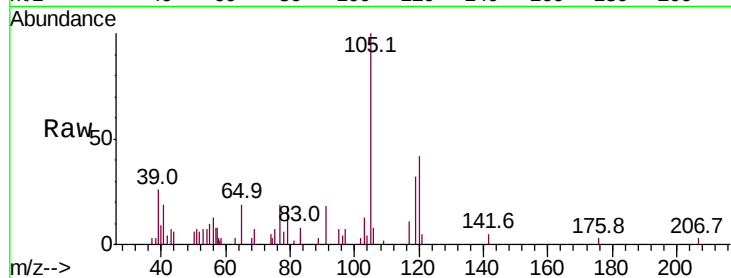
Tgt Ion: 95 Resp: 1655580
Ion Ratio Lower Upper
95 100
174 64.6 53.1 79.7
175 4.5 4.0 6.0





#74
 1,2,4-Trimethylbenzene
 Concen: 0.030 ppbv
 RT: 16.76
 Delta R.T: MSVOA_L
 Lab File: ClientSampleId :
 Acq: 16 Dec 2021 16:52

Tot Ion:	105	Resp:	9464
Ion	Ratio	Lower	Upper
105	100		
120	44.4	40.1	60.1
91	15.3	39.8	59.8#
77	9.3	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

