

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL061625\
 Data File : VL042637.D
 Acq On : 16 Jun 2025 19:46
 Operator : SY/MD
 Sample : Q2317-03DL 5X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 115-IA-2DL

Quant Time: Jun 17 03:10:08 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL052925AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Fri May 30 02:01:56 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

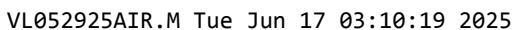
Internal Standards						
1) Bromochloromethane	2.790	49	101539	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.962	114	255635	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.885	117	225996	10.000	ppbv	0.00

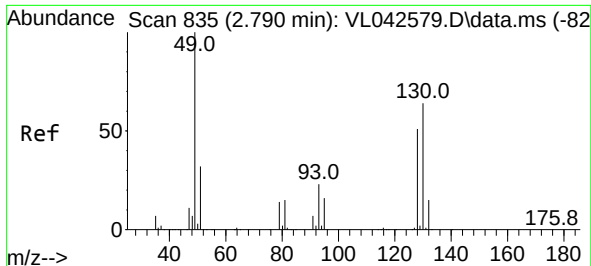
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	174084	10.276	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.800%

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	1351	0.108	ppbv #	76
3) Chlorodifluoromethane	1.466	51	18078	1.052	ppbv #	64
4) Chloromethane	1.534	50	802	0.162	ppbv #	87
9) Propene	1.560	41	26045	3.763	ppbv	95
11) Trichlorofluoromethane	1.877	101	14944	1.287	ppbv	93
12) 1,1,2-Trichlorotrifluo...	1.877	101	14944	1.639	ppbv #	15
13) Ethanol	1.722	45	104557	126.755	ppbv	96
15) Acetone	1.835	43	87546	7.158	ppbv	99
16) 1,3-Butadiene	1.599	39	240	0.041	ppbv #	13
17) tert-Butyl alcohol	2.046	59	1476	0.116	ppbv	97
19) Isopropyl Alcohol	1.887	45	16309	2.231	ppbv #	1
20) Methylene Chloride	2.062	84	1144	0.283	ppbv #	80
21) Allyl Chloride	2.043	41	305	0.035	ppbv #	17
23) Vinyl Acetate	2.457	43	4078	0.247	ppbv #	70
25) Ethyl Acetate	2.839	43	4187	0.125	ppbv #	76
26) Hexane	2.832	57	2298	0.151	ppbv #	79
29) Chloroform	2.845	83	669	0.034	ppbv	91
34) 2-Butanone	2.560	43	8807	0.483	ppbv	94
36) Benzene	3.658	78	995	0.040	ppbv #	80
39) 1,2-Dichloropropane	3.959	63	67071	7.205	ppbv #	24
41) Tetrahydrofuran	3.065	42	2429	0.228	ppbv	97
53) Toluene	6.933	91	1854	0.064	ppbv #	44
69) p-Isopropyltoluene	11.927	119	3845	0.081	ppbv	92
75) 1,3-Dichlorobenzene	11.672	146	92972	4.297	ppbv	99
76) 1,4-Dichlorobenzene	11.672	146	92972	4.309	ppbv	99
77) 1,2-Dichlorobenzene	11.672	146	92972	4.428	ppbv	98

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

Quant Time: Jun 17 03:10:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL052925AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri May 30 02:01:56 2025
Response via : Initial Calibration

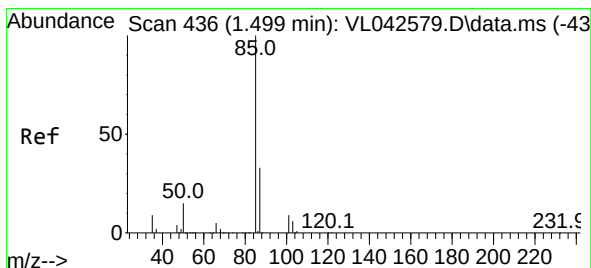
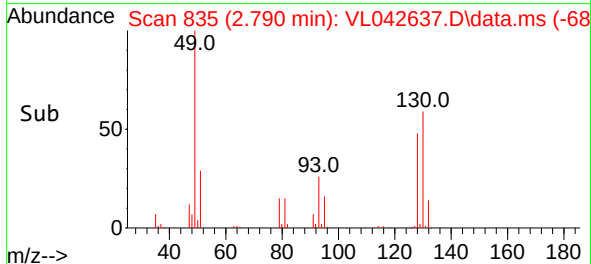
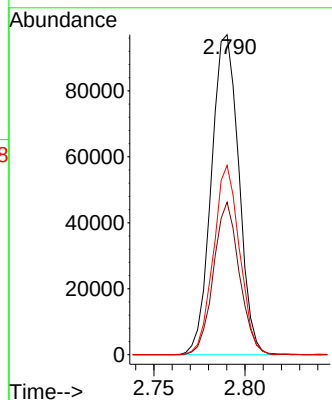
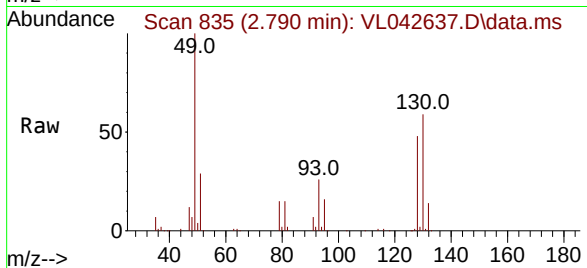




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.790 min Scan# 835
Delta R.T. 0.000 min
Lab File: VL042637.D
Acq: 16 Jun 2025 19:46

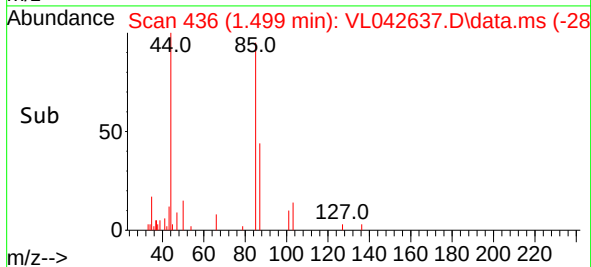
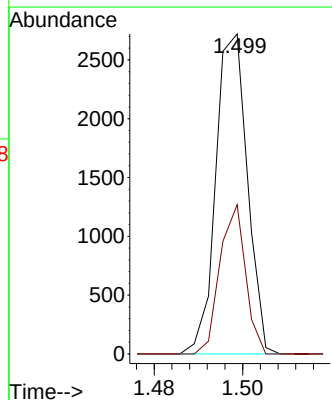
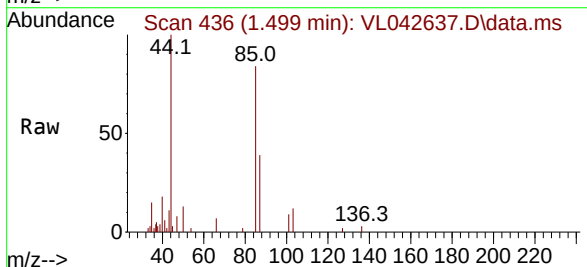
Instrument :
MSVOA_L
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115-IA-2DL

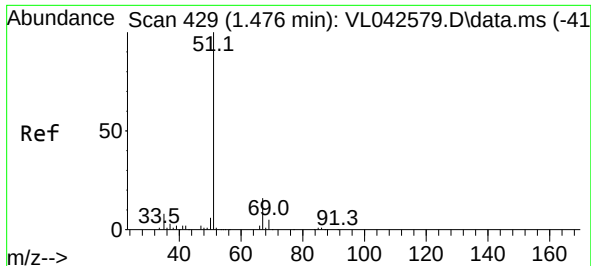
Tgt Ion: 49 Resp: 101539
Ion Ratio Lower Upper
49 100
128 45.0 24.2 72.6
130 56.6 30.4 91.2



#2
Dichlorodifluoromethane
Concen: 0.108 ppbv
RT: 1.499 min Scan# 436
Delta R.T. -0.000 min
Lab File: VL042637.D
Acq: 16 Jun 2025 19:46

Tgt Ion: 85 Resp: 1351
Ion Ratio Lower Upper
85 100
87 46.6 26.6 39.8#





#3

Chlorodifluoromethane

Concen: 1.052 ppbv

RT: 1.466 min Scan# 41

Delta R.T. -0.010 min

Lab File: VL042637.D

Acq: 16 Jun 2025 19:46

Instrument :

MSVOA_L

ClientSampleId :

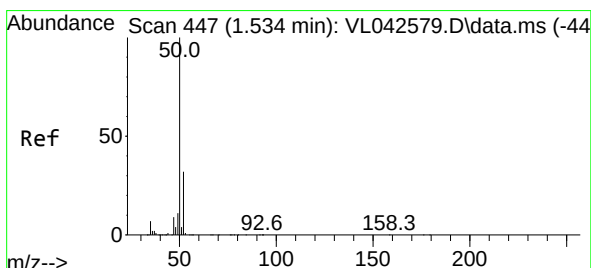
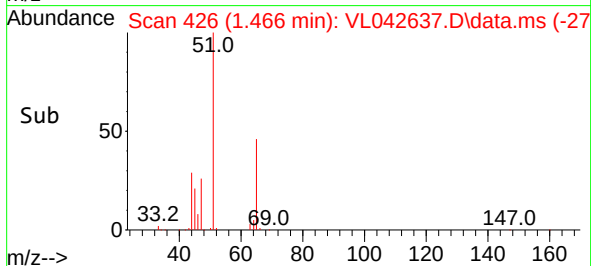
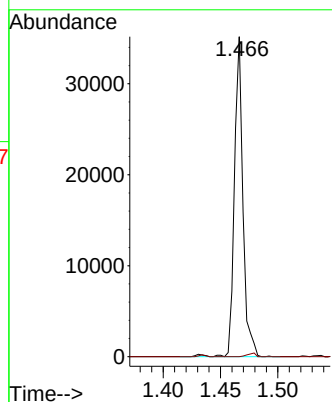
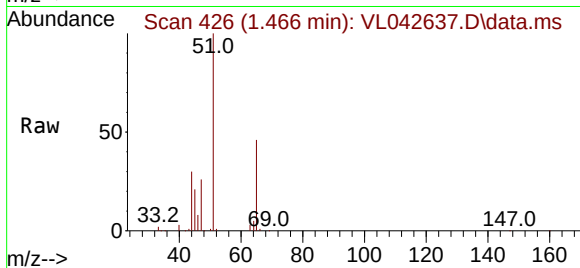
115-IA-2DL

Tgt Ion: 51 Resp: 18078

Ion Ratio Lower Upper

51 100

67 1.0 13.4 20.2#



#4

Chloromethane

Concen: 0.162 ppbv

RT: 1.534 min Scan# 447

Delta R.T. -0.000 min

Lab File: VL042637.D

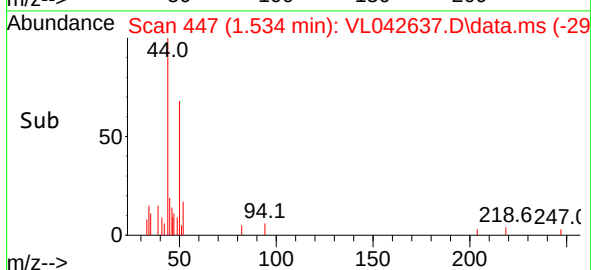
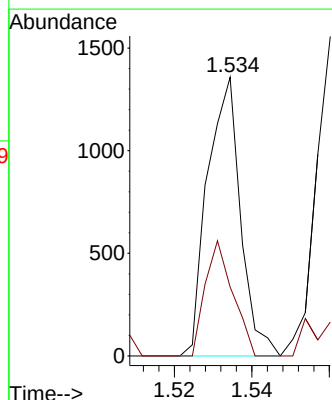
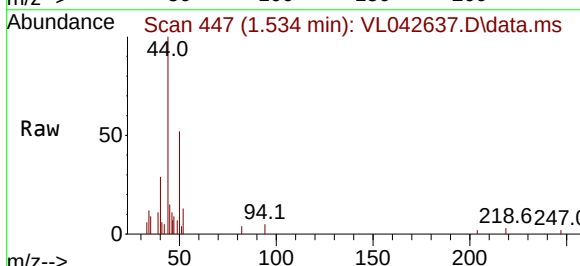
Acq: 16 Jun 2025 19:46

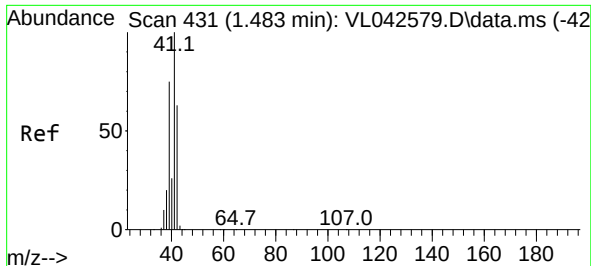
Tgt Ion: 50 Resp: 802

Ion Ratio Lower Upper

50 100

52 24.7 25.8 38.6#





#9

Propene

Concen: 3.763 ppbv

RT: 1.560 min Scan# 41

Delta R.T. 0.078 min

Lab File: VL042637.D

Acq: 16 Jun 2025 19:46

Instrument :

MSVOA_L

ClientSampleId :

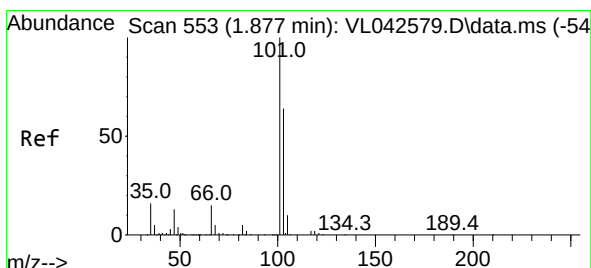
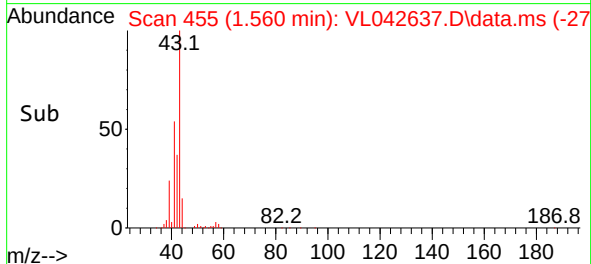
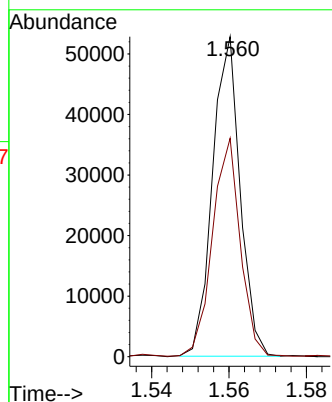
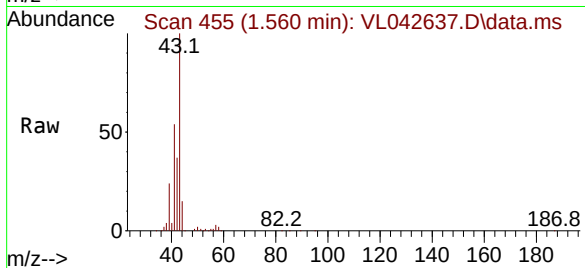
115-IA-2DL

Tgt Ion: 41 Resp: 26045

Ion Ratio Lower Upper

41 100

42 70.7 53.3 79.9



#11

Trichlorofluoromethane

Concen: 1.287 ppbv

RT: 1.877 min Scan# 553

Delta R.T. -0.000 min

Lab File: VL042637.D

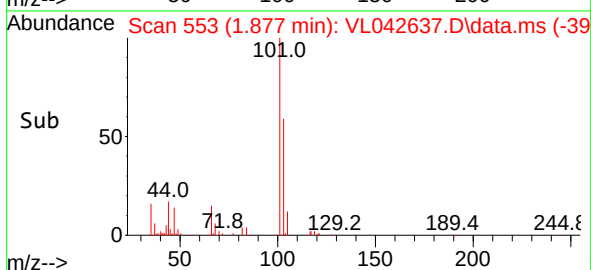
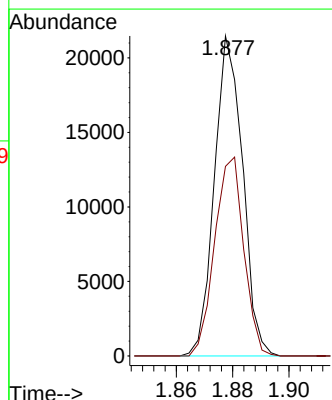
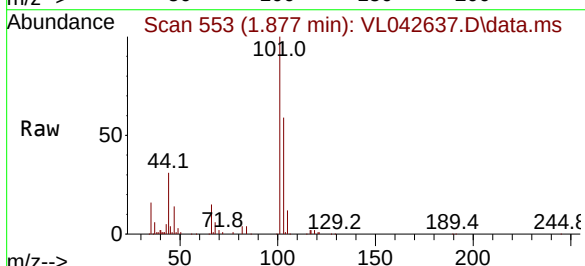
Acq: 16 Jun 2025 19:46

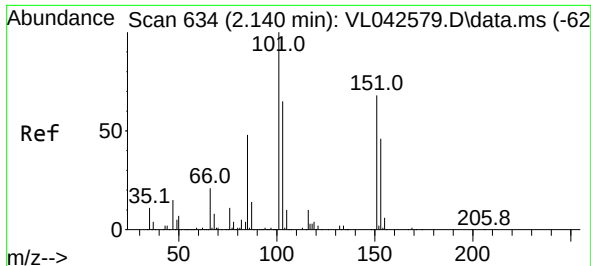
Tgt Ion: 101 Resp: 14944

Ion Ratio Lower Upper

101 100

103 59.2 51.5 77.3

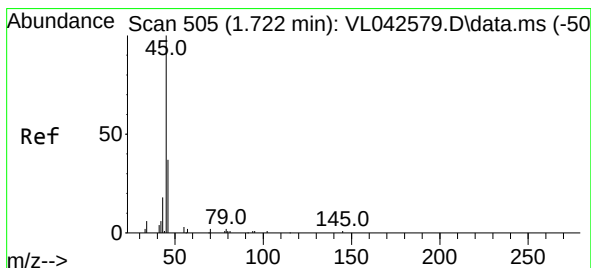
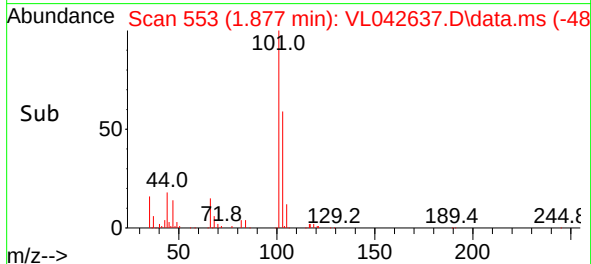
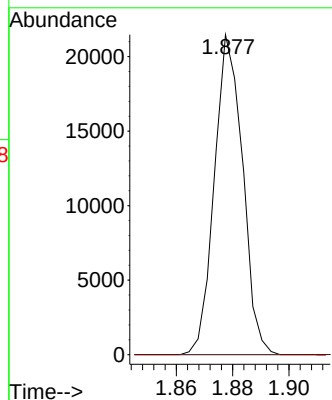
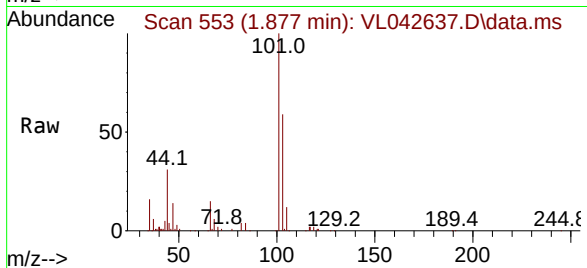




#12
1,1,2-Trichlorotrifluoroethane
Concen: 1.639 ppbv
RT: 1.877 min Scan# 51
Delta R.T. -0.262 min
Lab File: VL042637.D
Acq: 16 Jun 2025 19:46

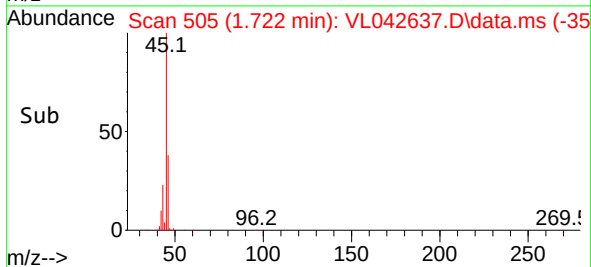
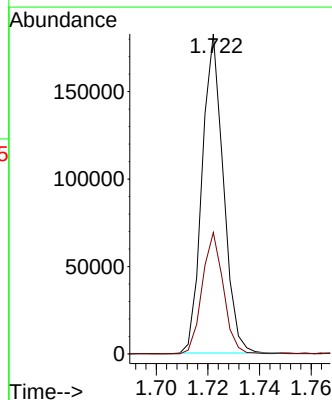
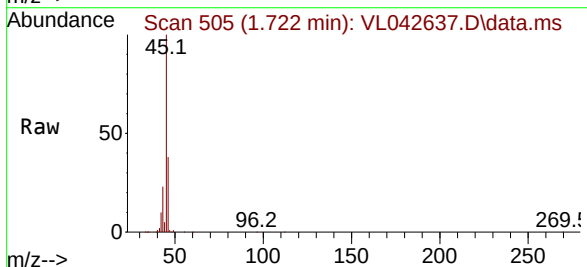
Instrument :
MSVOA_1
ClientSampleId :
115-IA-2DL

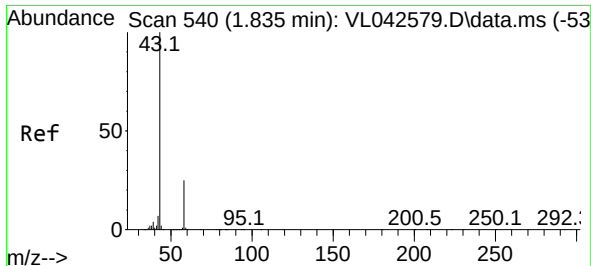
Tgt Ion:101 Resp: 14944
Ion Ratio Lower Upper
101 100
151 0.1 55.3 82.9#



#13
Ethanol
Concen: 126.755 ppbv
RT: 1.722 min Scan# 505
Delta R.T. -0.000 min
Lab File: VL042637.D
Acq: 16 Jun 2025 19:46

Tgt Ion: 45 Resp: 104557
Ion Ratio Lower Upper
45 100
46 38.6 14.5 58.1

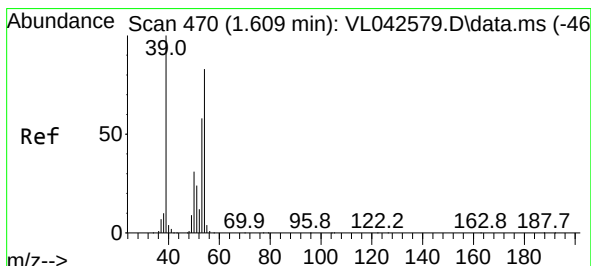
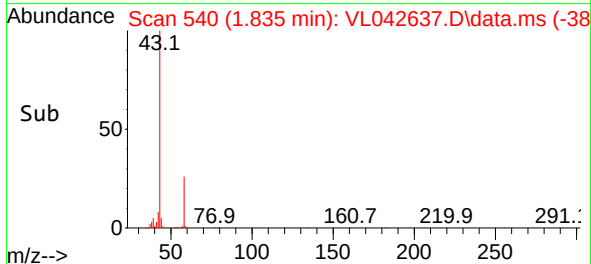
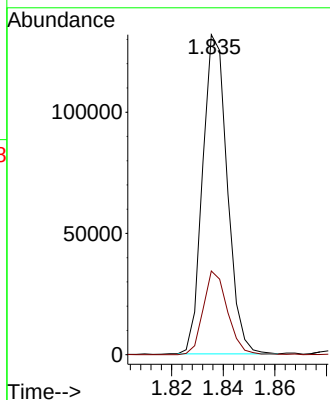
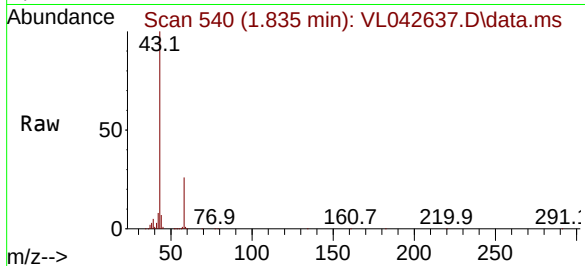




#15
Acetone
Concen: 7.158 ppbv
RT: 1.835 min Scan# 540
Delta R.T. -0.000 min
Lab File: VL042637.D
Acq: 16 Jun 2025 19:46

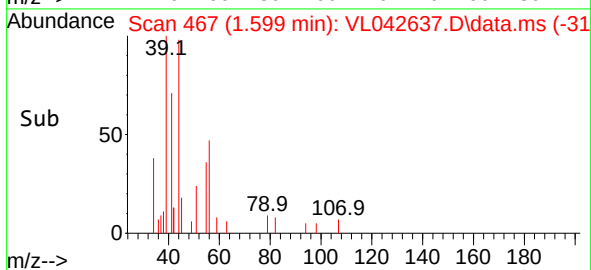
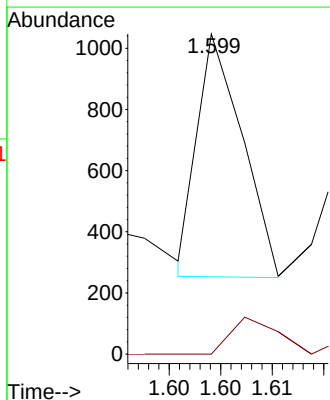
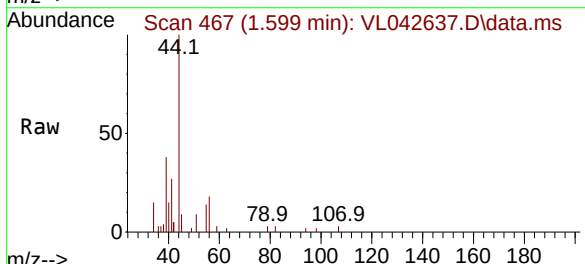
Instrument : MSVOA_1
ClientSampleId : 115-IA-2DL

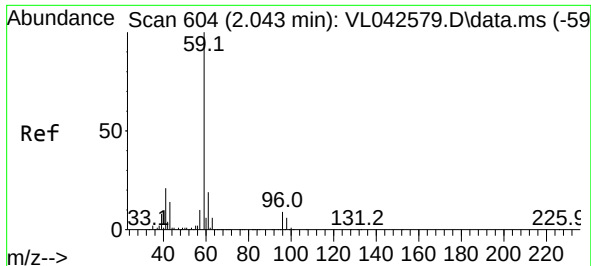
Tgt Ion: 43 Resp: 87546
Ion Ratio Lower Upper
43 100
58 25.9 21.0 31.4



#16
1,3-Butadiene
Concen: 0.041 ppbv
RT: 1.599 min Scan# 467
Delta R.T. -0.010 min
Lab File: VL042637.D
Acq: 16 Jun 2025 19:46

Tgt Ion: 39 Resp: 240
Ion Ratio Lower Upper
39 100
54 0.0 57.9 86.9#

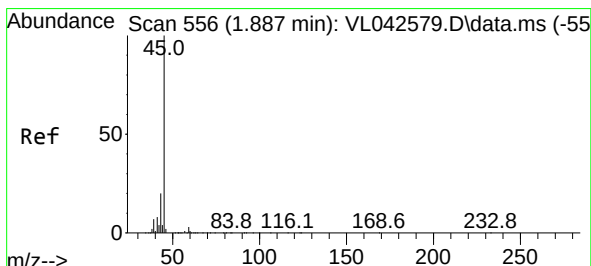
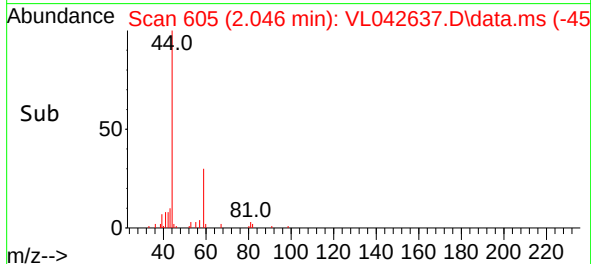
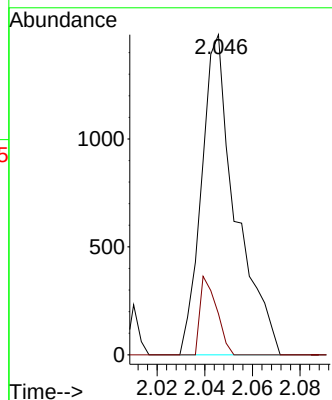
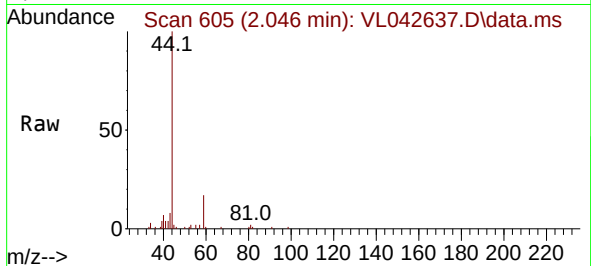




#17
tert-Butyl alcohol
Concen: 0.116 ppbv
RT: 2.046 min Scan# 604
Delta R.T. 0.003 min
Lab File: VL042637.D
Acq: 16 Jun 2025 19:46

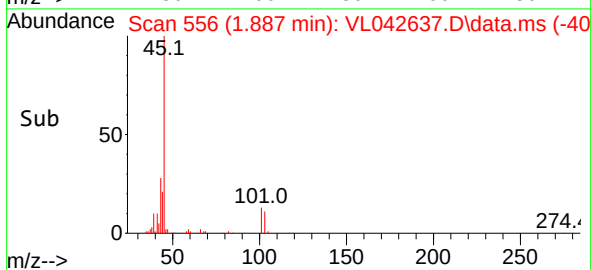
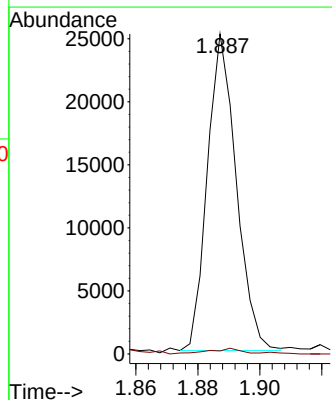
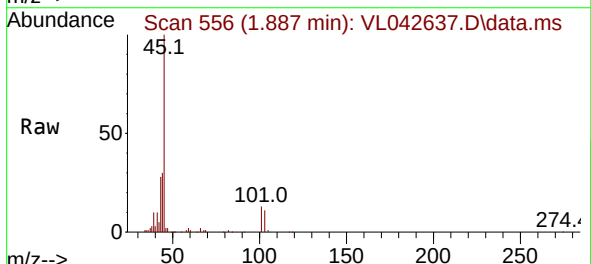
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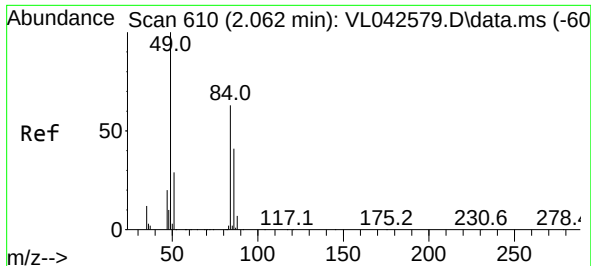
Tgt Ion: 59 Resp: 1476
Ion Ratio Lower Upper
59 100
57 11.9 8.6 12.8



#19
Isopropyl Alcohol
Concen: 2.231 ppbv
RT: 1.887 min Scan# 556
Delta R.T. -0.000 min
Lab File: VL042637.D
Acq: 16 Jun 2025 19:46

Tgt Ion: 45 Resp: 16309
Ion Ratio Lower Upper
45 100
58 138.8 29.4 44.2#

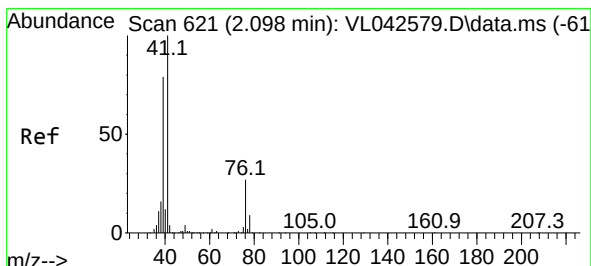
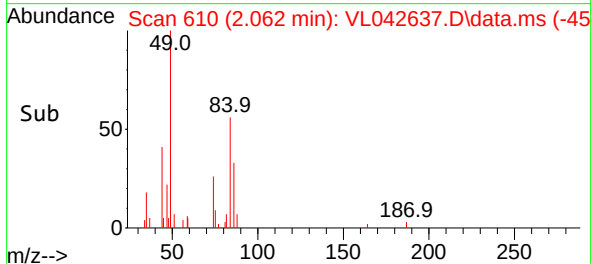
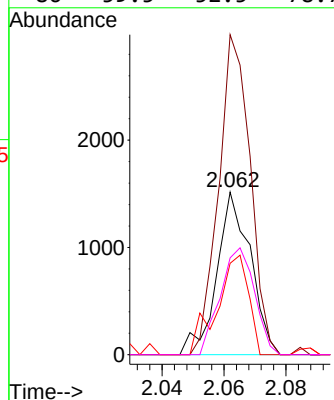
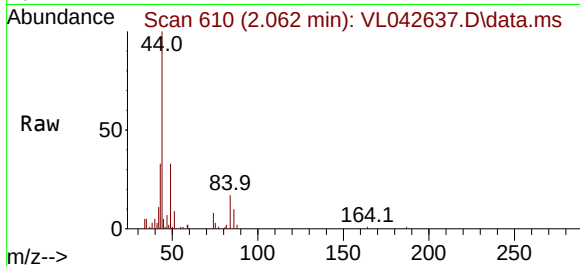




#20
Methylene Chloride
Concen: 0.283 ppbv
RT: 2.062 min Scan# 610
Delta R.T. -0.000 min
Lab File: VL042637.D
Acq: 16 Jun 2025 19:46

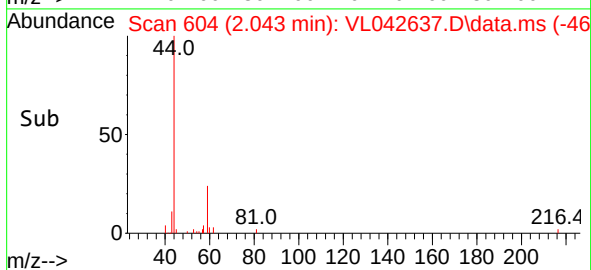
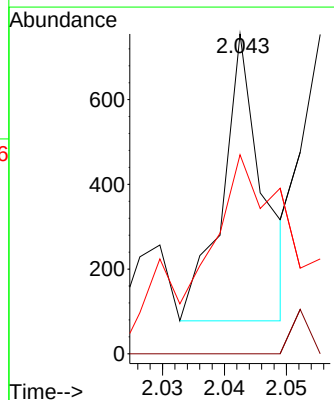
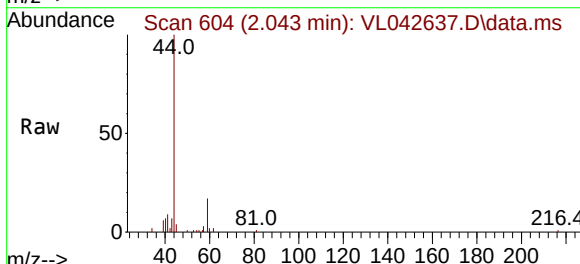
Instrument :
MSVOA_L
ClientSampleId :
115-IA-2DL

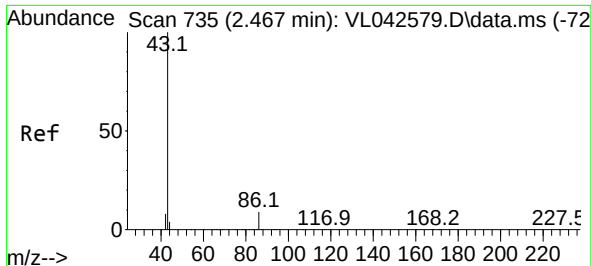
Tgt Ion:	84	Resp:	1144
Ion	Ratio	Lower	Upper
84	100		
49	197.0	128.8	193.2#
51	56.2	38.6	57.8
86	59.5	52.5	78.7



#21
Allyl Chloride
Concen: 0.035 ppbv
RT: 2.043 min Scan# 604
Delta R.T. -0.055 min
Lab File: VL042637.D
Acq: 16 Jun 2025 19:46

Tgt Ion:	41	Resp:	305
Ion	Ratio	Lower	Upper
41	100		
76	0.0	21.2	31.8#
39	157.0	60.9	91.3#

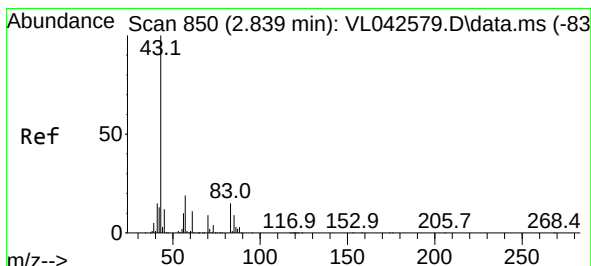
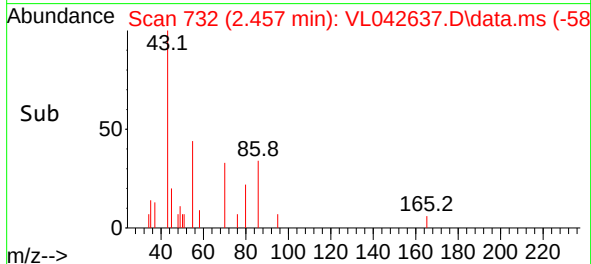
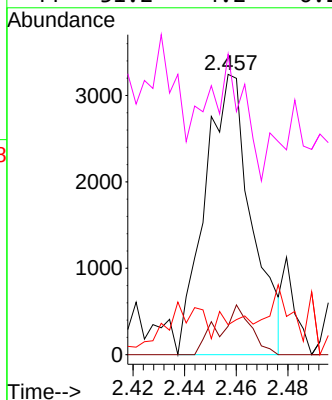
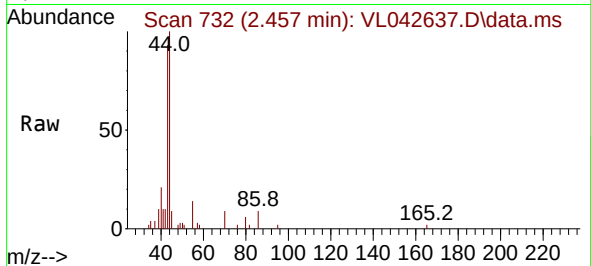




#23
 Vinyl Acetate
 Concen: 0.247 ppbv
 RT: 2.457 min Scan# 71
 Delta R.T. -0.010 min
 Lab File: VL042637.D
 Acq: 16 Jun 2025 19:46

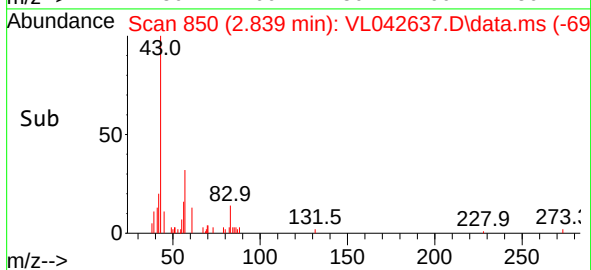
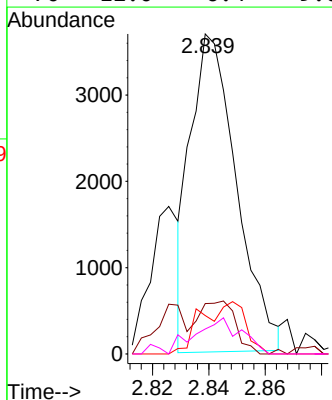
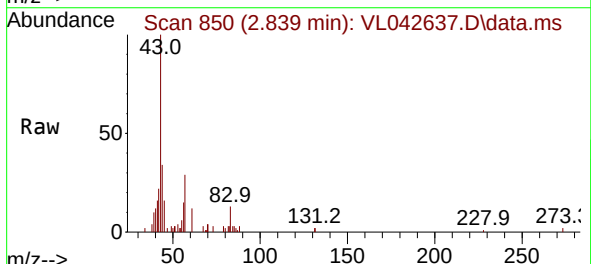
Instrument :
 MSVOA_L
 ClientSampleId :
 115-IA-2DL

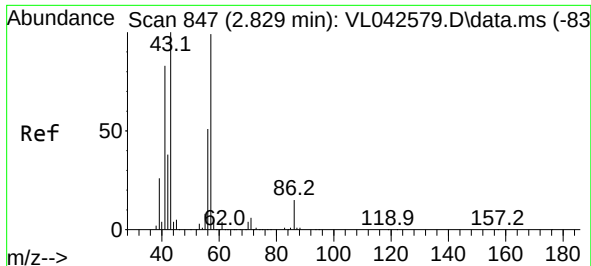
Tgt Ion:	43	Resp:	4078
Ion	Ratio	Lower	Upper
43	100		
86	10.2	6.6	9.8#
42	0.0	7.0	10.4#
44	31.2	4.2	6.2#



#25
 Ethyl Acetate
 Concen: 0.125 ppbv
 RT: 2.839 min Scan# 850
 Delta R.T. -0.000 min
 Lab File: VL042637.D
 Acq: 16 Jun 2025 19:46

Tgt Ion:	43	Resp:	4187
Ion	Ratio	Lower	Upper
43	100		
45	24.6	8.2	12.2#
61	15.8	7.1	10.7#
70	12.0	6.4	9.6#

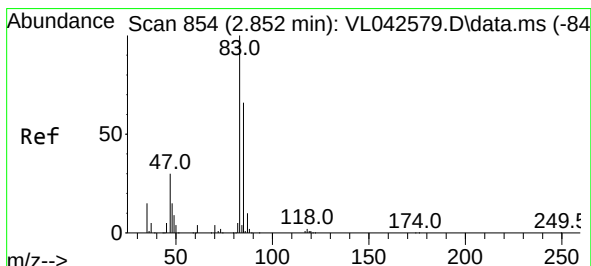
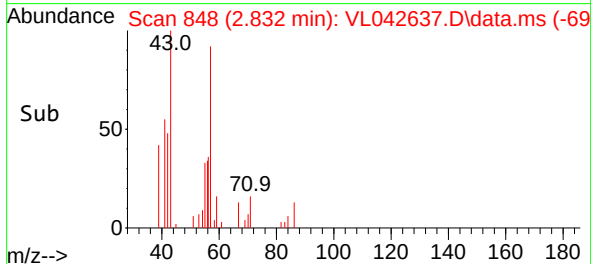
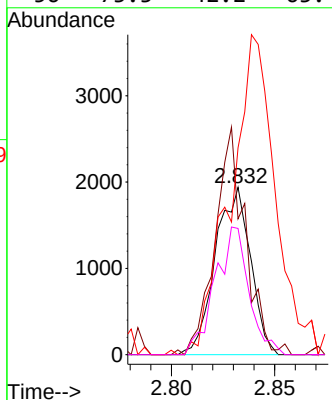
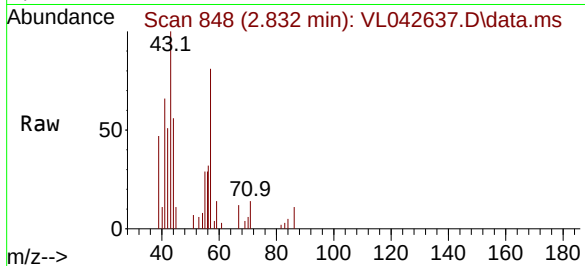




#26
Hexane
Concen: 0.151 ppbv
RT: 2.832 min Scan# 847
Delta R.T. 0.003 min
Lab File: VL042637.D
Acq: 16 Jun 2025 19:46

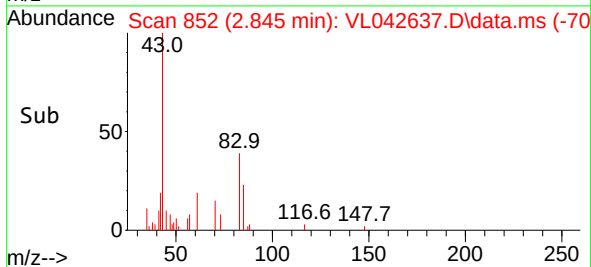
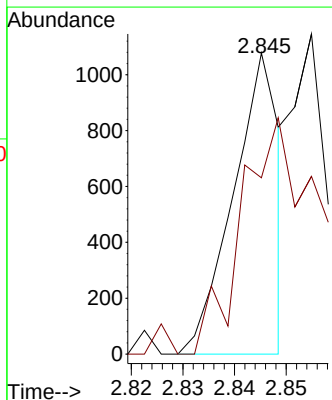
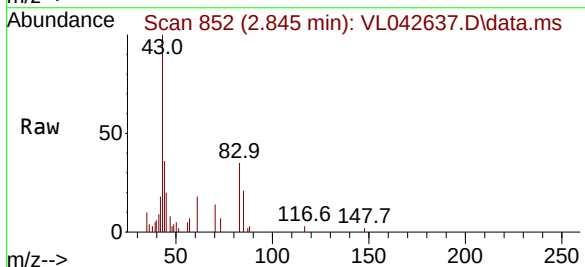
Instrument :
MSVOA_L
ClientSampleId :
115-IA-2DL

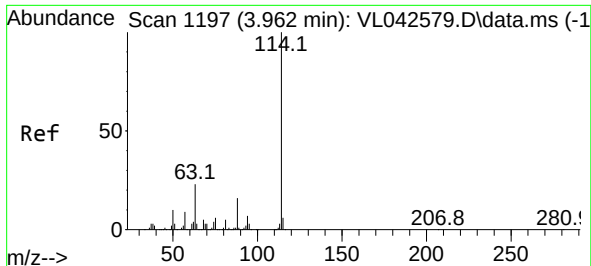
Tgt Ion: 57 Resp: 2298
Ion Ratio Lower Upper
57 100
41 118.4 70.6 106.0#
43 249.5 181.1 271.7
56 73.3 42.2 63.4#



#29
Chloroform
Concen: 0.034 ppbv
RT: 2.845 min Scan# 852
Delta R.T. -0.007 min
Lab File: VL042637.D
Acq: 16 Jun 2025 19:46

Tgt Ion: 83 Resp: 669
Ion Ratio Lower Upper
83 100
85 58.5 52.8 79.2





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.962 min Scan# 1197

Delta R.T. -0.000 min

Lab File: VL042637.D

Acq: 16 Jun 2025 19:46

Instrument :

MSVOA_L

ClientSampleId :

115-IA-2DL

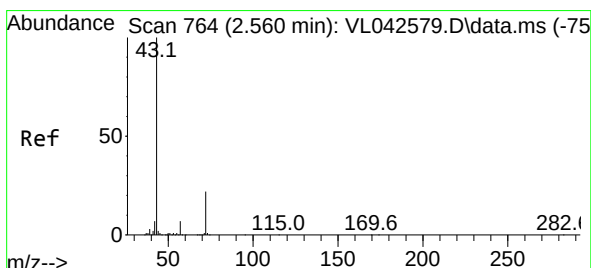
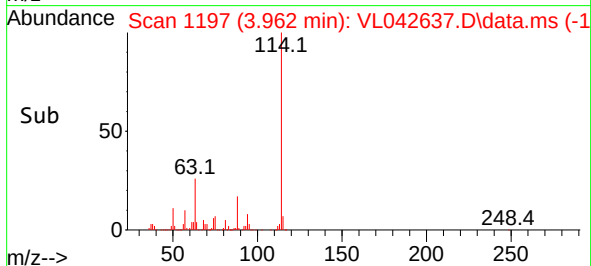
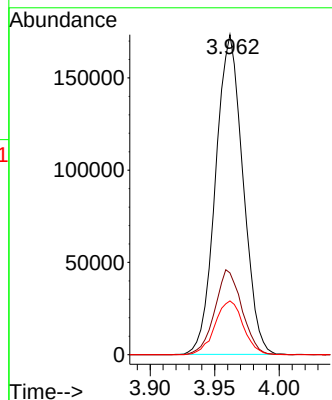
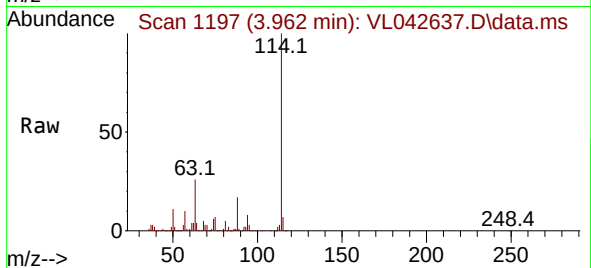
Tgt Ion:114 Resp: 255635

Ion Ratio Lower Upper

114 100

63 26.3 19.0 28.6

88 17.4 13.6 20.4



#34

2-Butanone

Concen: 0.483 ppbv

RT: 2.560 min Scan# 764

Delta R.T. -0.000 min

Lab File: VL042637.D

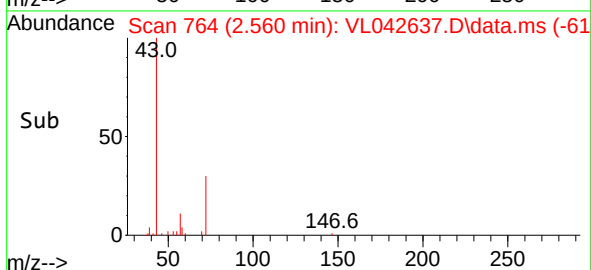
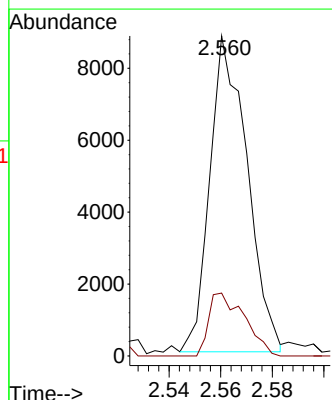
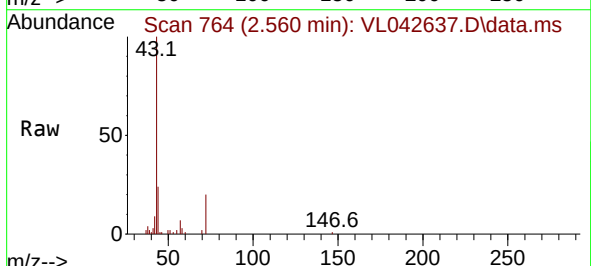
Acq: 16 Jun 2025 19:46

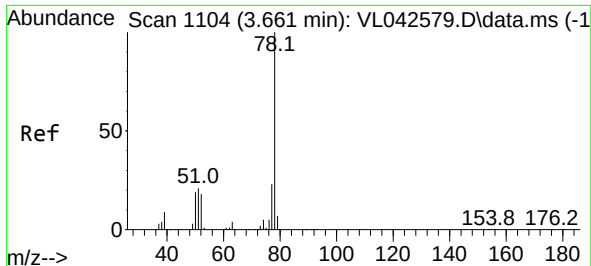
Tgt Ion: 43 Resp: 8807

Ion Ratio Lower Upper

43 100

72 19.2 17.7 26.5

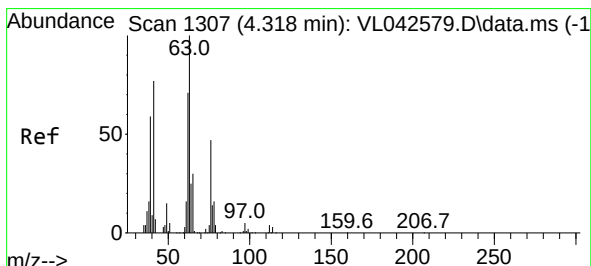
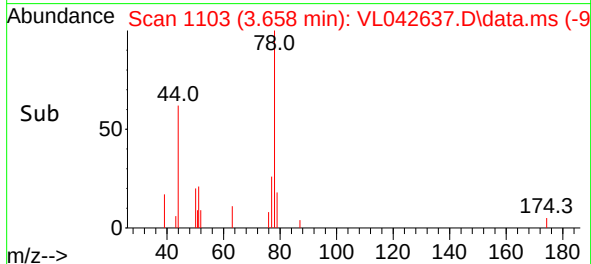
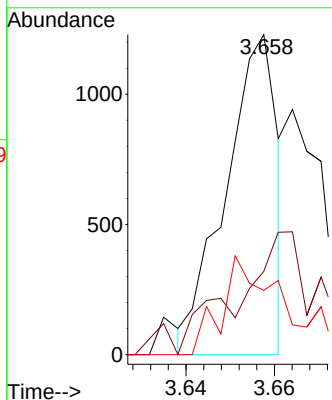
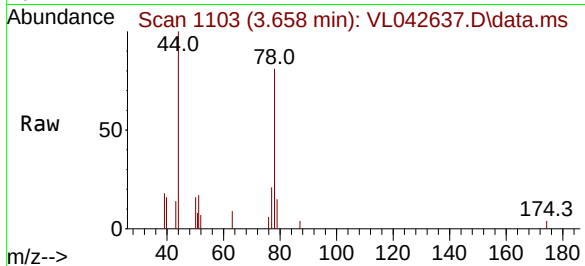




#36
Benzene
Concen: 0.040 ppbv
RT: 3.658 min Scan# 1103
Delta R.T. -0.003 min
Lab File: VL042637.D
Acq: 16 Jun 2025 19:46

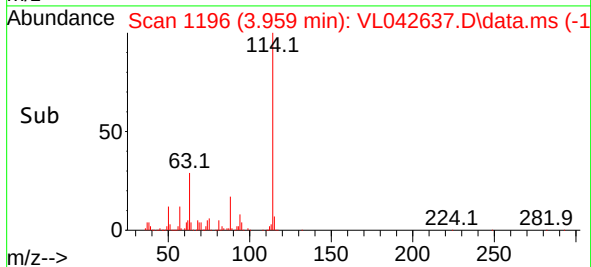
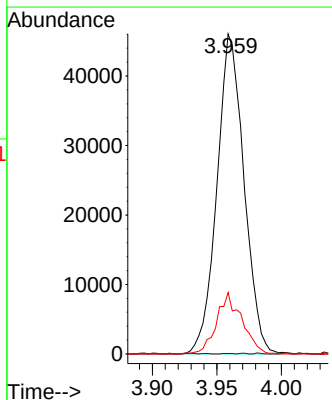
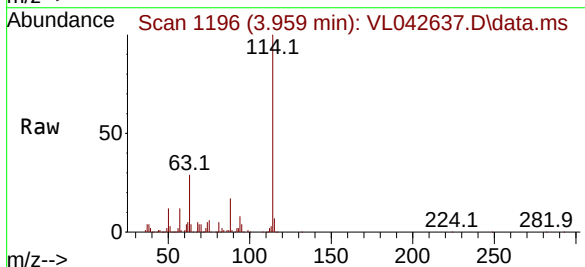
Instrument :
MSVOA_L
ClientSampleId :
115-IA-2DL

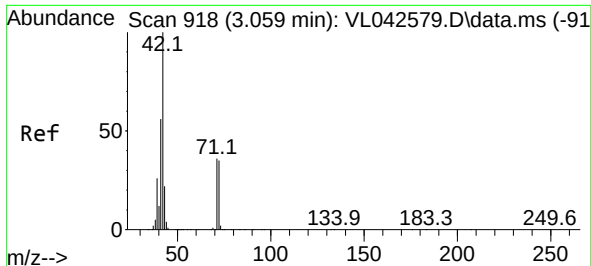
Tgt Ion: 78 Resp: 995
Ion Ratio Lower Upper
78 100
77 28.3 18.2 27.2#
50 32.2 15.2 22.8#



#39
1,2-Dichloropropane
Concen: 7.205 ppbv
RT: 3.959 min Scan# 1196
Delta R.T. -0.359 min
Lab File: VL042637.D
Acq: 16 Jun 2025 19:46

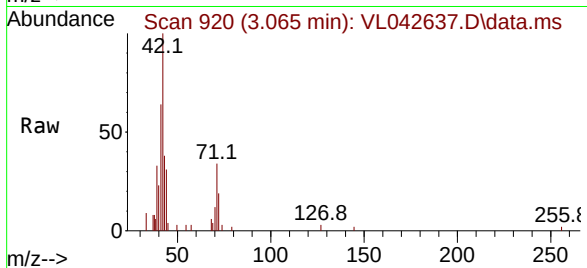
Tgt Ion: 63 Resp: 67071
Ion Ratio Lower Upper
63 100
41 0.1 61.8 92.6#
62 19.2 56.6 85.0#



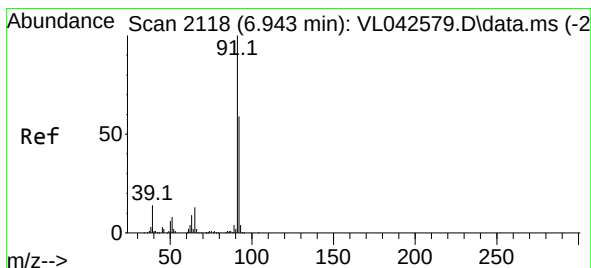
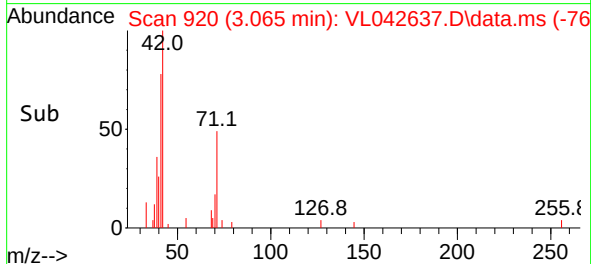
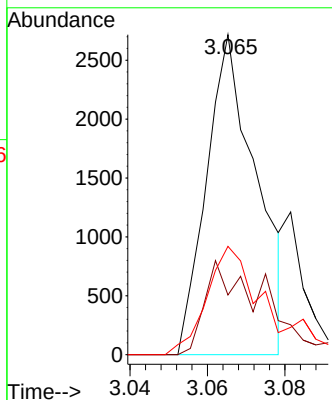


#41
Tetrahydrofuran
Concen: 0.228 ppbv
RT: 3.065 min Scan# 918
Delta R.T. 0.006 min
Lab File: VL042637.D
Acq: 16 Jun 2025 19:46

Instrument :
MSVOA_L
ClientSampleId :
115-IA-2DL

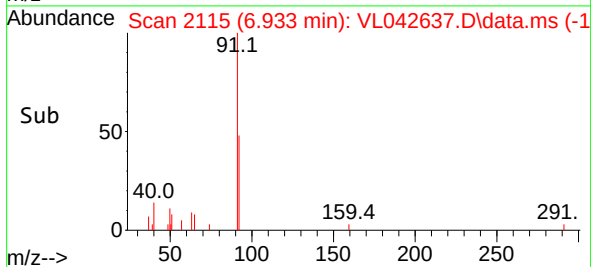
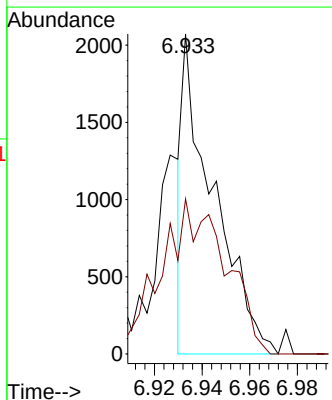
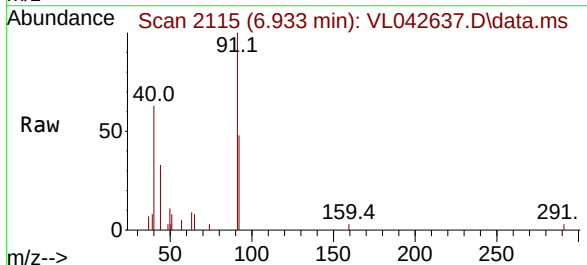


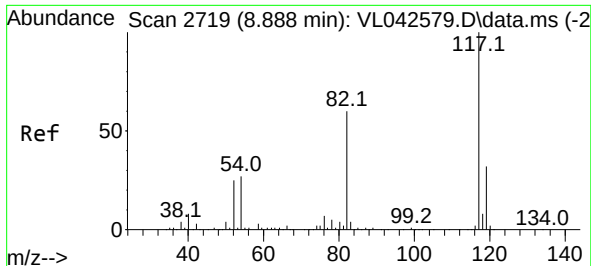
Tgt Ion:	42	Resp:	2429
Ion	Ratio	Lower	Upper
42	100		
72	36.1	28.9	43.3
71	39.7	28.5	42.7



#53
Toluene
Concen: 0.064 ppbv
RT: 6.933 min Scan# 2115
Delta R.T. -0.010 min
Lab File: VL042637.D
Acq: 16 Jun 2025 19:46

Tgt Ion:	91	Resp:	1854
Ion	Ratio	Lower	Upper
91	100		
92	103.0	48.2	72.4#

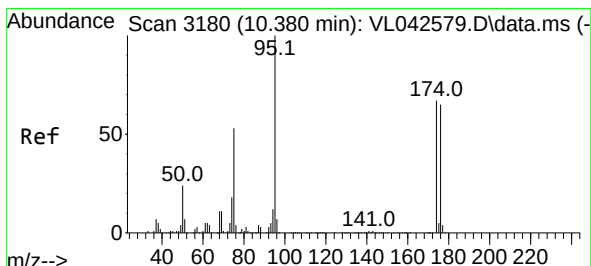
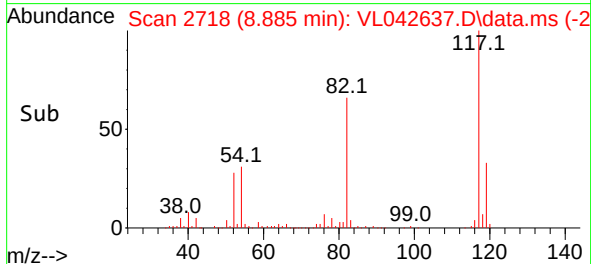
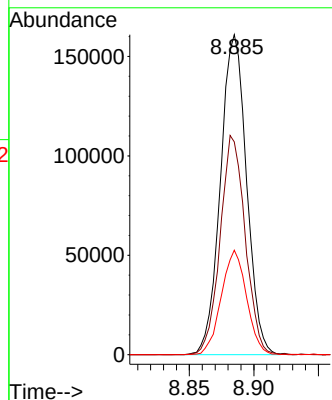
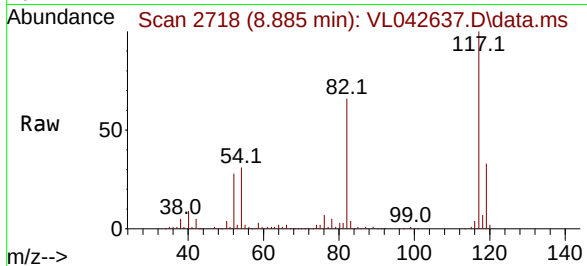




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.885 min Scan# 21
Delta R.T. -0.003 min
Lab File: VL042637.D
Acq: 16 Jun 2025 19:46

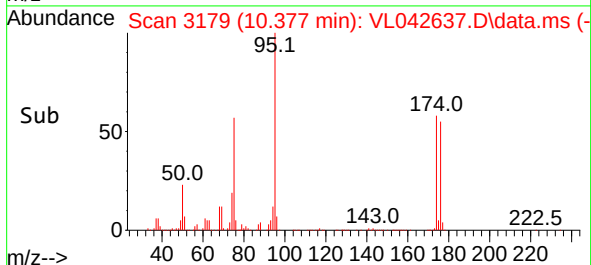
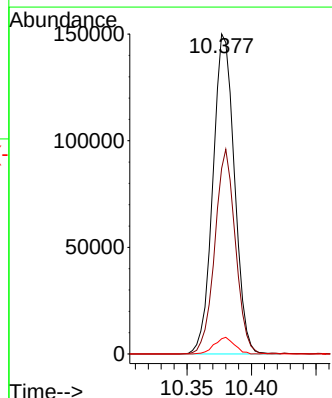
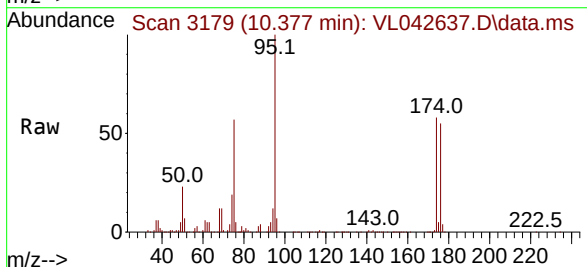
Instrument :
MSVOA_L
ClientSampleId :
115-IA-2DL

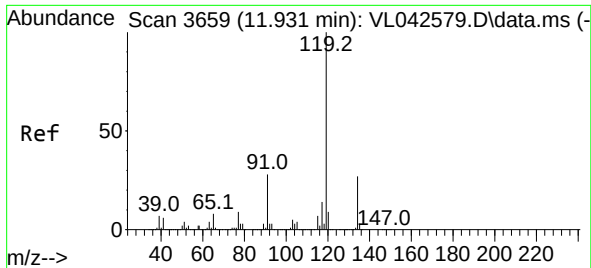
Tgt Ion:117 Resp: 225996
Ion Ratio Lower Upper
117 100
82 65.8 51.2 76.8
119 31.8 26.3 39.5



#68
1-Bromo-4-Fluorobenzene
Concen: 10.276 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. -0.003 min
Lab File: VL042637.D
Acq: 16 Jun 2025 19:46

Tgt Ion: 95 Resp: 174084
Ion Ratio Lower Upper
95 100
174 61.3 53.1 79.7
175 4.9 4.2 6.2

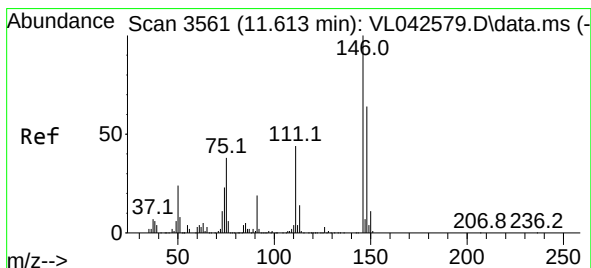
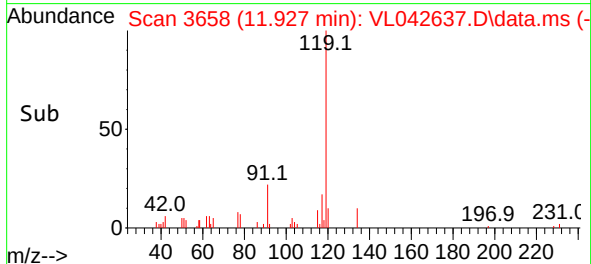
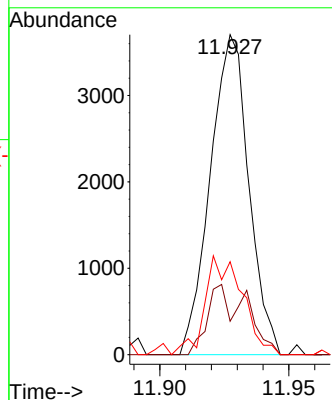
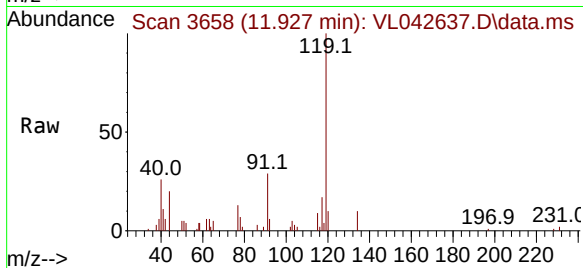




#69
 p-Isopropyltoluene
 Concen: 0.081 ppbv
 RT: 11.927 min Scan# 3079
 Delta R.T. -0.003 min
 Lab File: VL042637.D
 Acq: 16 Jun 2025 19:46

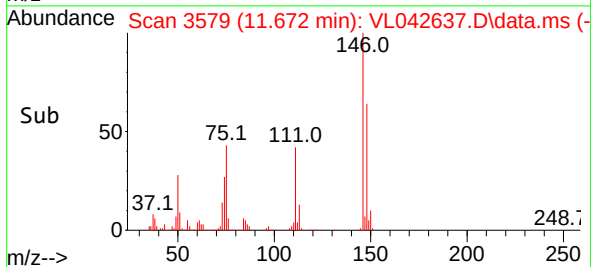
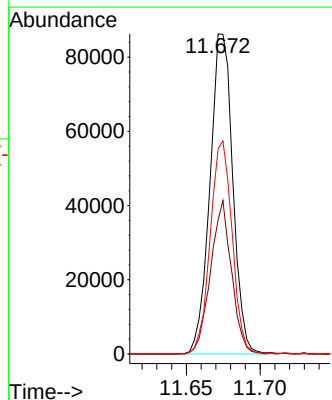
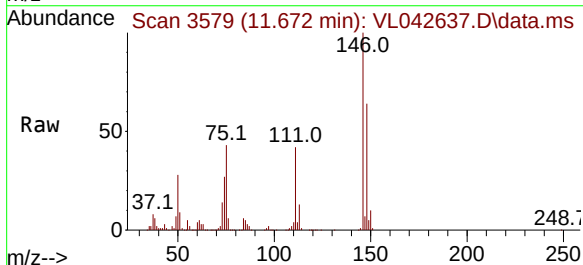
Instrument :
 MSVOA_1
 ClientSampleId :
 115-IA-2DL

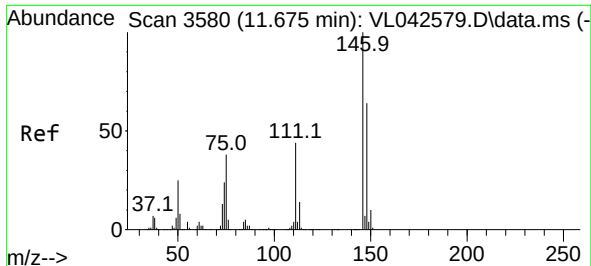
Tgt Ion:119 Resp: 3845
 Ion Ratio Lower Upper
 119 100
 134 22.0 21.1 31.7
 91 30.9 21.9 32.9



#75
 1,3-Dichlorobenzene
 Concen: 4.297 ppbv
 RT: 11.672 min Scan# 3579
 Delta R.T. 0.058 min
 Lab File: VL042637.D
 Acq: 16 Jun 2025 19:46

Tgt Ion:146 Resp: 92972
 Ion Ratio Lower Upper
 146 100
 111 44.1 22.4 67.3
 148 64.0 32.0 96.2

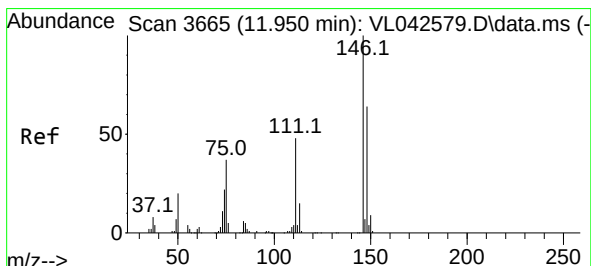
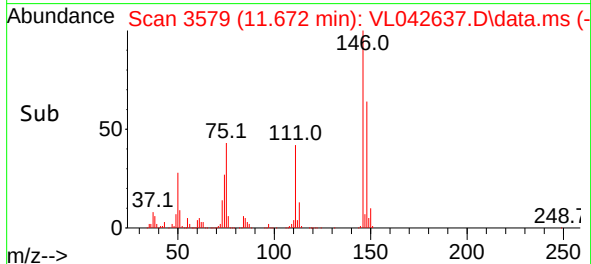
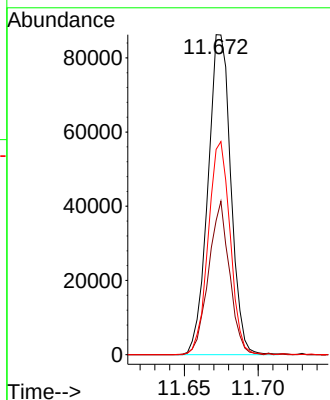
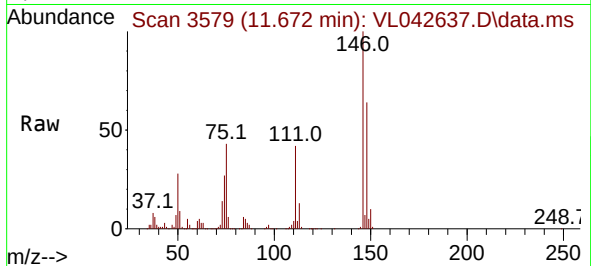




#76
1,4-Dichlorobenzene
Concen: 4.309 ppbv
RT: 11.672 min Scan# 3579
Delta R.T. -0.003 min
Lab File: VL042637.D
Acq: 16 Jun 2025 19:46

Instrument :
MSVOA_1
ClientSampleId :
115-IA-2DL

Tgt Ion:146 Resp: 92972
Ion Ratio Lower Upper
146 100
111 44.1 21.6 64.8
148 64.0 32.1 96.5



#77
1,2-Dichlorobenzene
Concen: 4.428 ppbv
RT: 11.672 min Scan# 3579
Delta R.T. -0.278 min
Lab File: VL042637.D
Acq: 16 Jun 2025 19:46

Tgt Ion:146 Resp: 92972
Ion Ratio Lower Upper
146 100
111 44.1 23.1 69.3
148 64.0 32.1 96.3

