

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL080425\
 Data File : VL042813.D
 Acq On : 04 Aug 2025 19:41
 Operator : SY/MD
 Sample : Q2750-03DL 20X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: Aug 05 01:11:44 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL072325AIR.M
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Thu Jul 24 05:24:41 2025
 Response via : Initial Calibration

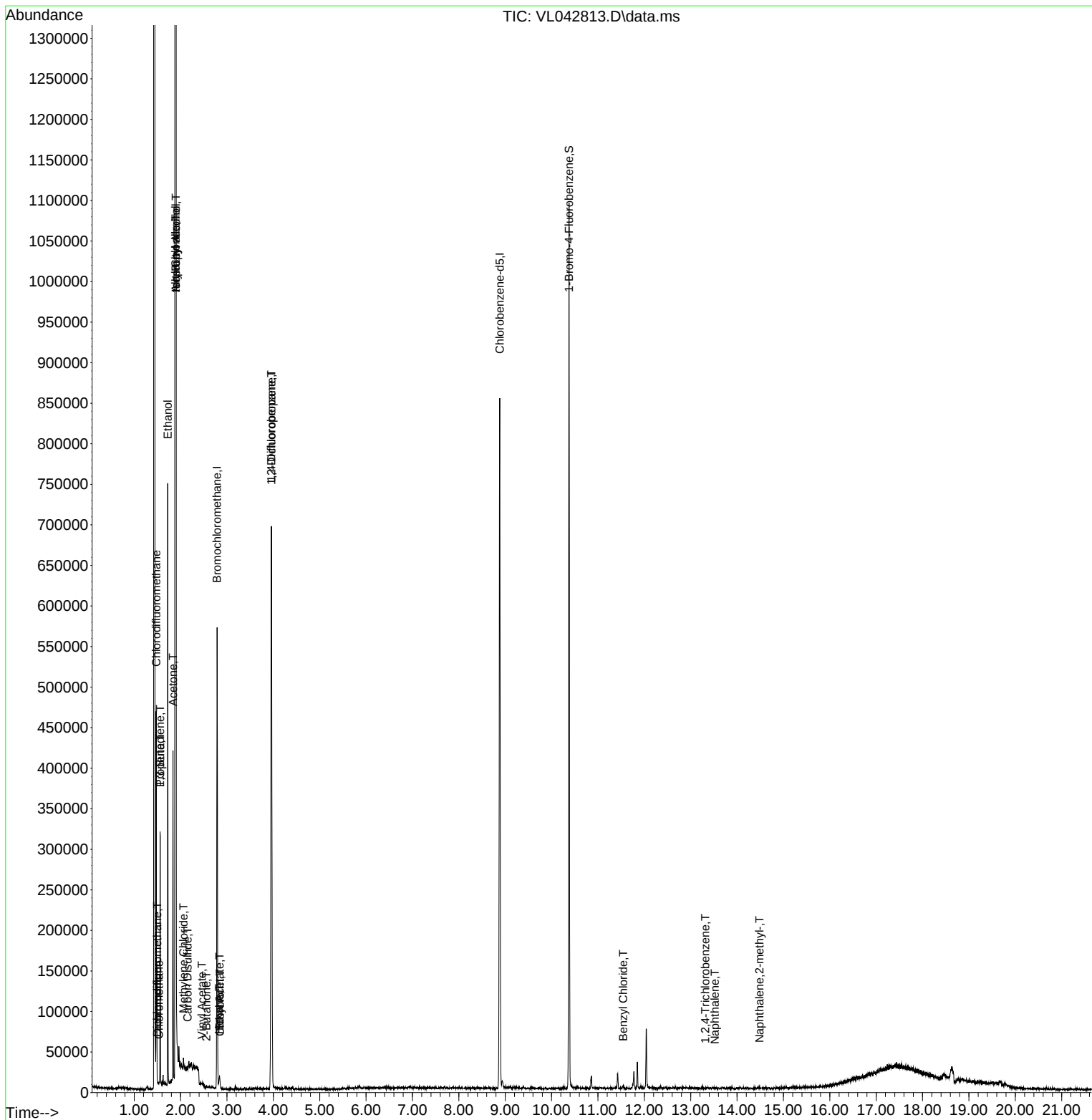
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

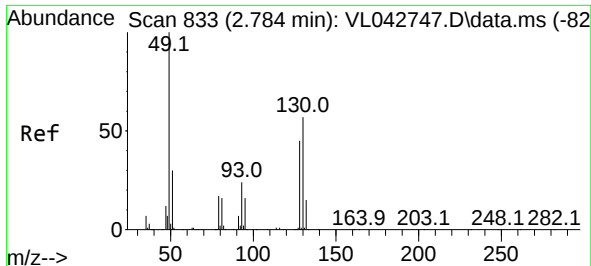
Internal Standards						
1) Bromochloromethane	2.787	49	146355	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	388590	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.882	117	332901	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	252224	9.567	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	95.700%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.499	85	651	0.034	ppbv #	79
3) Chlorodifluoromethane	1.473	51	133474	5.295	ppbv	99
4) Chloromethane	1.531	50	432	0.055	ppbv	99
9) Propene	1.557	41	38418	4.193	ppbv	98
13) Ethanol	1.722	45	252970	378.074	ppbv	89
15) Acetone	1.835	43	166188	8.223	ppbv	99
16) 1,3-Butadiene	1.557	39	17318	2.009	ppbv #	19
17) tert-Butyl alcohol	1.894	59	559405	30.691	ppbv #	94
19) Isopropyl Alcohol	1.897	45	4720366	439.534	ppbv #	40
20) Methylene Chloride	2.062	84	2222	0.349	ppbv #	87
21) Allyl Chloride	1.894	41	1260858	101.231	ppbv #	84
23) Vinyl Acetate	2.457	43	1494	0.061	ppbv #	92
25) Ethyl Acetate	2.839	43	8734	0.195	ppbv #	52
26) Hexane	2.829	57	1525	0.078	ppbv #	1
27) Carbon Disulfide	2.149	76	3045	0.181	ppbv #	64
29) Chloroform	2.848	83	1075	0.035	ppbv #	83
34) 2-Butanone	2.557	43	956	0.035	ppbv #	54
39) 1,2-Dichloropropane	3.955	63	100773	7.413	ppbv #	21
66) Benzyl Chloride	11.542	91	268	0.059	ppbv #	76
79) Naphthalene	13.520	128	11	0.435	ppbv #	1
80) Naphthalene,2-methyl-	14.484	142	23	1.129	ppbv #	85
81) 1,2,4-Trichlorobenzene	13.316	180	20	0.436	ppbv #	12

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

Instrument :
MSVOA_L
ClientSampleId :

Quant Time: Aug 05 01:11:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL072325AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Thu Jul 24 05:24:41 2025
Response via : Initial Calibration

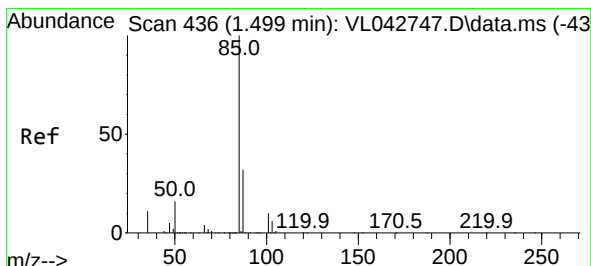
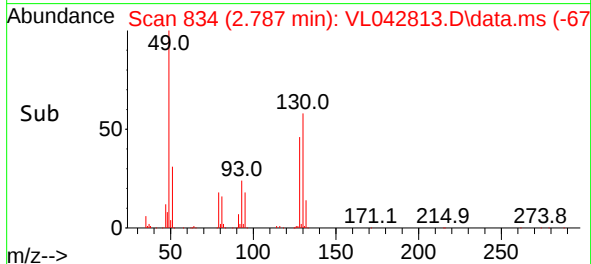
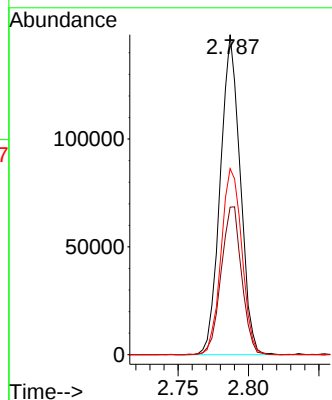
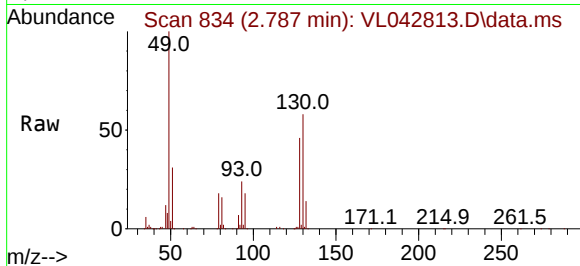




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 81
Delta R.T. 0.003 min
Lab File: VL042813.D
Acq: 04 Aug 2025 19:41

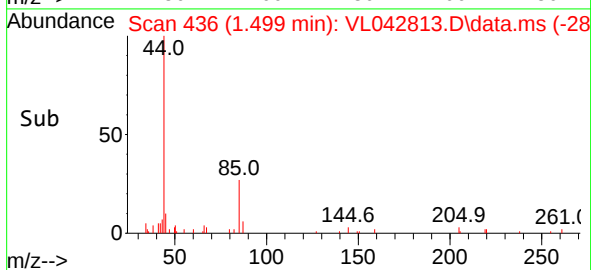
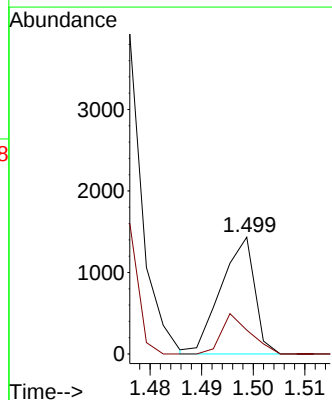
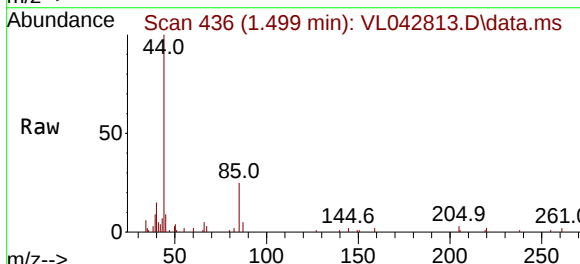
Instrument :
MSVOA_L
ClientSampleId :

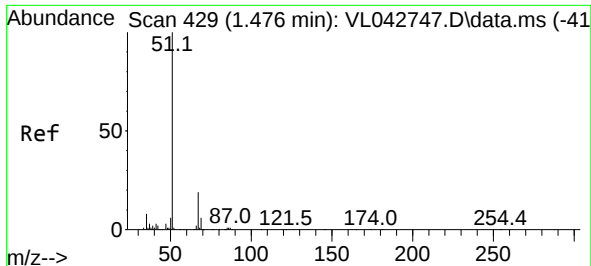
Tgt Ion: 49 Resp: 146355
Ion Ratio Lower Upper
49 100
128 47.7 23.6 71.0
130 60.6 30.3 90.8



#2
Dichlorodifluoromethane
Concen: 0.034 ppbv
RT: 1.499 min Scan# 436
Delta R.T. -0.000 min
Lab File: VL042813.D
Acq: 04 Aug 2025 19:41

Tgt Ion: 85 Resp: 651
Ion Ratio Lower Upper
85 100
87 20.4 25.4 38.2#

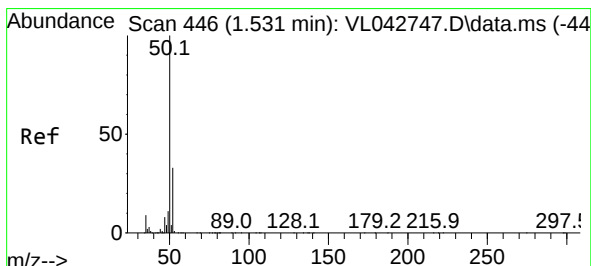
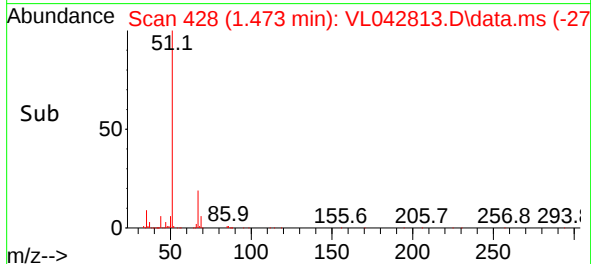
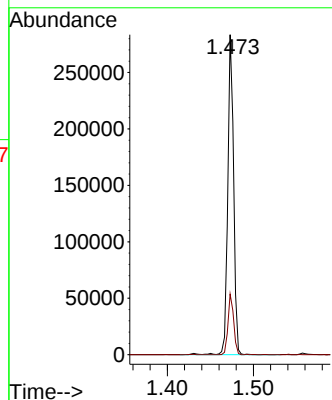
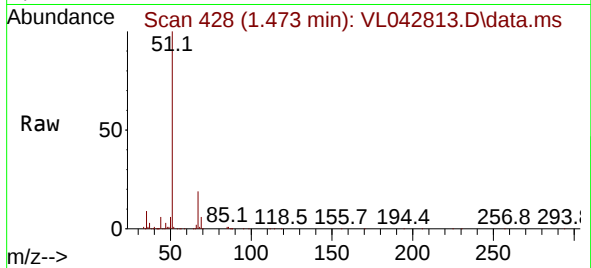




#3
Chlorodifluoromethane
Concen: 5.295 ppbv
RT: 1.473 min Scan# 41
Delta R.T. -0.003 min
Lab File: VL042813.D
Acq: 04 Aug 2025 19:41

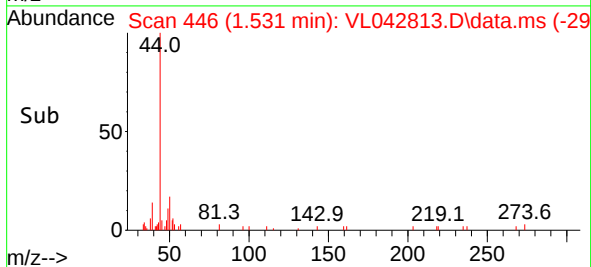
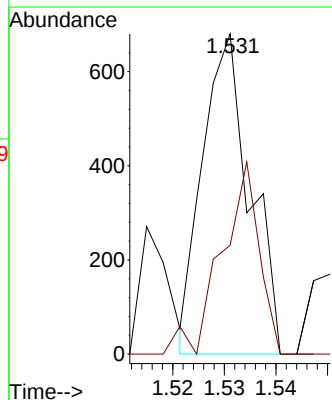
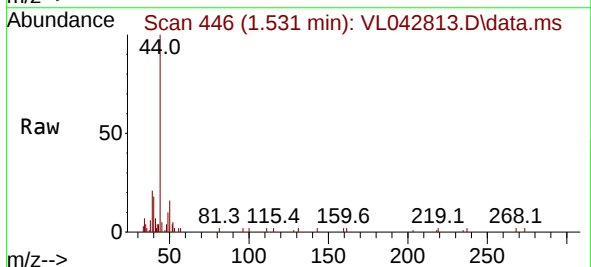
Instrument :
MSVOA_L
ClientSampleId :

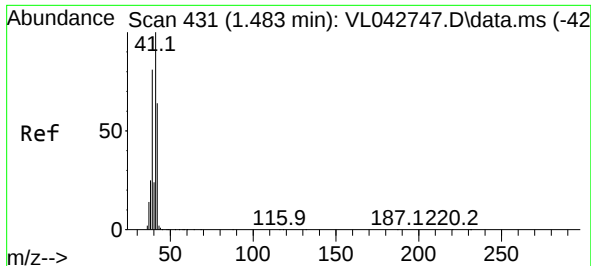
Tgt Ion: 51 Resp: 133474
Ion Ratio Lower Upper
51 100
67 18.5 15.0 22.6



#4
Chloromethane
Concen: 0.055 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042813.D
Acq: 04 Aug 2025 19:41

Tgt Ion: 50 Resp: 432
Ion Ratio Lower Upper
50 100
52 34.0 26.6 40.0

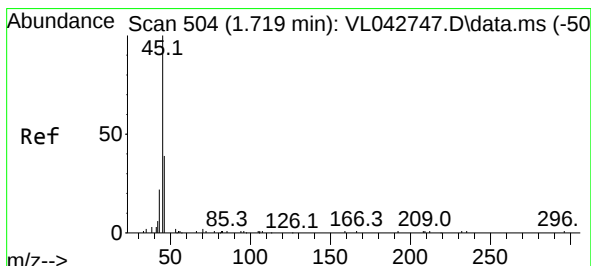
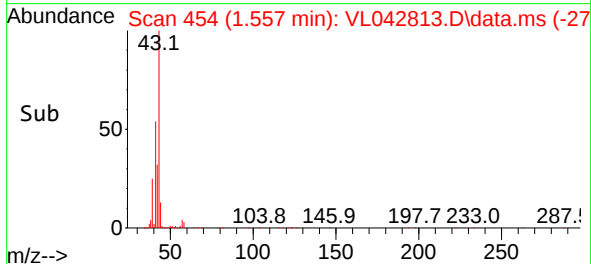
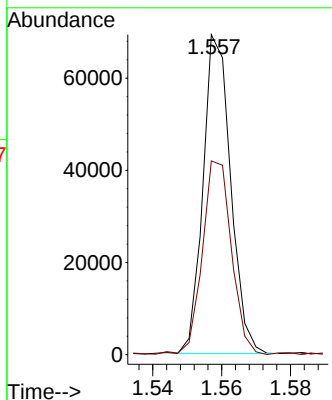
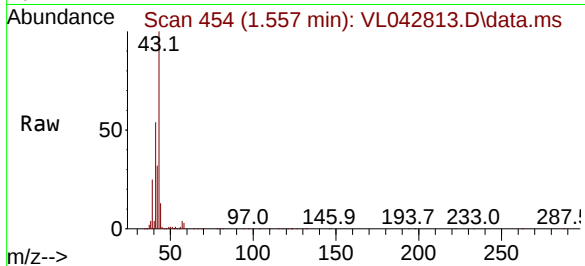




#9
Propene
Concen: 4.193 ppbv
RT: 1.557 min Scan# 41
Delta R.T. 0.074 min
Lab File: VL042813.D
Acq: 04 Aug 2025 19:41

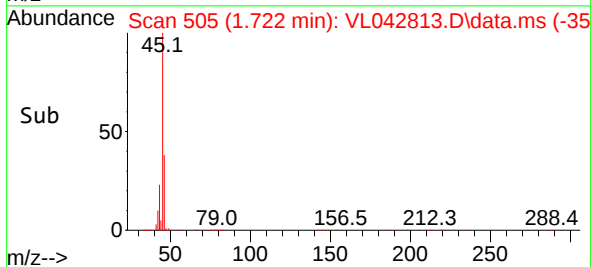
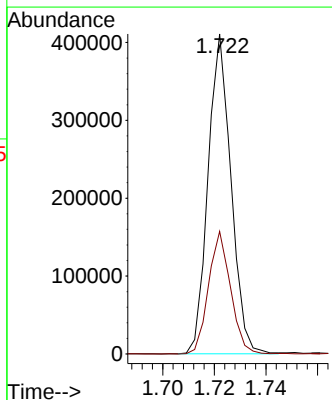
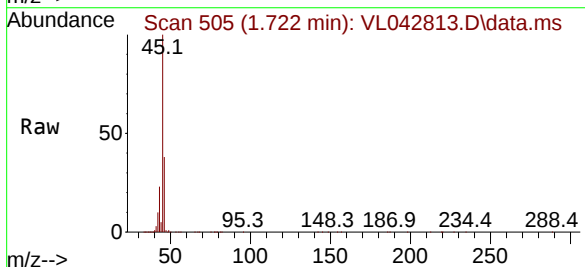
Instrument :
MSVOA_L
ClientSampleId :

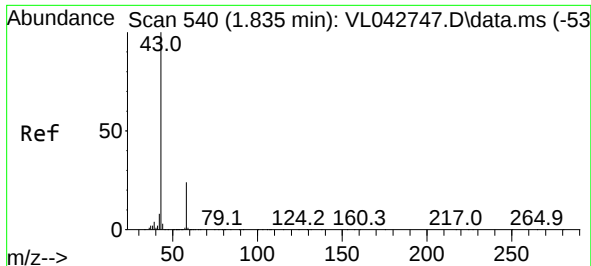
Tgt Ion: 41 Resp: 38418
Ion Ratio Lower Upper
41 100
42 64.7 53.2 79.8



#13
Ethanol
Concen: 378.074 ppbv
RT: 1.722 min Scan# 505
Delta R.T. 0.003 min
Lab File: VL042813.D
Acq: 04 Aug 2025 19:41

Tgt Ion: 45 Resp: 252970
Ion Ratio Lower Upper
45 100
46 37.3 17.8 71.4

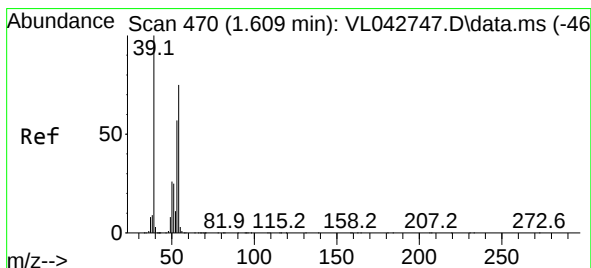
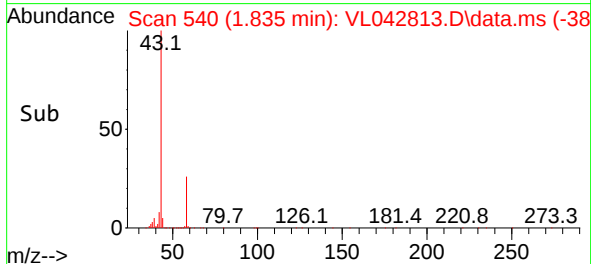
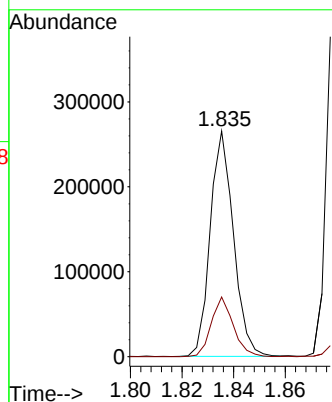
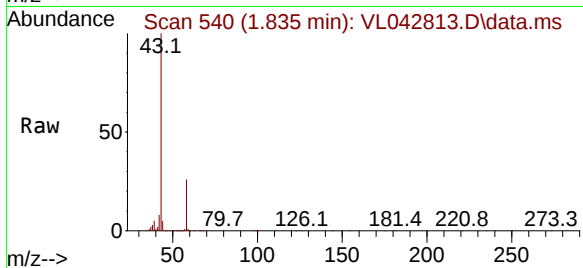




#15
Acetone
Concen: 8.223 ppbv
RT: 1.835 min Scan# 54
Delta R.T. -0.000 min
Lab File: VL042813.D
Acq: 04 Aug 2025 19:41

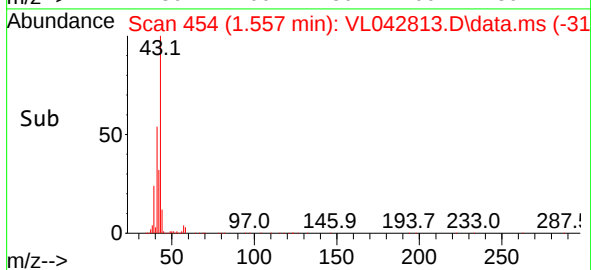
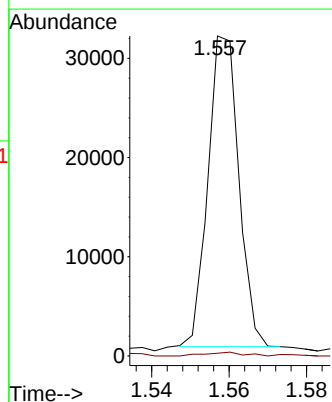
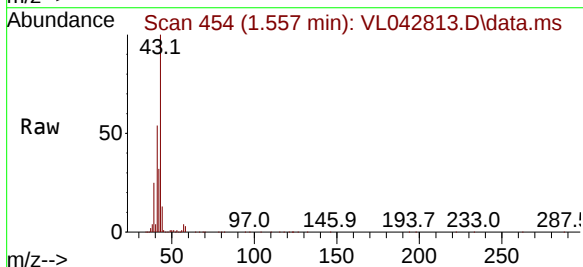
Instrument :
MSVOA_L
ClientSampleId :

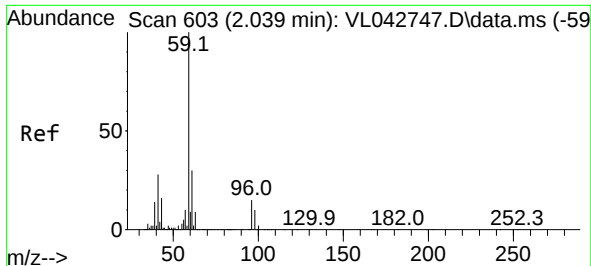
Tgt Ion: 43 Resp: 166188
Ion Ratio Lower Upper
43 100
58 25.2 19.8 29.8



#16
1,3-Butadiene
Concen: 2.009 ppbv
RT: 1.557 min Scan# 454
Delta R.T. -0.052 min
Lab File: VL042813.D
Acq: 04 Aug 2025 19:41

Tgt Ion: 39 Resp: 17318
Ion Ratio Lower Upper
39 100
54 2.5 54.5 81.7#





#17

tert-Butyl alcohol

Concen: 30.691 ppbv

RT: 1.894 min Scan# 51

Delta R.T. -0.146 min

Lab File: VL042813.D

Acq: 04 Aug 2025 19:41

Instrument :

MSVOA_L

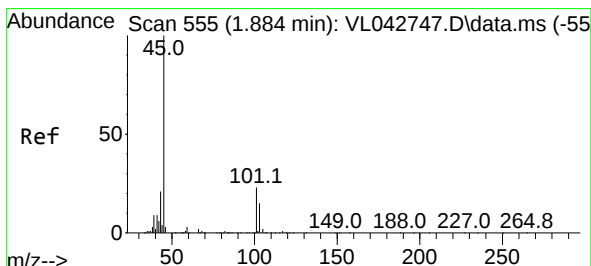
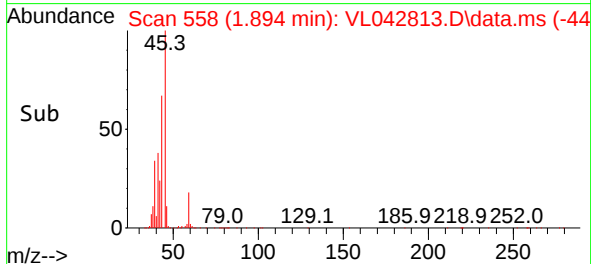
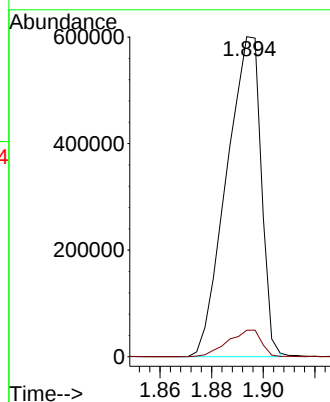
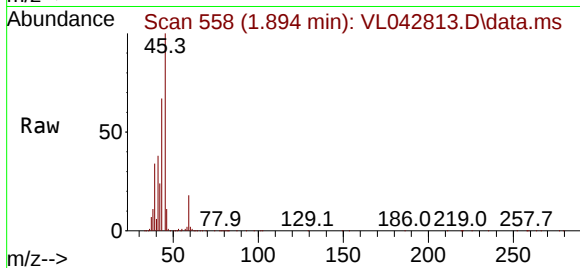
ClientSampleId :

Tgt Ion: 59 Resp: 559405

Ion Ratio Lower Upper

59 100

57 8.2 8.3 12.5#



#19

Isopropyl Alcohol

Concen: 439.534 ppbv

RT: 1.897 min Scan# 559

Delta R.T. 0.013 min

Lab File: VL042813.D

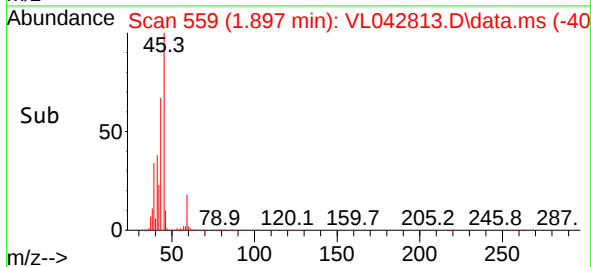
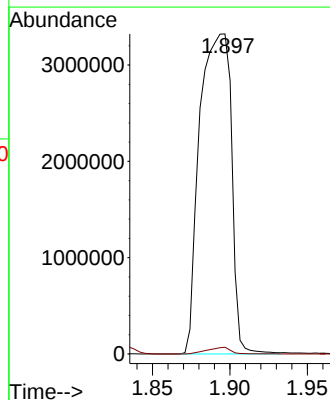
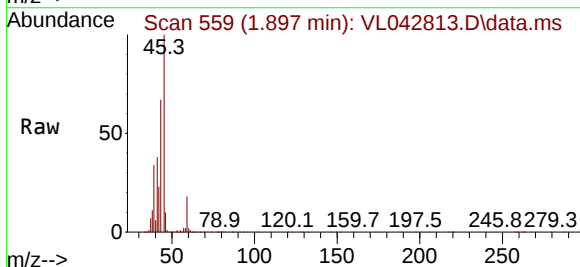
Acq: 04 Aug 2025 19:41

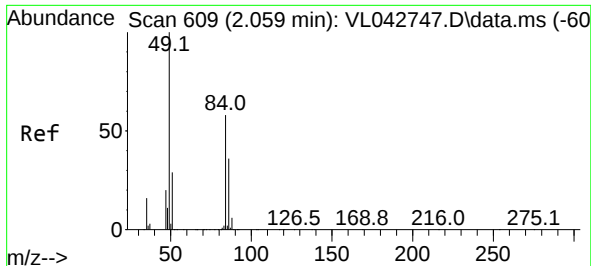
Tgt Ion: 45 Resp: 4720366

Ion Ratio Lower Upper

45 100

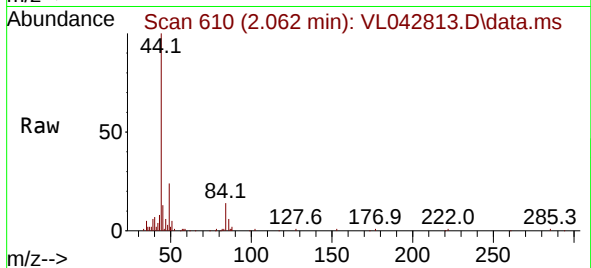
58 1.6 30.0 45.0#





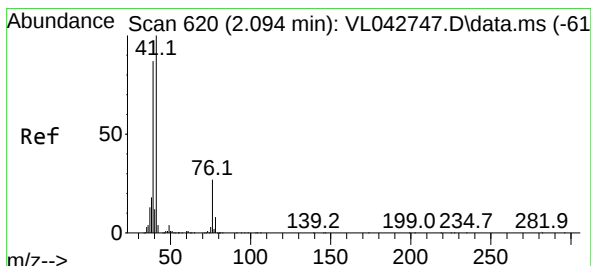
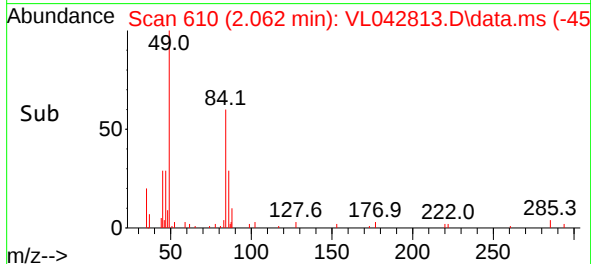
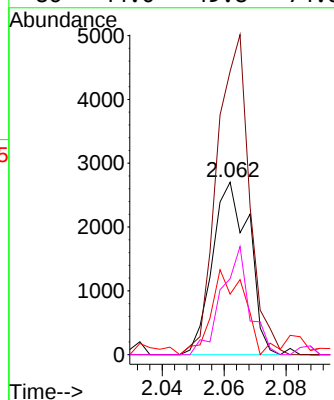
#20
Methylene Chloride
Concen: 0.349 ppbv
RT: 2.062 min Scan# 61
Delta R.T. 0.003 min
Lab File: VL042813.D
Acq: 04 Aug 2025 19:41

Instrument :
MSVOA_L
ClientSampleId :



Tgt Ion: 84 Resp: 2222

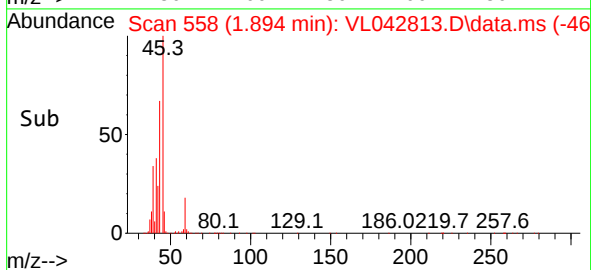
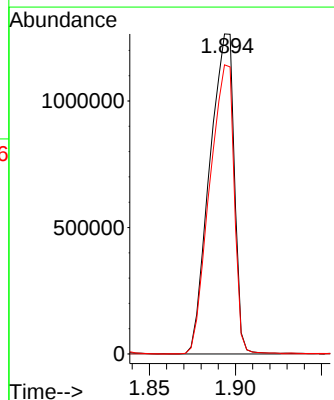
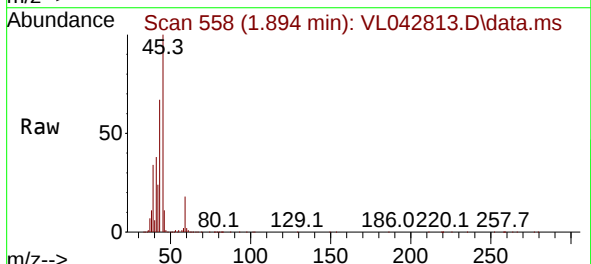
Ion	Ratio	Lower	Upper
84	100		
49	164.3	138.6	208.0
51	35.0	40.6	61.0#
86	44.0	49.8	74.8#

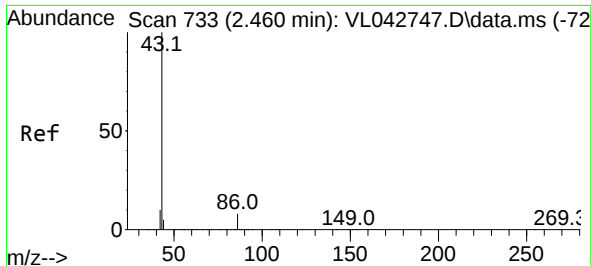


#21
Allyl Chloride
Concen: 101.231 ppbv
RT: 1.894 min Scan# 558
Delta R.T. -0.201 min
Lab File: VL042813.D
Acq: 04 Aug 2025 19:41

Tgt Ion: 41 Resp: 1260858

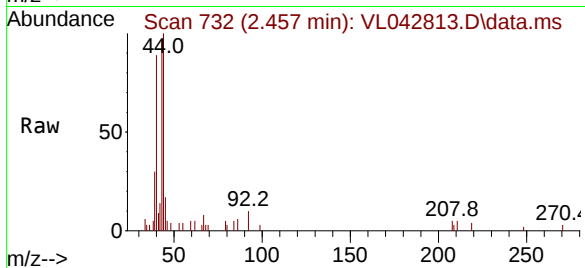
Ion	Ratio	Lower	Upper
41	100		
76	0.0	21.1	31.7#
39	89.9	68.3	102.5



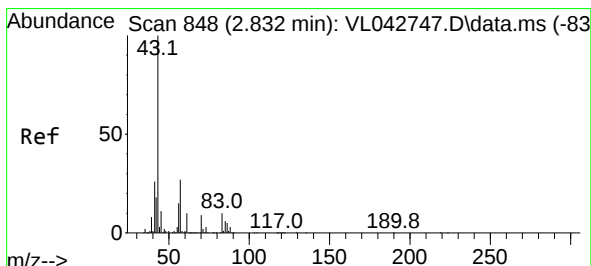
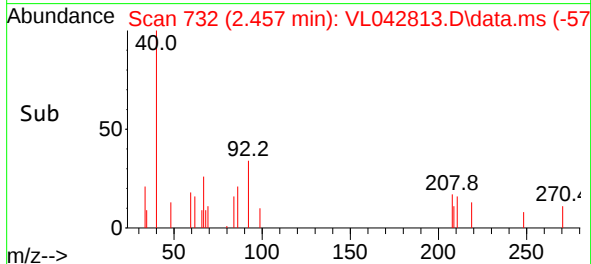
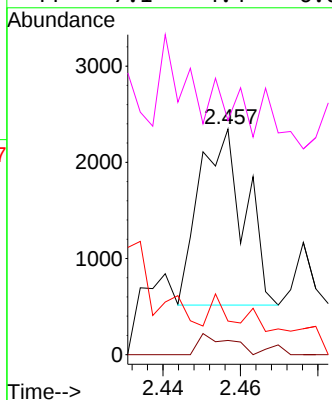


#23
 Vinyl Acetate
 Concen: 0.061 ppbv
 RT: 2.457 min Scan# 71
 Delta R.T. -0.003 min
 Lab File: VL042813.D
 Acq: 04 Aug 2025 19:41

Instrument :
 MSVOA_L
 ClientSampleId :

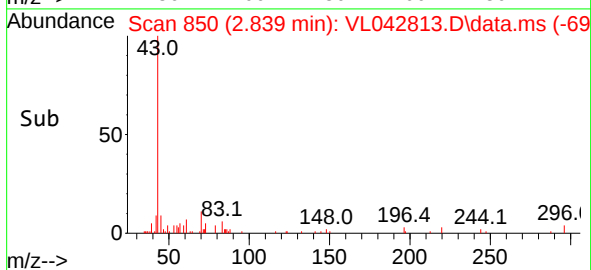
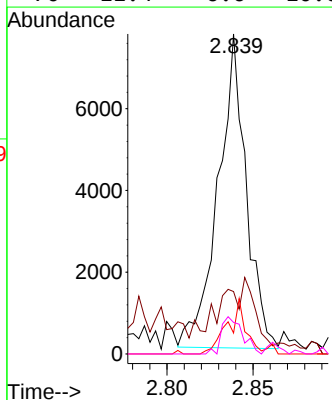
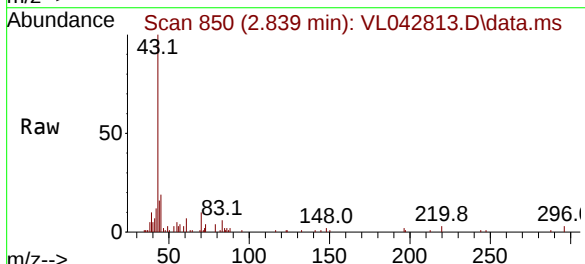


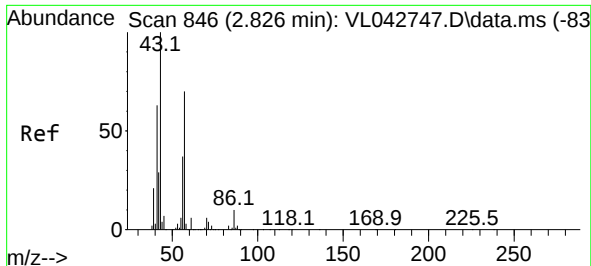
Tgt Ion: 43	Resp: 1494
Ion Ratio	Lower Upper
43 100	
86 8.1	6.1 9.1
42 4.4	7.8 11.8#
44 7.1	4.4 6.6#



#25
 Ethyl Acetate
 Concen: 0.195 ppbv
 RT: 2.839 min Scan# 850
 Delta R.T. 0.006 min
 Lab File: VL042813.D
 Acq: 04 Aug 2025 19:41

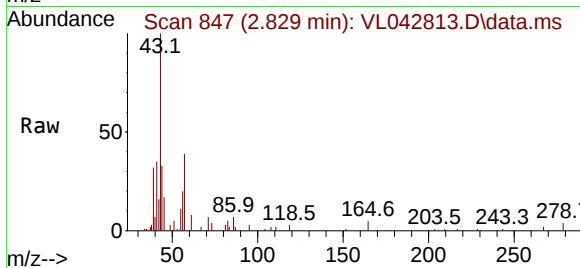
Tgt	Ion: 43	Resp:	8734
Ion	Ratio	Lower	Upper
43	100		
45	52.0	7.8	11.6#
61	12.1	6.7	10.1#
70	11.4	6.6	10.0#



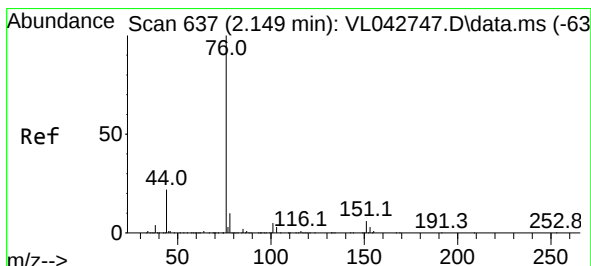
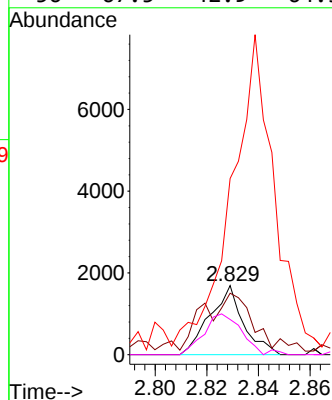
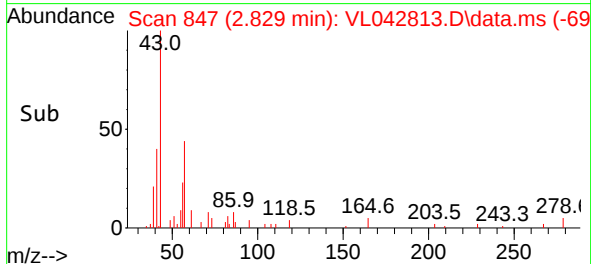


#26
Hexane
Concen: 0.078 ppbv
RT: 2.829 min Scan# 846
Delta R.T. 0.003 min
Lab File: VL042813.D
Acq: 04 Aug 2025 19:41

Instrument :
MSVOA_L
ClientSampleId :

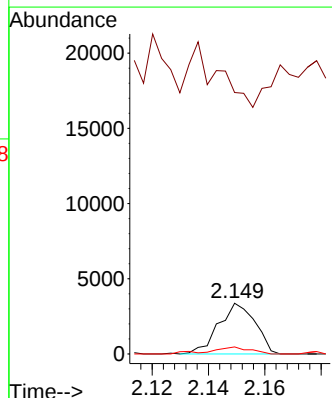
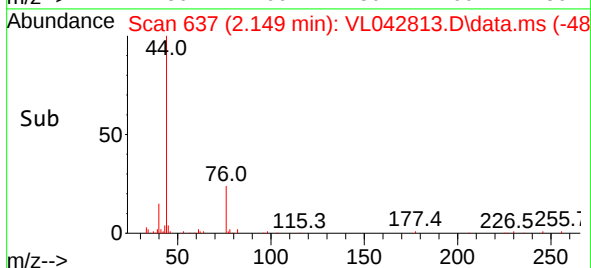
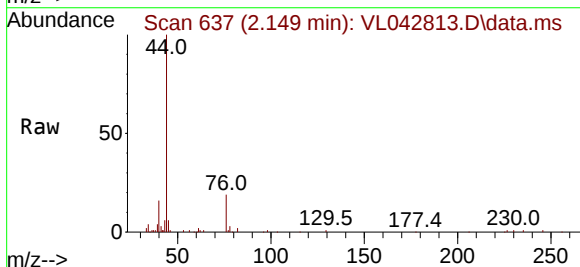


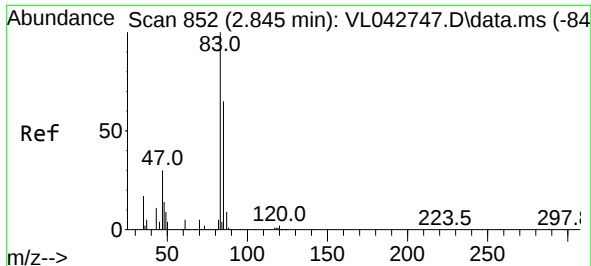
Tgt Ion: 57 Resp: 1525
Ion Ratio Lower Upper
57 100
41 155.0 75.4 113.2#
43 685.2 185.0 277.6#
56 67.5 42.9 64.3#



#27
Carbon Disulfide
Concen: 0.181 ppbv
RT: 2.149 min Scan# 637
Delta R.T. -0.000 min
Lab File: VL042813.D
Acq: 04 Aug 2025 19:41

Tgt Ion: 76 Resp: 3045
Ion Ratio Lower Upper
76 100
44 0.0 19.3 28.9#
78 16.5 9.9 14.9#





#29

Chloroform

Concen: 0.035 ppbv

RT: 2.848 min Scan# 81

Delta R.T. 0.003 min

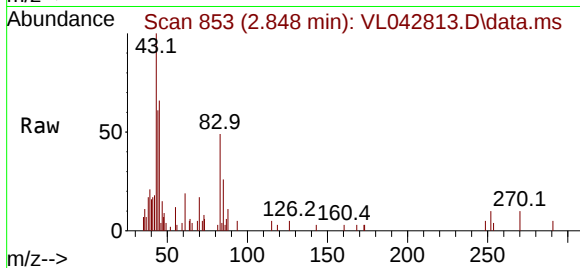
Lab File: VL042813.D

Acq: 04 Aug 2025 19:41

Instrument :

MSVOA_L

ClientSampleId :

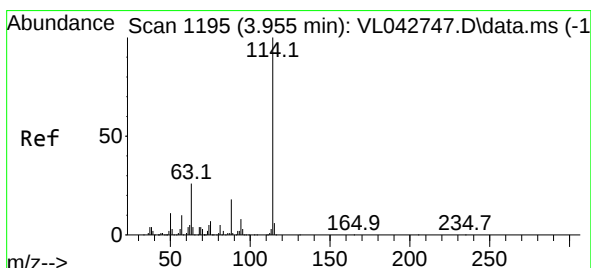
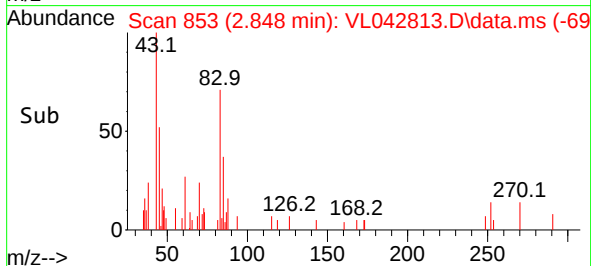
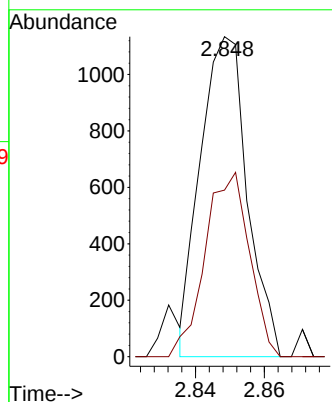


Tgt Ion: 83 Resp: 1075

Ion Ratio Lower Upper

83 100

85 52.0 52.2 78.2#



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.959 min Scan# 1196

Delta R.T. 0.003 min

Lab File: VL042813.D

Acq: 04 Aug 2025 19:41

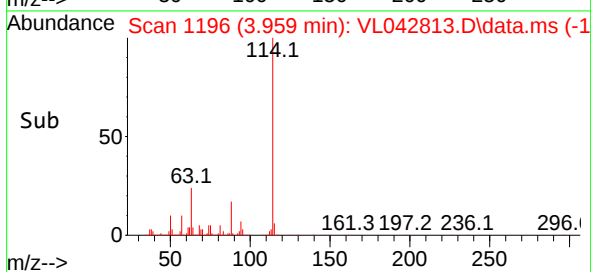
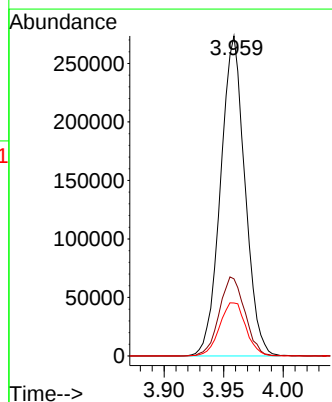
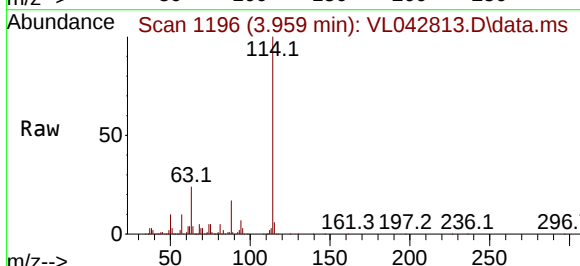
Tgt Ion:114 Resp: 388590

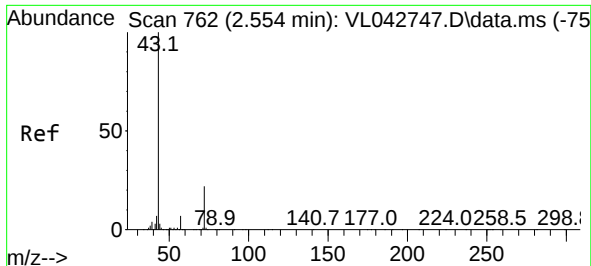
Ion Ratio Lower Upper

114 100

63 26.0 20.5 30.7

88 17.9 14.0 21.0

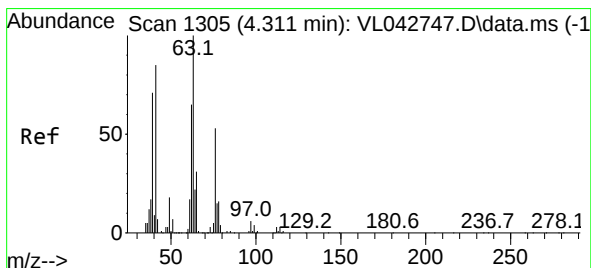
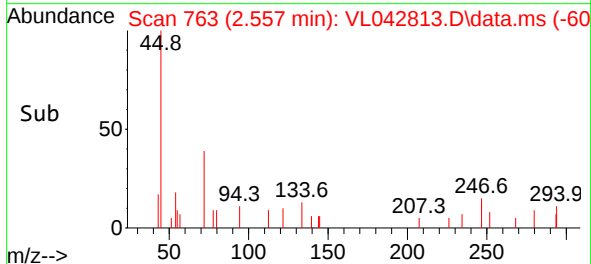
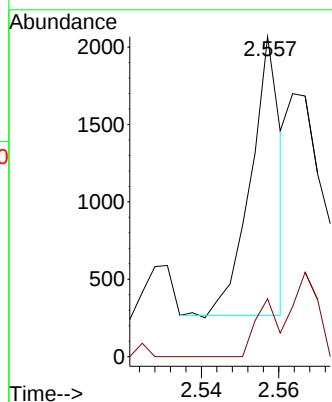
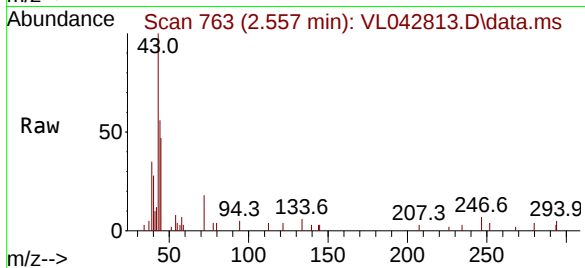




#34
2-Butanone
Concen: 0.035 ppbv
RT: 2.557 min Scan# 71
Delta R.T. 0.003 min
Lab File: VL042813.D
Acq: 04 Aug 2025 19:41

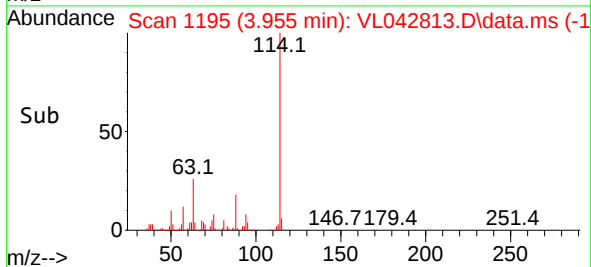
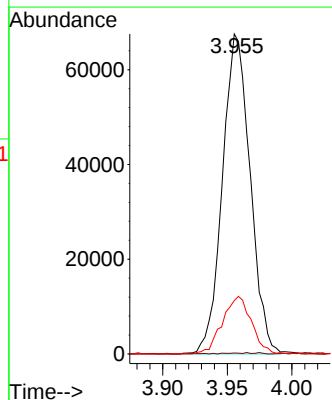
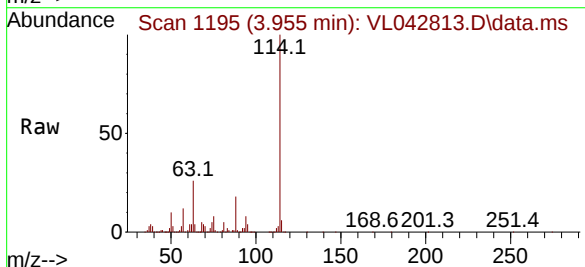
Instrument :
MSVOA_L
ClientSampleId :

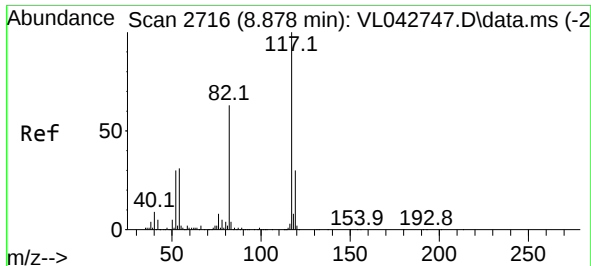
Tgt Ion: 43 Resp: 956
Ion Ratio Lower Upper
43 100
72 0.0 17.4 26.0#



#39
1,2-Dichloropropane
Concen: 7.413 ppbv
RT: 3.955 min Scan# 1195
Delta R.T. -0.356 min
Lab File: VL042813.D
Acq: 04 Aug 2025 19:41

Tgt Ion: 63 Resp: 100773
Ion Ratio Lower Upper
63 100
41 0.3 68.2 102.4#
62 16.7 52.0 78.0#

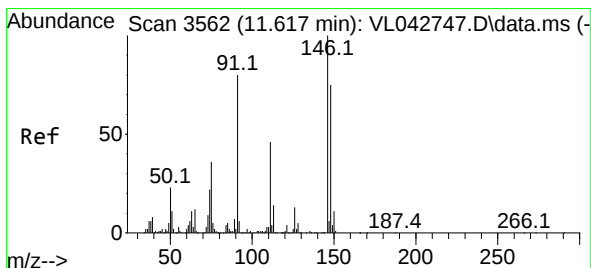
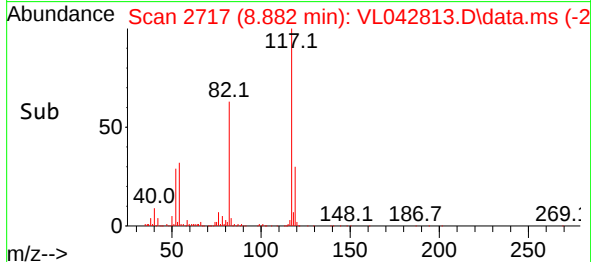
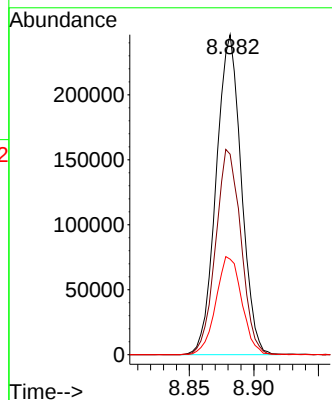
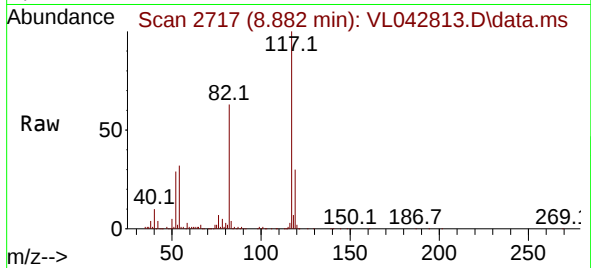




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 21
Delta R.T. 0.003 min
Lab File: VL042813.D
Acq: 04 Aug 2025 19:41

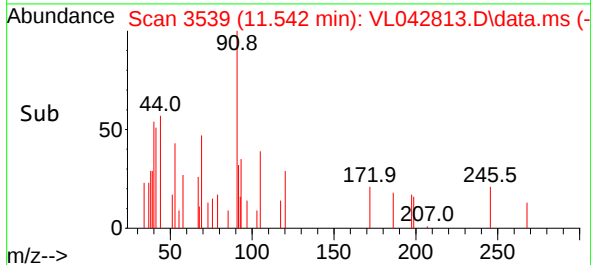
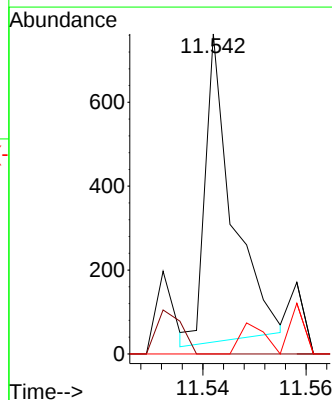
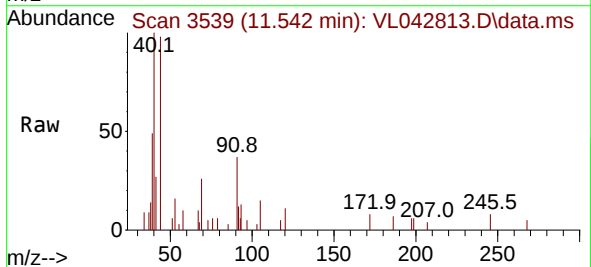
Instrument :
MSVOA_L
ClientSampleId :

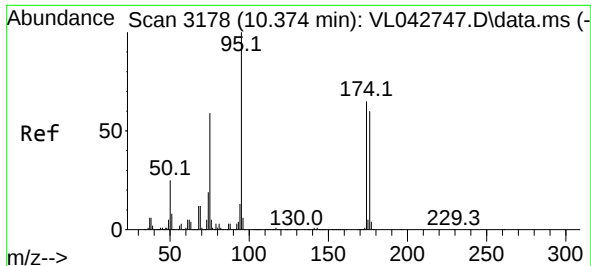
Tgt Ion:117 Resp: 332901
Ion Ratio Lower Upper
117 100
82 64.8 53.3 79.9
119 31.7 25.8 38.6



#66
Benzyl Chloride
Concen: 0.059 ppbv
RT: 11.542 min Scan# 3539
Delta R.T. -0.075 min
Lab File: VL042813.D
Acq: 04 Aug 2025 19:41

Tgt Ion: 91 Resp: 268
Ion Ratio Lower Upper
91 100
126 26.9 14.4 21.6#
128 17.9 5.2 7.8#

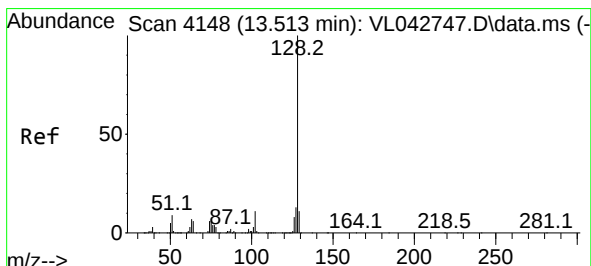
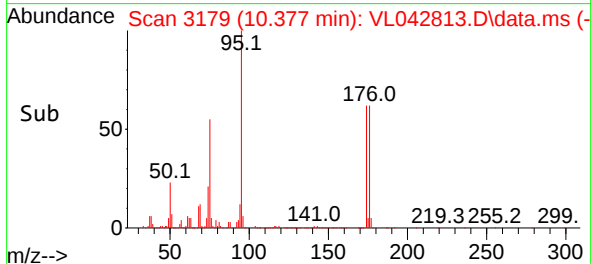
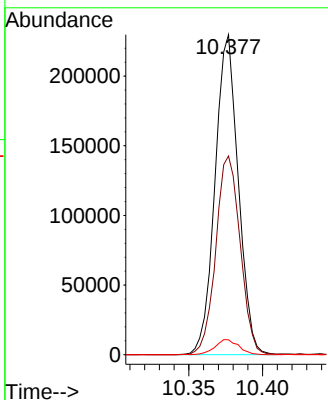
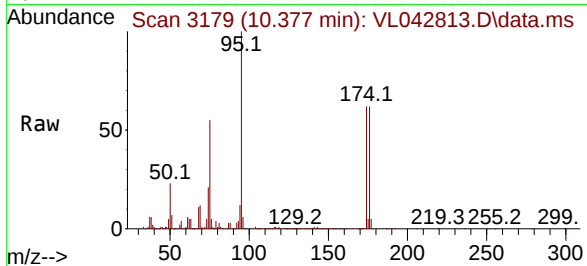




#68
1-Bromo-4-Fluorobenzene
Concen: 9.567 ppbv
RT: 10.377 min Scan# 3178
Delta R.T. 0.003 min
Lab File: VL042813.D
Acq: 04 Aug 2025 19:41

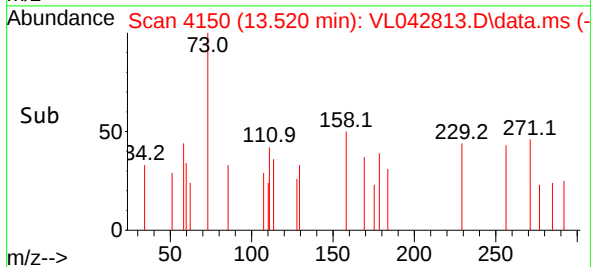
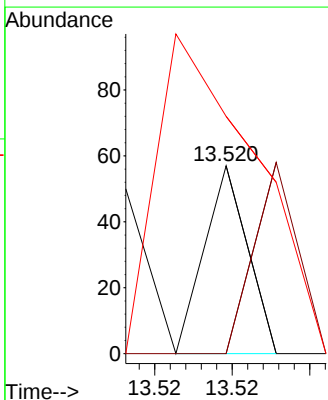
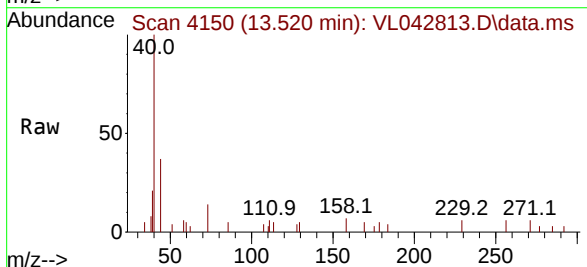
Instrument :
MSVOA_L
ClientSampleId :

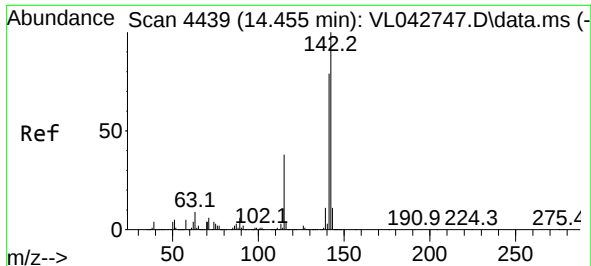
Tgt Ion: 95 Resp: 252224
Ion Ratio Lower Upper
95 100
174 65.1 53.8 80.6
175 4.8 4.0 6.0



#79
Naphthalene
Concen: 0.435 ppbv
RT: 13.520 min Scan# 4150
Delta R.T. 0.006 min
Lab File: VL042813.D
Acq: 04 Aug 2025 19:41

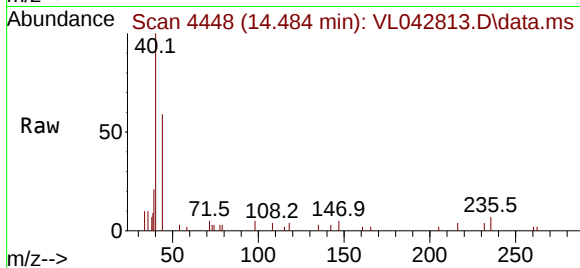
Tgt Ion: 128 Resp: 11
Ion Ratio Lower Upper
128 100
127 100.0 10.5 15.7#
129 35.1 8.6 13.0#



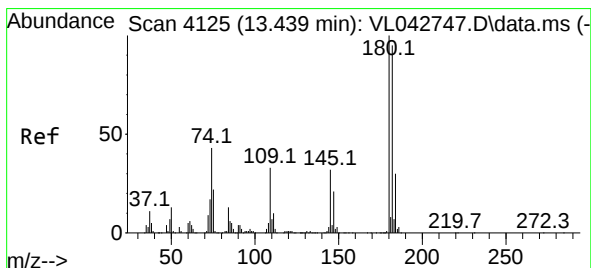
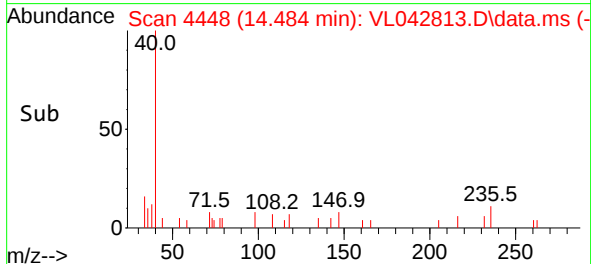
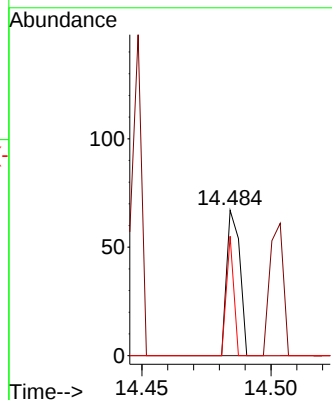


#80
Naphthalene, 2-methyl-
Concen: 1.129 ppbv
RT: 14.484 min Scan# 4439
Delta R.T. 0.029 min
Lab File: VL042813.D
Acq: 04 Aug 2025 19:41

Instrument :
MSVOA_L
ClientSampleId :



Tgt Ion:142 Resp: 23
Ion Ratio Lower Upper
142 100
141 95.7 65.8 98.8
115 47.8 31.2 46.8#



#81
1,2,4-Trichlorobenzene
Concen: 0.436 ppbv
RT: 13.316 min Scan# 4087
Delta R.T. -0.123 min
Lab File: VL042813.D
Acq: 04 Aug 2025 19:41

Tgt Ion:180 Resp: 20
Ion Ratio Lower Upper
180 100
182 0.0 76.2 114.2#
184 0.0 24.8 37.2#

