

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL120225\
 Data File : VL043296.D
 Acq On : 02 Dec 2025 13:38
 Operator : SY/MD
 Sample : Q3744-02
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

Quant Time: Dec 03 00:06:15 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Wed Nov 19 01:11:25 2025
 Response via : Initial Calibration

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

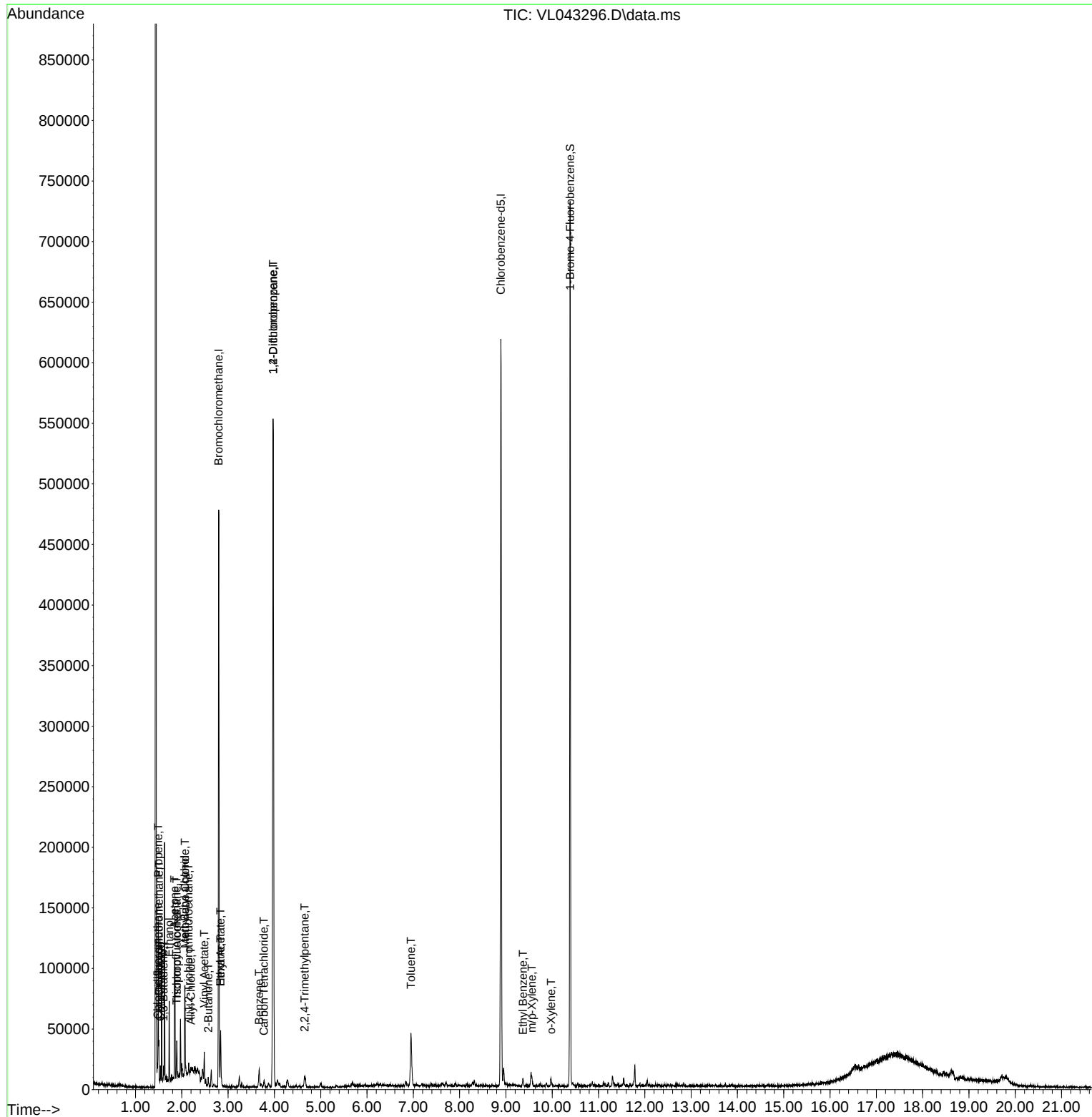
Internal Standards						
1) Bromochloromethane	2.797	49	126789	10.000	ppbv	0.02
33) 1,4-Difluorobenzene	3.971	114	324565	10.000	ppbv	0.02
55) Chlorobenzene-d5	8.891	117	247329	10.000	ppbv	0.02
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.387	95	172635	9.522	ppbv	0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	95.200%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.505	85	8865	0.496	ppbv	98
3) Chlorodifluoromethane	1.479	51	9306	0.529	ppbv #	83
4) Chloromethane	1.538	50	3024	0.452	ppbv #	81
9) Propene	1.492	41	11744	1.573	ppbv #	1
11) Trichlorofluoromethane	1.887	101	4741	0.274	ppbv	97
12) 1,1,2-Trichlorotrifluo...	2.146	101	1032	0.076	ppbv	96
13) Ethanol	1.729	45	22036	8.391	ppbv	96
15) Acetone	1.842	43	47521	2.698	ppbv	93
16) 1,3-Butadiene	1.606	39	2246	0.286	ppbv #	52
17) tert-Butyl alcohol	2.065	59	2406	0.104	ppbv #	71
19) Isopropyl Alcohol	1.894	45	10741	1.079	ppbv #	3
20) Methylene Chloride	2.068	84	5935	0.389	ppbv	95
21) Allyl Chloride	2.198	41	467	0.039	ppbv #	1
23) Vinyl Acetate	2.486	43	6516	0.306	ppbv #	41
25) Ethyl Acetate	2.839	43	8212	0.216	ppbv #	87
26) Hexane	2.839	57	9224	0.554	ppbv #	45
34) 2-Butanone	2.570	43	3785	0.165	ppbv	93
35) Carbon Tetrachloride	3.774	117	1393	0.057	ppbv #	86
36) Benzene	3.671	78	8750	0.282	ppbv	94
39) 1,2-Dichloropropane	3.971	63	80607	7.086	ppbv #	23
44) 2,2,4-Trimethylpentane	4.651	57	4611	0.086	ppbv #	39
53) Toluene	6.949	91	29906	0.813	ppbv	98
58) Ethyl Benzene	9.367	91	3465	0.073	ppbv	94
59) m/p-Xylene	9.558	91	2860	0.075	ppbv #	31
60) o-Xylene	9.975	91	2757	0.072	ppbv	93

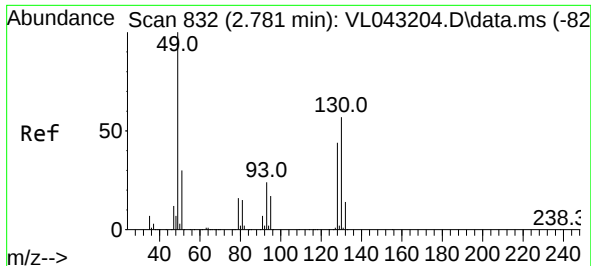
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL120225\  
Data File : VL043296.D  
Acq On    : 02 Dec 2025  13:38  
Operator  : SY/MD  
Sample    : Q3744-02  
Misc      : 400mL/MSVOA_L  
ALS Vial  : 1      Sample Multiplier: 1
```

Instrument :
MSVOA_L
ClientSampleId :
IA1

Quant Time: Dec 03 00:06:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Nov 19 01:11:25 2025
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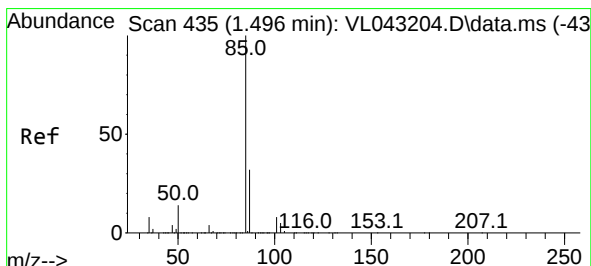
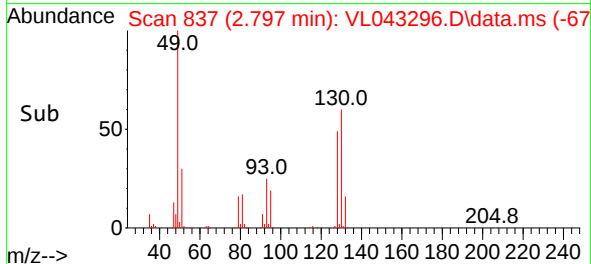
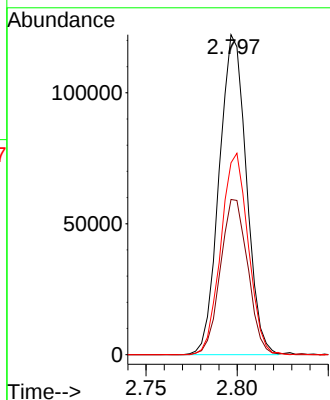
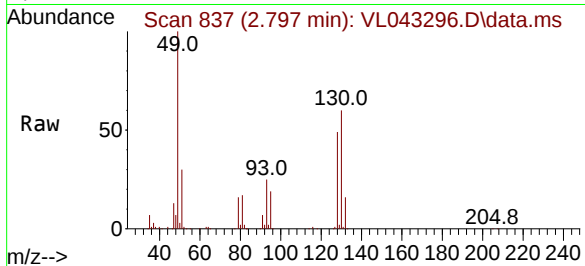




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.797 min Scan# 832
Delta R.T. 0.016 min
Lab File: VL043296.D
Acq: 02 Dec 2025 13:38

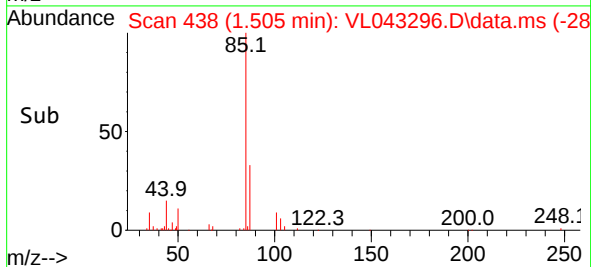
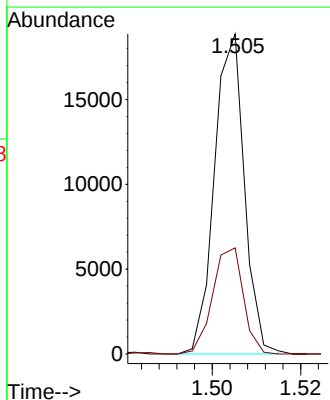
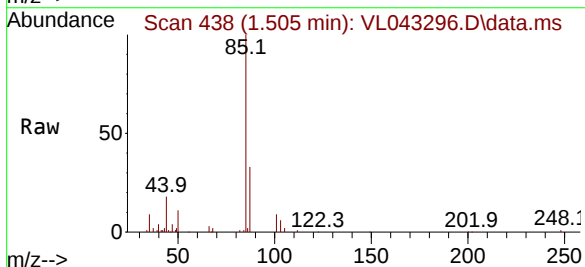
Instrument :
MSVOA_L
ClientSampleId :
IA1

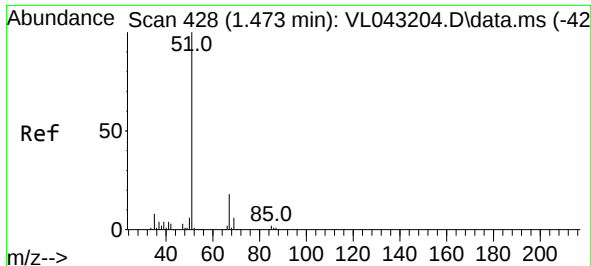
Tgt Ion: 49 Resp: 126789
Ion Ratio Lower Upper
49 100
128 49.0 23.0 69.0
130 63.2 29.9 89.7



#2
Dichlorodifluoromethane
Concen: 0.496 ppbv
RT: 1.505 min Scan# 438
Delta R.T. 0.009 min
Lab File: VL043296.D
Acq: 02 Dec 2025 13:38

Tgt Ion: 85 Resp: 8865
Ion Ratio Lower Upper
85 100
87 33.1 25.4 38.2

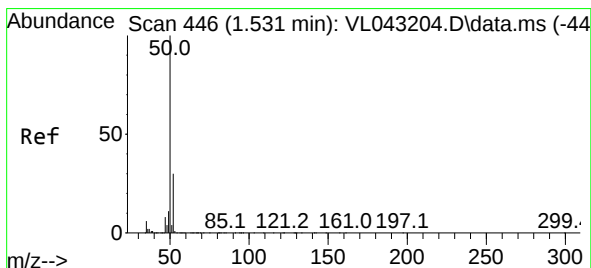
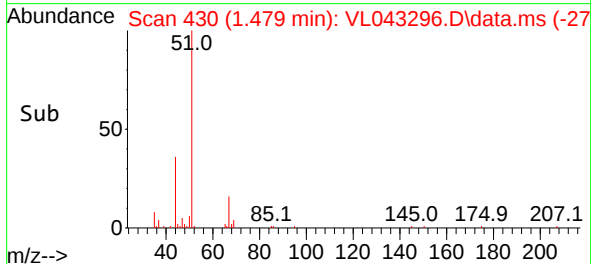
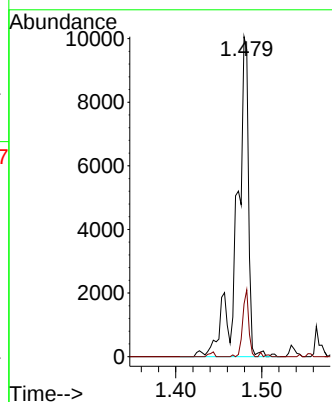
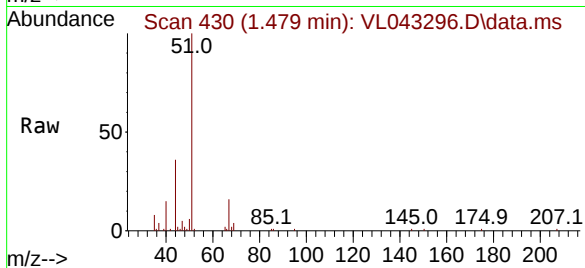




#3
Chlorodifluoromethane
Concen: 0.529 ppbv
RT: 1.479 min Scan# 41
Delta R.T. 0.006 min
Lab File: VL043296.D
Acq: 02 Dec 2025 13:38

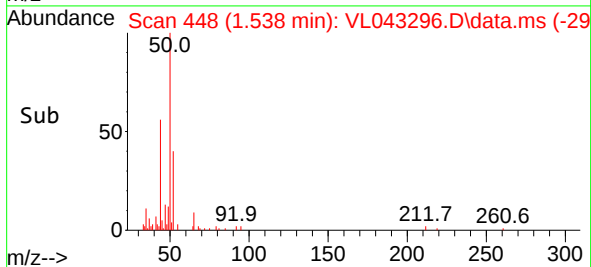
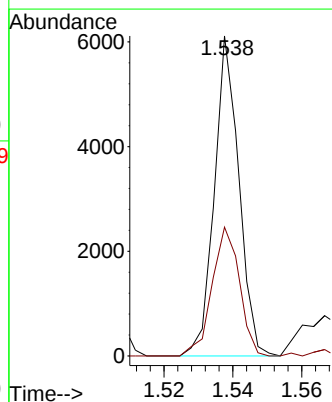
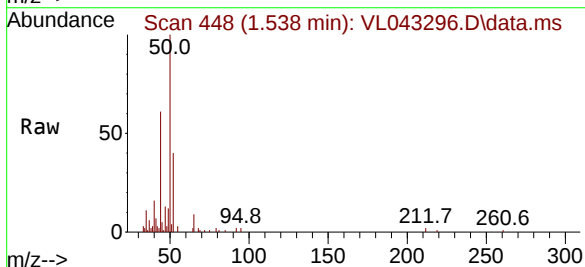
Instrument :
MSVOA_L
ClientSampleId :
IA1

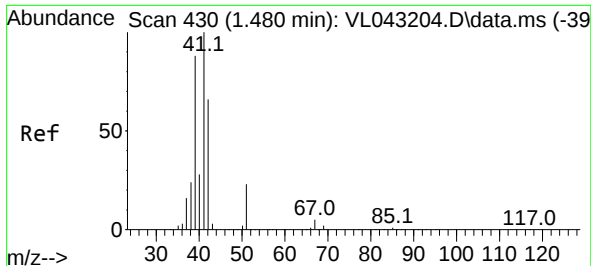
Tgt Ion: 51 Resp: 9306
Ion Ratio Lower Upper
51 100
67 11.2 14.9 22.3#



#4
Chloromethane
Concen: 0.452 ppbv
RT: 1.538 min Scan# 448
Delta R.T. 0.006 min
Lab File: VL043296.D
Acq: 02 Dec 2025 13:38

Tgt Ion: 50 Resp: 3024
Ion Ratio Lower Upper
50 100
52 40.3 24.1 36.1#





#9

Propene

Concen: 1.573 ppbv

RT: 1.492 min Scan# 41

Delta R.T. 0.013 min

Lab File: VL043296.D

Acq: 02 Dec 2025 13:38

Instrument :

MSVOA_L

ClientSampleId :

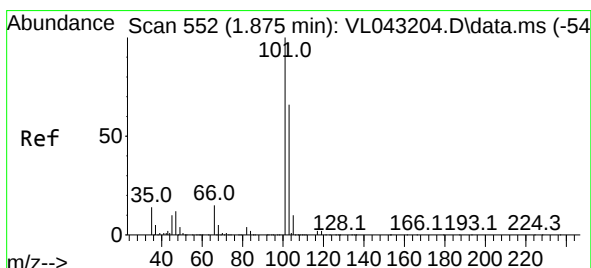
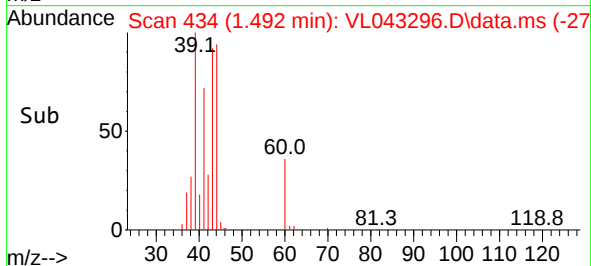
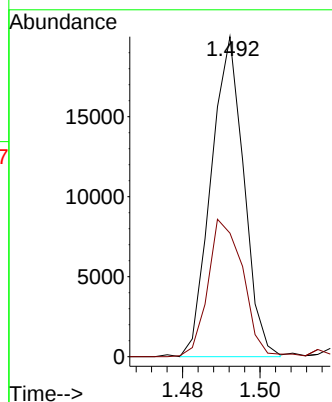
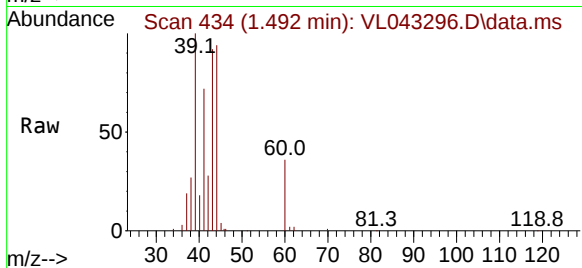
IA1

Tgt Ion: 41 Resp: 11744

Ion Ratio Lower Upper

41 100

42 47.0 3.7 5.5#



#11

Trichlorofluoromethane

Concen: 0.274 ppbv

RT: 1.887 min Scan# 556

Delta R.T. 0.013 min

Lab File: VL043296.D

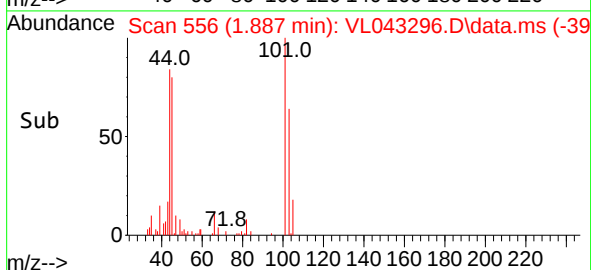
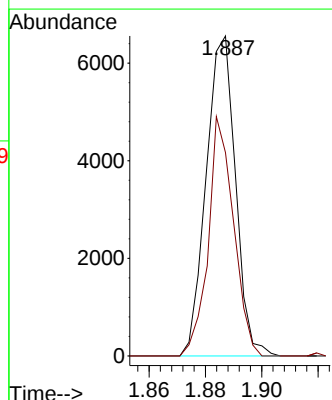
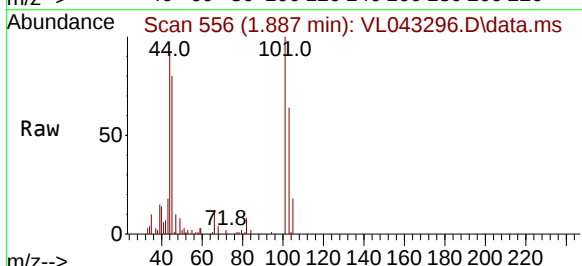
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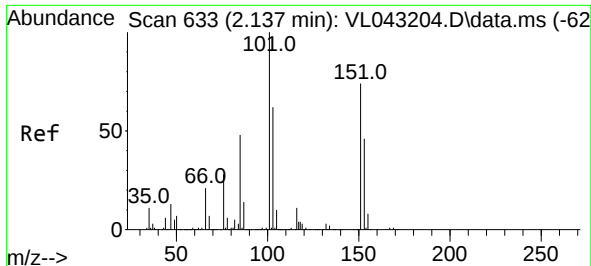
Tgt Ion:101 Resp: 4741

Ion Ratio Lower Upper

101 100

103 63.6 52.6 79.0

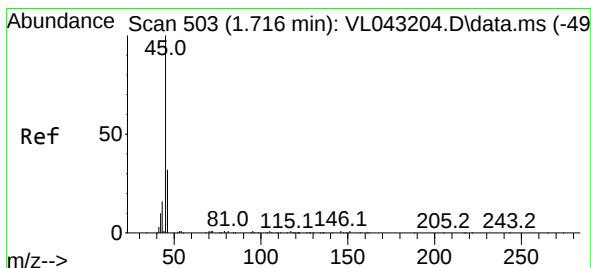
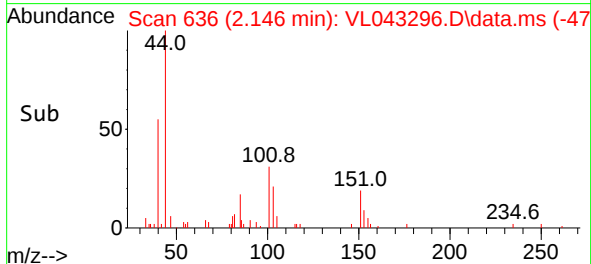
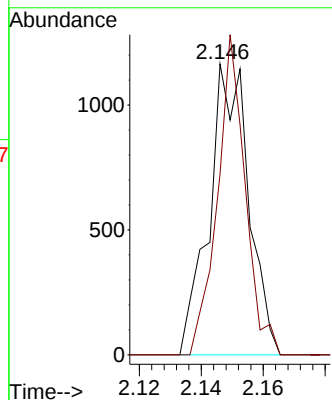
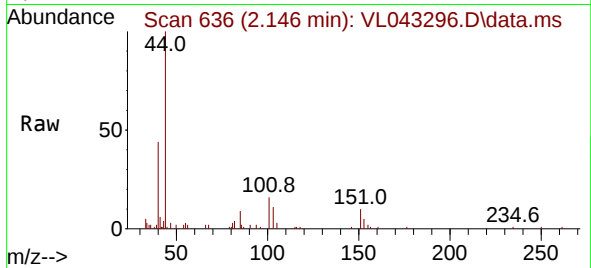




#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.076 ppbv
RT: 2.146 min Scan# 61
Delta R.T. 0.009 min
Lab File: VL043296.D
Acq: 02 Dec 2025 13:38

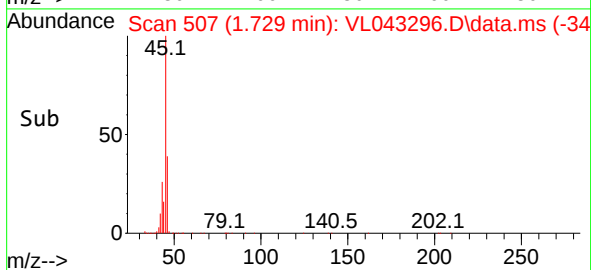
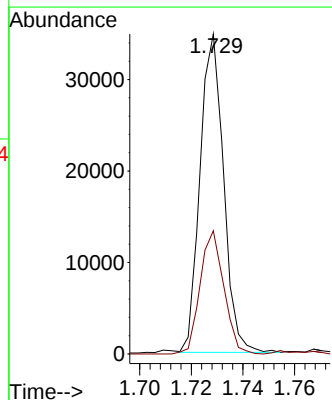
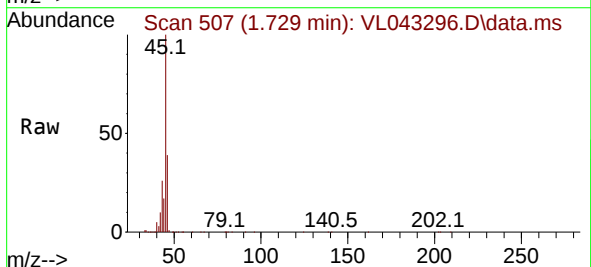
Instrument :
MSVOA_L
ClientSampleId :
IA1

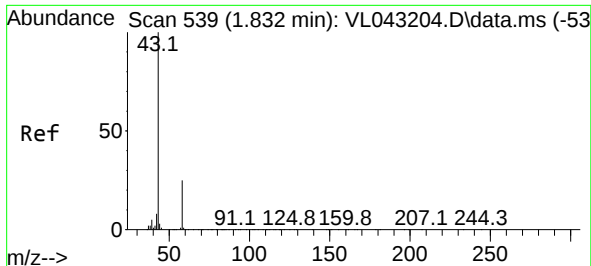
Tgt Ion:101 Resp: 1032
Ion Ratio Lower Upper
101 100
151 77.4 59.2 88.8



#13
Ethanol
Concen: 8.391 ppbv
RT: 1.729 min Scan# 507
Delta R.T. 0.013 min
Lab File: VL043296.D
Acq: 02 Dec 2025 13:38

Tgt Ion: 45 Resp: 22036
Ion Ratio Lower Upper
45 100
46 39.5 15.0 59.8

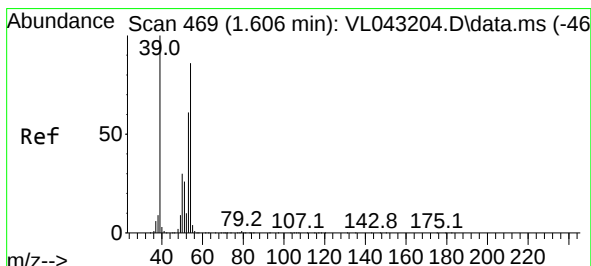
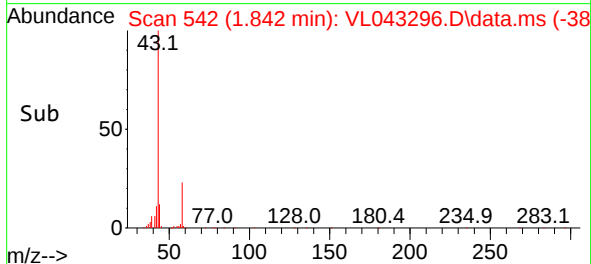
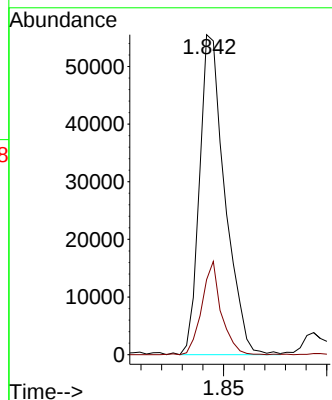
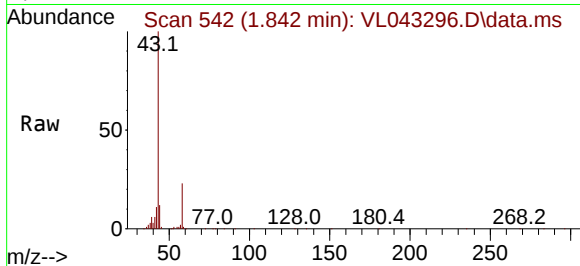




#15
Acetone
Concen: 2.698 ppbv
RT: 1.842 min Scan# 541
Delta R.T. 0.009 min
Lab File: VL043296.D
Acq: 02 Dec 2025 13:38

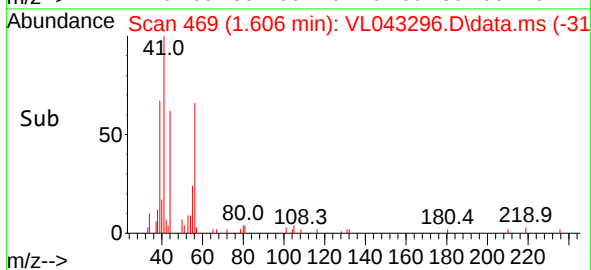
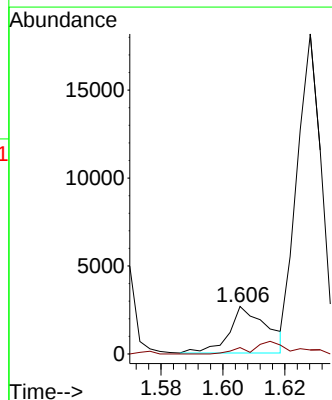
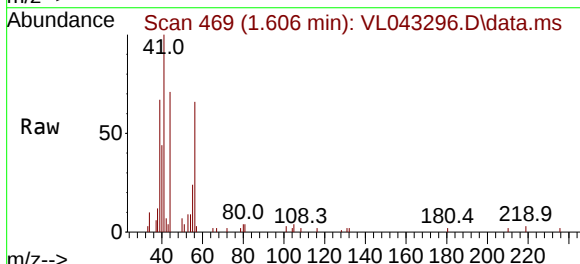
Instrument :
MSVOA_L
ClientSampleId :
IA1

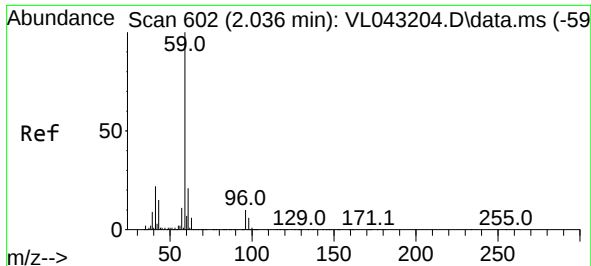
Tgt Ion: 43 Resp: 47521
Ion Ratio Lower Upper
43 100
58 22.3 20.7 31.1



#16
1,3-Butadiene
Concen: 0.286 ppbv
RT: 1.606 min Scan# 469
Delta R.T. -0.000 min
Lab File: VL043296.D
Acq: 02 Dec 2025 13:38

Tgt Ion: 39 Resp: 2246
Ion Ratio Lower Upper
39 100
54 33.8 59.4 89.2#





#17

tert-Butyl alcohol

Concen: 0.104 ppbv

RT: 2.065 min Scan# 611

Delta R.T. 0.029 min

Lab File: VL043296.D

Acq: 02 Dec 2025 13:38

Instrument :

MSVOA_L

ClientSampleId :

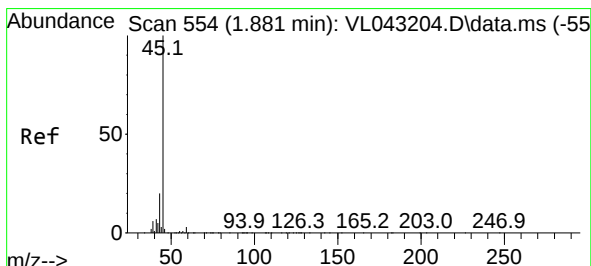
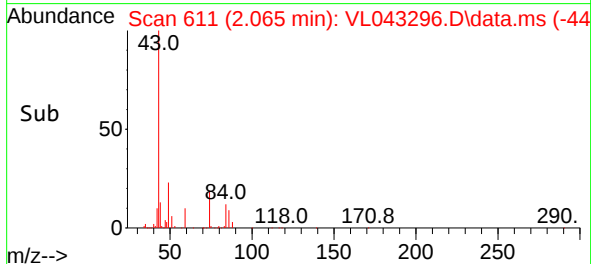
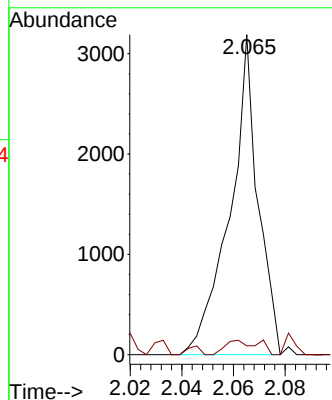
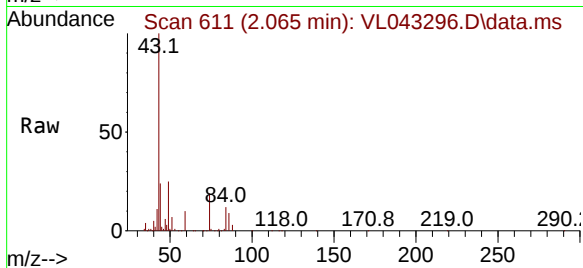
IA1

Tgt Ion: 59 Resp: 2406

Ion Ratio Lower Upper

59 100

57 0.0 9.0 13.4#



#19

Isopropyl Alcohol

Concen: 1.079 ppbv

RT: 1.894 min Scan# 558

Delta R.T. 0.013 min

Lab File: VL043296.D

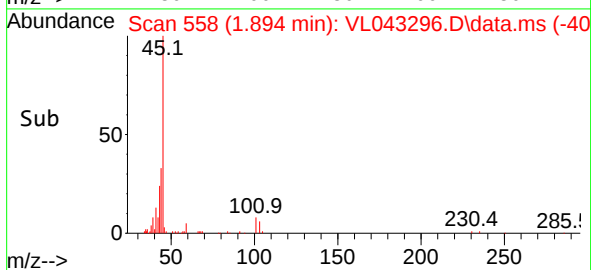
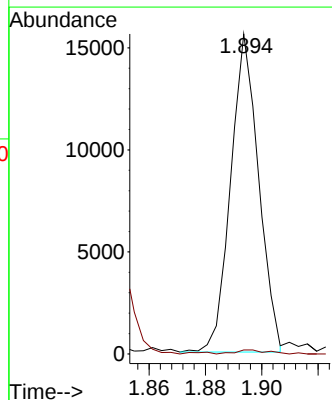
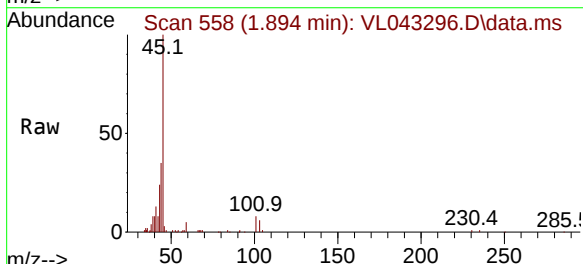
Acq: 02 Dec 2025 13:38

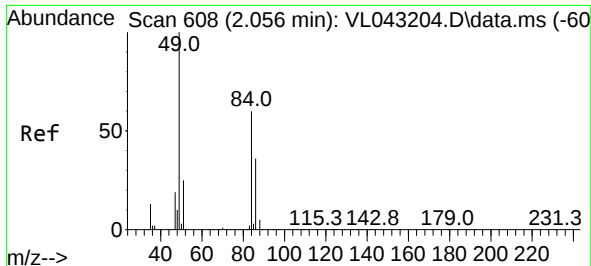
Tgt Ion: 45 Resp: 10741

Ion Ratio Lower Upper

45 100

58 98.6 31.3 46.9#



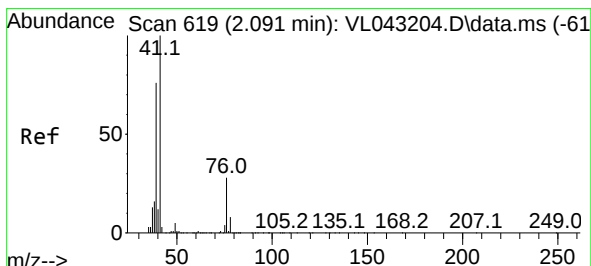
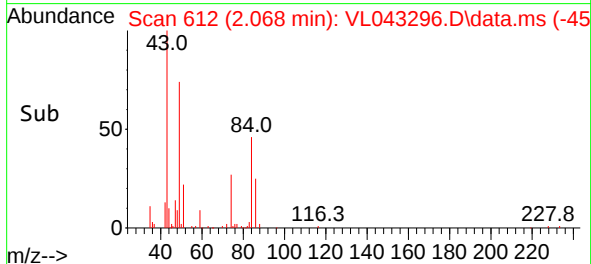
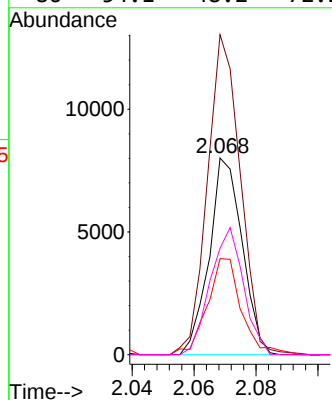
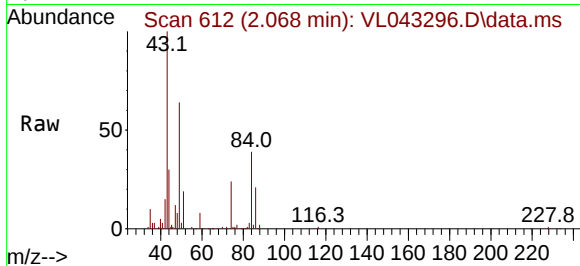


#20
Methylene Chloride
Concen: 0.389 ppbv
RT: 2.068 min Scan# 612
Delta R.T. 0.012 min
Lab File: VL043296.D
Acq: 02 Dec 2025 13:38

Instrument :
MSVOA_L
ClientSampleId :
IA1

Tgt Ion: 84 Resp: 5935

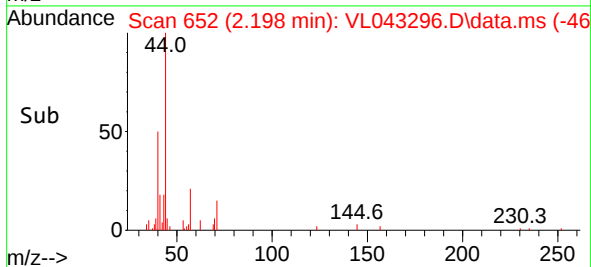
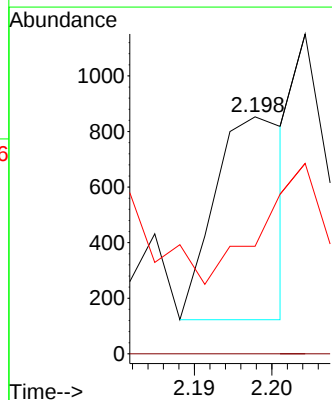
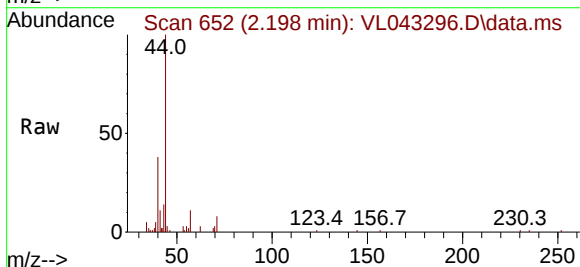
Ion	Ratio	Lower	Upper
84	100		
49	161.2	132.9	199.3
51	46.0	34.8	52.2
86	54.1	48.2	72.2

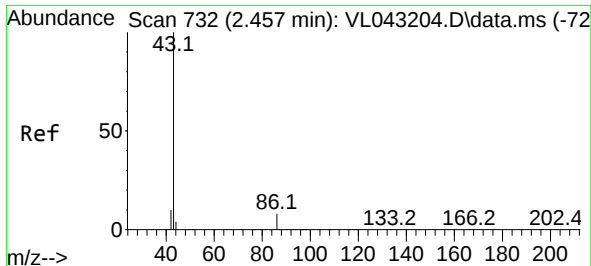


#21
Allyl Chloride
Concen: 0.039 ppbv
RT: 2.198 min Scan# 652
Delta R.T. 0.106 min
Lab File: VL043296.D
Acq: 02 Dec 2025 13:38

Tgt Ion: 41 Resp: 467

Ion	Ratio	Lower	Upper
41	100		
76	55.9	22.1	33.1#
39	179.0	61.0	91.4#

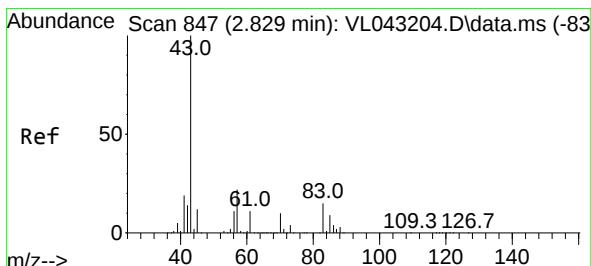
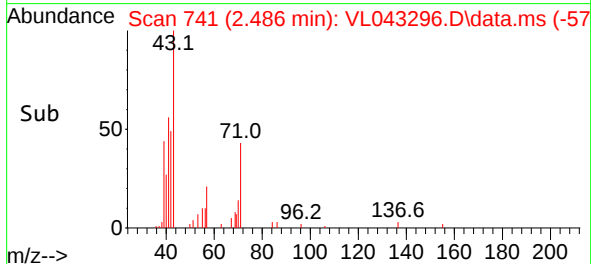
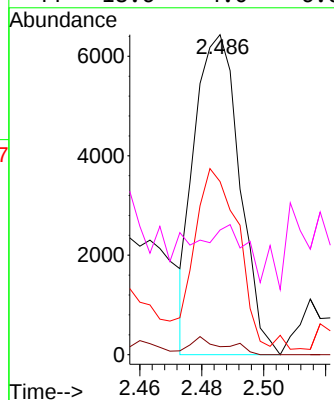
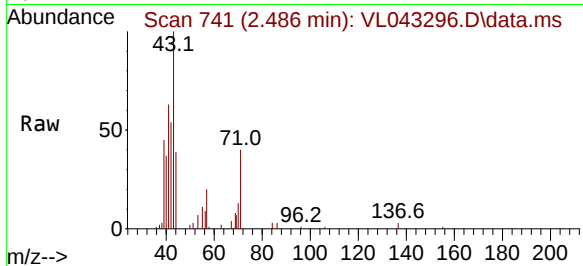




#23
 Vinyl Acetate
 Concen: 0.306 ppbv
 RT: 2.486 min Scan# 741
 Delta R.T. 0.029 min
 Lab File: VL043296.D
 Acq: 02 Dec 2025 13:38

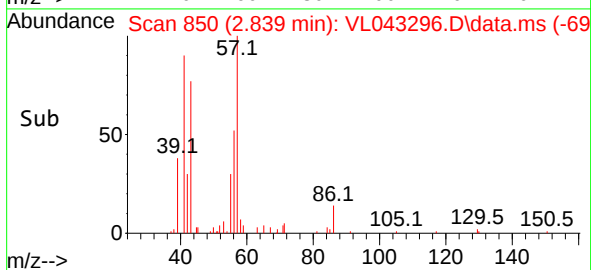
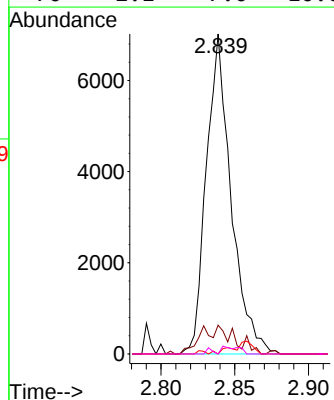
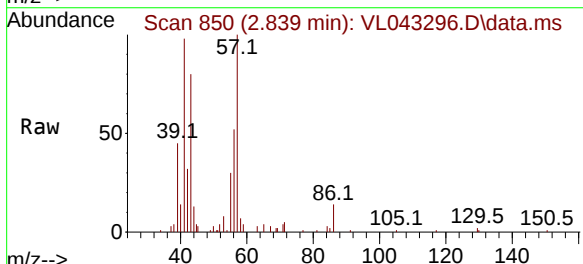
Instrument :
 MSVOA_1
 ClientSampleId :
 IA1

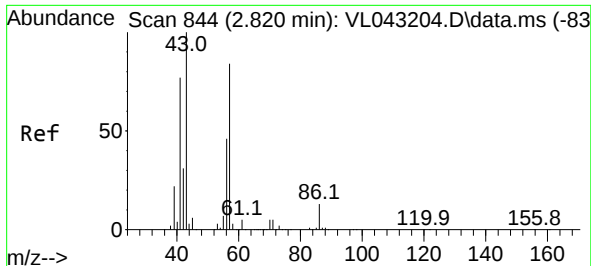
Tgt Ion:	43	Resp:	6516
Ion	Ratio	Lower	Upper
43	100		
86	2.5	6.2	9.2#
42	48.1	8.0	12.0#
44	18.6	4.0	6.0#



#25
 Ethyl Acetate
 Concen: 0.216 ppbv
 RT: 2.839 min Scan# 850
 Delta R.T. 0.009 min
 Lab File: VL043296.D
 Acq: 02 Dec 2025 13:38

Tgt Ion:	43	Resp:	8212
Ion	Ratio	Lower	Upper
43	100		
45	12.4	8.1	12.1#
61	3.5	7.0	10.4#
70	2.1	7.0	10.6#

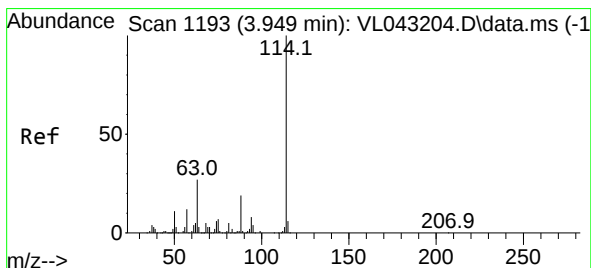
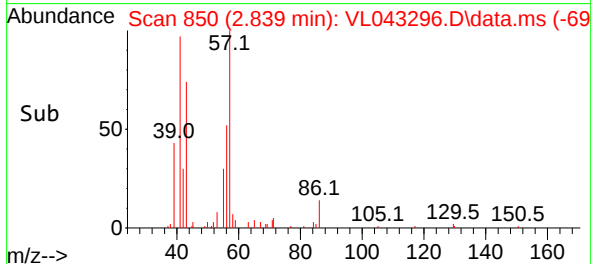
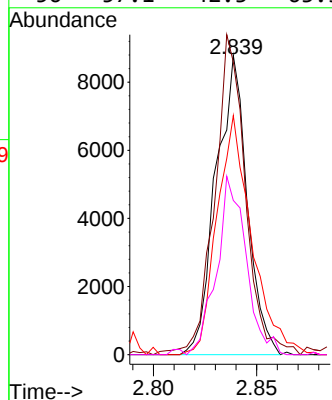
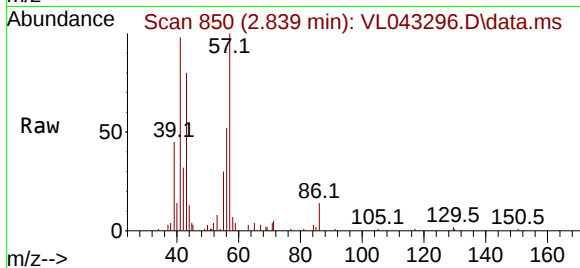




#26
Hexane
Concen: 0.554 ppbv
RT: 2.839 min Scan# 81
Delta R.T. 0.019 min
Lab File: VL043296.D
Acq: 02 Dec 2025 13:38

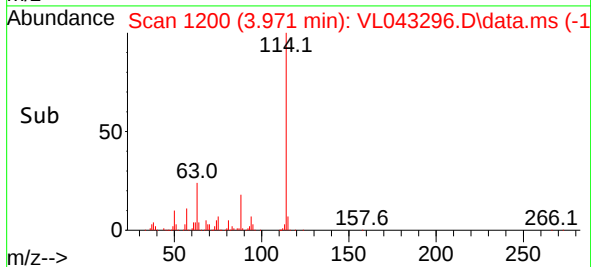
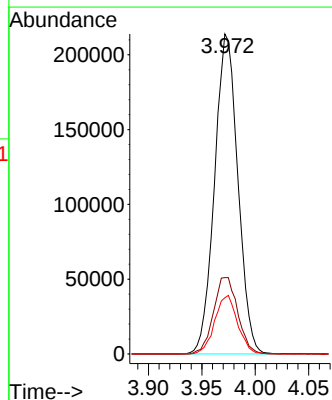
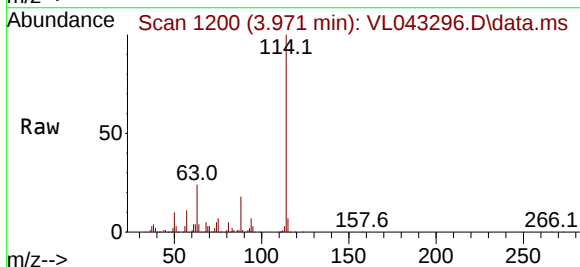
Instrument :
MSVOA_L
ClientSampleId :
IA1

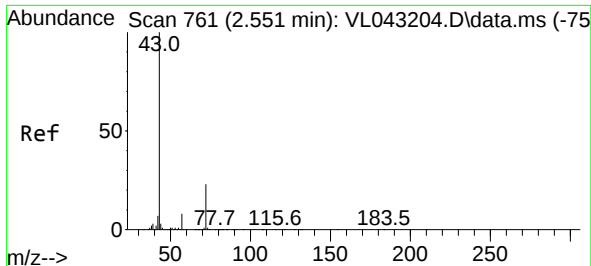
Tgt Ion: 57	Resp: 9224
Ion Ratio	Lower Upper
57 100	
41 108.4	74.6 111.8
43 89.0	179.0 268.4#
56 57.1	42.3 63.5



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.971 min Scan# 1200
Delta R.T. 0.022 min
Lab File: VL043296.D
Acq: 02 Dec 2025 13:38

Tgt Ion:114	Resp: 324565
Ion Ratio	Lower Upper
114 100	
63 24.9	21.0 31.6
88 17.9	14.9 22.3

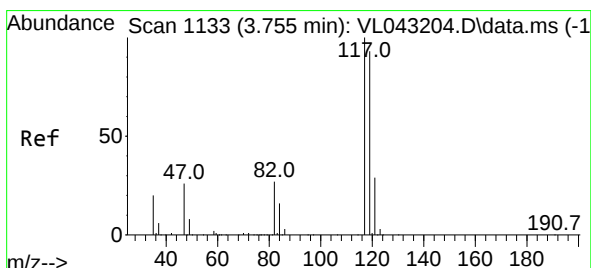
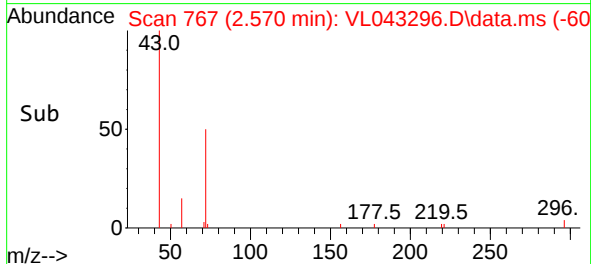
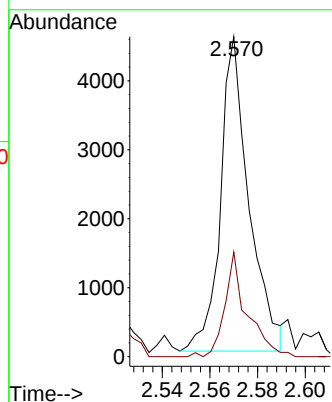
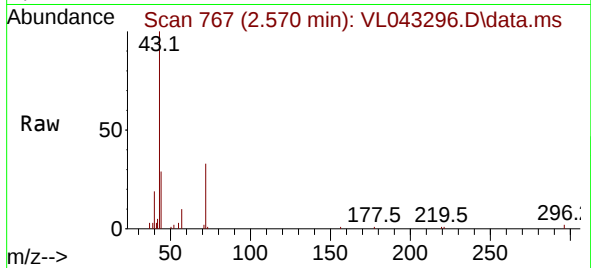




#34
2-Butanone
Concen: 0.165 ppbv
RT: 2.570 min Scan# 761
Delta R.T. 0.019 min
Lab File: VL043296.D
Acq: 02 Dec 2025 13:38

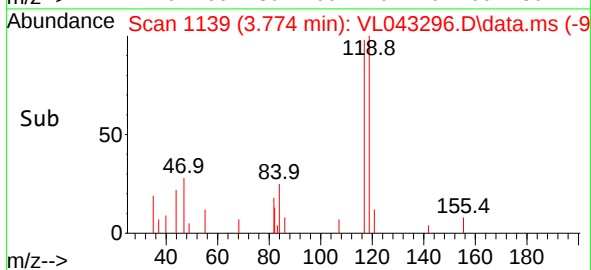
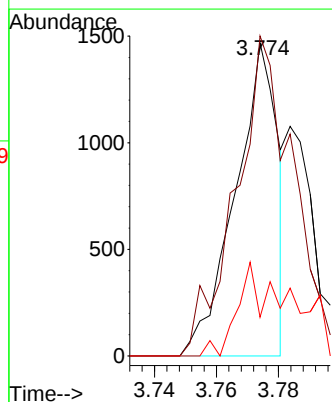
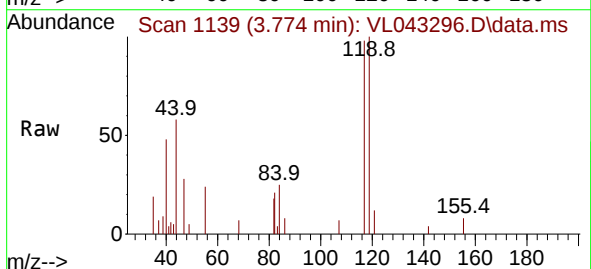
Instrument :
MSVOA_L
ClientSampleId :
IA1

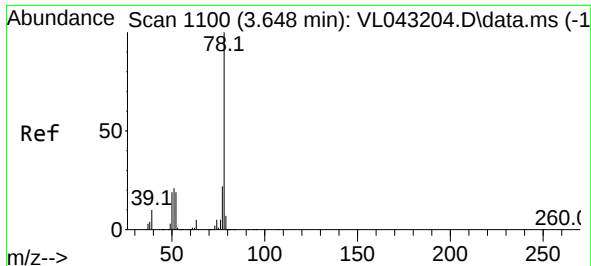
Tgt Ion: 43 Resp: 3785
Ion Ratio Lower Upper
43 100
72 25.8 18.1 27.1



#35
Carbon Tetrachloride
Concen: 0.057 ppbv
RT: 3.774 min Scan# 1139
Delta R.T. 0.019 min
Lab File: VL043296.D
Acq: 02 Dec 2025 13:38

Tgt Ion: 117 Resp: 1393
Ion Ratio Lower Upper
117 100
119 102.2 74.6 112.0
121 12.4 23.2 34.8#

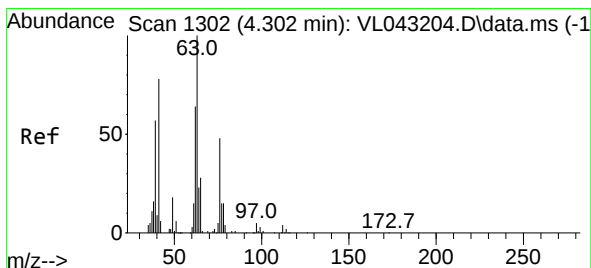
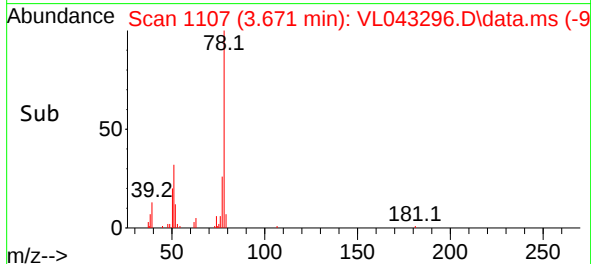
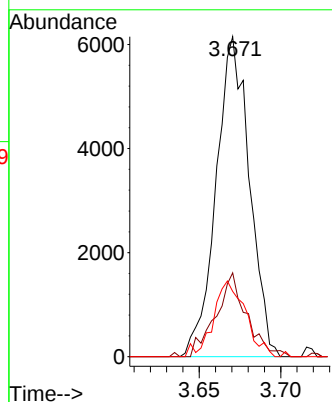
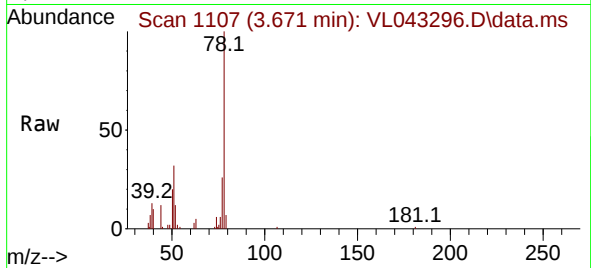




#36
Benzene
Concen: 0.282 ppbv
RT: 3.671 min Scan# 1107
Delta R.T. 0.022 min
Lab File: VL043296.D
Acq: 02 Dec 2025 13:38

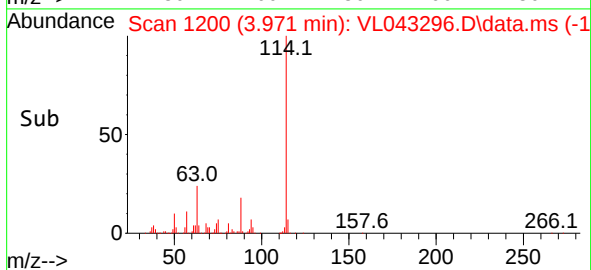
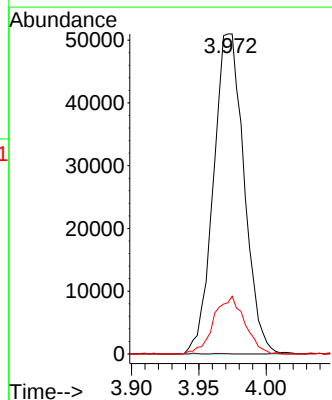
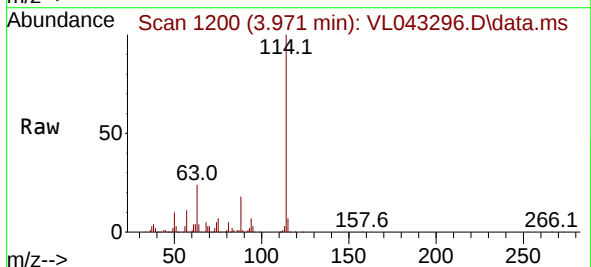
Instrument :
MSVOA_L
ClientSampleId :
IA1

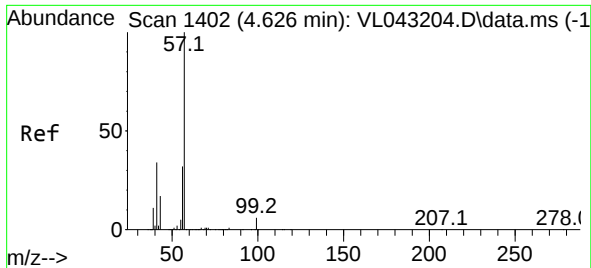
Tgt Ion: 78	Resp:	8750	
Ion	Ratio	Lower	Upper
78	100		
77	26.2	17.5	26.3
50	20.4	15.5	23.3



#39
1,2-Dichloropropane
Concen: 7.086 ppbv
RT: 3.971 min Scan# 1200
Delta R.T. -0.330 min
Lab File: VL043296.D
Acq: 02 Dec 2025 13:38

Tgt Ion: 63	Resp:	80607	
Ion Ratio	Lower	Upper	
63 100			
41 0.3	62.6	93.8#	
62 16.0	51.0	76.6#	

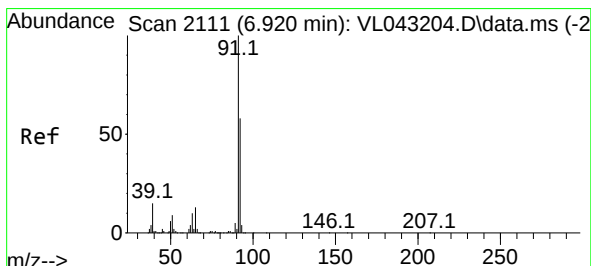
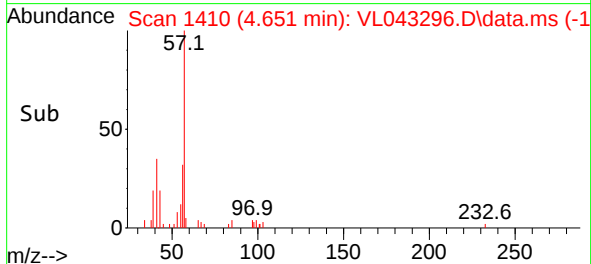
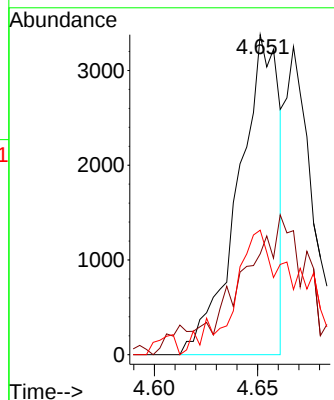
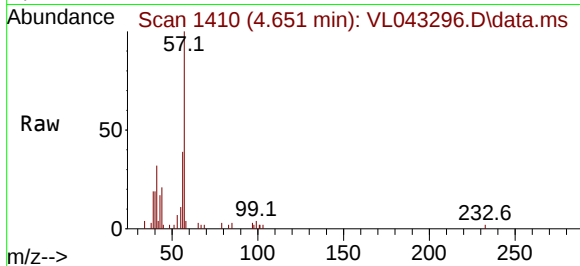




#44
2,2,4-Trimethylpentane
Concen: 0.086 ppbv
RT: 4.651 min Scan# 1402
Delta R.T. 0.026 min
Lab File: VL043296.D
Acq: 02 Dec 2025 13:38

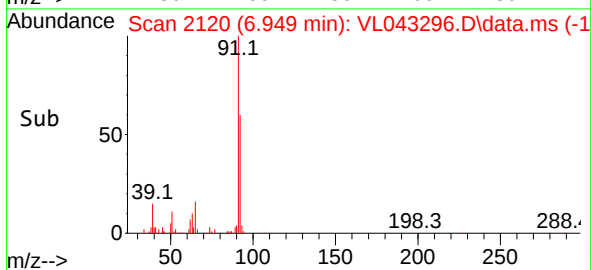
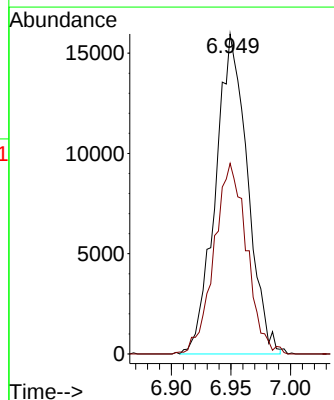
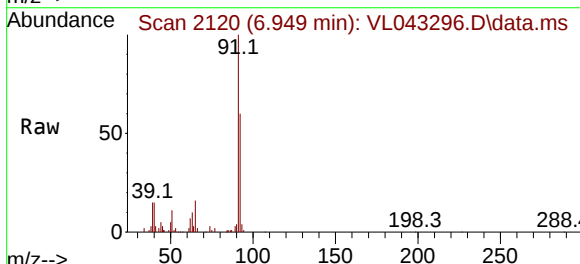
Instrument :
MSVOA_1
ClientSampleId :
IA1

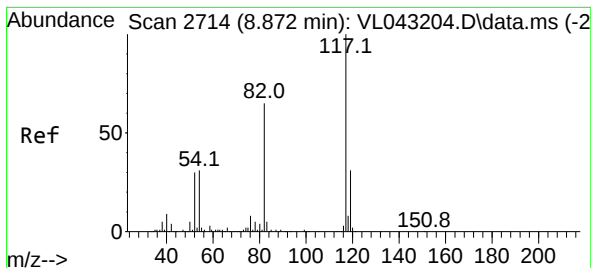
Tgt Ion: 57 Resp: 4611
Ion Ratio Lower Upper
57 100
41 0.0 28.0 42.0#
56 66.5 25.6 38.4#



#53
Toluene
Concen: 0.813 ppbv
RT: 6.949 min Scan# 2120
Delta R.T. 0.029 min
Lab File: VL043296.D
Acq: 02 Dec 2025 13:38

Tgt Ion: 91 Resp: 29906
Ion Ratio Lower Upper
91 100
92 60.7 47.4 71.0





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.891 min Scan# 21

Delta R.T. 0.019 min

Lab File: VL043296.D

Acq: 02 Dec 2025 13:38

Instrument :

MSVOA_L

ClientSampleId :

IA1

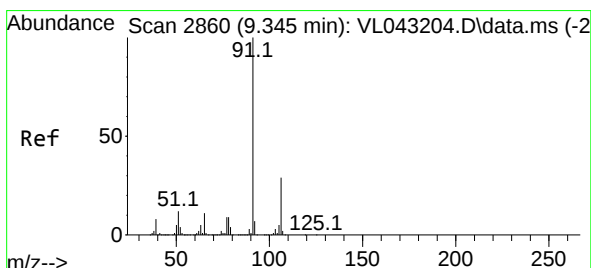
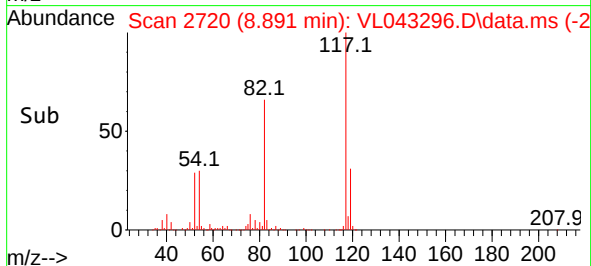
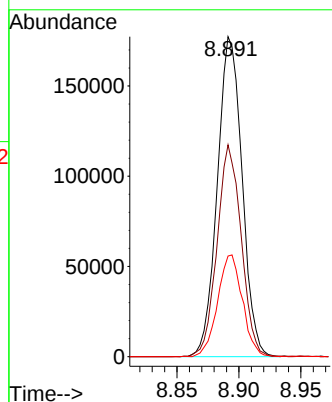
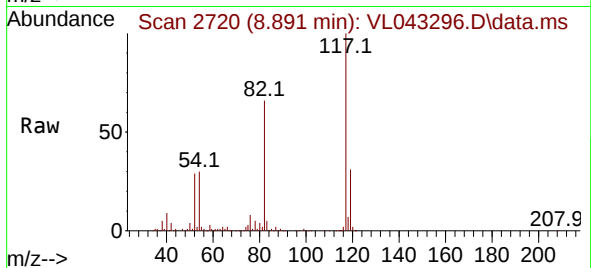
Tgt Ion:117 Resp: 247329

Ion Ratio Lower Upper

117 100

82 64.5 56.1 84.1

119 32.0 25.0 37.6



#58

Ethyl Benzene

Concen: 0.073 ppbv

RT: 9.367 min Scan# 2867

Delta R.T. 0.022 min

Lab File: VL043296.D

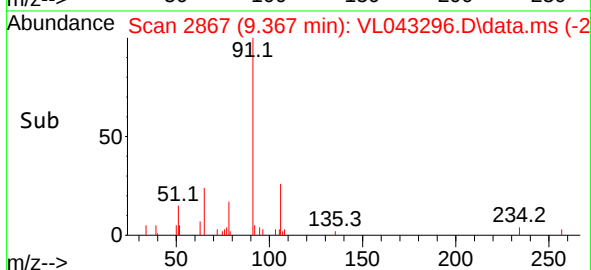
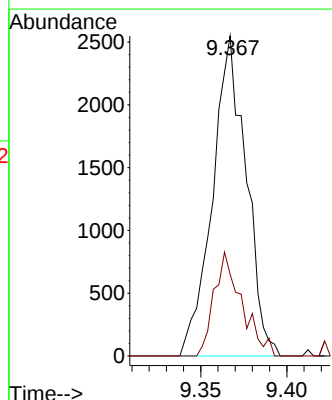
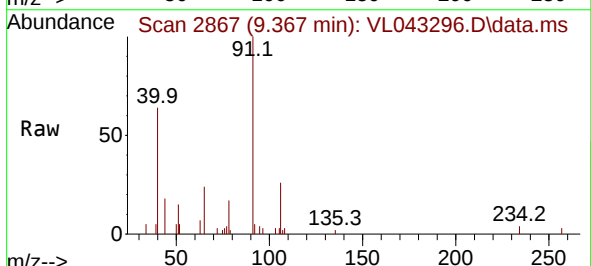
Acq: 02 Dec 2025 13:38

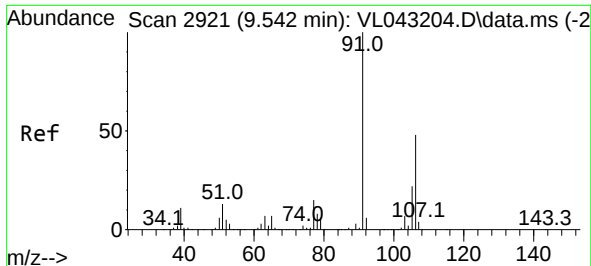
Tgt Ion: 91 Resp: 3465

Ion Ratio Lower Upper

91 100

106 25.6 22.8 34.2





#59

m/p-Xylene

Concen: 0.075 ppbv

RT: 9.558 min Scan# 2921

Delta R.T. 0.016 min

Lab File: VL043296.D

Acq: 02 Dec 2025 13:38

Instrument :

MSVOA_L

ClientSampleId :

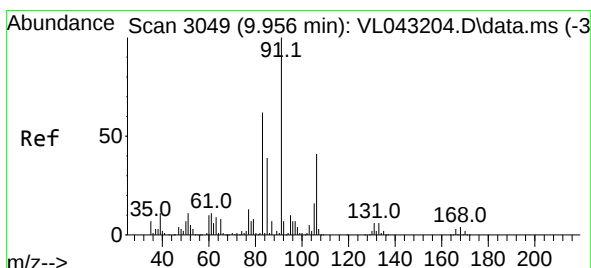
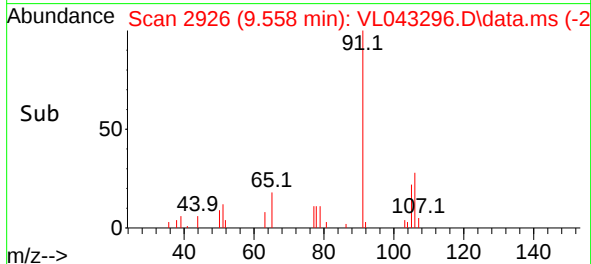
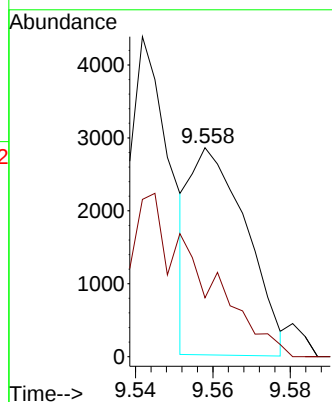
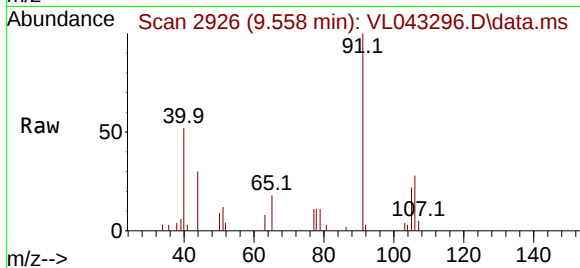
IA1

Tgt Ion: 91 Resp: 2860

Ion Ratio Lower Upper

91 100

106 0.0 36.1 54.1#



#60

o-Xylene

Concen: 0.072 ppbv

RT: 9.975 min Scan# 3055

Delta R.T. 0.019 min

Lab File: VL043296.D

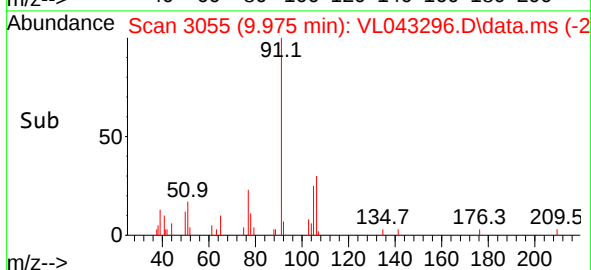
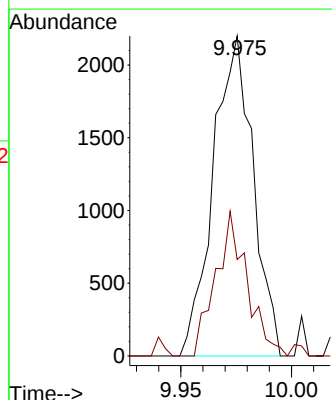
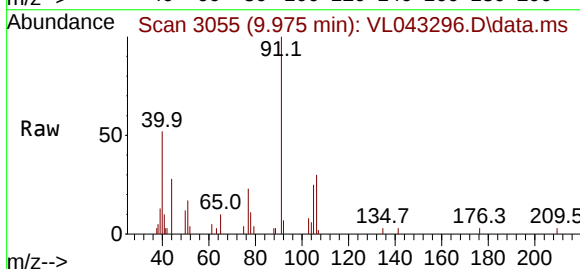
Acq: 02 Dec 2025 13:38

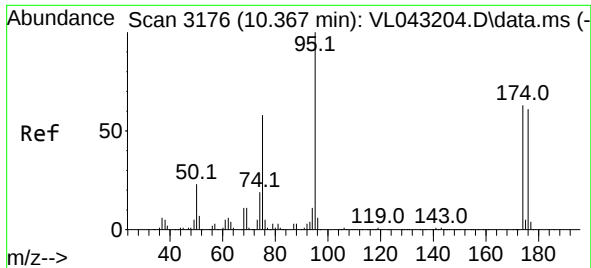
Tgt Ion: 91 Resp: 2757

Ion Ratio Lower Upper

91 100

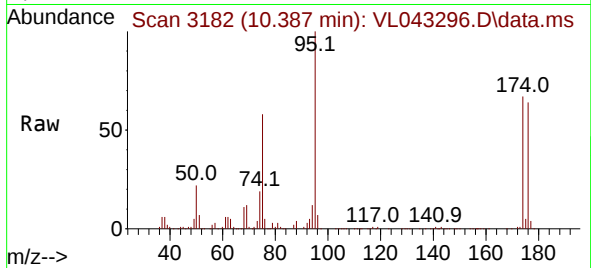
106 37.8 20.9 62.8





#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.522 ppbv
 RT: 10.387 min Scan# 31
 Delta R.T. 0.019 min
 Lab File: VL043296.D
 Acq: 02 Dec 2025 13:38

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1



Tgt Ion: 95 Resp: 172635

Ion	Ratio	Lower	Upper
95	100		
174	67.6	50.2	75.2
175	5.0	4.1	6.1

