

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
 Data File : VL042967.D
 Acq On : 22 Sep 2025 20:59
 Operator : SY/MD
 Sample : Q3112-03DL 40X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV3DL

Quant Time: Sep 23 02:56:02 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Tue Sep 23 02:39:16 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.797	49	156410	10.000	ppbv	0.01
33) 1,4-Difluorobenzene	3.968	114	471354	10.000	ppbv	0.02
55) Chlorobenzene-d5	8.888	117	414212	10.000	ppbv	0.01

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.383	95	303786	9.825	ppbv	0.01
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.200%

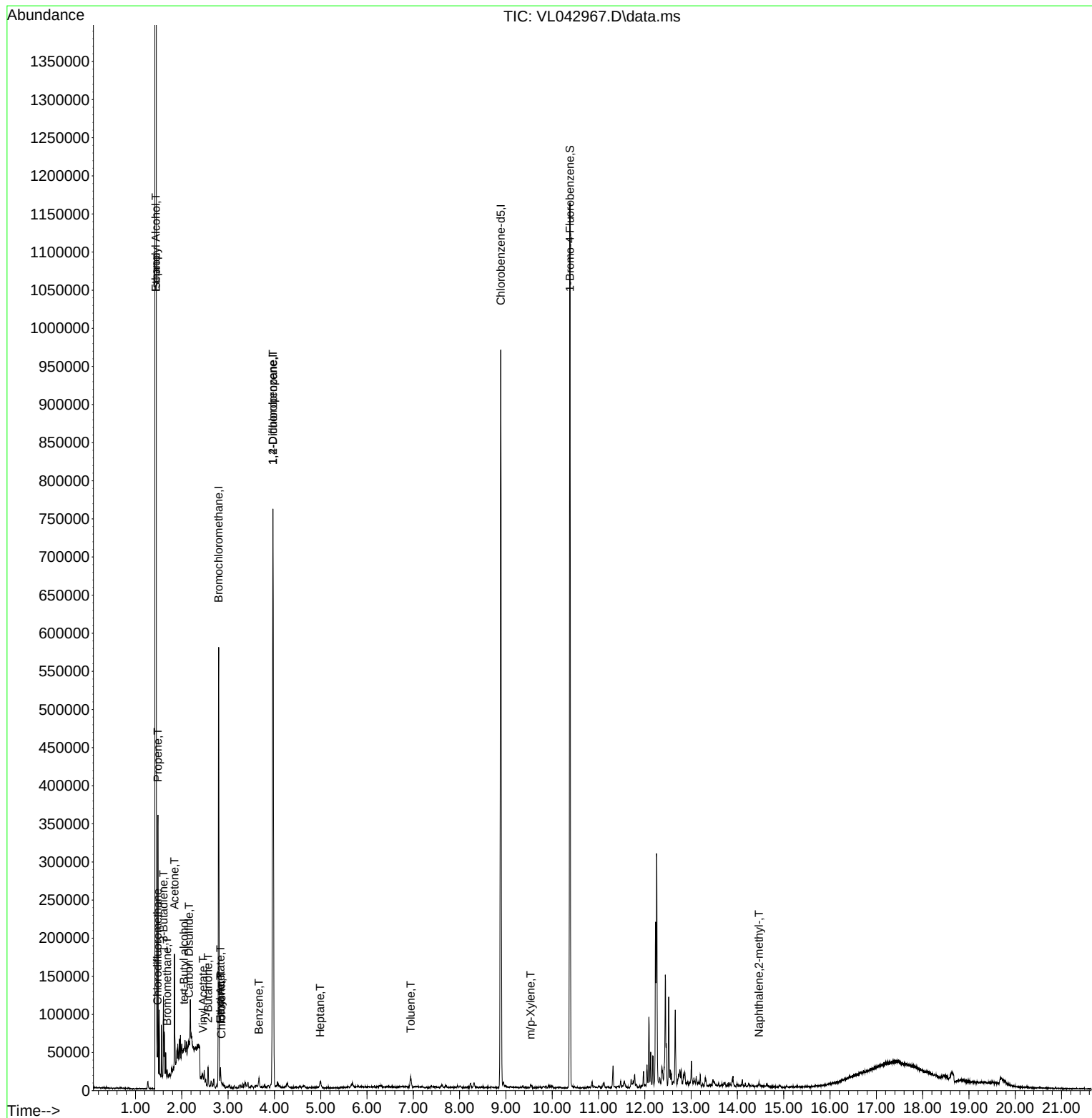
Target Compounds						Qvalue
3) Chlorodifluoromethane	1.476	51	3752	0.143	ppbv #	85
6) Bromomethane	1.683	94	92	0.030	ppbv #	79
9) Propene	1.483	41	51888	4.549	ppbv	89
10) Heptane	4.985	43	1193	0.039	ppbv #	1
13) Ethanol	1.441	45	172582	155.966	ppbv #	1
15) Acetone	1.842	43	62670	3.076	ppbv	99
16) 1,3-Butadiene	1.602	39	18369	1.912	ppbv #	38
17) tert-Butyl alcohol	2.049	59	816	0.037	ppbv #	1
19) Isopropyl Alcohol	1.441	45	172582	14.092	ppbv #	39
20) Methylene Chloride	2.068	84	2441	Below Cal	#	84
23) Vinyl Acetate	2.460	43	1317	0.045	ppbv #	40
25) Ethyl Acetate	2.836	43	4466	0.087	ppbv #	89
26) Hexane	2.836	57	6030	0.257	ppbv #	42
27) Carbon Disulfide	2.156	76	2686	0.128	ppbv #	1
29) Chloroform	2.858	83	1722	0.056	ppbv	95
34) 2-Butanone	2.567	43	16539	0.501	ppbv	99
36) Benzene	3.664	78	6691	0.151	ppbv #	88
39) 1,2-Dichloropropane	3.968	63	114627	7.094	ppbv #	24
53) Toluene	6.946	91	6152	0.117	ppbv #	56
59) m/p-Xylene	9.535	91	1728	0.032	ppbv #	100
80) Naphthalene,2-methyl-	14.465	142	1830	0.111	ppbv #	90

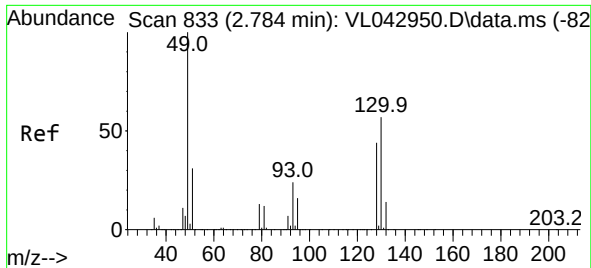
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
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Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
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Response via : Initial Calibration

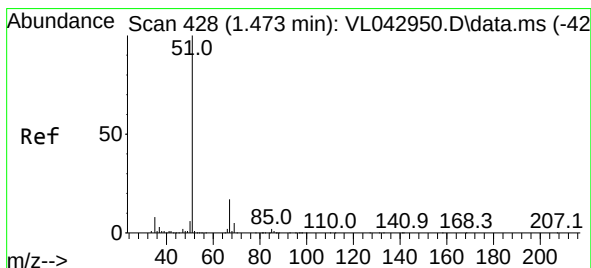
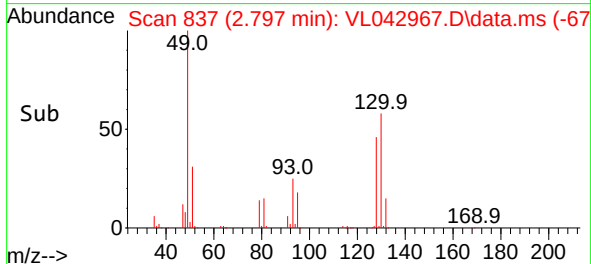
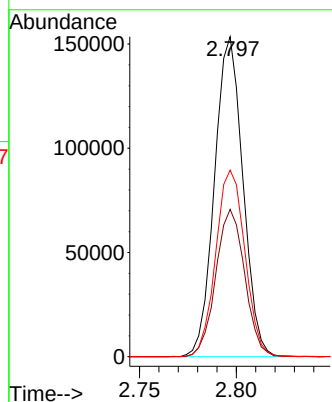
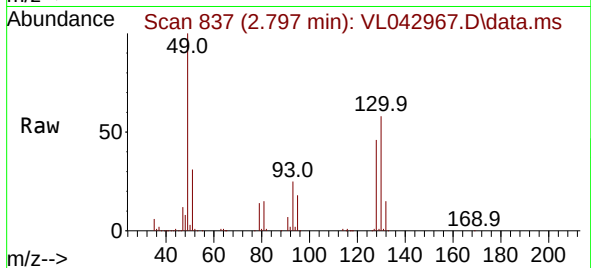




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.797 min Scan# 81
Delta R.T. 0.013 min
Lab File: VL042967.D
Acq: 22 Sep 2025 20:59

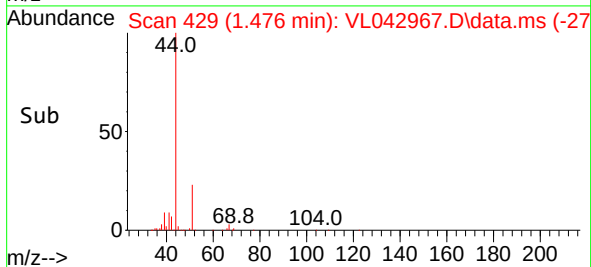
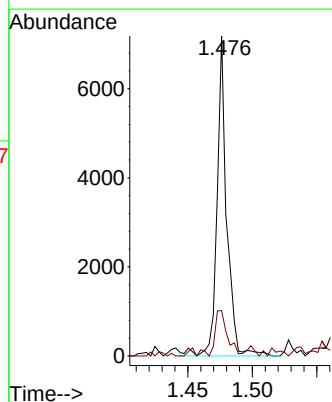
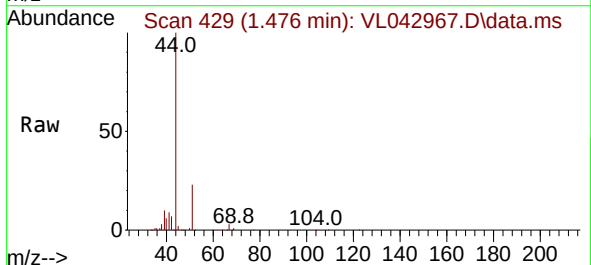
Instrument :
MSVOA_L
ClientSampleId :
SV3DL

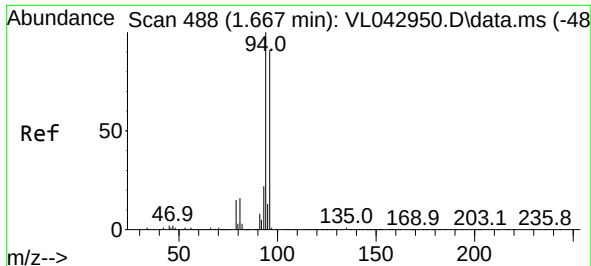
Tgt Ion: 49 Resp: 156410
Ion Ratio Lower Upper
49 100
128 46.9 22.9 68.8
130 60.0 29.1 87.3



#3
Chlorodifluoromethane
Concen: 0.143 ppbv
RT: 1.476 min Scan# 429
Delta R.T. 0.003 min
Lab File: VL042967.D
Acq: 22 Sep 2025 20:59

Tgt Ion: 51 Resp: 3752
Ion Ratio Lower Upper
51 100
67 23.7 13.8 20.8#

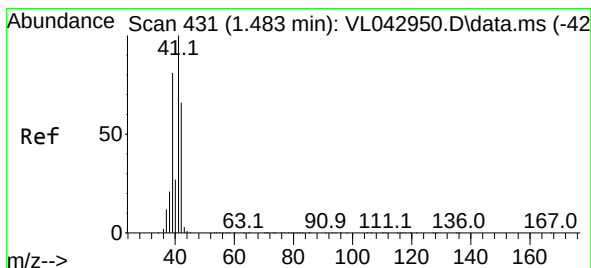
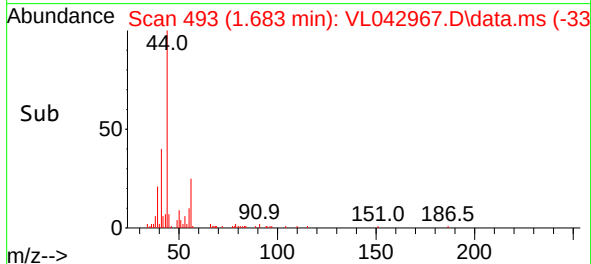
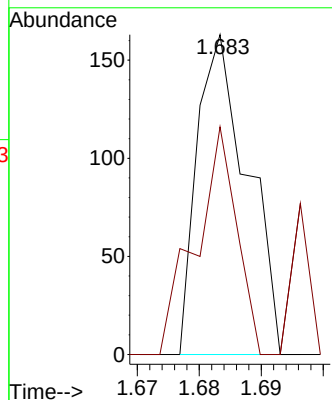
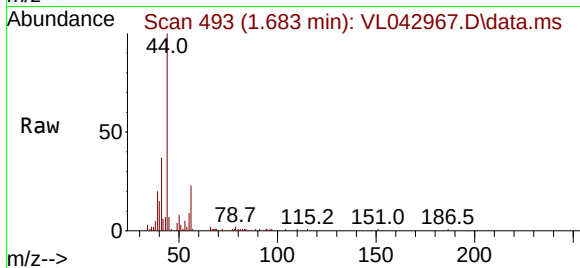




#6
Bromomethane
Concen: 0.030 ppbv
RT: 1.683 min Scan# 493
Delta R.T. 0.016 min
Lab File: VL042967.D
Acq: 22 Sep 2025 20:59

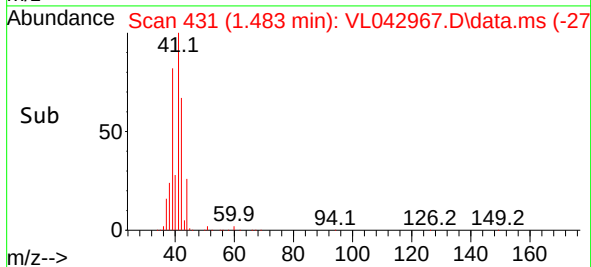
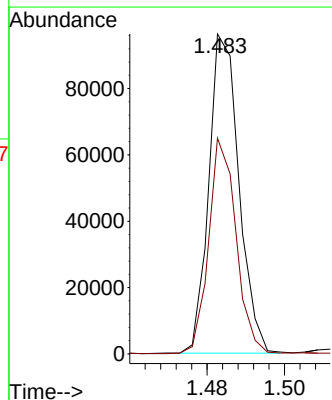
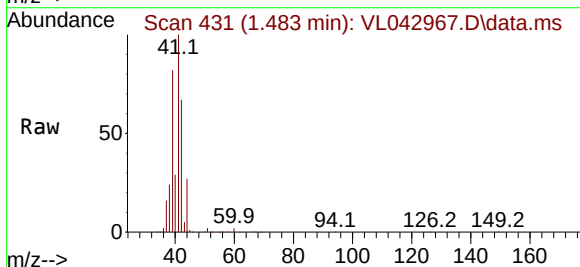
Instrument :
MSVOA_L
ClientSampleId :
SV3DL

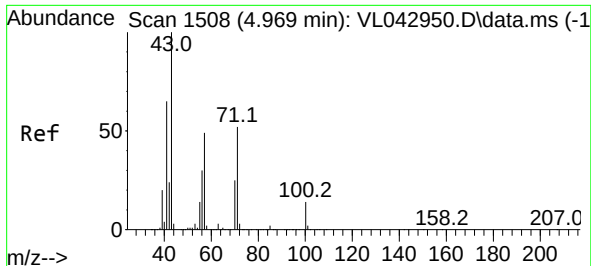
Tgt Ion: 94 Resp: 92
Ion Ratio Lower Upper
94 100
96 71.2 72.6 108.8#



#9
Propene
Concen: 4.549 ppbv
RT: 1.483 min Scan# 431
Delta R.T. -0.000 min
Lab File: VL042967.D
Acq: 22 Sep 2025 20:59

Tgt Ion: 41 Resp: 51888
Ion Ratio Lower Upper
41 100
42 62.5 57.4 86.2

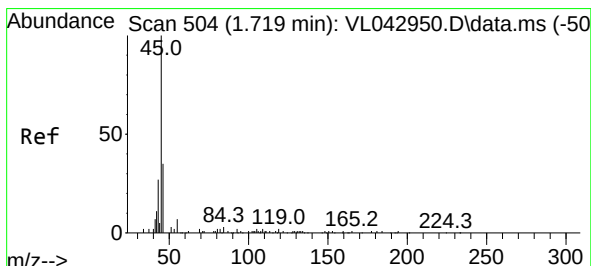
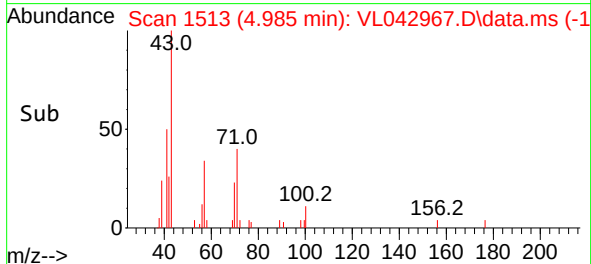
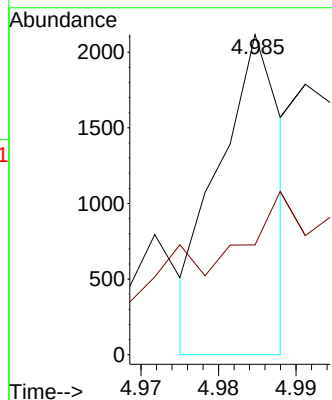
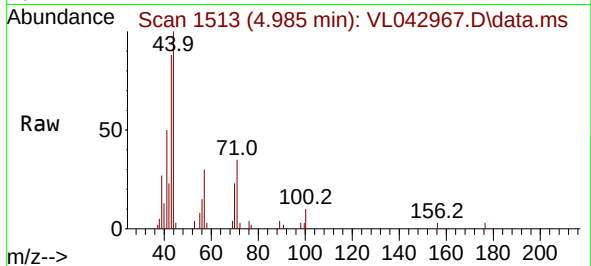




#10
Heptane
Concen: 0.039 ppbv
RT: 4.985 min Scan# 11
Delta R.T. 0.016 min
Lab File: VL042967.D
Acq: 22 Sep 2025 20:59

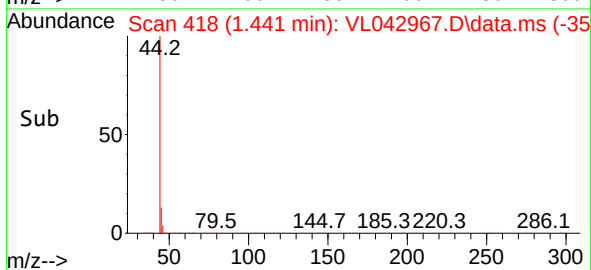
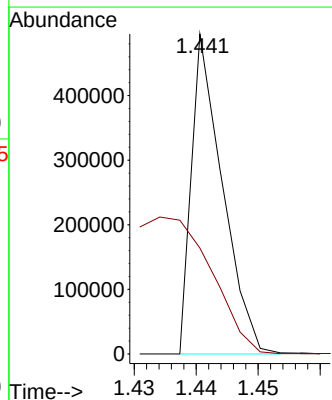
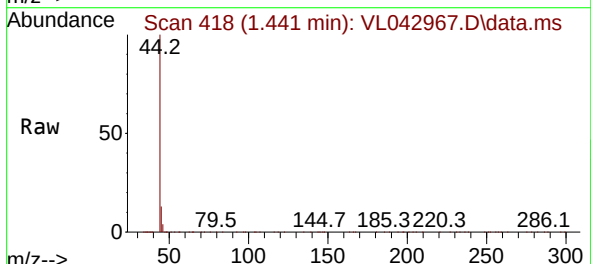
Instrument :
MSVOA_L
ClientSampleId :
SV3DL

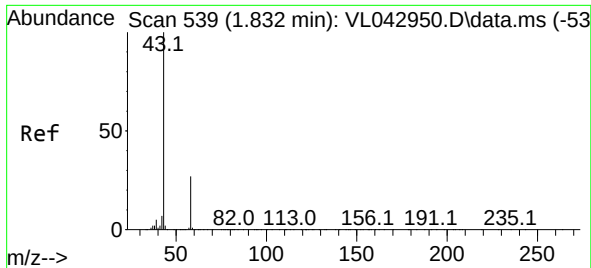
Tgt Ion: 43 Resp: 1193
Ion Ratio Lower Upper
43 100
57 182.1 38.6 57.8#



#13
Ethanol
Concen: 155.966 ppbv
RT: 1.441 min Scan# 418
Delta R.T. -0.278 min
Lab File: VL042967.D
Acq: 22 Sep 2025 20:59

Tgt Ion: 45 Resp: 172582
Ion Ratio Lower Upper
45 100
46 146.4 16.2 64.6#





#15

Acetone

Concen: 3.076 ppbv

RT: 1.842 min Scan# 54

Delta R.T. 0.010 min

Lab File: VL042967.D

Acq: 22 Sep 2025 20:59

Instrument :

MSVOA_L

ClientSampleId :

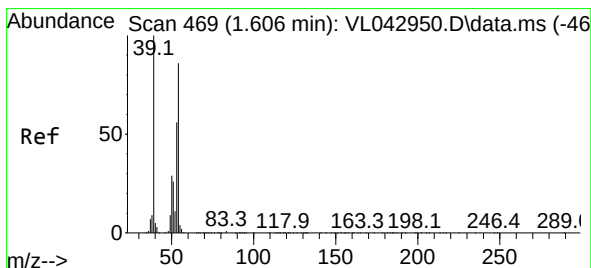
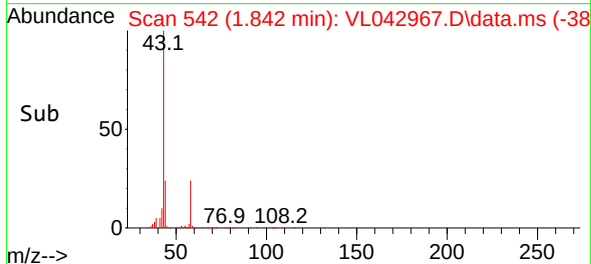
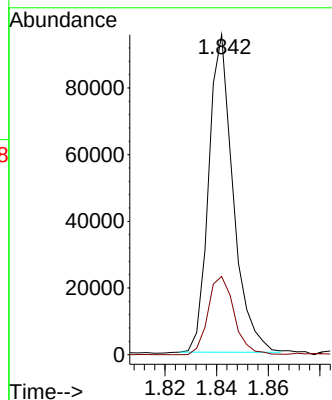
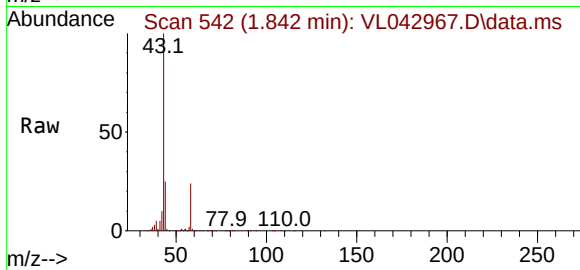
SV3DL

Tgt Ion: 43 Resp: 62670

Ion Ratio Lower Upper

43 100

58 27.2 22.3 33.5



#16

1,3-Butadiene

Concen: 1.912 ppbv

RT: 1.602 min Scan# 468

Delta R.T. -0.003 min

Lab File: VL042967.D

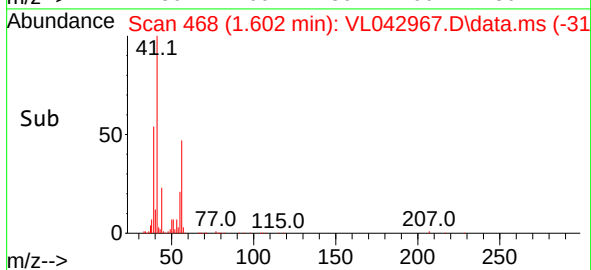
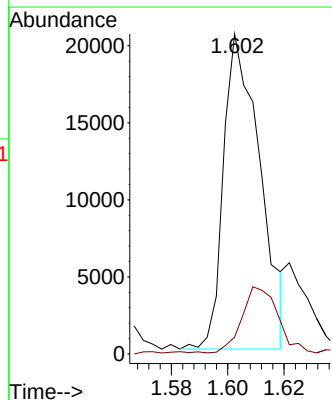
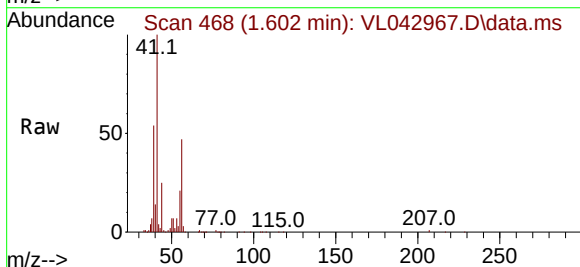
Acq: 22 Sep 2025 20:59

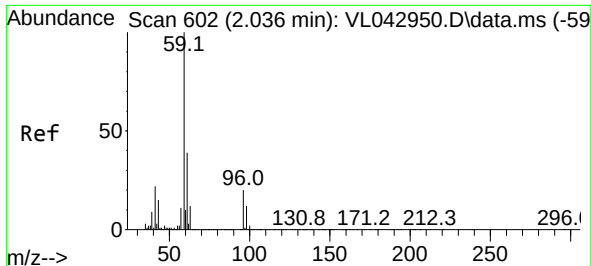
Tgt Ion: 39 Resp: 18369

Ion Ratio Lower Upper

39 100

54 22.7 60.8 91.2#





#17

tert-Butyl alcohol

Concen: 0.037 ppbv

RT: 2.049 min Scan# 602

Delta R.T. 0.013 min

Lab File: VL042967.D

Acq: 22 Sep 2025 20:59

Instrument :

MSVOA_L

ClientSampleId :

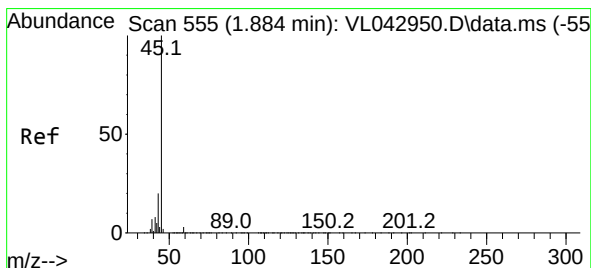
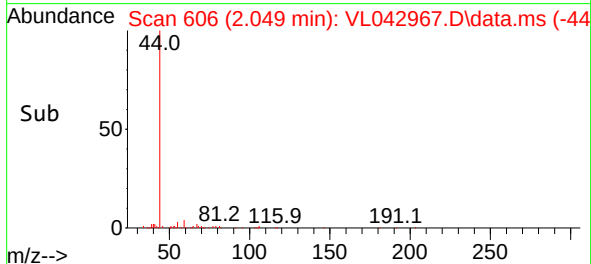
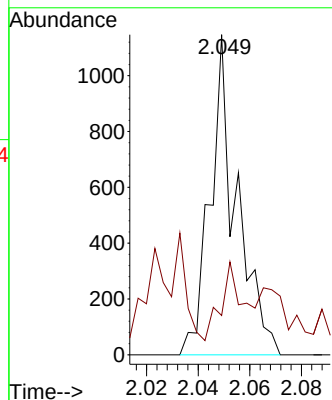
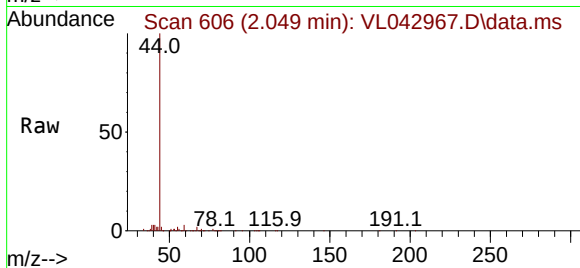
SV3DL

Tgt Ion: 59 Resp: 816

Ion Ratio Lower Upper

59 100

57 68.6 8.6 12.8#



#19

Isopropyl Alcohol

Concen: 14.092 ppbv

RT: 1.441 min Scan# 418

Delta R.T. -0.443 min

Lab File: VL042967.D

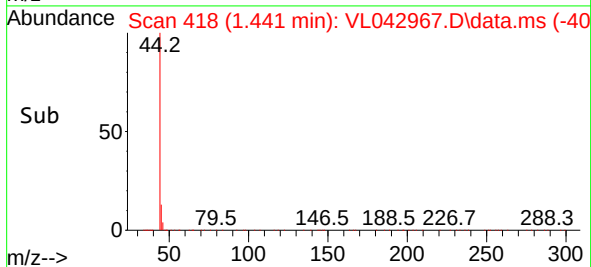
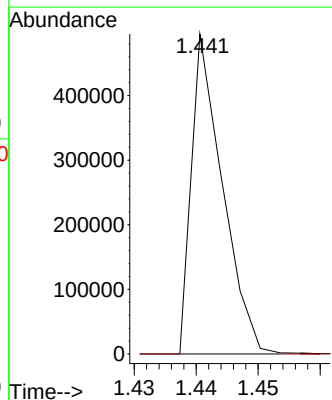
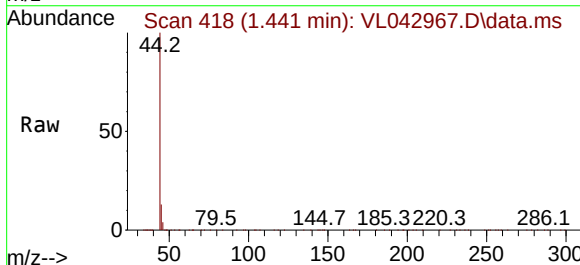
Acq: 22 Sep 2025 20:59

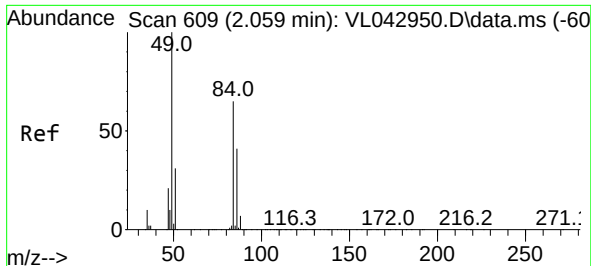
Tgt Ion: 45 Resp: 172582

Ion Ratio Lower Upper

45 100

58 1.4 31.0 46.6#





#20

Methylene Chloride

Concen: Below Cal

RT: 2.068 min Scan# 612

Delta R.T. 0.009 min

Lab File: VL042967.D

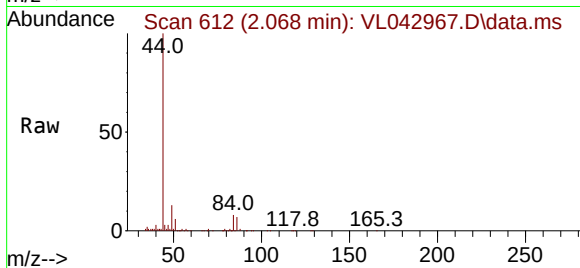
Acq: 22 Sep 2025 20:59

Instrument :

MSVOA_L

ClientSampleId :

SV3DL



Tgt Ion: 84 Resp: 2441

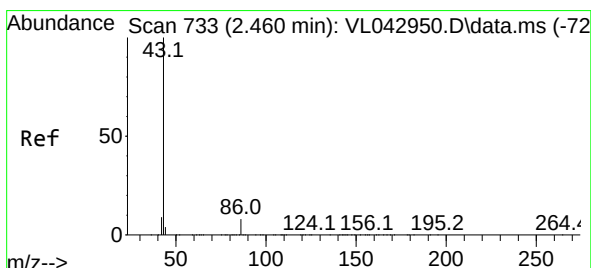
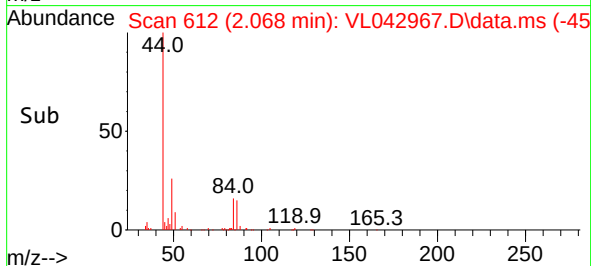
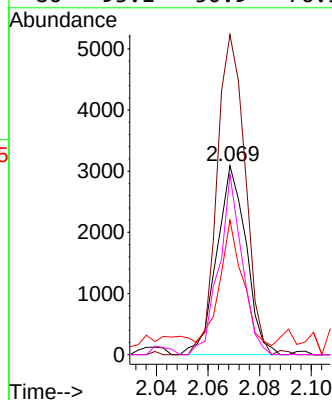
Ion Ratio Lower Upper

84 100

49 165.2 124.1 186.1

51 60.7 39.8 59.8#

86 93.1 50.9 76.3#



#23

Vinyl Acetate

Concen: 0.045 ppbv

RT: 2.460 min Scan# 733

Delta R.T. -0.000 min

Lab File: VL042967.D

Acq: 22 Sep 2025 20:59

Tgt Ion: 43 Resp: 1317

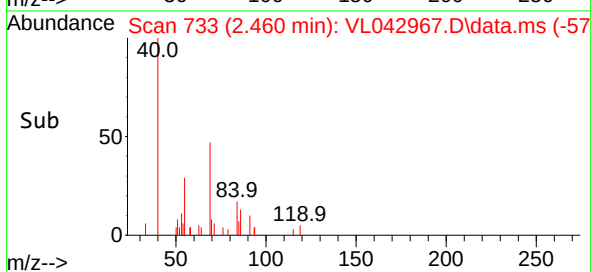
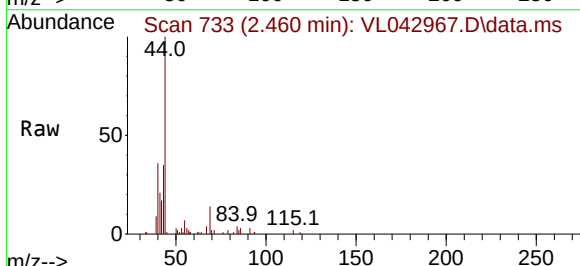
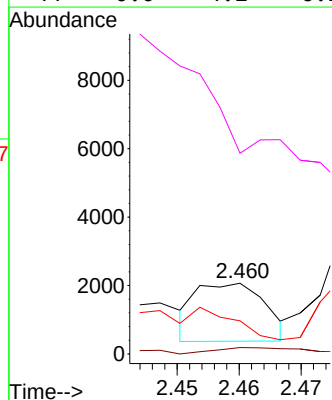
Ion Ratio Lower Upper

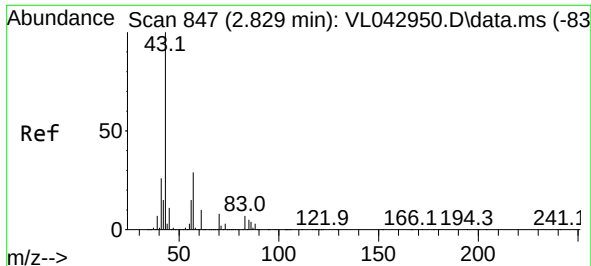
43 100

86 17.0 6.2 9.2#

42 50.0 7.4 11.0#

44 0.0 4.2 6.2#

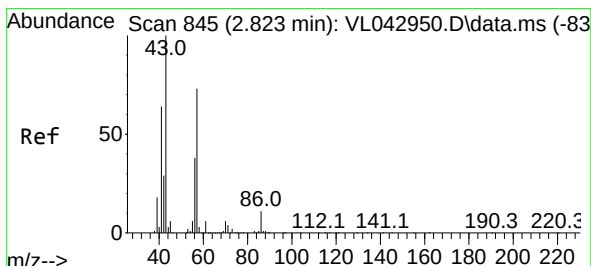
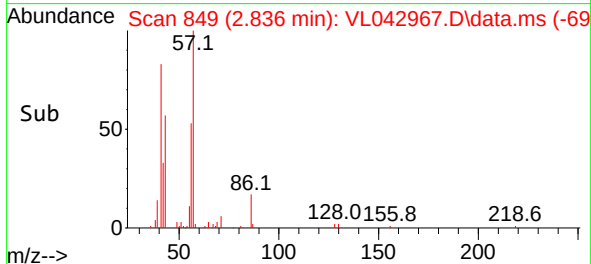
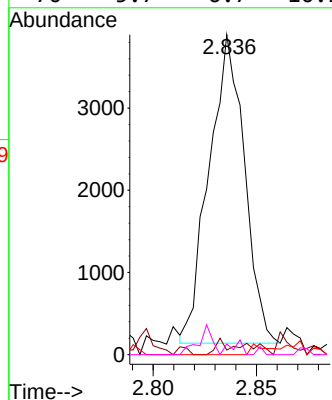
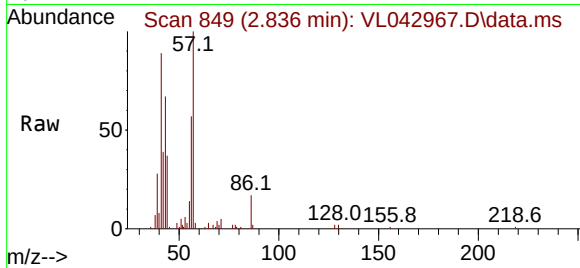




#25
Ethyl Acetate
Concen: 0.087 ppbv
RT: 2.836 min Scan# 849
Delta R.T. 0.006 min
Lab File: VL042967.D
Acq: 22 Sep 2025 20:59

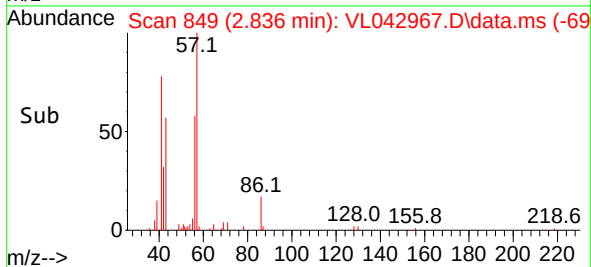
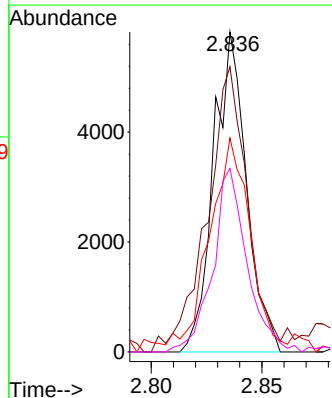
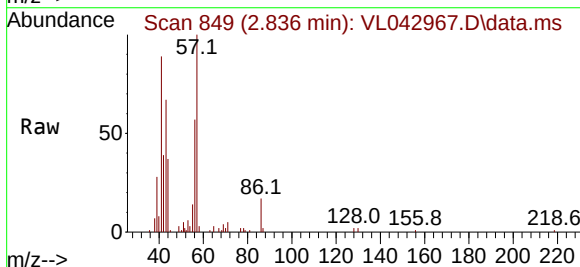
Instrument :
MSVOA_L
ClientSampleId :
SV3DL

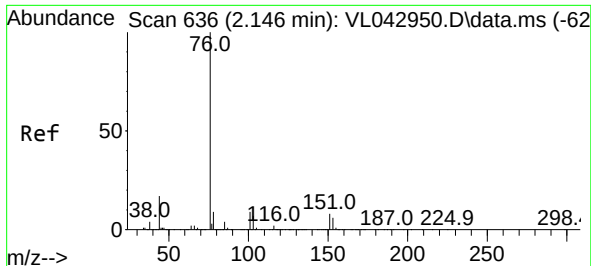
Tgt Ion: 43	Resp: 4466
Ion Ratio	Lower Upper
43 100	
45 7.5	7.7 11.5#
61 1.2	7.1 10.7#
70 5.7	6.7 10.1#



#26
Hexane
Concen: 0.257 ppbv
RT: 2.836 min Scan# 849
Delta R.T. 0.013 min
Lab File: VL042967.D
Acq: 22 Sep 2025 20:59

Tgt Ion: 57	Resp: 6030
Ion Ratio	Lower Upper
57 100	
41 111.6	71.7 107.5#
43 90.0	180.8 271.2#
56 59.6	41.4 62.0





#27

Carbon Disulfide

Concen: 0.128 ppbv

RT: 2.156 min Scan# 61

Delta R.T. 0.010 min

Lab File: VL042967.D

Acq: 22 Sep 2025 20:59

Instrument :

MSVOA_L

ClientSampleId :

SV3DL

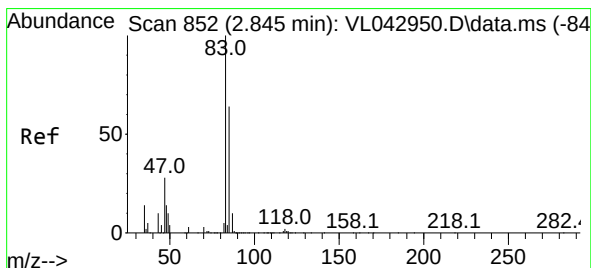
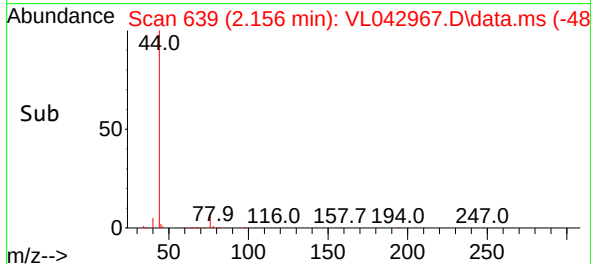
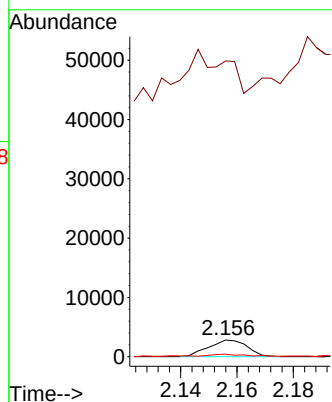
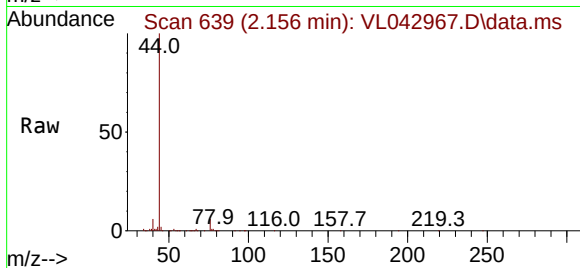
Tgt Ion: 76 Resp: 2686

Ion Ratio Lower Upper

76 100

44 5186.4 15.6 23.4#

78 22.4 8.9 13.3#



#29

Chloroform

Concen: 0.056 ppbv

RT: 2.858 min Scan# 856

Delta R.T. 0.013 min

Lab File: VL042967.D

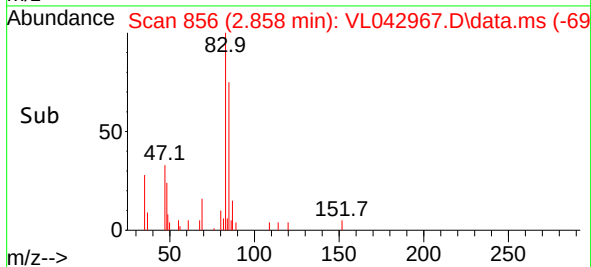
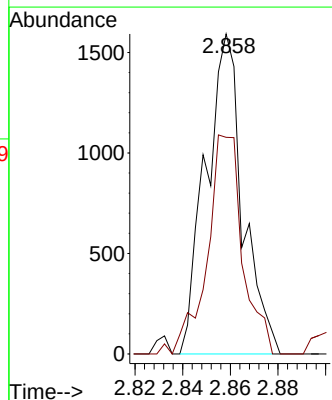
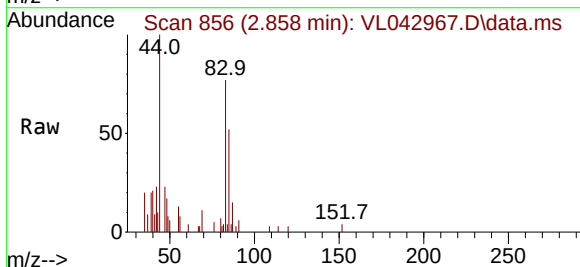
Acq: 22 Sep 2025 20:59

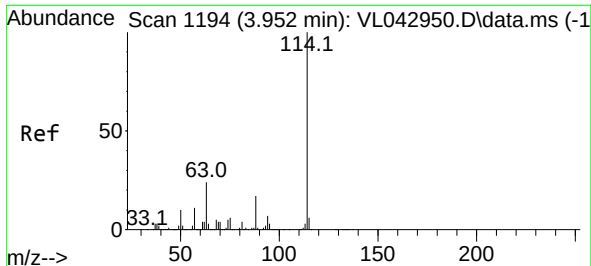
Tgt Ion: 83 Resp: 1722

Ion Ratio Lower Upper

83 100

85 67.7 51.2 76.8

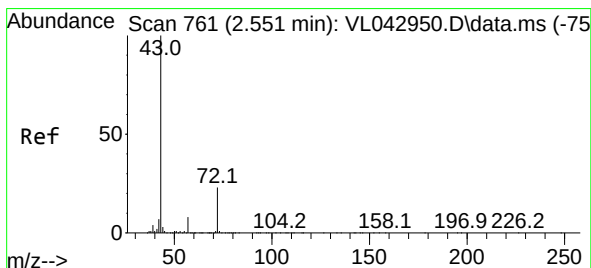
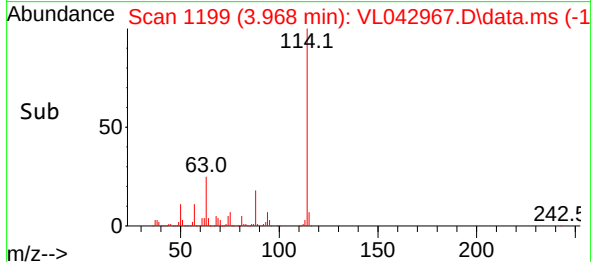
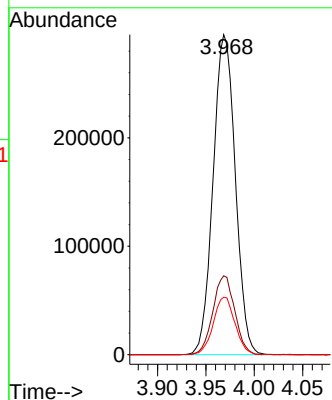
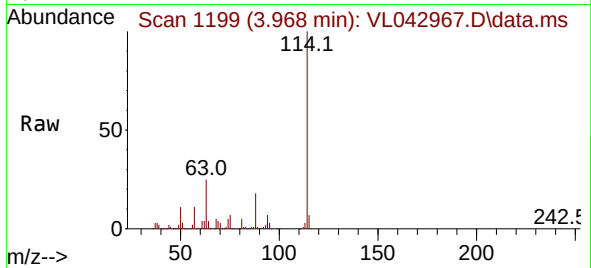




#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 3.968 min Scan# 1199
 Delta R.T. 0.016 min
 Lab File: VL042967.D
 Acq: 22 Sep 2025 20:59

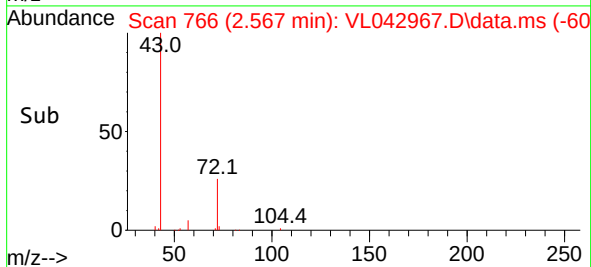
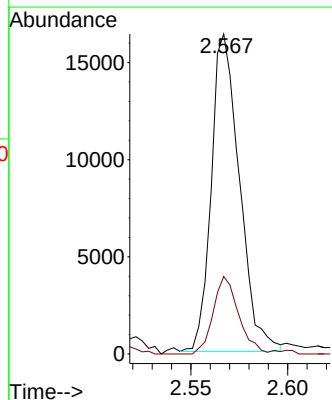
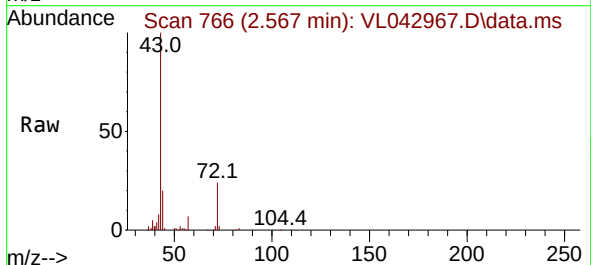
Instrument :
 MSVOA_L
 ClientSampleId :
 SV3DL

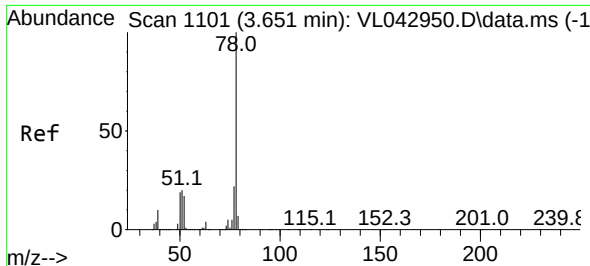
Tgt Ion:114 Resp: 471354
 Ion Ratio Lower Upper
 114 100
 63 24.3 19.4 29.2
 88 17.6 14.2 21.2



#34
 2-Butanone
 Concen: 0.501 ppbv
 RT: 2.567 min Scan# 766
 Delta R.T. 0.016 min
 Lab File: VL042967.D
 Acq: 22 Sep 2025 20:59

Tgt Ion: 43 Resp: 16539
 Ion Ratio Lower Upper
 43 100
 72 22.7 17.7 26.5

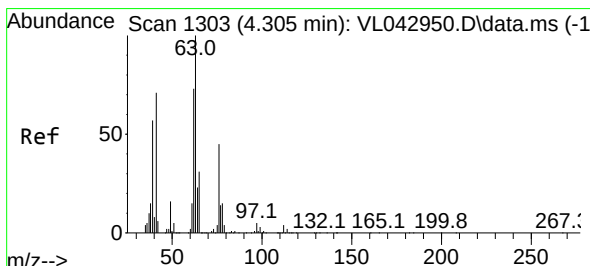
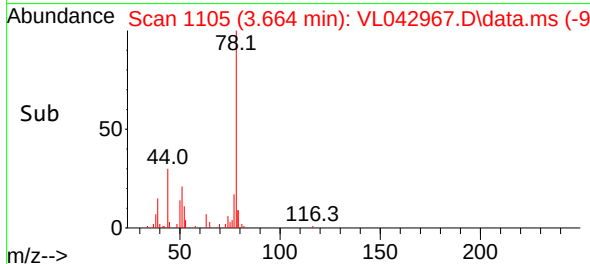
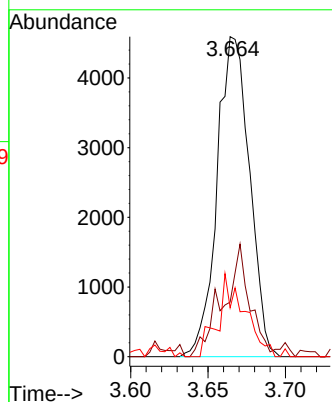
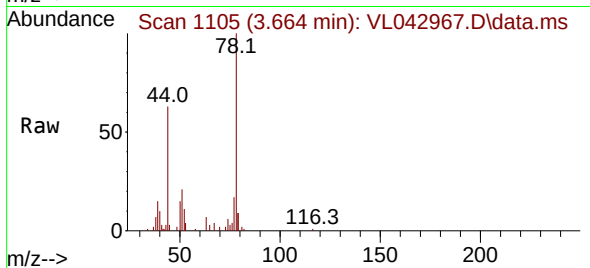




#36
Benzene
Concen: 0.151 ppbv
RT: 3.664 min Scan# 1105
Delta R.T. 0.013 min
Lab File: VL042967.D
Acq: 22 Sep 2025 20:59

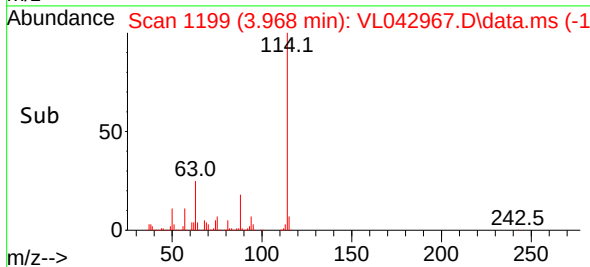
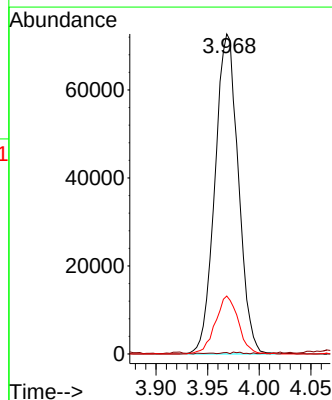
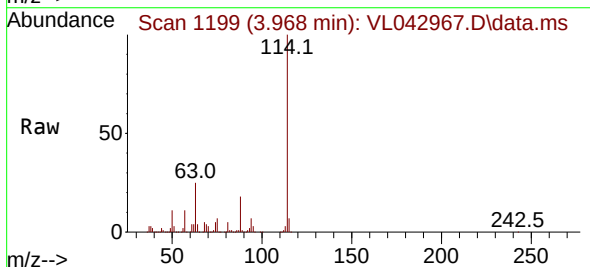
Instrument :
MSVOA_L
ClientSampleId :
SV3DL

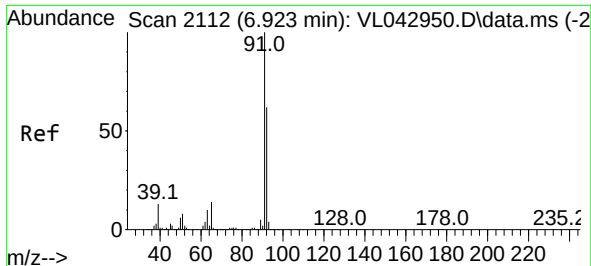
Tgt Ion: 78 Resp: 6691
Ion Ratio Lower Upper
78 100
77 14.7 17.8 26.6#
50 15.3 15.0 22.4



#39
1,2-Dichloropropane
Concen: 7.094 ppbv
RT: 3.968 min Scan# 1199
Delta R.T. -0.337 min
Lab File: VL042967.D
Acq: 22 Sep 2025 20:59

Tgt Ion: 63 Resp: 114627
Ion Ratio Lower Upper
63 100
41 0.0 57.5 86.3#
62 18.1 58.5 87.7#

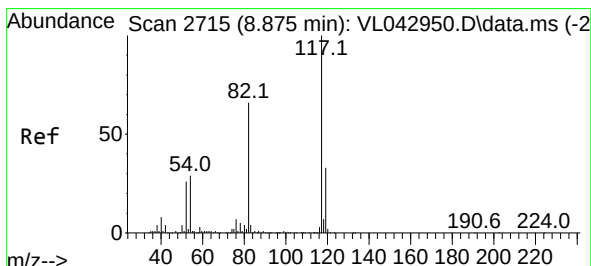
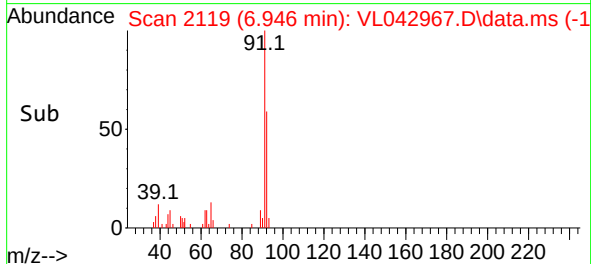
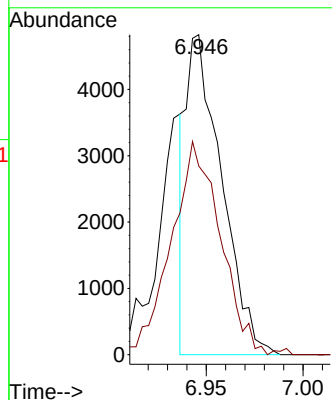
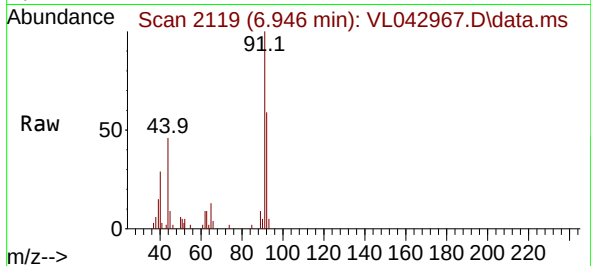




#53
Toluene
Concen: 0.117 ppbv
RT: 6.946 min Scan# 2112
Delta R.T. 0.023 min
Lab File: VL042967.D
Acq: 22 Sep 2025 20:59

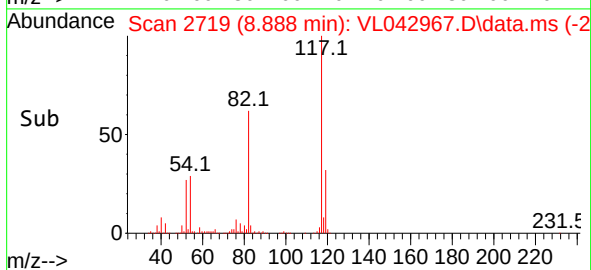
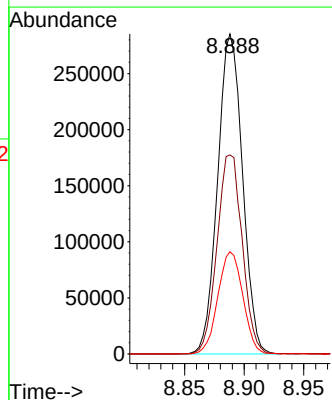
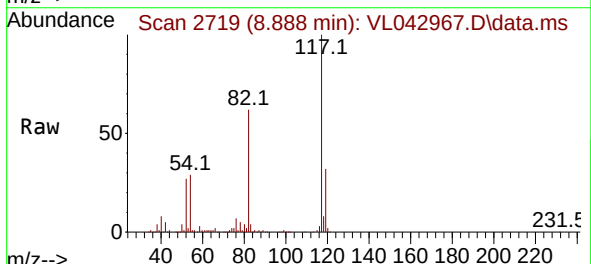
Instrument :
MSVOA_L
ClientSampleId :
SV3DL

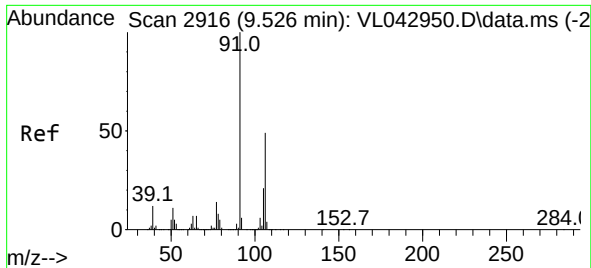
Tgt Ion: 91 Resp: 6152
Ion Ratio Lower Upper
91 100
92 93.4 48.2 72.2#



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.888 min Scan# 2719
Delta R.T. 0.013 min
Lab File: VL042967.D
Acq: 22 Sep 2025 20:59

Tgt Ion: 117 Resp: 414212
Ion Ratio Lower Upper
117 100
82 63.1 52.8 79.2
119 32.1 26.5 39.7

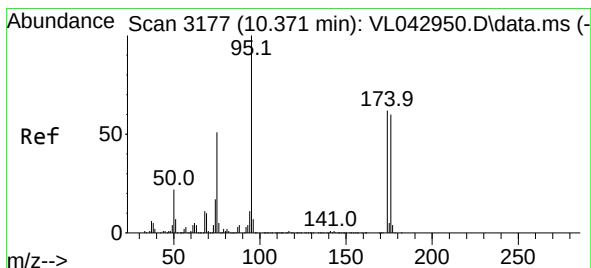
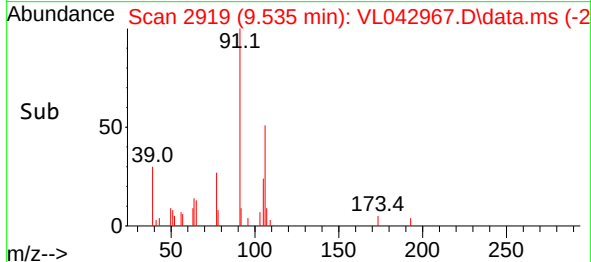
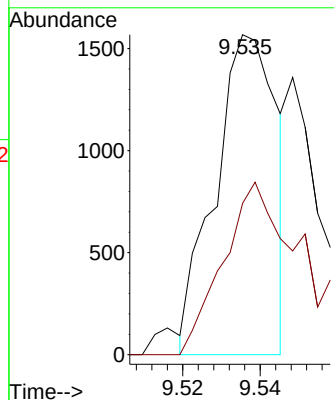
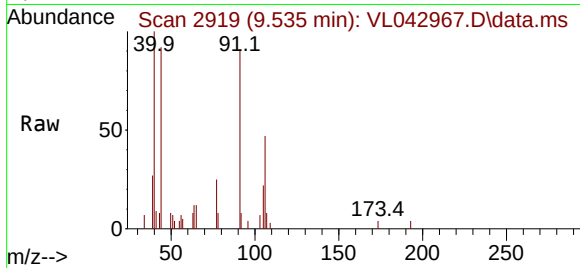




#59
m/p-Xylene
Concen: 0.032 ppbv
RT: 9.535 min Scan# 2916
Delta R.T. 0.010 min
Lab File: VL042967.D
Acq: 22 Sep 2025 20:59

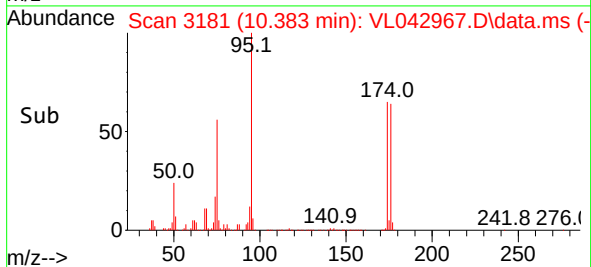
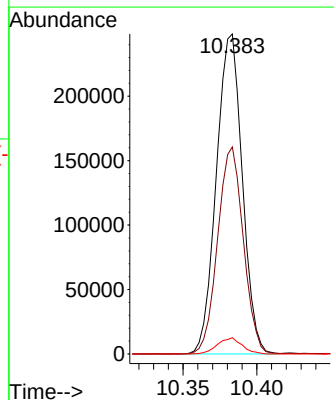
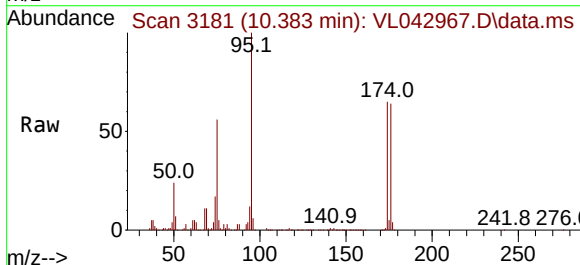
Instrument :
MSVOA_L
ClientSampleId :
SV3DL

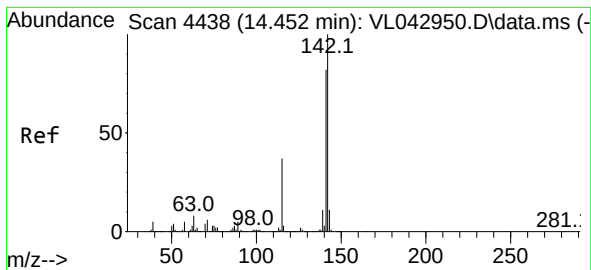
Tgt Ion: 91 Resp: 1728
Ion Ratio Lower Upper
91 100
106 76.6 0.0 0.0#



#68
1-Bromo-4-Fluorobenzene
Concen: 9.825 ppbv
RT: 10.383 min Scan# 3181
Delta R.T. 0.013 min
Lab File: VL042967.D
Acq: 22 Sep 2025 20:59

Tgt Ion: 95 Resp: 303786
Ion Ratio Lower Upper
95 100
174 64.0 51.4 77.2
175 4.8 4.0 6.0





#80

Naphthalene, 2-methyl-

Concen: 0.111 ppbv

RT: 14.465 min Scan# 44

Delta R.T. 0.013 min

Lab File: VL042967.D

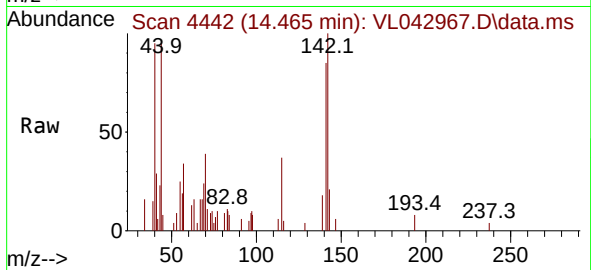
Acq: 22 Sep 2025 20:59

Instrument :

MSVOA_L

ClientSampleId :

SV3DL



Tgt Ion:142 Resp: 1830

Ion Ratio Lower Upper

142 100

141 84.6 65.1 97.7

115 50.3 28.9 43.3#

