

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111825\
 Data File : VL043228.D
 Acq On : 18 Nov 2025 23:41
 Operator : SY/MD
 Sample : Q3651-03DL 40X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1DL

Quant Time: Nov 19 01:42:28 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)

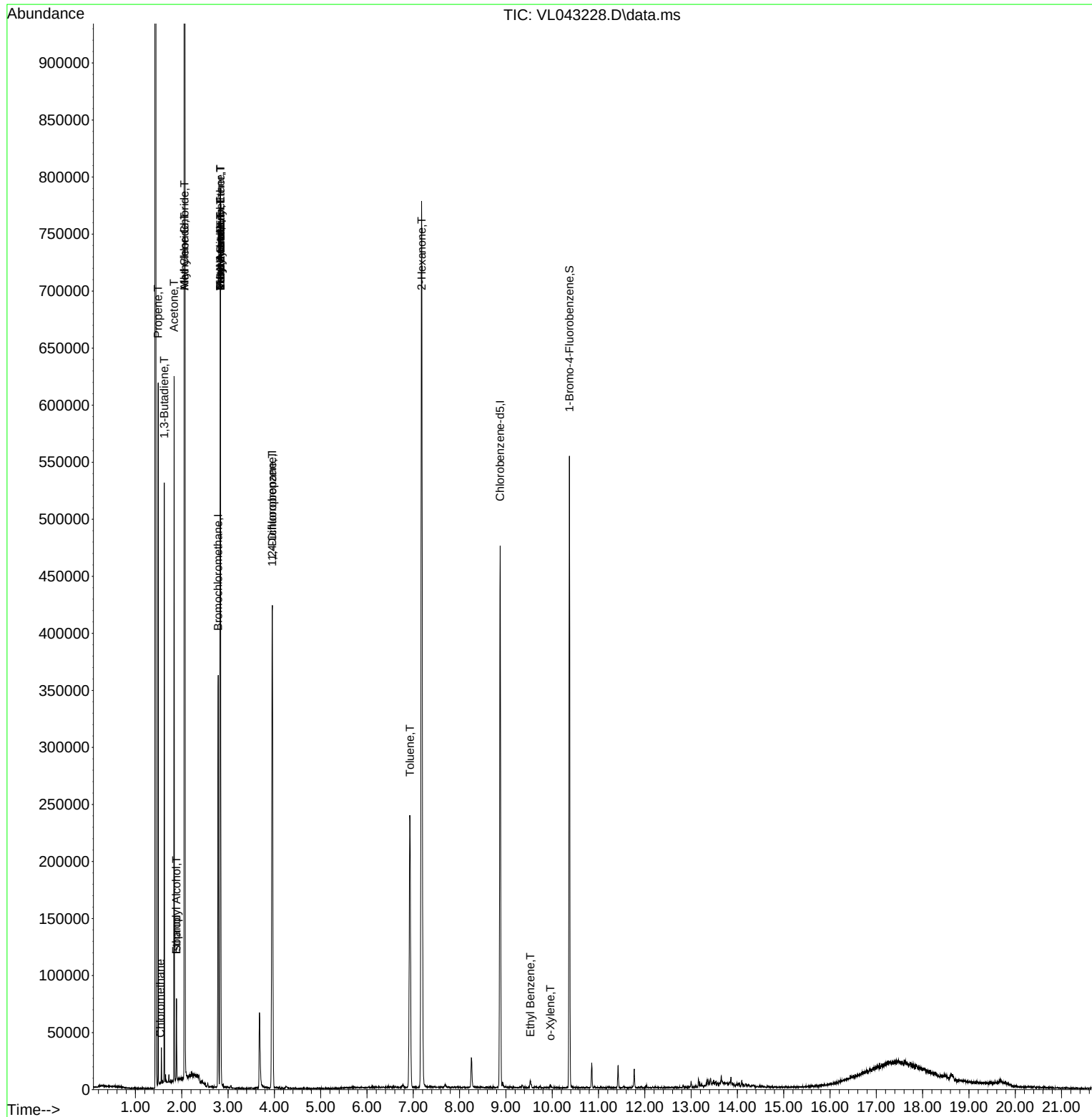
Internal Standards						
1) Bromochloromethane	2.787	49	94797	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.956	114	245185	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.876	117	185139	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.371	95	138351	10.195	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.900%
Target Compounds						
					Qvalue	
4) Chloromethane	1.538	50	225	0.045	ppbv #	85
9) Propene	1.490	41	37021	6.630	ppbv #	4
13) Ethanol	1.884	45	29431	14.990	ppbv #	38
15) Acetone	1.833	43	272097	20.660	ppbv	98
16) 1,3-Butadiene	1.622	39	25452	4.335	ppbv #	14
19) Isopropyl Alcohol	1.884	45	29431	3.955	ppbv #	1
20) Methylene Chloride	2.059	84	1349633	376.536	ppbv #	79
21) Allyl Chloride	2.059	41	52024	5.871	ppbv #	25
23) Vinyl Acetate	2.833	43	529396	33.295	ppbv #	89
25) Ethyl Acetate	2.833	43	529396	18.637	ppbv #	92
28) Methyl tert-Butyl Ether	2.833	73	22196	3.631	ppbv #	53
31) cis-1,2-Dichloroethene	2.833	61	63792	5.153	ppbv #	26
34) 2-Butanone	2.833	43	529396	30.588	ppbv #	53
39) 1,2-Dichloropropane	3.953	63	65291	7.597	ppbv #	25
41) Tetrahydrofuran	2.833	42	42960	4.495	ppbv #	42
51) 2-Hexanone	7.180	43	692507	36.578	ppbv #	29
53) Toluene	6.930	91	178574	6.423	ppbv	99
58) Ethyl Benzene	9.526	91	2716	0.076	ppbv	93
60) o-Xylene	9.960	91	971	0.034	ppbv	92

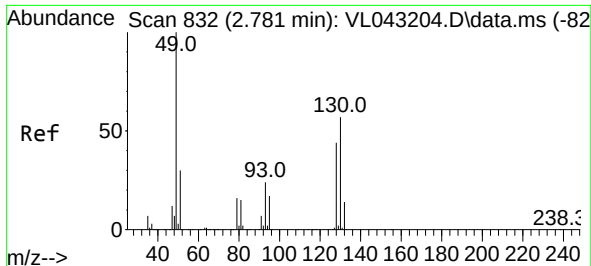
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111825\
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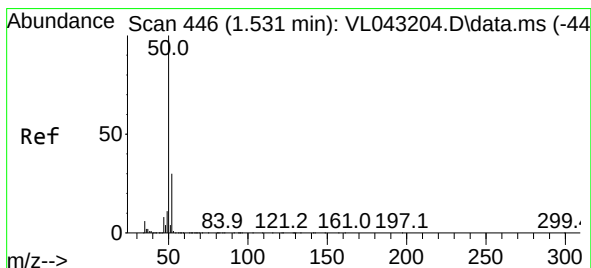
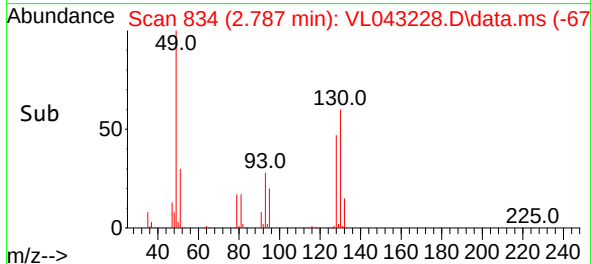
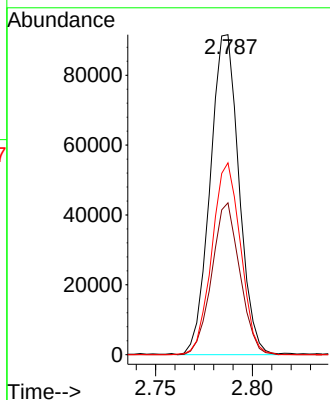
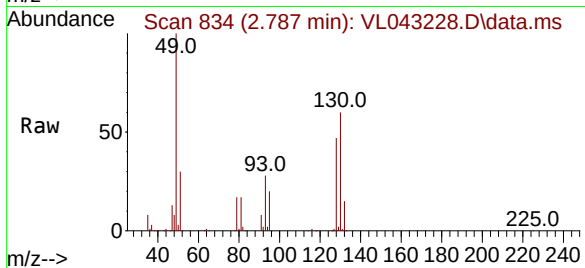




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 81
Delta R.T. 0.006 min
Lab File: VL043228.D
Acq: 18 Nov 2025 23:41

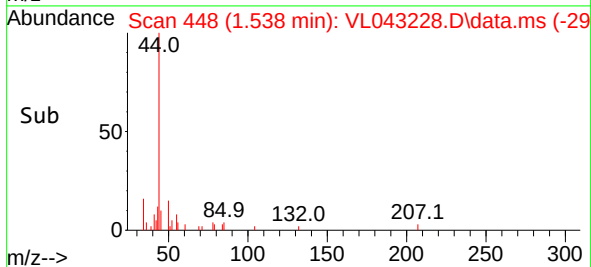
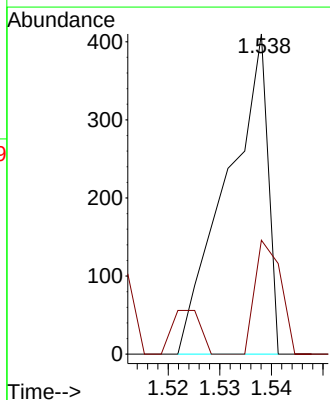
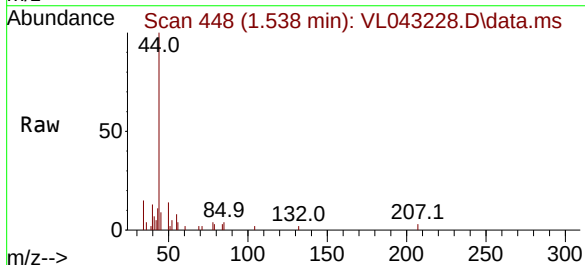
Instrument :
MSVOA_L
ClientSampleId :
IA1DL

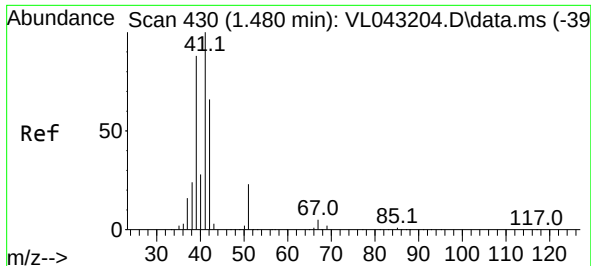
Tgt Ion: 49 Resp: 94797
Ion Ratio Lower Upper
49 100
128 46.1 23.0 69.0
130 59.5 29.9 89.7



#4
Chloromethane
Concen: 0.045 ppbv
RT: 1.538 min Scan# 448
Delta R.T. 0.007 min
Lab File: VL043228.D
Acq: 18 Nov 2025 23:41

Tgt Ion: 50 Resp: 225
Ion Ratio Lower Upper
50 100
52 22.0 24.1 36.1#





#9

Propene

Concen: 6.630 ppbv

RT: 1.490 min Scan# 41

Delta R.T. 0.010 min

Lab File: VL043228.D

Acq: 18 Nov 2025 23:41

Instrument :

MSVOA_L

ClientSampleId :

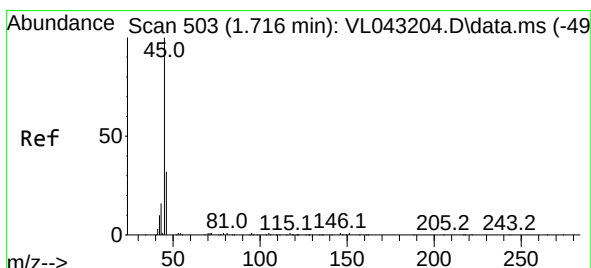
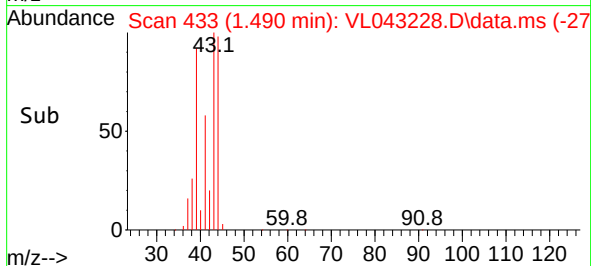
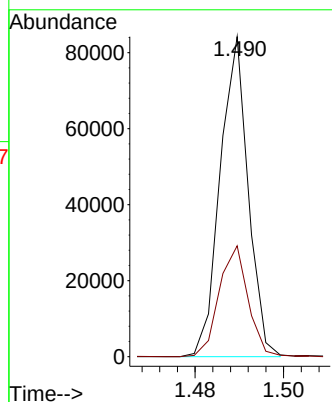
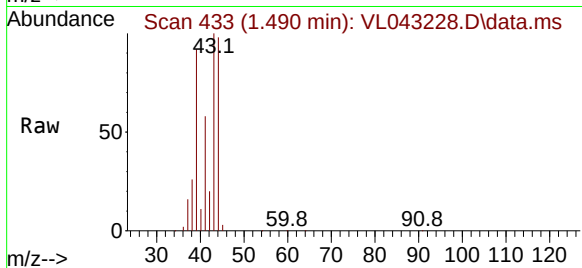
IA1DL

Tgt Ion: 41 Resp: 37021

Ion Ratio Lower Upper

41 100

42 36.3 3.7 5.5#



#13

Ethanol

Concen: 14.990 ppbv

RT: 1.884 min Scan# 555

Delta R.T. 0.168 min

Lab File: VL043228.D

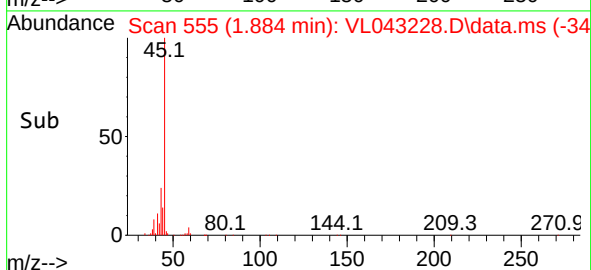
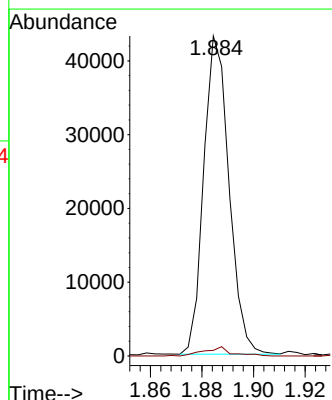
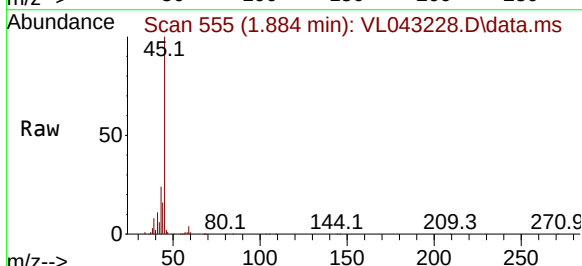
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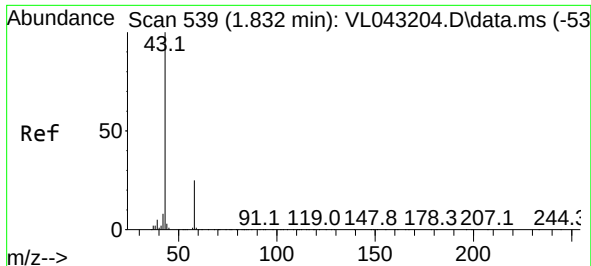
Tgt Ion: 45 Resp: 29431

Ion Ratio Lower Upper

45 100

46 0.0 15.0 59.8#

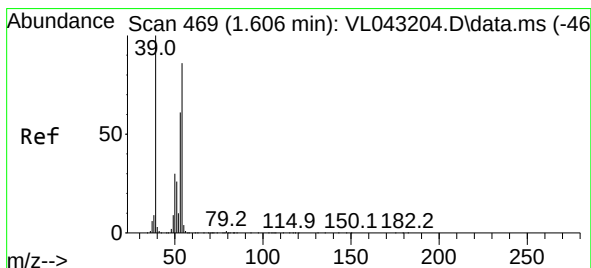
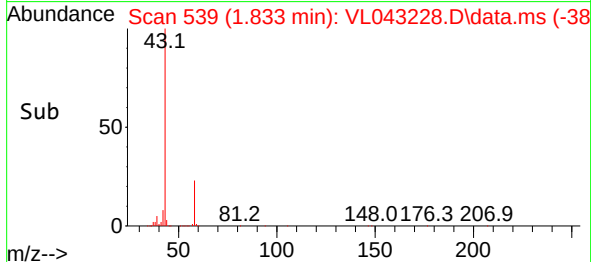
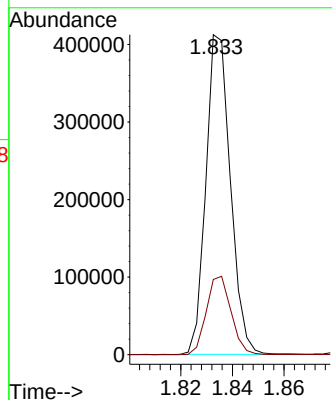
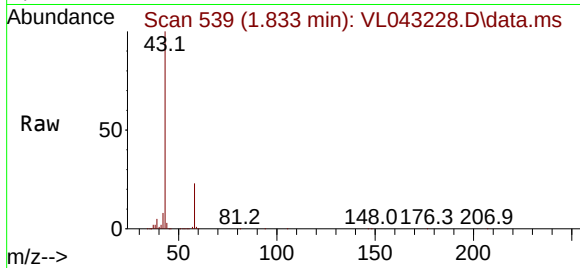




#15
Acetone
Concen: 20.660 ppbv
RT: 1.833 min Scan# 51
Delta R.T. 0.000 min
Lab File: VL043228.D
Acq: 18 Nov 2025 23:41

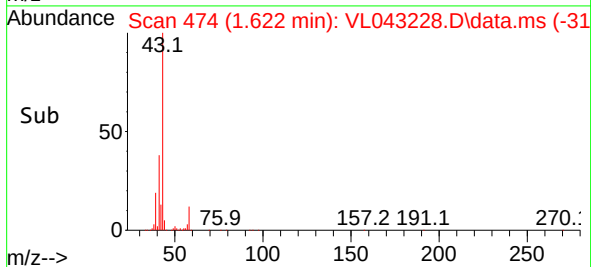
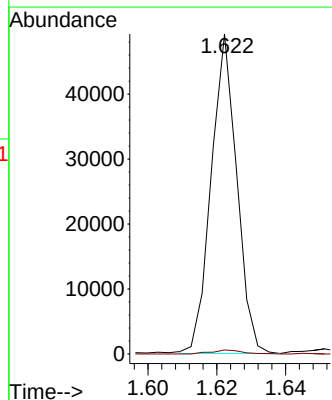
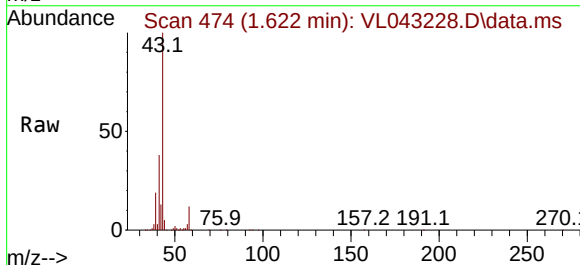
Instrument :
MSVOA_L
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IA1DL

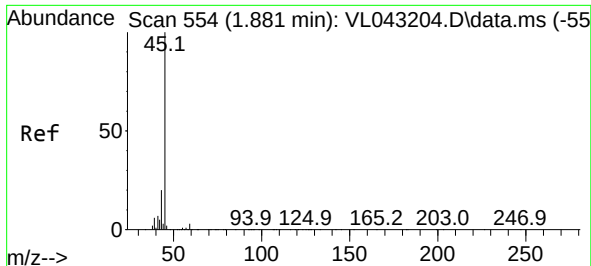
Tgt Ion: 43 Resp: 272097
Ion Ratio Lower Upper
43 100
58 24.7 20.7 31.1



#16
1,3-Butadiene
Concen: 4.335 ppbv
RT: 1.622 min Scan# 474
Delta R.T. 0.016 min
Lab File: VL043228.D
Acq: 18 Nov 2025 23:41

Tgt Ion: 39 Resp: 25452
Ion Ratio Lower Upper
39 100
54 1.6 59.4 89.2#

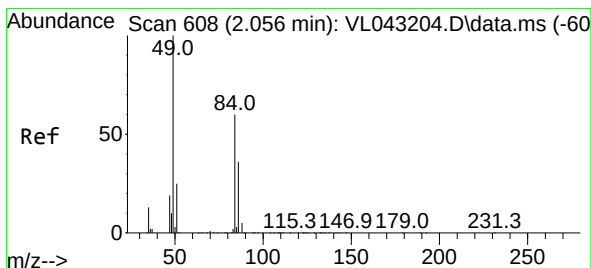
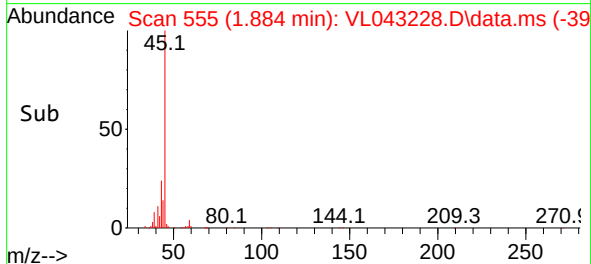
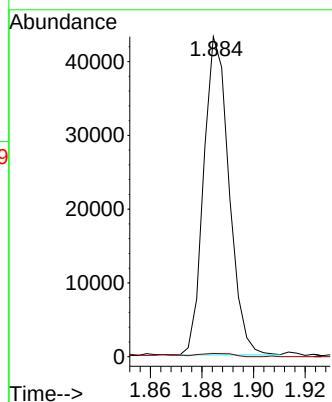
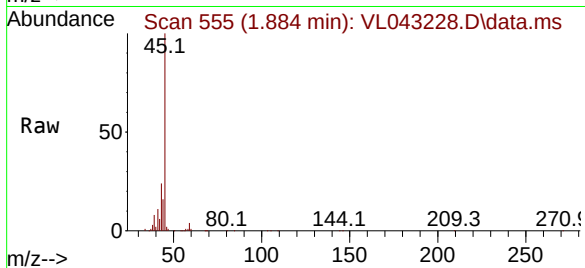




#19
Isopropyl Alcohol
Concen: 3.955 ppbv
RT: 1.884 min Scan# 511
Delta R.T. 0.003 min
Lab File: VL043228.D
Acq: 18 Nov 2025 23:41

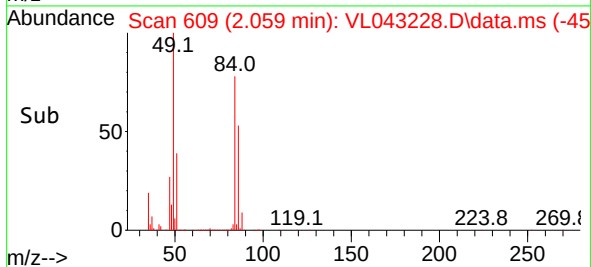
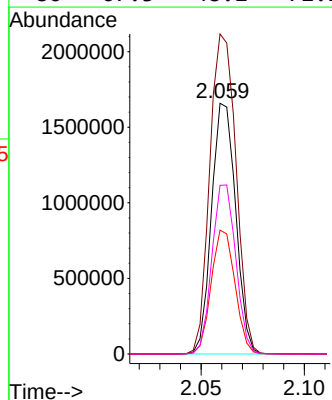
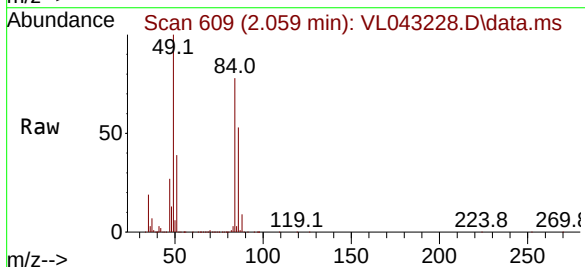
Instrument :
MSVOA_1
ClientSampleId :
IA1DL

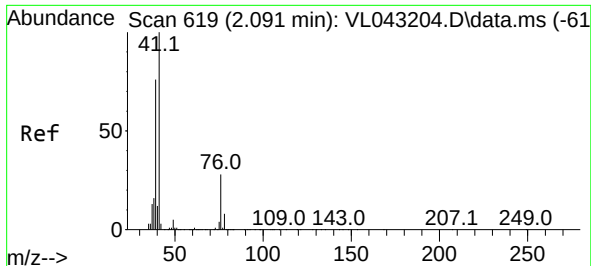
Tgt Ion: 45 Resp: 29431
Ion Ratio Lower Upper
45 100
58 228.6 31.3 46.9#



#20
Methylene Chloride
Concen: 376.536 ppbv
RT: 2.059 min Scan# 609
Delta R.T. 0.003 min
Lab File: VL043228.D
Acq: 18 Nov 2025 23:41

Tgt Ion: 84 Resp: 1349633
Ion Ratio Lower Upper
84 100
49 127.7 132.9 199.3#
51 49.4 34.8 52.2
86 67.3 48.2 72.2

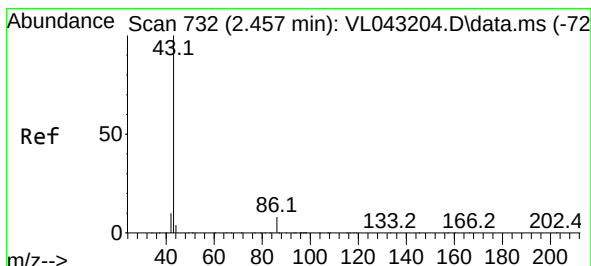
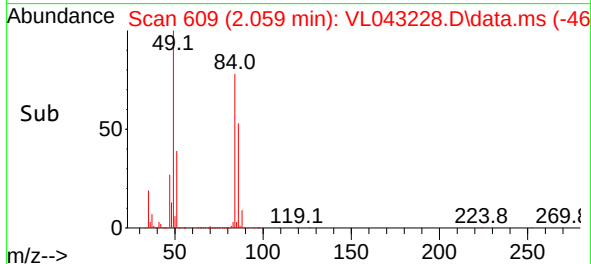
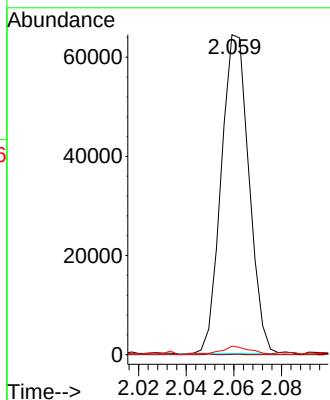
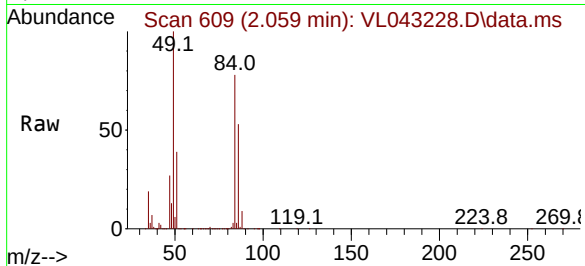




#21
 Allyl Chloride
 Concen: 5.871 ppbv
 RT: 2.059 min Scan# 619
 Delta R.T. -0.032 min
 Lab File: VL043228.D
 Acq: 18 Nov 2025 23:41

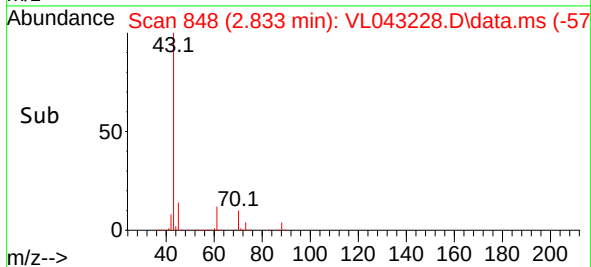
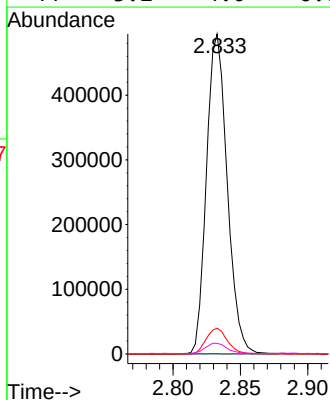
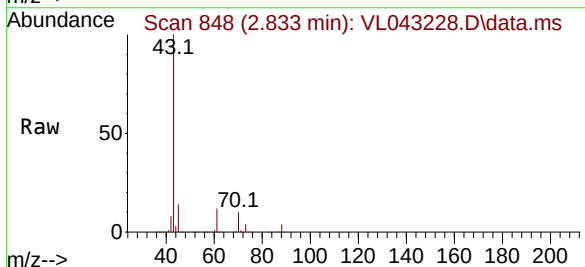
Instrument :
 MSVOA_1
 ClientSampleId :
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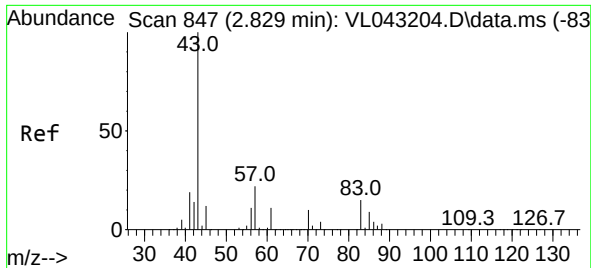
Tgt Ion: 41 Resp: 52024
 Ion Ratio Lower Upper
 41 100
 76 0.1 22.1 33.1#
 39 4.5 61.0 91.4#



#23
 Vinyl Acetate
 Concen: 33.295 ppbv
 RT: 2.833 min Scan# 848
 Delta R.T. 0.376 min
 Lab File: VL043228.D
 Acq: 18 Nov 2025 23:41

Tgt Ion: 43 Resp: 529396
 Ion Ratio Lower Upper
 43 100
 86 0.1 6.2 9.2#
 42 8.0 8.0 12.0
 44 3.2 4.0 6.0#

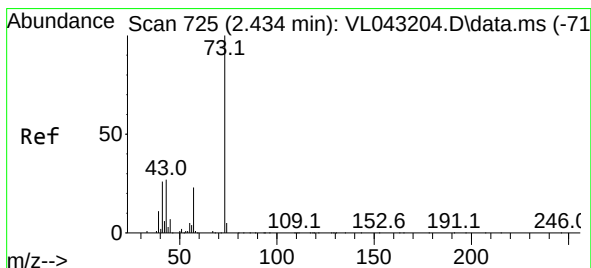
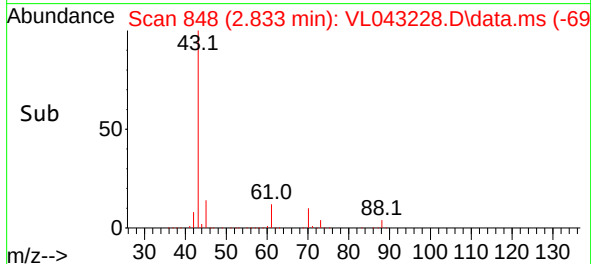
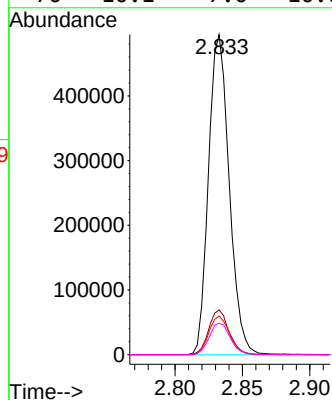
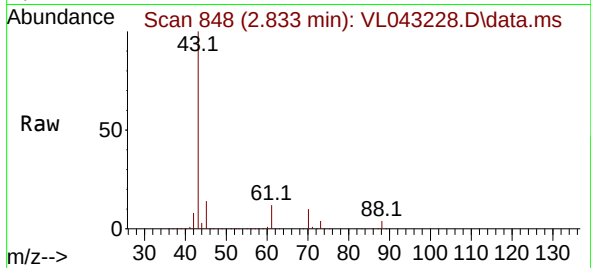




#25
Ethyl Acetate
Concen: 18.637 ppbv
RT: 2.833 min Scan# 848
Delta R.T. 0.003 min
Lab File: VL043228.D
Acq: 18 Nov 2025 23:41

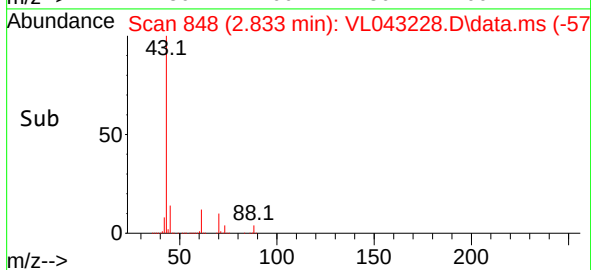
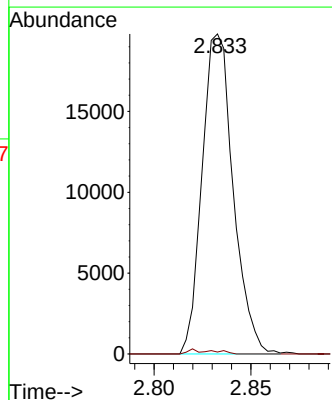
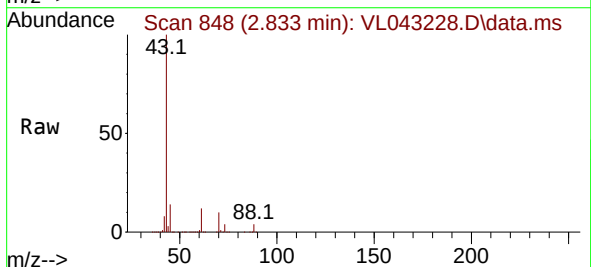
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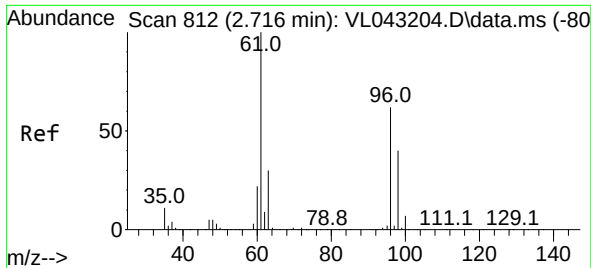
Tgt Ion: 43 Resp: 529396
Ion Ratio Lower Upper
43 100
45 13.7 8.1 12.1#
61 12.1 7.0 10.4#
70 10.1 7.0 10.6



#28
Methyl tert-Butyl Ether
Concen: 3.631 ppbv
RT: 2.833 min Scan# 848
Delta R.T. 0.398 min
Lab File: VL043228.D
Acq: 18 Nov 2025 23:41

Tgt Ion: 73 Resp: 22196
Ion Ratio Lower Upper
73 100
57 1.1 19.8 29.8#

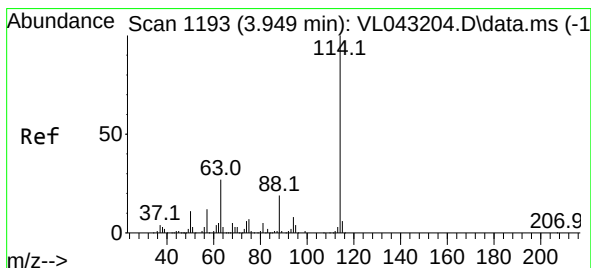
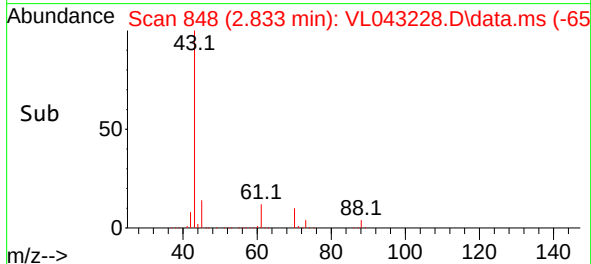
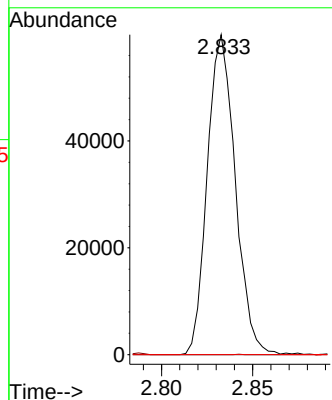
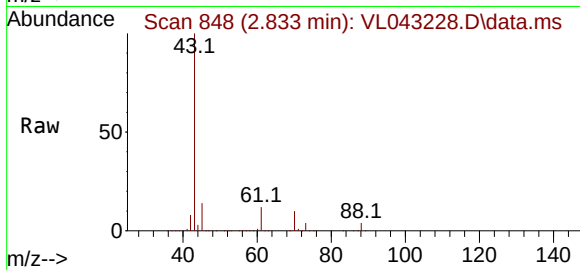




#31
 cis-1,2-Dichloroethene
 Concen: 5.153 ppbv
 RT: 2.833 min Scan# 84
 Delta R.T. 0.117 min
 Lab File: VL043228.D
 Acq: 18 Nov 2025 23:41

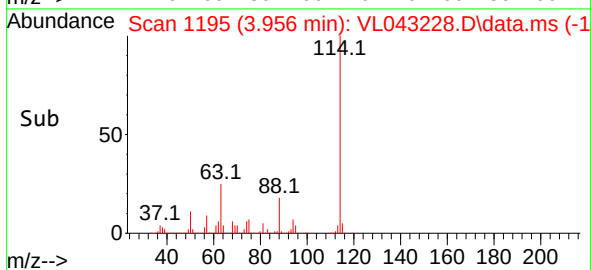
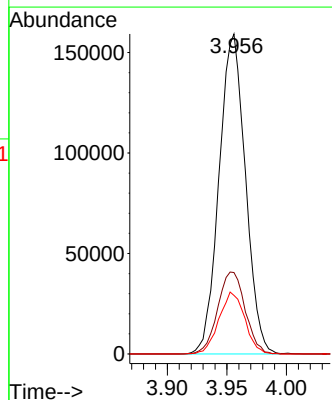
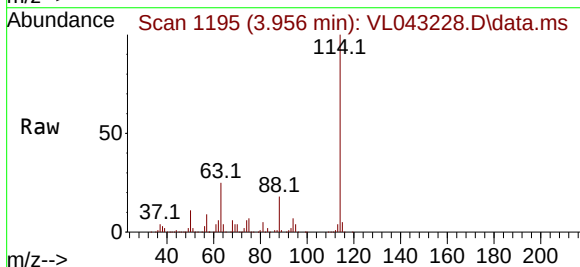
Instrument :
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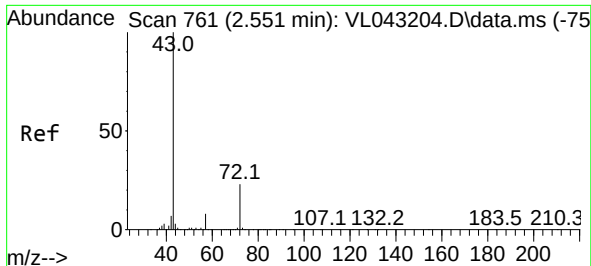
Tgt Ion: 61 Resp: 63792
 Ion Ratio Lower Upper
 61 100
 96 0.0 49.3 73.9#
 98 0.0 32.1 48.1#



#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 3.956 min Scan# 1195
 Delta R.T. 0.007 min
 Lab File: VL043228.D
 Acq: 18 Nov 2025 23:41

Tgt Ion: 114 Resp: 245185
 Ion Ratio Lower Upper
 114 100
 63 26.6 21.0 31.6
 88 19.0 14.9 22.3

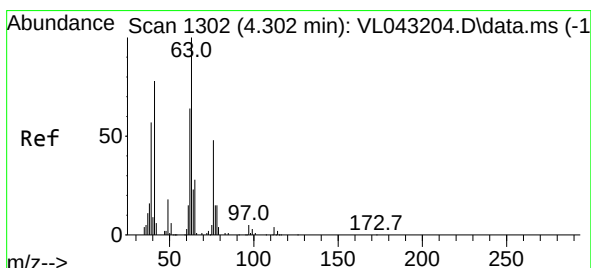
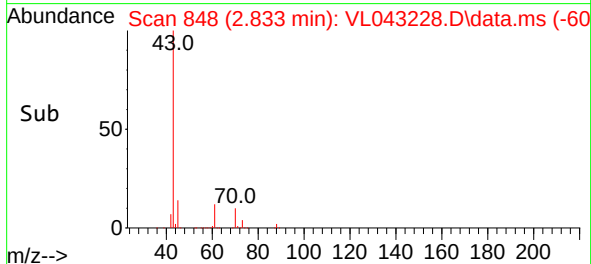
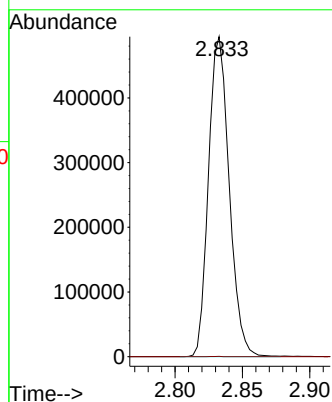
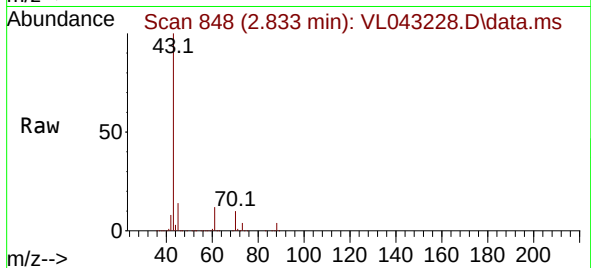




#34
2-Butanone
Concen: 30.588 ppbv
RT: 2.833 min Scan# 84
Delta R.T. 0.282 min
Lab File: VL043228.D
Acq: 18 Nov 2025 23:41

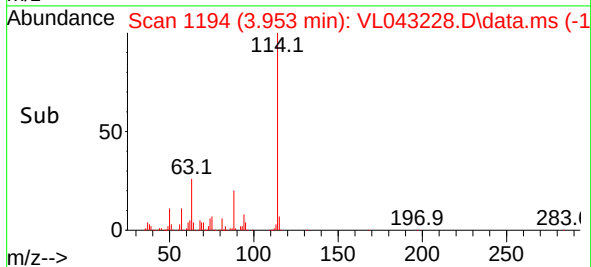
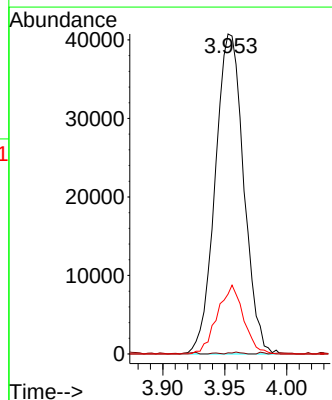
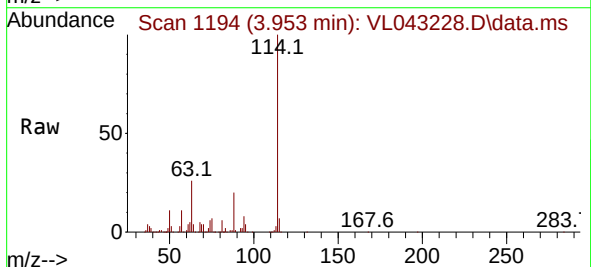
Instrument :
MSVOA_L
ClientSampleId :
IA1DL

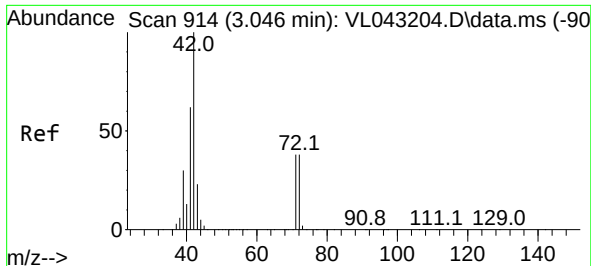
Tgt Ion: 43 Resp: 529396
Ion Ratio Lower Upper
43 100
72 0.0 18.1 27.1#



#39
1,2-Dichloropropane
Concen: 7.597 ppbv
RT: 3.953 min Scan# 1194
Delta R.T. -0.349 min
Lab File: VL043228.D
Acq: 18 Nov 2025 23:41

Tgt Ion: 63 Resp: 65291
Ion Ratio Lower Upper
63 100
41 0.4 62.6 93.8#
62 18.7 51.0 76.6#

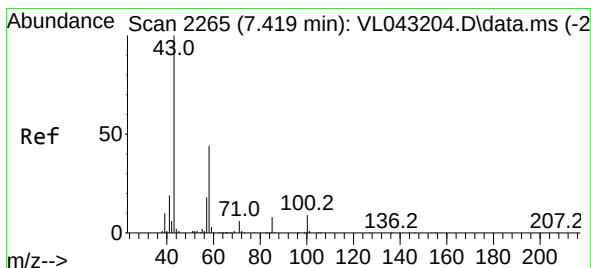
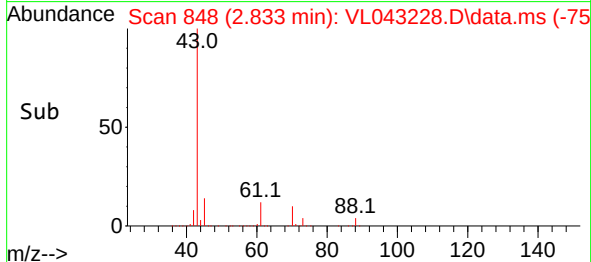
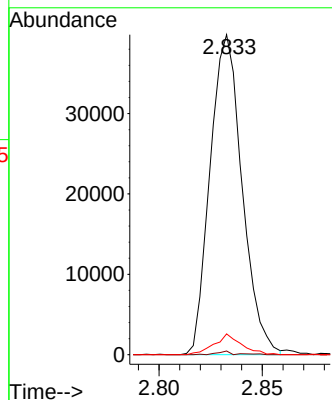
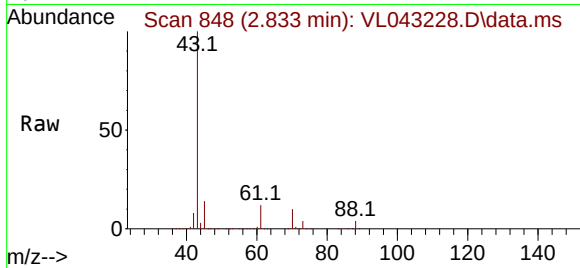




#41
Tetrahydrofuran
Concen: 4.495 ppbv
RT: 2.833 min Scan# 84
Delta R.T. -0.213 min
Lab File: VL043228.D
Acq: 18 Nov 2025 23:41

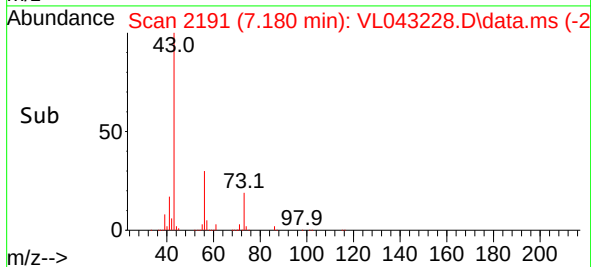
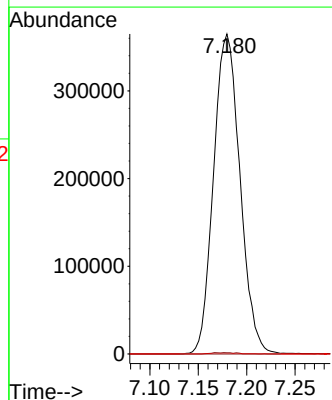
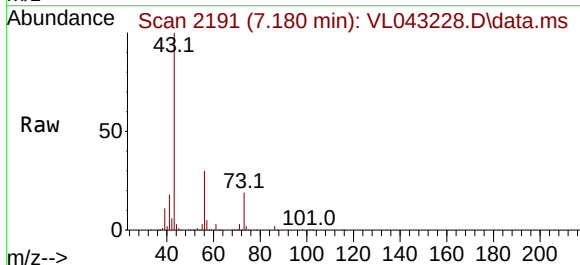
Instrument :
MSVOA_L
ClientSampleId :
IA1DL

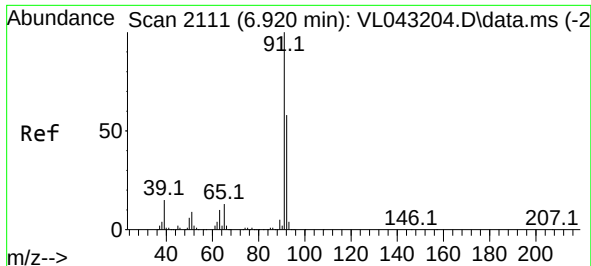
Tgt Ion: 42 Resp: 42960
Ion Ratio Lower Upper
42 100
72 0.6 30.6 46.0#
71 5.5 30.5 45.7#



#51
2-Hexanone
Concen: 36.578 ppbv
RT: 7.180 min Scan# 2191
Delta R.T. -0.239 min
Lab File: VL043228.D
Acq: 18 Nov 2025 23:41

Tgt Ion: 43 Resp: 692507
Ion Ratio Lower Upper
43 100
58 0.4 38.4 57.6#
98 0.0 0.0 0.0

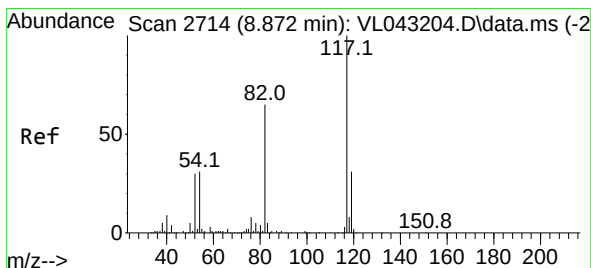
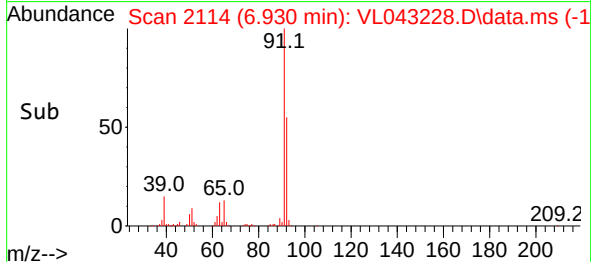
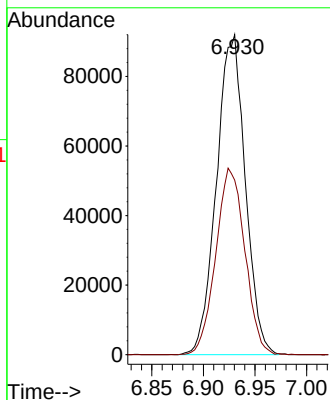
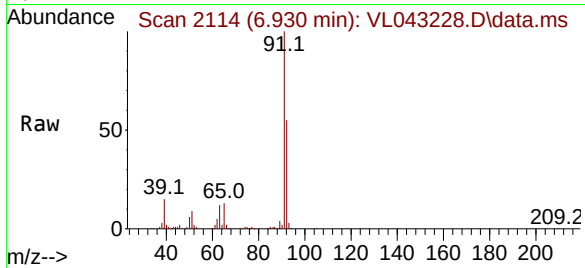




#53
Toluene
Concen: 6.423 ppbv
RT: 6.930 min Scan# 2111
Delta R.T. 0.010 min
Lab File: VL043228.D
Acq: 18 Nov 2025 23:41

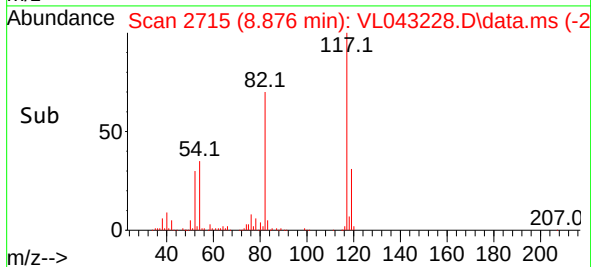
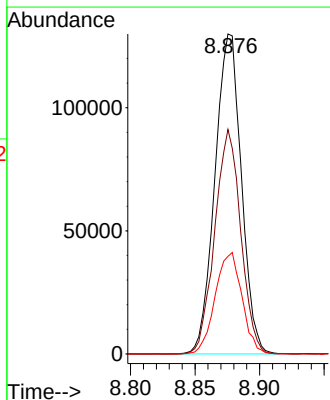
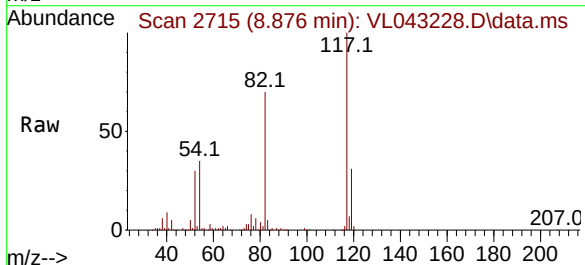
Instrument :
MSVOA_L
ClientSampleId :
IA1DL

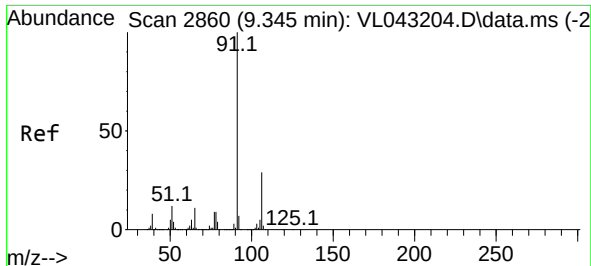
Tgt Ion: 91 Resp: 178574
Ion Ratio Lower Upper
91 100
92 58.8 47.4 71.0



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.876 min Scan# 2715
Delta R.T. 0.003 min
Lab File: VL043228.D
Acq: 18 Nov 2025 23:41

Tgt Ion: 117 Resp: 185139
Ion Ratio Lower Upper
117 100
82 69.0 56.1 84.1
119 32.2 25.0 37.6





#58

Ethyl Benzene

Concen: 0.076 ppbv

RT: 9.526 min Scan# 2916

Delta R.T. 0.181 min

Lab File: VL043228.D

Acq: 18 Nov 2025 23:41

Instrument :

MSVOA_L

ClientSampleId :

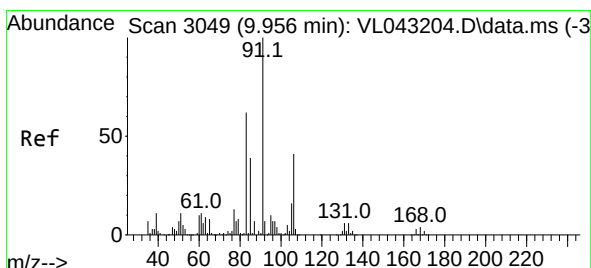
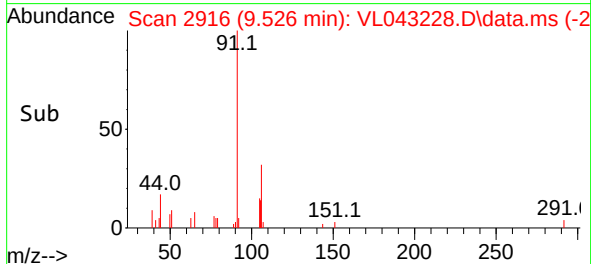
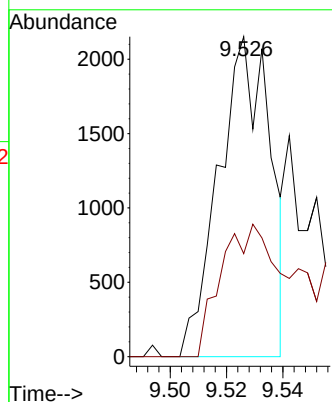
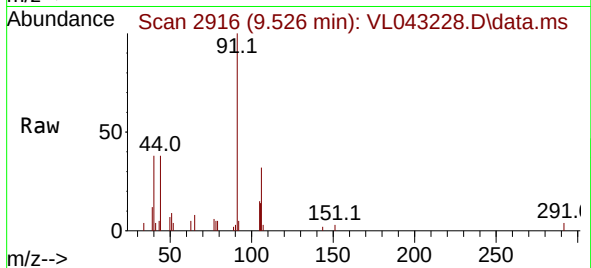
IA1DL

Tgt Ion: 91 Resp: 2716

Ion Ratio Lower Upper

91 100

106 32.2 22.8 34.2



#60

o-Xylene

Concen: 0.034 ppbv

RT: 9.960 min Scan# 3050

Delta R.T. 0.003 min

Lab File: VL043228.D

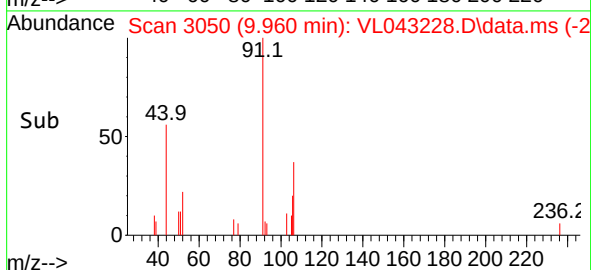
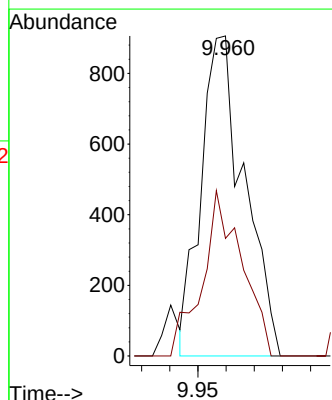
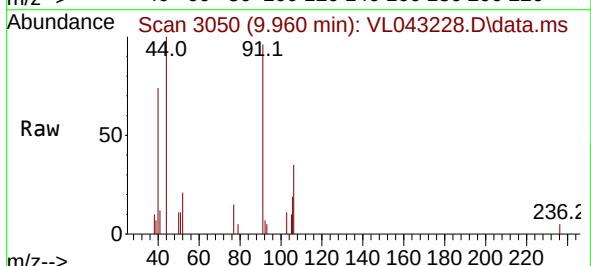
Acq: 18 Nov 2025 23:41

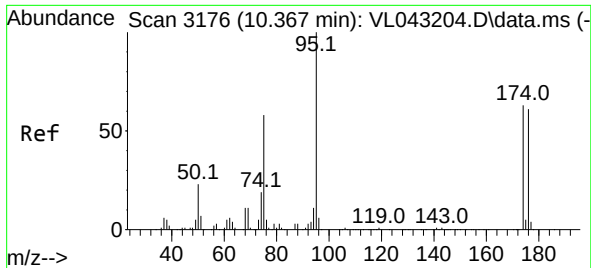
Tgt Ion: 91 Resp: 971

Ion Ratio Lower Upper

91 100

106 47.1 20.9 62.8





#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.195 ppbv
 RT: 10.371 min Scan# 31
 Delta R.T. 0.003 min
 Lab File: VL043228.D
 Acq: 18 Nov 2025 23:41

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1DL

Tgt Ion: 95 Resp: 138351
 Ion Ratio Lower Upper
 95 100
 174 58.0 50.2 75.2
 175 4.5 4.1 6.1

