

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111825\
 Data File : VL043227.D
 Acq On : 18 Nov 2025 23:09
 Operator : SY/MD
 Sample : Q3651-03DL 20X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1DL

Quant Time: Nov 19 01:42:06 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

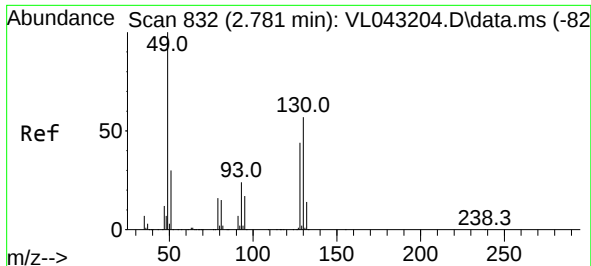
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	2.784	49	97499	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	252986	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.875	117	194710	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.368	95	143516	10.056	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	= 100.600%	
Target Compounds						
					Qvalue	
3) Chlorodifluoromethane	1.467	51	531	0.039	ppbv #	83
4) Chloromethane	1.531	50	318	0.062	ppbv #	68
9) Propene	1.486	41	76968	13.402	ppbv #	13
13) Ethanol	1.719	45	3837	1.900	ppbv #	38
15) Acetone	1.832	43	534562	39.463	ppbv	100
16) 1,3-Butadiene	1.622	39	50940	8.435	ppbv #	15
18) 1,1-Dichloroethene	2.030	96	203	0.042	ppbv #	48
19) Isopropyl Alcohol	1.884	45	62095	8.112	ppbv #	1
20) Methylene Chloride	2.059	84	2076011	563.561	ppbv #	68
21) Allyl Chloride	2.059	41	85816	9.416	ppbv #	21
23) Vinyl Acetate	2.829	43	1059250	64.773	ppbv #	89
25) Ethyl Acetate	2.829	43	1059250	36.257	ppbv #	92
28) Methyl tert-Butyl Ether	2.833	73	46898	7.459	ppbv #	53
31) cis-1,2-Dichloroethene	2.829	61	129103	10.140	ppbv #	26
34) 2-Butanone	2.829	43	1059250	59.315	ppbv #	53
39) 1,2-Dichloropropane	3.952	63	67728	7.638	ppbv #	25
41) Tetrahydrofuran	3.056	42	1131	0.115	ppbv #	37
51) 2-Hexanone	7.179	43	1435410	73.479	ppbv #	29
53) Toluene	6.924	91	373472	13.018	ppbv	99
58) Ethyl Benzene	9.354	91	1413	0.038	ppbv	97
59) m/p-Xylene	9.529	91	5041	0.168	ppbv #	56
60) o-Xylene	9.956	91	2379	0.079	ppbv	91

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

Quant Time: Nov 19 01:42:06 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
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 2.784 min Scan# 81

Delta R.T. 0.003 min

Lab File: VL043227.D

Acq: 18 Nov 2025 23:09

Instrument :

MSVOA_L

ClientSampleId :

IA1DL

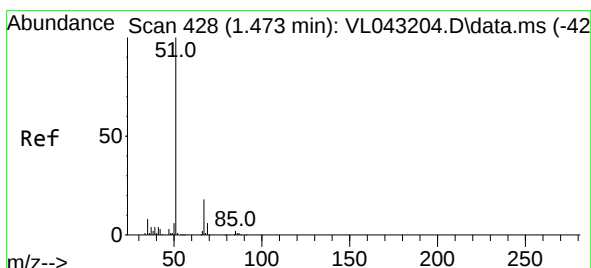
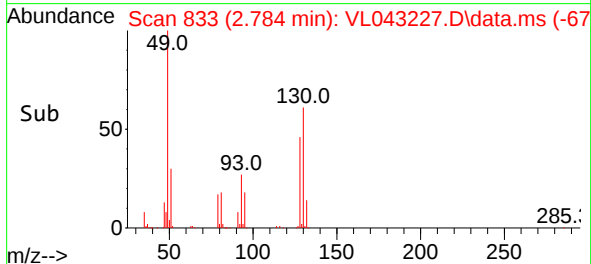
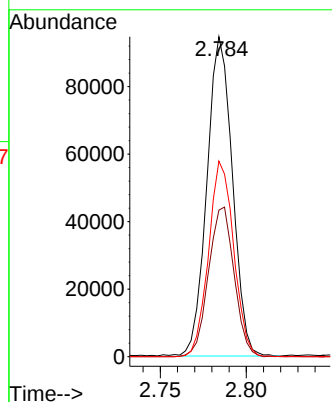
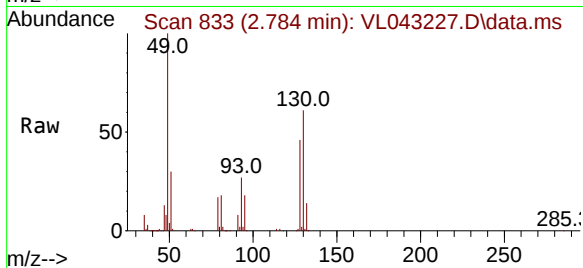
Tgt Ion: 49 Resp: 97499

Ion Ratio Lower Upper

49 100

128 47.1 23.0 69.0

130 60.4 29.9 89.7



#3

Chlorodifluoromethane

Concen: 0.039 ppbv

RT: 1.467 min Scan# 426

Delta R.T. -0.006 min

Lab File: VL043227.D

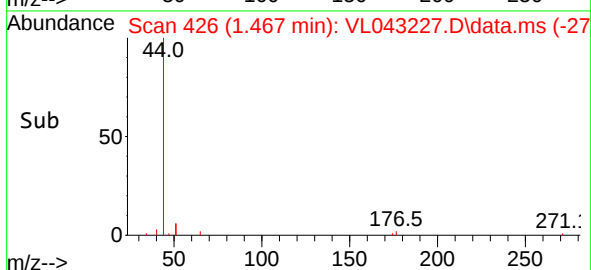
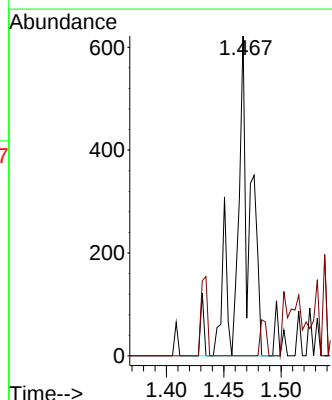
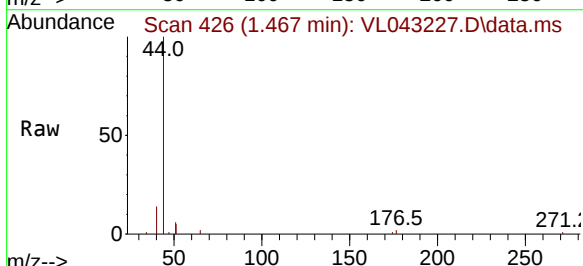
Acq: 18 Nov 2025 23:09

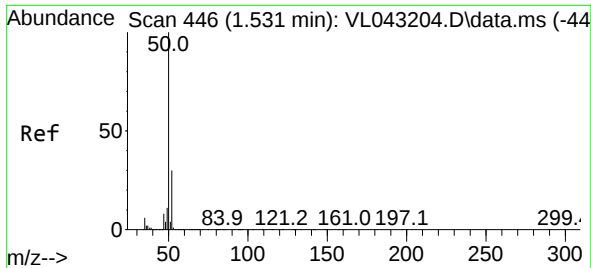
Tgt Ion: 51 Resp: 531

Ion Ratio Lower Upper

51 100

67 10.9 14.9 22.3#

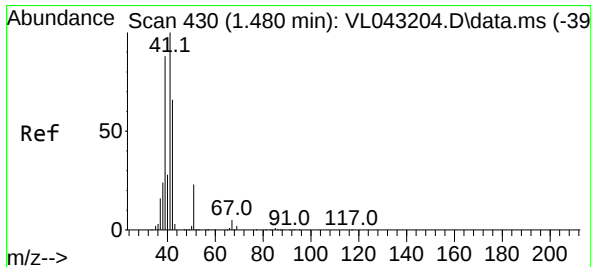
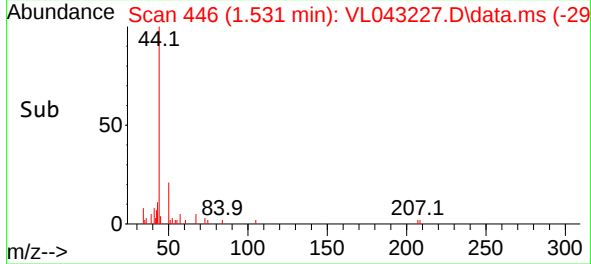
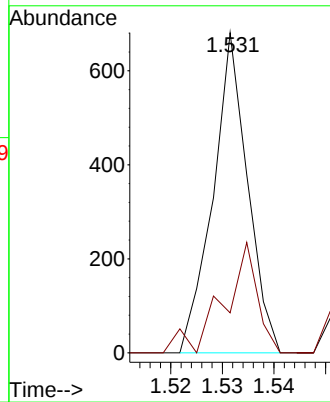
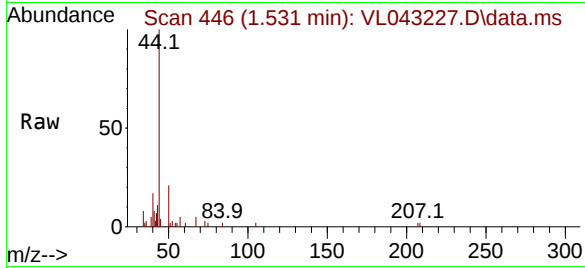




#4
Chloromethane
Concen: 0.062 ppbv
RT: 1.531 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL043227.D
Acq: 18 Nov 2025 23:09

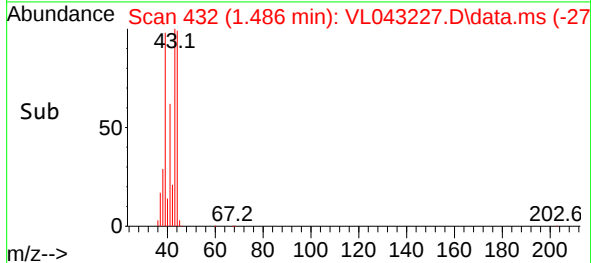
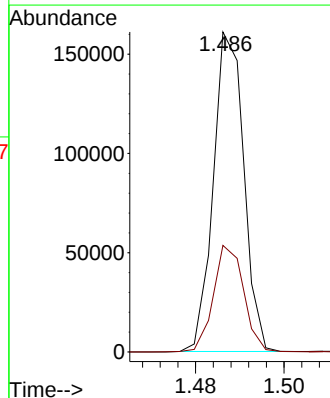
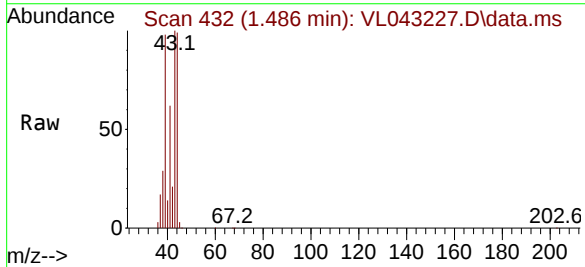
Instrument :
MSVOA_L
ClientSampleId :
IA1DL

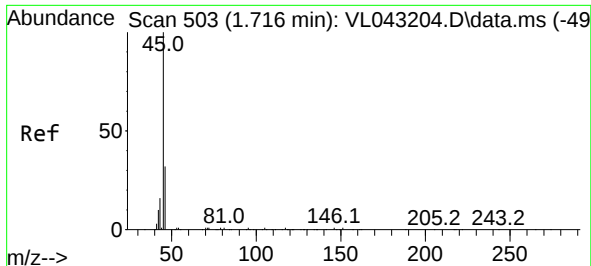
Tgt Ion: 50 Resp: 318
Ion Ratio Lower Upper
50 100
52 12.5 24.1 36.1#



#9
Propene
Concen: 13.402 ppbv
RT: 1.486 min Scan# 432
Delta R.T. 0.007 min
Lab File: VL043227.D
Acq: 18 Nov 2025 23:09

Tgt Ion: 41 Resp: 76968
Ion Ratio Lower Upper
41 100
42 33.4 3.7 5.5#

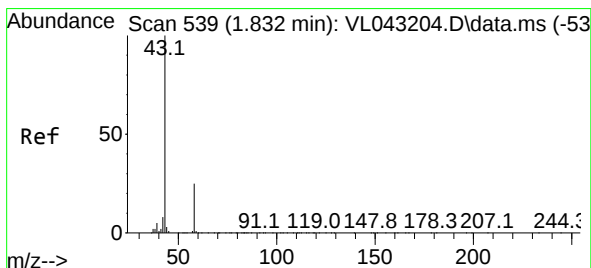
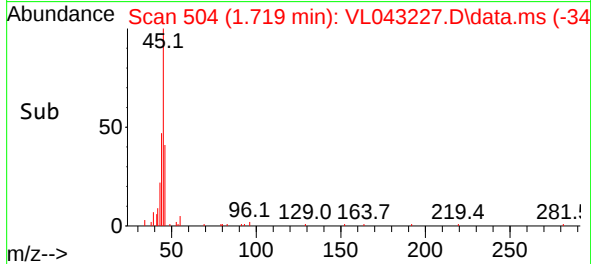
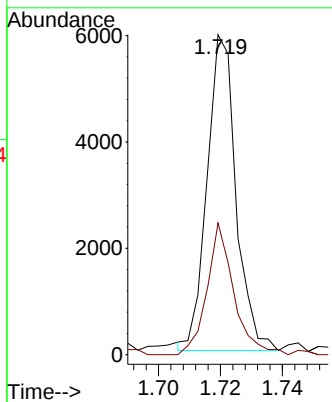
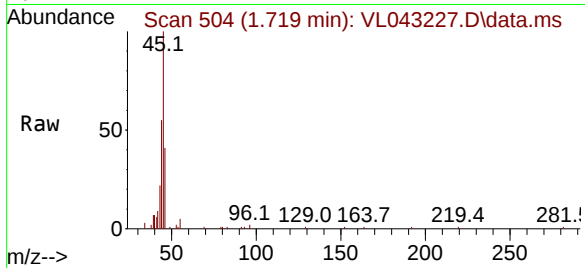




#13
 Ethanol
 Concen: 1.900 ppbv
 RT: 1.719 min Scan# 503
 Delta R.T. 0.003 min
 Lab File: VL043227.D
 Acq: 18 Nov 2025 23:09

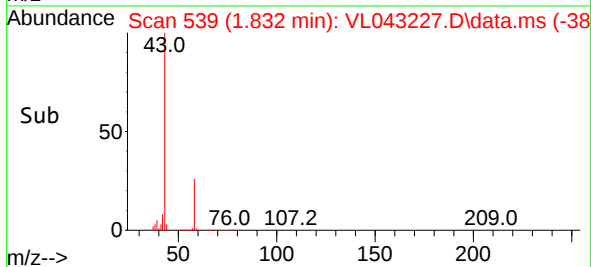
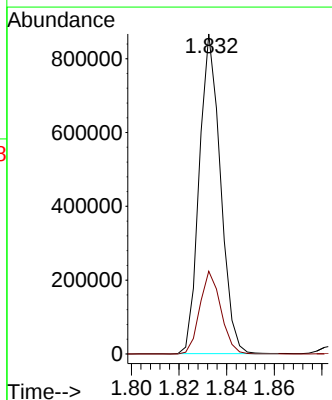
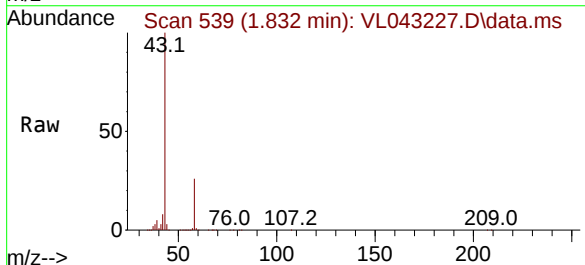
Instrument :
 MSVOA_L
 ClientSampleId :
 IA1DL

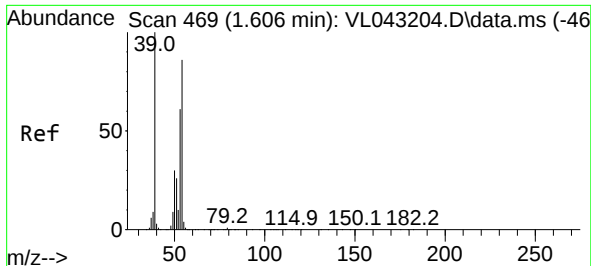
Tgt Ion: 45 Resp: 3837
 Ion Ratio Lower Upper
 45 100
 46 0.0 15.0 59.8#



#15
 Acetone
 Concen: 39.463 ppbv
 RT: 1.832 min Scan# 539
 Delta R.T. 0.000 min
 Lab File: VL043227.D
 Acq: 18 Nov 2025 23:09

Tgt Ion: 43 Resp: 534562
 Ion Ratio Lower Upper
 43 100
 58 25.8 20.7 31.1





#16

1,3-Butadiene

Concen: 8.435 ppbv

RT: 1.622 min Scan# 41

Delta R.T. 0.016 min

Lab File: VL043227.D

Acq: 18 Nov 2025 23:09

Instrument :

MSVOA_L

ClientSampleId :

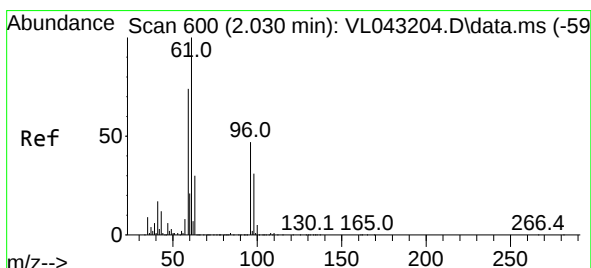
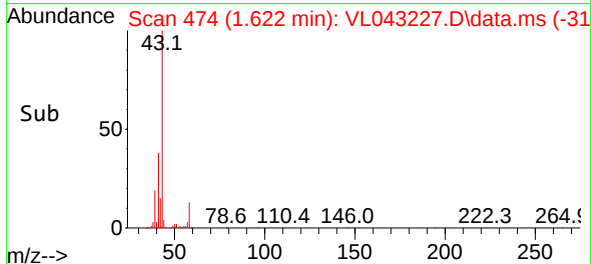
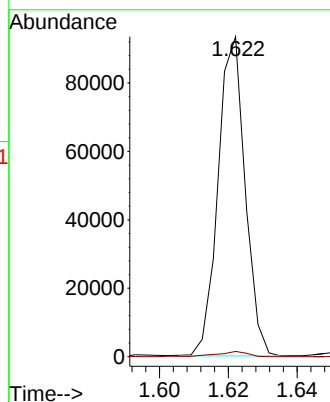
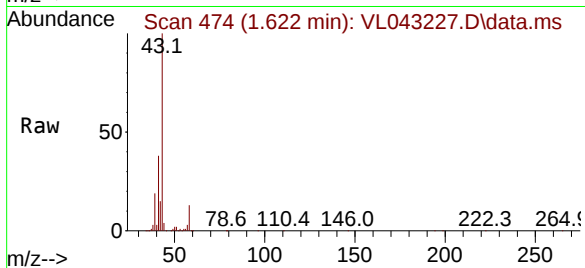
IA1DL

Tgt Ion: 39 Resp: 50940

Ion Ratio Lower Upper

39 100

54 2.0 59.4 89.2#



#18

1,1-Dichloroethene

Concen: 0.042 ppbv

RT: 2.030 min Scan# 600

Delta R.T. 0.000 min

Lab File: VL043227.D

Acq: 18 Nov 2025 23:09

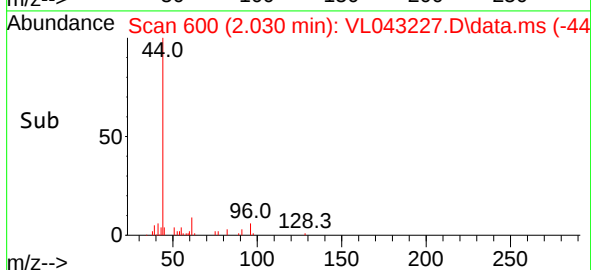
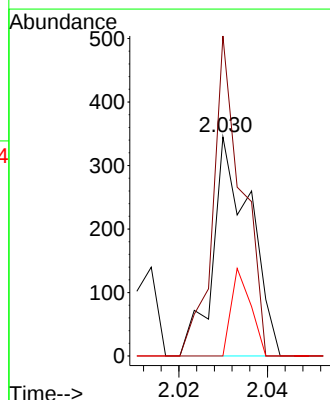
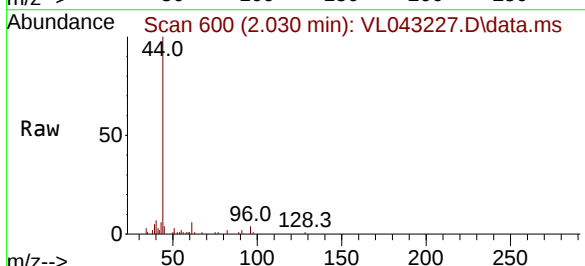
Tgt Ion: 96 Resp: 203

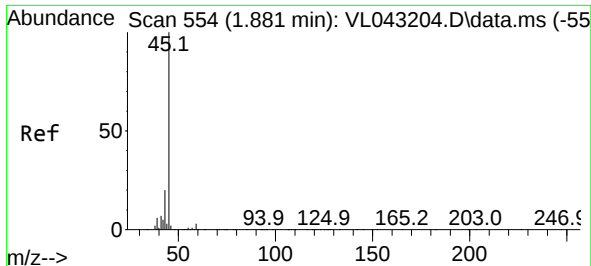
Ion Ratio Lower Upper

96 100

61 146.1 170.6 255.8#

98 0.0 52.2 78.4#

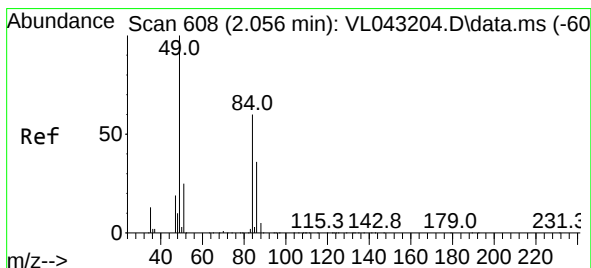
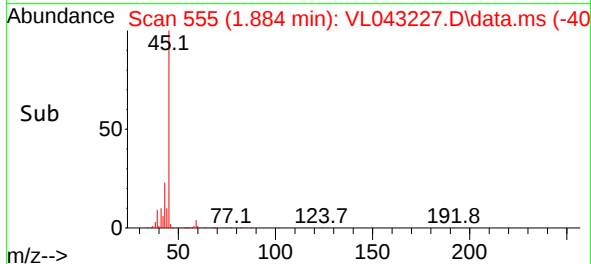
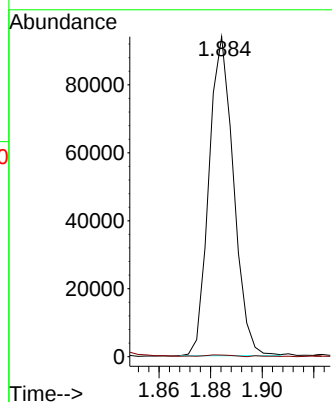
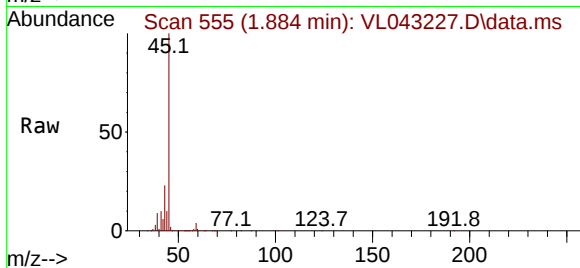




#19
Isopropyl Alcohol
Concen: 8.112 ppbv
RT: 1.884 min Scan# 511
Delta R.T. 0.003 min
Lab File: VL043227.D
Acq: 18 Nov 2025 23:09

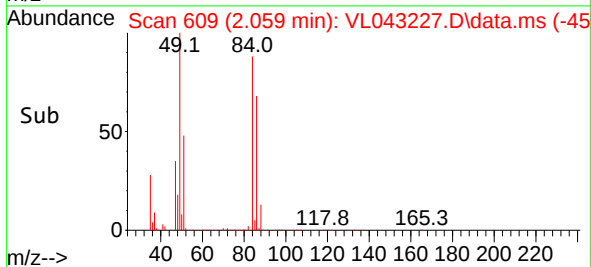
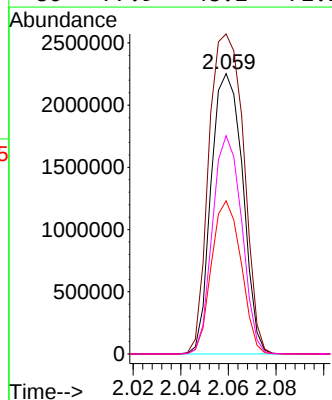
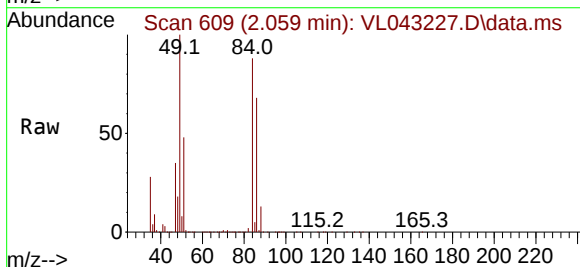
Instrument :
MSVOA_L
ClientSampleId :
IA1DL

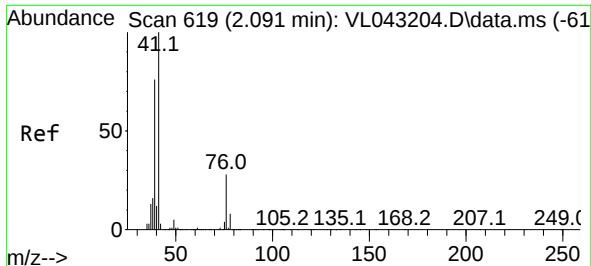
Tgt Ion: 45 Resp: 62095
Ion Ratio Lower Upper
45 100
58 221.7 31.3 46.9#



#20
Methylene Chloride
Concen: 563.561 ppbv
RT: 2.059 min Scan# 609
Delta R.T. 0.003 min
Lab File: VL043227.D
Acq: 18 Nov 2025 23:09

Tgt Ion: 84 Resp: 2076011
Ion Ratio Lower Upper
84 100
49 114.2 132.9 199.3#
51 54.6 34.8 52.2#
86 77.9 48.2 72.2#

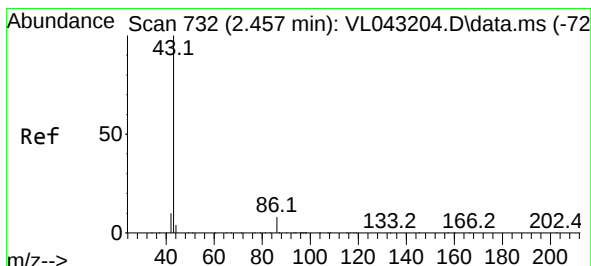
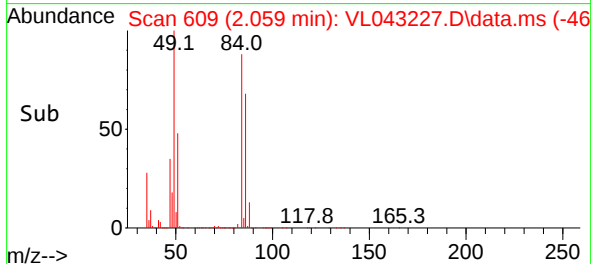
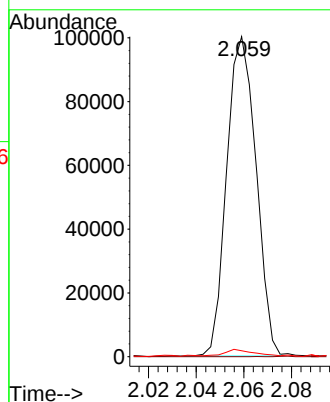
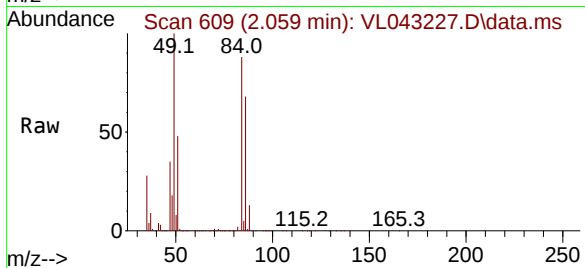




#21
 Allyl Chloride
 Concen: 9.416 ppbv
 RT: 2.059 min Scan# 619
 Delta R.T. -0.032 min
 Lab File: VL043227.D
 Acq: 18 Nov 2025 23:09

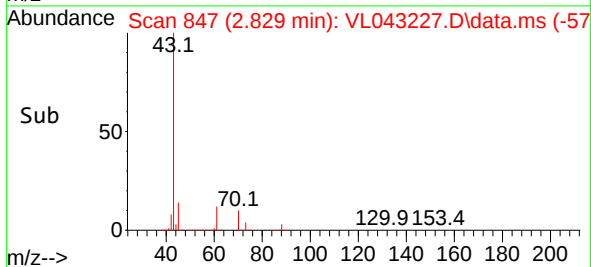
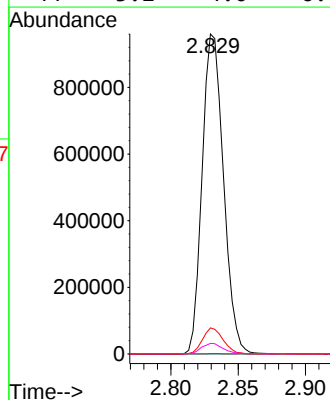
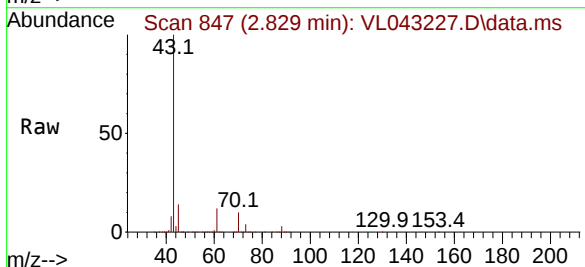
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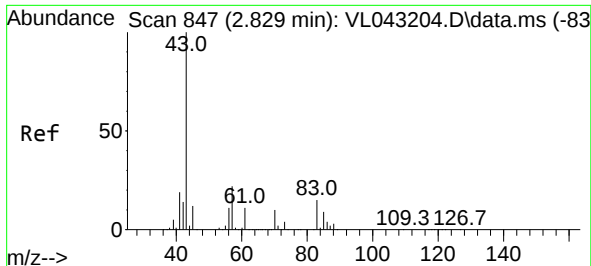
Tgt Ion: 41 Resp: 85816
 Ion Ratio Lower Upper
 41 100
 76 0.1 22.1 33.1#
 39 0.0 61.0 91.4#



#23
 Vinyl Acetate
 Concen: 64.773 ppbv
 RT: 2.829 min Scan# 847
 Delta R.T. 0.372 min
 Lab File: VL043227.D
 Acq: 18 Nov 2025 23:09

Tgt Ion: 43 Resp: 1059250
 Ion Ratio Lower Upper
 43 100
 86 0.0 6.2 9.2#
 42 8.1 8.0 12.0
 44 3.2 4.0 6.0#

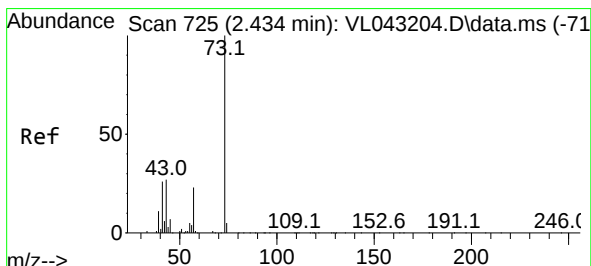
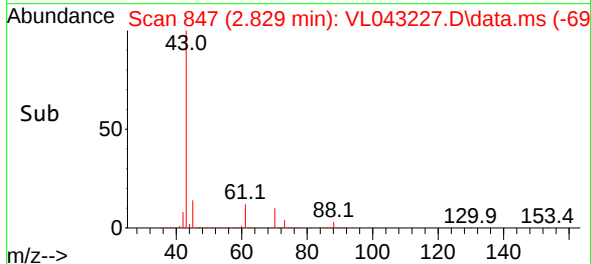
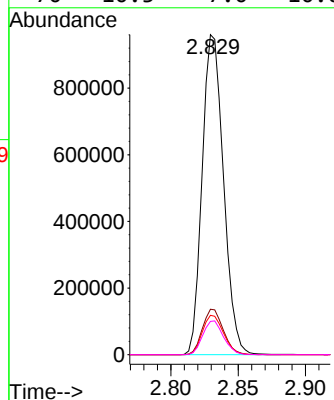
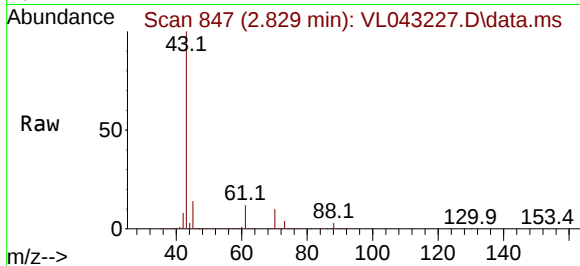




#25
Ethyl Acetate
Concen: 36.257 ppbv
RT: 2.829 min Scan# 847
Delta R.T. 0.000 min
Lab File: VL043227.D
Acq: 18 Nov 2025 23:09

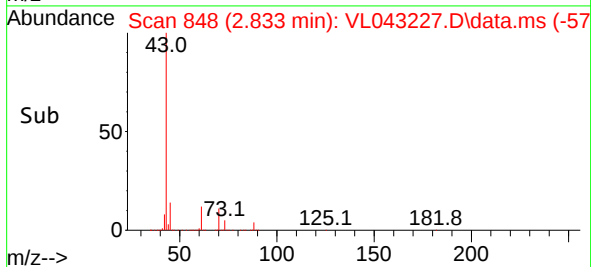
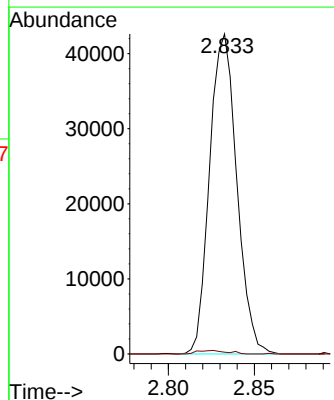
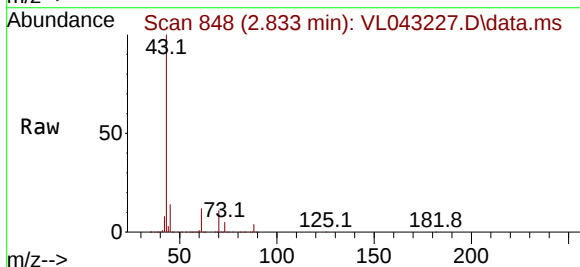
Instrument :
MSVOA_1
ClientSampleId :
IA1DL

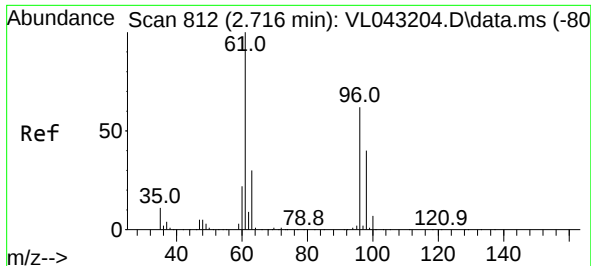
Tgt Ion: 43 Resp: 1059250
Ion Ratio Lower Upper
43 100
45 13.9 8.1 12.1#
61 12.2 7.0 10.4#
70 10.3 7.0 10.6



#28
Methyl tert-Butyl Ether
Concen: 7.459 ppbv
RT: 2.833 min Scan# 848
Delta R.T. 0.398 min
Lab File: VL043227.D
Acq: 18 Nov 2025 23:09

Tgt Ion: 73 Resp: 46898
Ion Ratio Lower Upper
73 100
57 1.2 19.8 29.8#

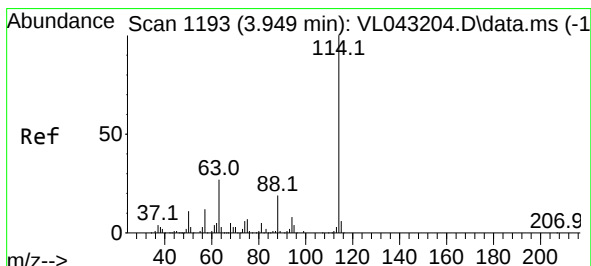
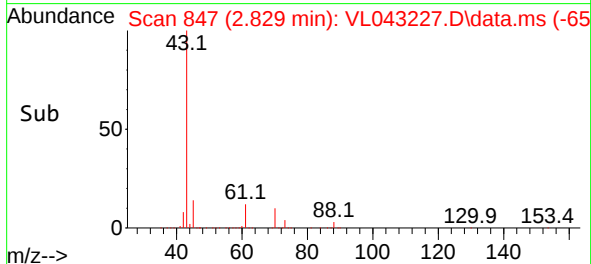
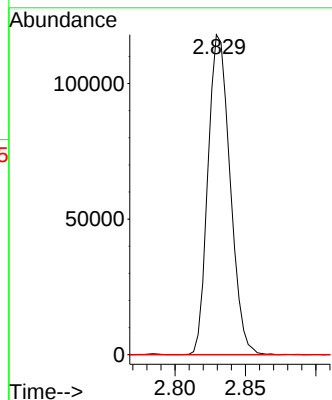
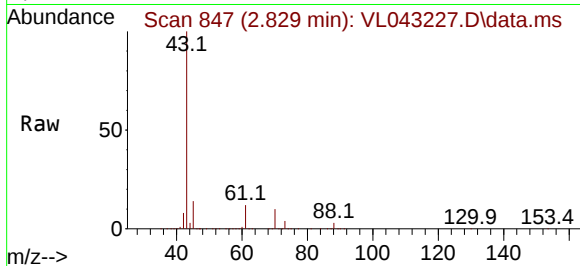




#31
 cis-1,2-Dichloroethene
 Concen: 10.140 ppbv
 RT: 2.829 min Scan# 847
 Delta R.T. 0.113 min
 Lab File: VL043227.D
 Acq: 18 Nov 2025 23:09

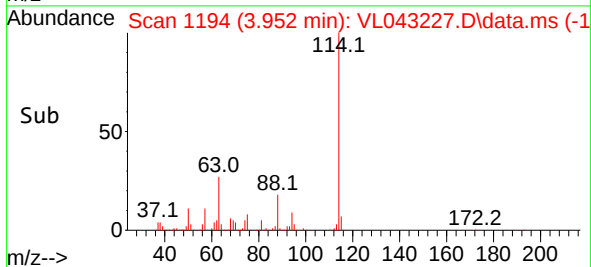
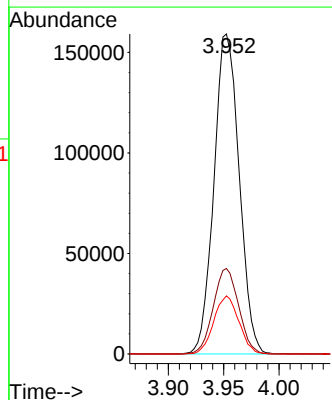
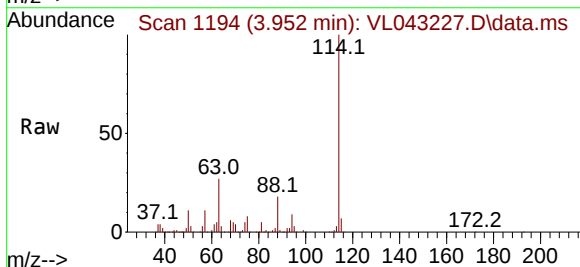
Instrument :
 MSVOA_L
 ClientSampleId :
 IA1DL

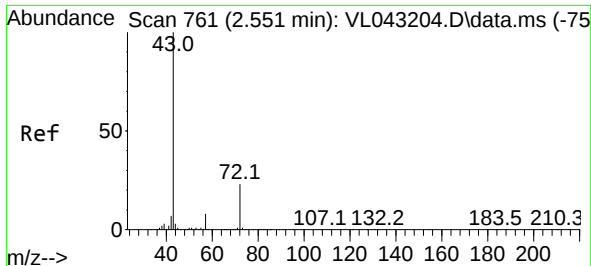
Tgt Ion: 61 Resp: 129103
 Ion Ratio Lower Upper
 61 100
 96 0.0 49.3 73.9#
 98 0.0 32.1 48.1#



#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 3.952 min Scan# 1194
 Delta R.T. 0.003 min
 Lab File: VL043227.D
 Acq: 18 Nov 2025 23:09

Tgt Ion: 114 Resp: 252986
 Ion Ratio Lower Upper
 114 100
 63 26.8 21.0 31.6
 88 18.0 14.9 22.3

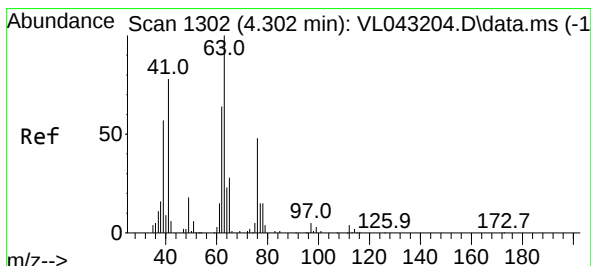
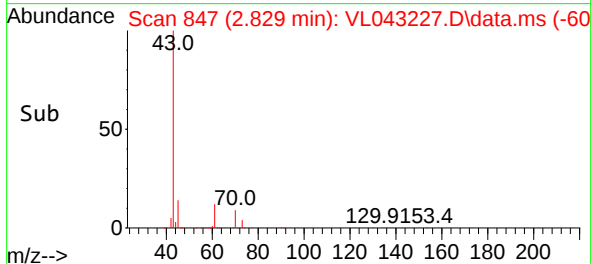
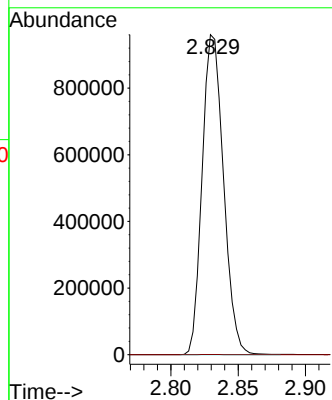
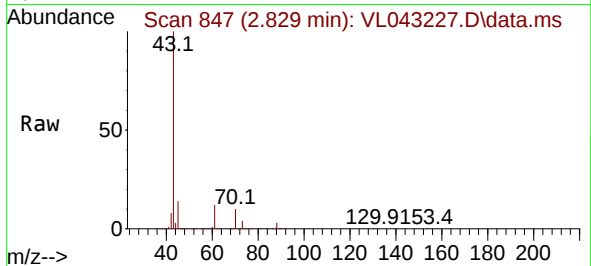




#34
2-Butanone
Concen: 59.315 ppbv
RT: 2.829 min Scan# 84
Delta R.T. 0.278 min
Lab File: VL043227.D
Acq: 18 Nov 2025 23:09

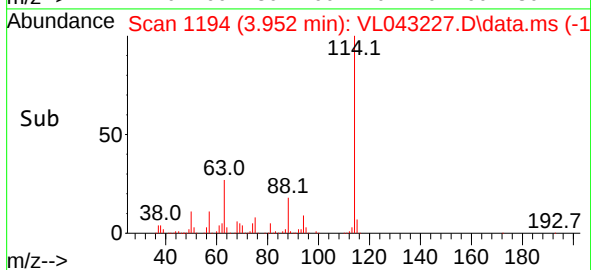
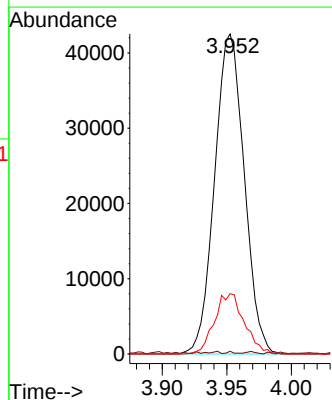
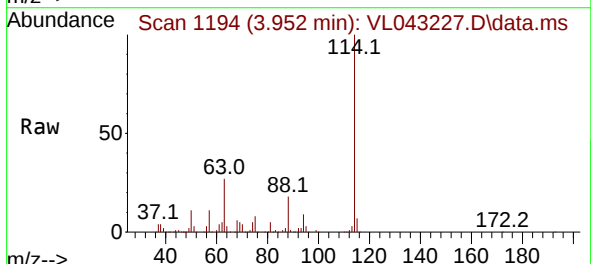
Instrument :
MSVOA_L
ClientSampleId :
IA1DL

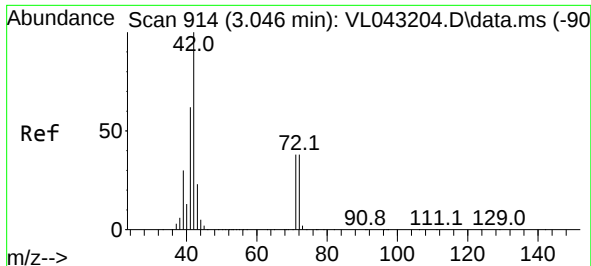
Tgt Ion: 43 Resp: 1059250
Ion Ratio Lower Upper
43 100
72 0.0 18.1 27.1#



#39
1,2-Dichloropropane
Concen: 7.638 ppbv
RT: 3.952 min Scan# 1194
Delta R.T. -0.349 min
Lab File: VL043227.D
Acq: 18 Nov 2025 23:09

Tgt Ion: 63 Resp: 67728
Ion Ratio Lower Upper
63 100
41 0.7 62.6 93.8#
62 18.8 51.0 76.6#

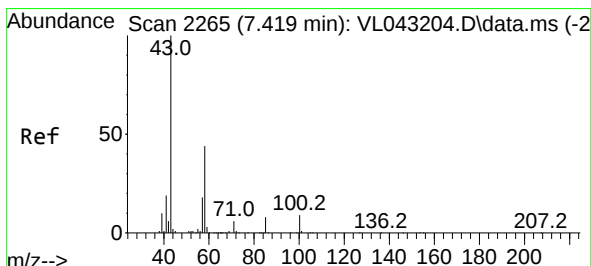
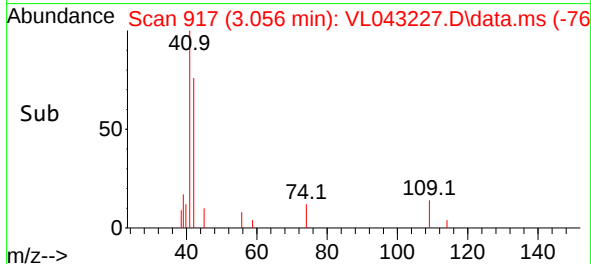
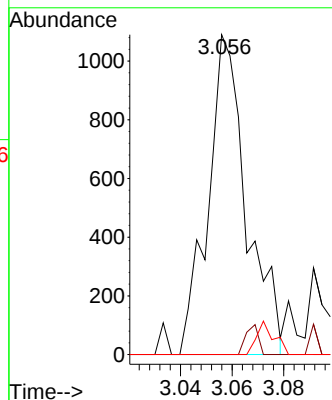
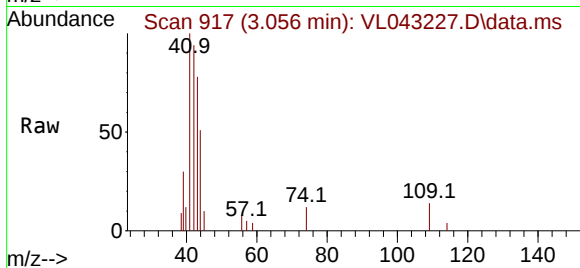




#41
Tetrahydrofuran
Concen: 0.115 ppbv
RT: 3.056 min Scan# 914
Delta R.T. 0.010 min
Lab File: VL043227.D
Acq: 18 Nov 2025 23:09

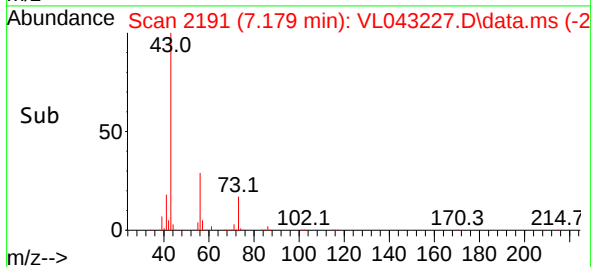
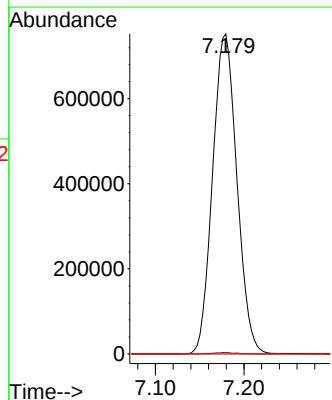
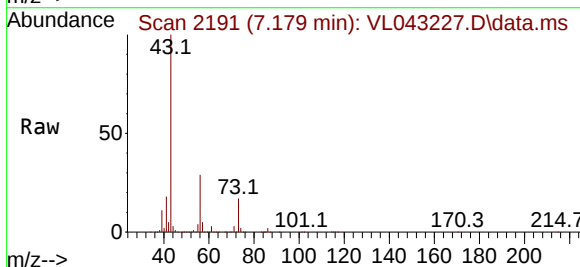
Instrument :
MSVOA_L
ClientSampleId :
IA1DL

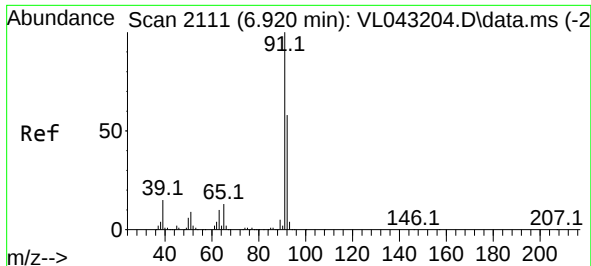
Tgt Ion: 42 Resp: 1131
Ion Ratio Lower Upper
42 100
72 0.0 30.6 46.0#
71 0.0 30.5 45.7#



#51
2-Hexanone
Concen: 73.479 ppbv
RT: 7.179 min Scan# 2191
Delta R.T. -0.239 min
Lab File: VL043227.D
Acq: 18 Nov 2025 23:09

Tgt Ion: 43 Resp: 1435410
Ion Ratio Lower Upper
43 100
58 0.4 38.4 57.6#
98 0.0 0.0 0.0#

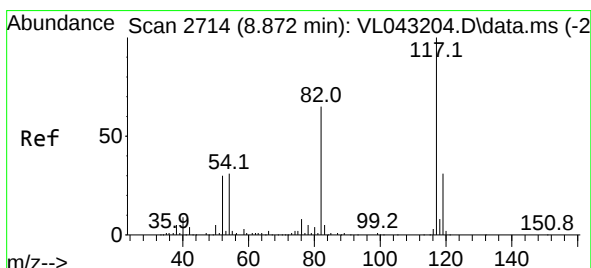
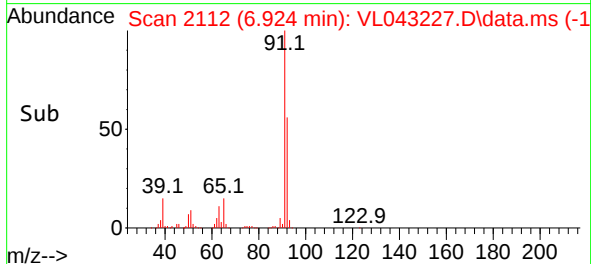
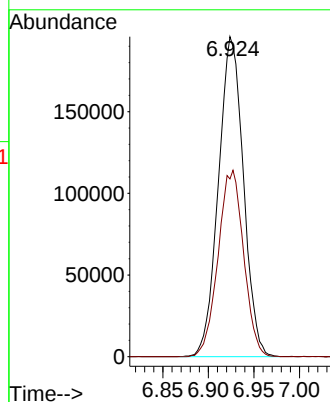
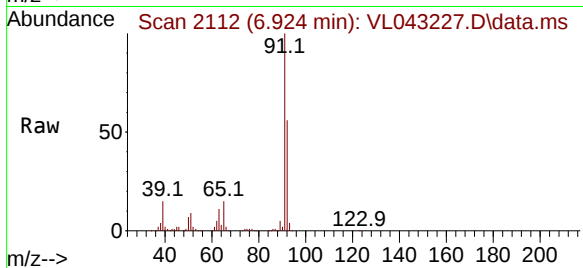




#53
Toluene
Concen: 13.018 ppbv
RT: 6.924 min Scan# 2111
Delta R.T. 0.003 min
Lab File: VL043227.D
Acq: 18 Nov 2025 23:09

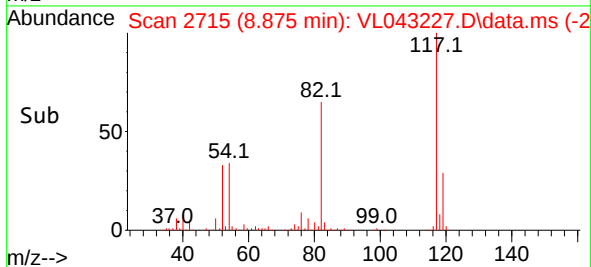
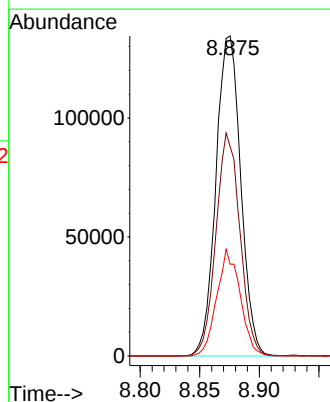
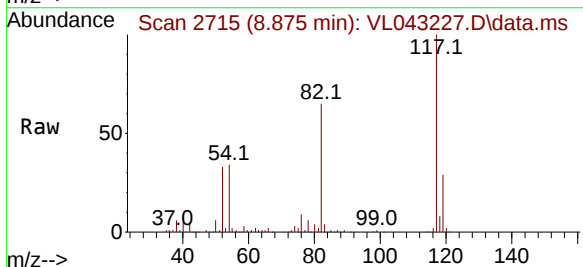
Instrument :
MSVOA_L
ClientSampleId :
IA1DL

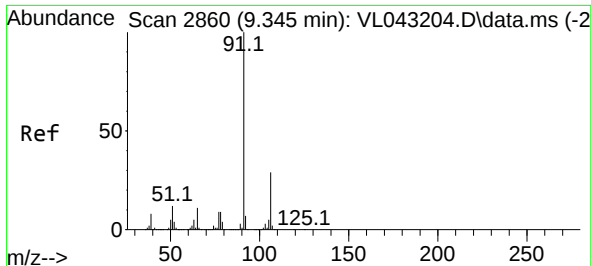
Tgt Ion: 91 Resp: 373472
Ion Ratio Lower Upper
91 100
92 59.6 47.4 71.0



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 2715
Delta R.T. 0.003 min
Lab File: VL043227.D
Acq: 18 Nov 2025 23:09

Tgt Ion: 117 Resp: 194710
Ion Ratio Lower Upper
117 100
82 67.3 56.1 84.1
119 31.4 25.0 37.6

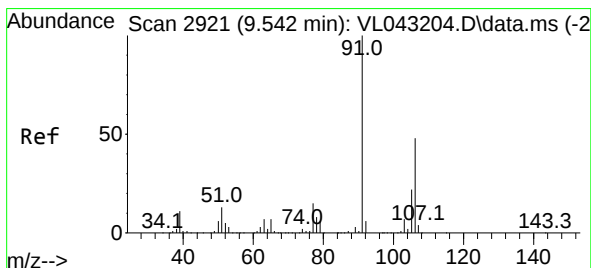
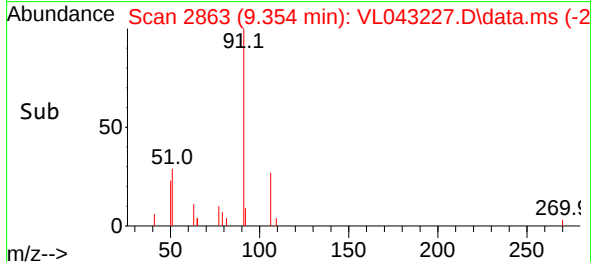
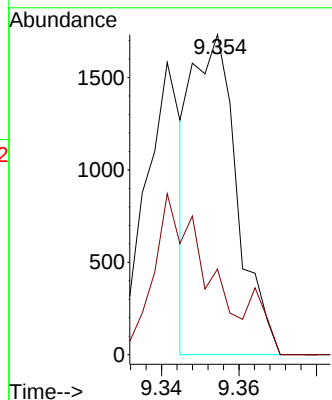
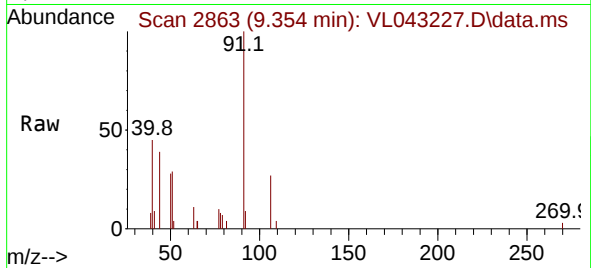




#58
Ethyl Benzene
Concen: 0.038 ppbv
RT: 9.354 min Scan# 21
Delta R.T. 0.010 min
Lab File: VL043227.D
Acq: 18 Nov 2025 23:09

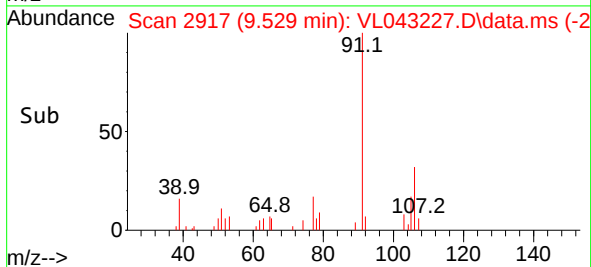
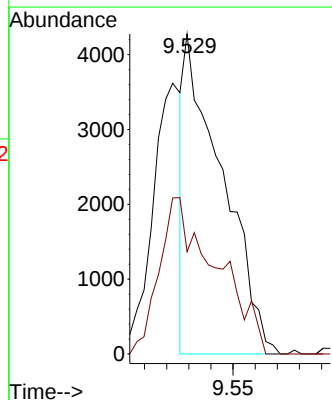
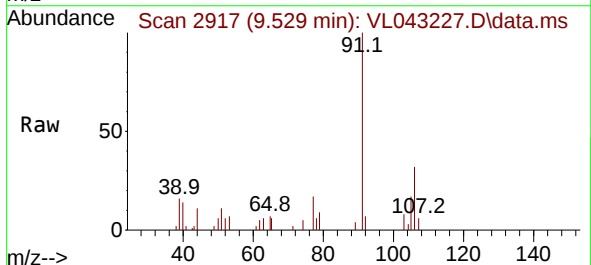
Instrument :
MSVOA_L
ClientSampleId :
IA1DL

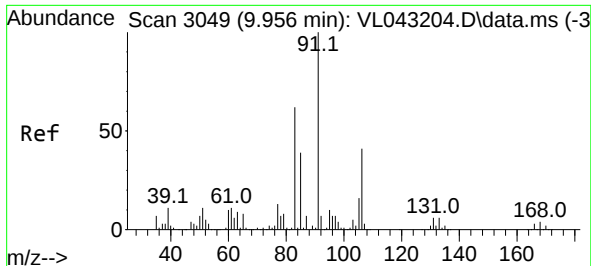
Tgt Ion: 91 Resp: 1413
Ion Ratio Lower Upper
91 100
106 26.7 22.8 34.2



#59
m/p-Xylene
Concen: 0.168 ppbv
RT: 9.529 min Scan# 2917
Delta R.T. -0.013 min
Lab File: VL043227.D
Acq: 18 Nov 2025 23:09

Tgt Ion: 91 Resp: 5041
Ion Ratio Lower Upper
91 100
106 74.2 36.1 54.1#

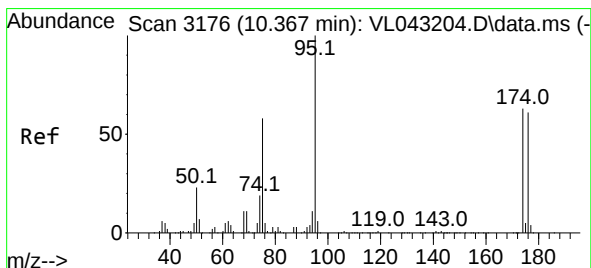
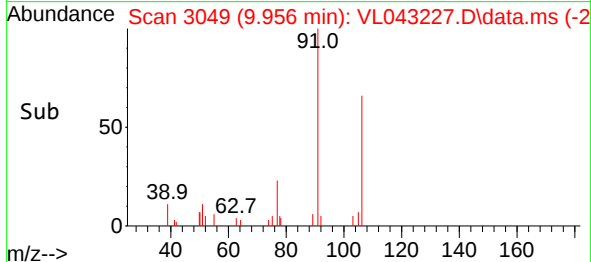
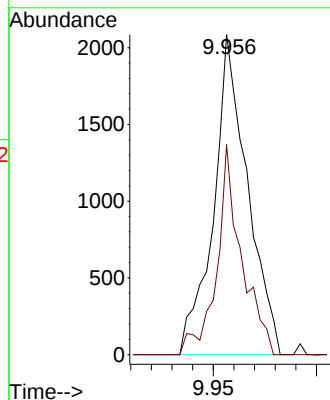
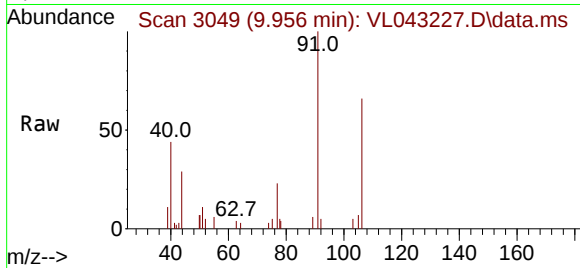




#60
o-Xylene
Concen: 0.079 ppbv
RT: 9.956 min Scan# 3049
Delta R.T. 0.000 min
Lab File: VL043227.D
Acq: 18 Nov 2025 23:09

Instrument :
MSVOA_L
ClientSampleId :
IA1DL

Tgt Ion: 91 Resp: 2379
Ion Ratio Lower Upper
91 100
106 47.6 20.9 62.8



#68
1-Bromo-4-Fluorobenzene
Concen: 10.056 ppbv
RT: 10.368 min Scan# 3176
Delta R.T. 0.000 min
Lab File: VL043227.D
Acq: 18 Nov 2025 23:09

Tgt Ion: 95 Resp: 143516
Ion Ratio Lower Upper
95 100
174 58.3 50.2 75.2
175 4.2 4.1 6.1

