

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091025\
 Data File : VL042926.D
 Acq On : 10 Sep 2025 13:33
 Operator : SY/MD
 Sample : Q3052-02DUPDL 40X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV2DLDUP

Quant Time: Sep 11 01:12:57 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Tue Sep 09 00:52:26 2025
 Response via : Initial Calibration

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

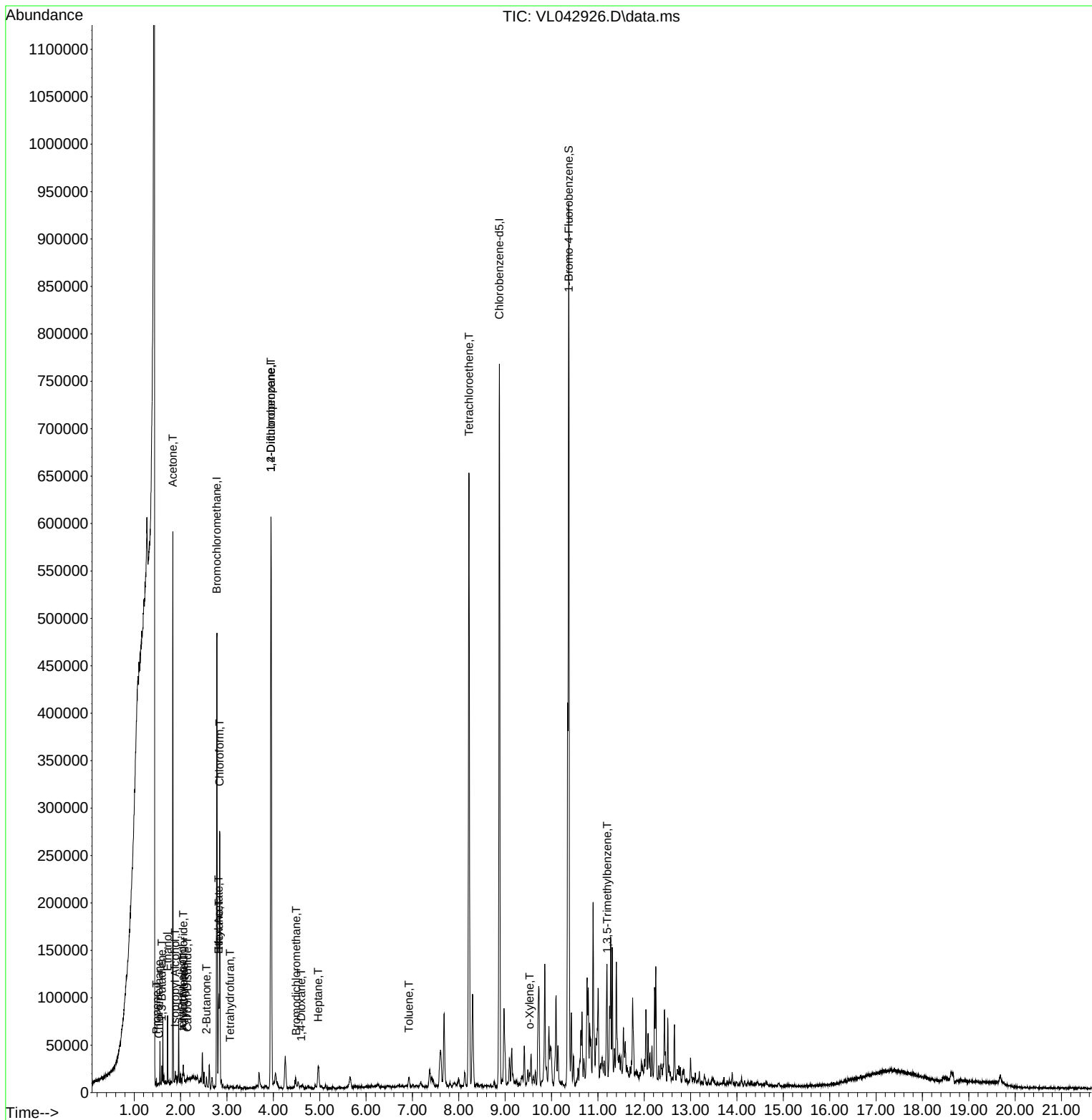
Internal Standards						
1) Bromochloromethane	2.780	49	141045	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.949	114	346694	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.875	117	303060	10.000	ppbv	0.00

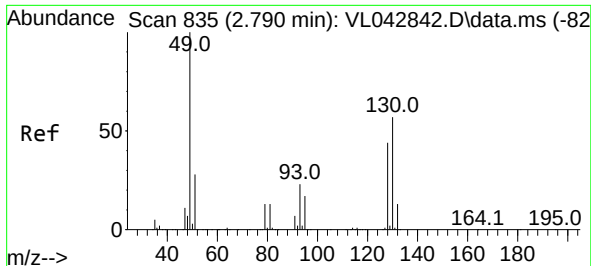
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.370	95	240184	10.567	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	105.700%

Target Compounds						Qvalue
4) Chloromethane	1.531	50	318	0.038	ppbv	98
9) Propene	1.479	41	1232	0.125	ppbv #	31
10) Heptane	4.965	43	4198	0.159	ppbv #	16
13) Ethanol	1.719	45	25295	28.035	ppbv	91
15) Acetone	1.832	43	243447	13.048	ppbv	98
16) 1,3-Butadiene	1.596	39	1971	0.233	ppbv #	44
17) tert-Butyl alcohol	2.039	59	2226	0.101	ppbv #	57
19) Isopropyl Alcohol	1.884	45	5337	0.479	ppbv #	1
20) Methylene Chloride	2.059	84	2335	0.299	ppbv #	72
21) Allyl Chloride	2.075	41	580	0.044	ppbv #	57
25) Ethyl Acetate	2.819	43	15312	0.339	ppbv #	74
26) Hexane	2.823	57	19929	0.956	ppbv #	42
27) Carbon Disulfide	2.146	76	1902	0.094	ppbv #	1
29) Chloroform	2.842	83	109000	3.663	ppbv	98
34) 2-Butanone	2.557	43	6656	0.284	ppbv	98
39) 1,2-Dichloropropane	3.949	63	89813	7.407	ppbv #	26
40) 1,4-Dioxane	4.603	88	240	0.042	ppbv #	1
41) Tetrahydrofuran	3.068	42	654	0.050	ppbv #	68
42) Bromodichloromethane	4.493	83	1613	0.062	ppbv	97
52) Tetrachloroethene	8.221	164	109548	9.121	ppbv	95
53) Toluene	6.923	91	4902	0.124	ppbv #	62
60) o-Xylene	9.529	91	5790	0.137	ppbv	77
73) 1,3,5-Trimethylbenzene	11.202	105	1372	0.032	ppbv	98

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

Quant Time: Sep 11 01:12:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Sep 09 00:52:26 2025
Response via : Initial Calibration

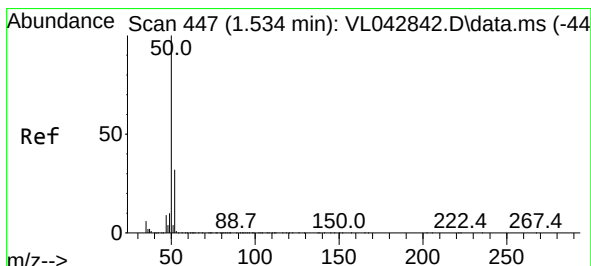
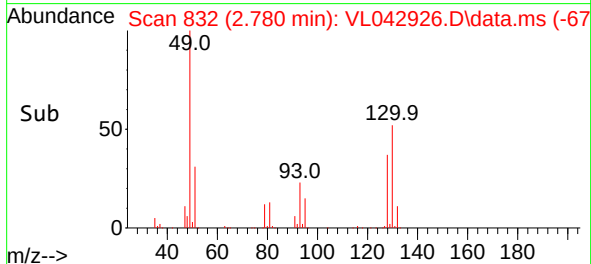
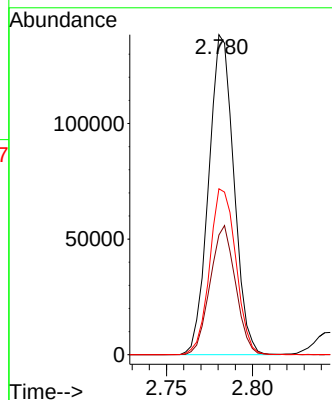
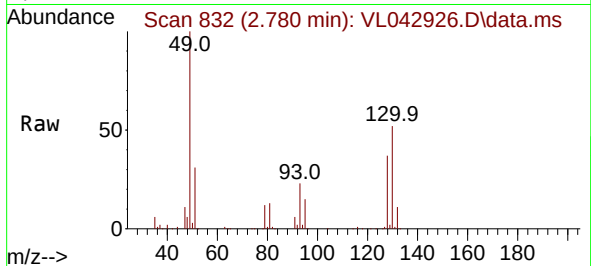




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.780 min Scan# 81
Delta R.T. 0.003 min
Lab File: VL042926.D
Acq: 10 Sep 2025 13:33

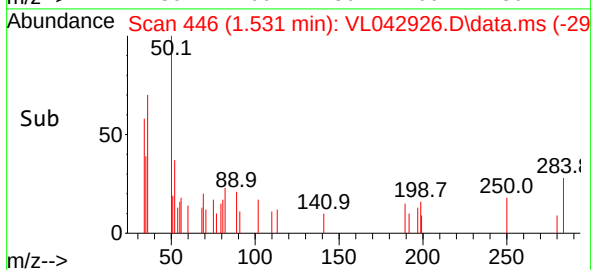
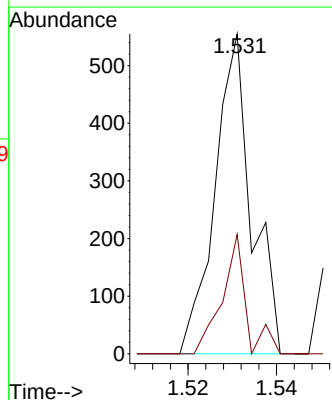
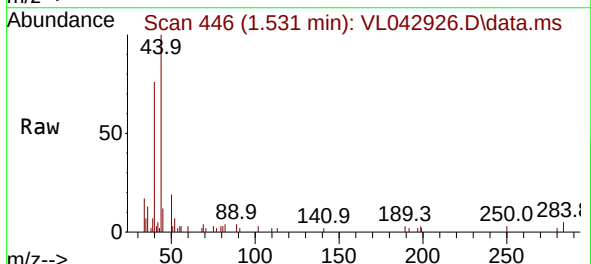
Instrument :
MSVOA_L
ClientSampleId :
SV2DLDUP

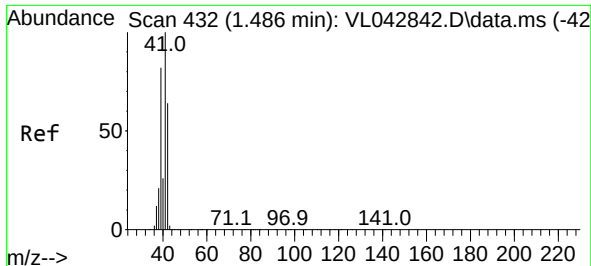
Tgt Ion: 49 Resp: 141045
Ion Ratio Lower Upper
49 100
128 40.6 23.7 71.1
130 54.0 30.6 91.6



#4
Chloromethane
Concen: 0.038 ppbv
RT: 1.531 min Scan# 446
Delta R.T. 0.003 min
Lab File: VL042926.D
Acq: 10 Sep 2025 13:33

Tgt Ion: 50 Resp: 318
Ion Ratio Lower Upper
50 100
52 31.5 25.9 38.9





#9

Propene

Concen: 0.125 ppbv

RT: 1.479 min Scan# 41

Delta R.T. 0.003 min

Lab File: VL042926.D

Acq: 10 Sep 2025 13:33

Instrument :

MSVOA_1

ClientSampleId :

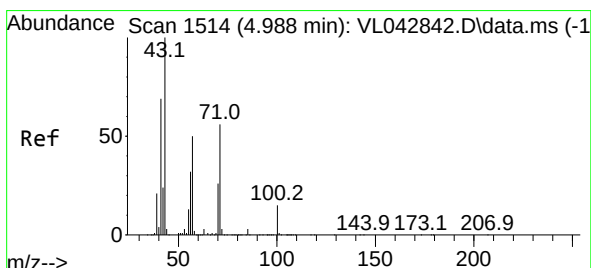
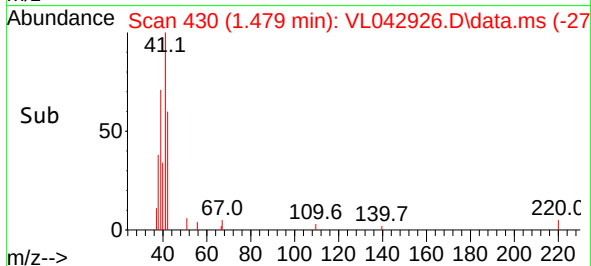
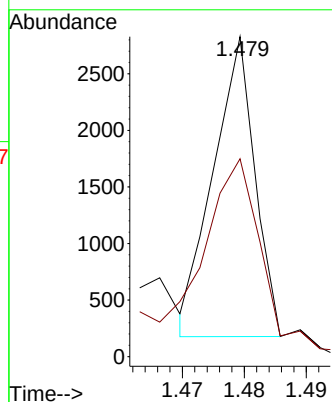
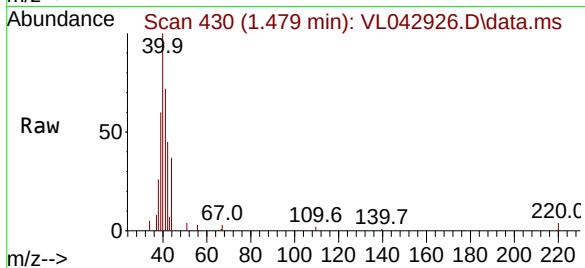
SV2DLDUP

Tgt Ion: 41 Resp: 1232

Ion Ratio Lower Upper

41 100

42 120.9 53.0 79.4#



#10

Heptane

Concen: 0.159 ppbv

RT: 4.965 min Scan# 1507

Delta R.T. 0.006 min

Lab File: VL042926.D

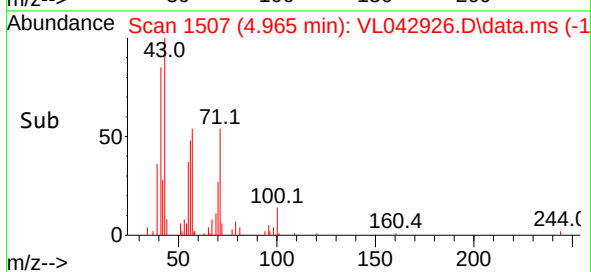
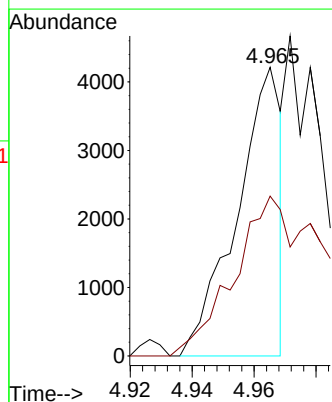
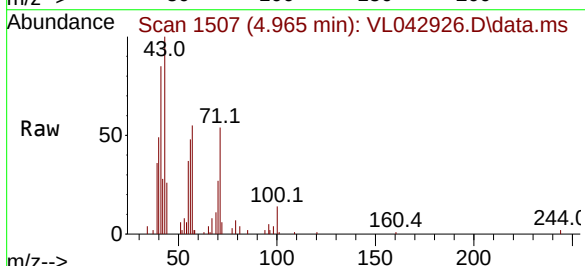
Acq: 10 Sep 2025 13:33

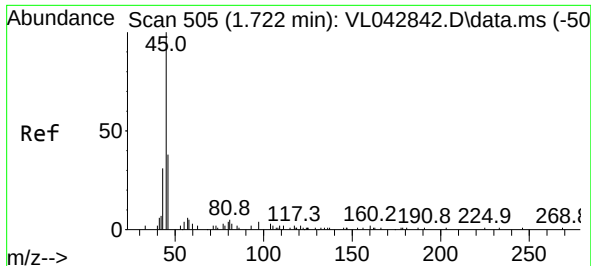
Tgt Ion: 43 Resp: 4198

Ion Ratio Lower Upper

43 100

57 110.7 41.4 62.0#

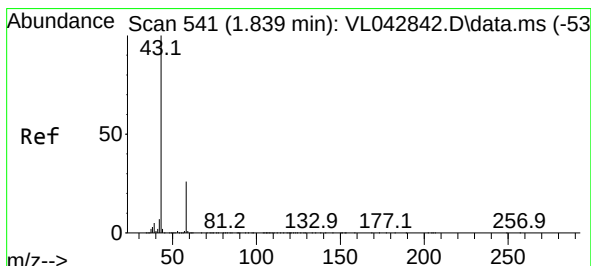
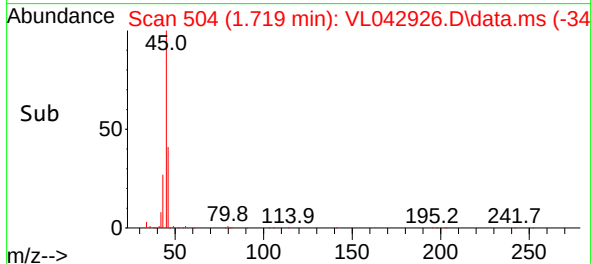
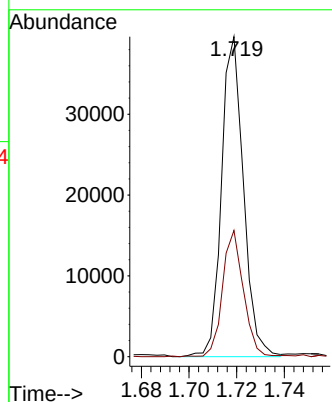
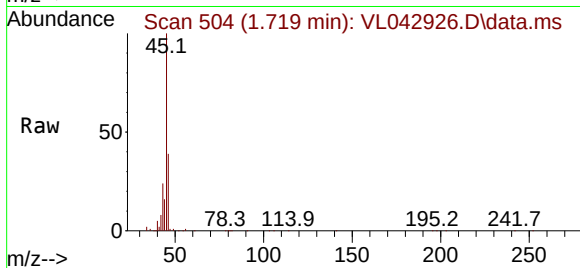




#13
 Ethanol
 Concen: 28.035 ppbv
 RT: 1.719 min Scan# 505
 Delta R.T. 0.003 min
 Lab File: VL042926.D
 Acq: 10 Sep 2025 13:33

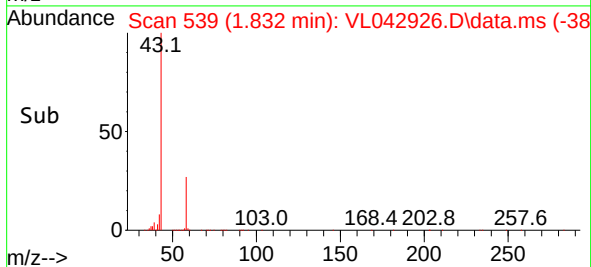
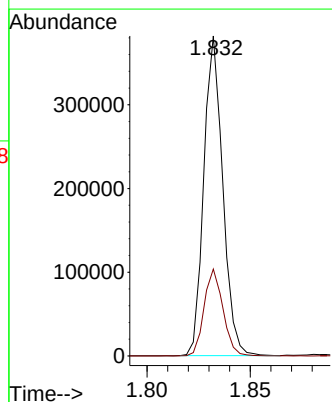
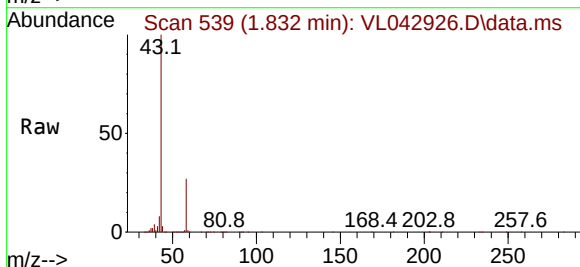
Instrument :
 MSVOA_1
 ClientSampleId :
 SV2DL DUP

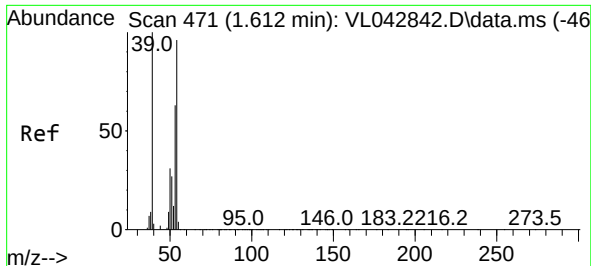
Tgt Ion: 45 Resp: 25295
 Ion Ratio Lower Upper
 45 100
 46 38.1 17.5 69.9



#15
 Acetone
 Concen: 13.048 ppbv
 RT: 1.832 min Scan# 539
 Delta R.T. 0.003 min
 Lab File: VL042926.D
 Acq: 10 Sep 2025 13:33

Tgt Ion: 43 Resp: 243447
 Ion Ratio Lower Upper
 43 100
 58 27.1 22.4 33.6

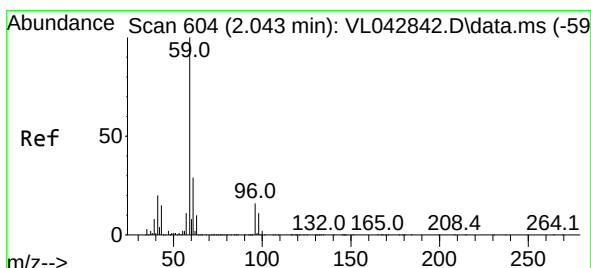
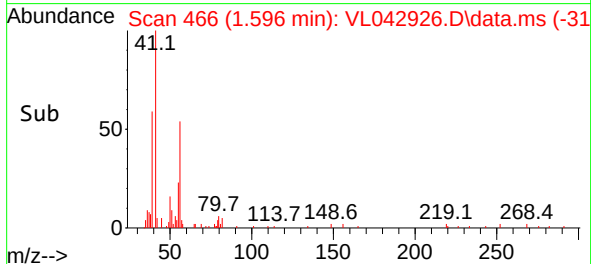
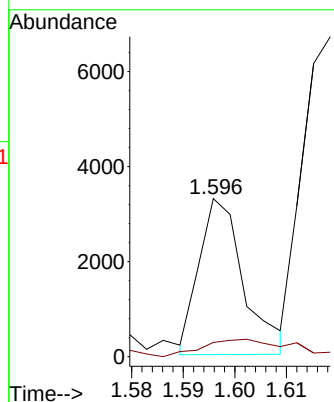
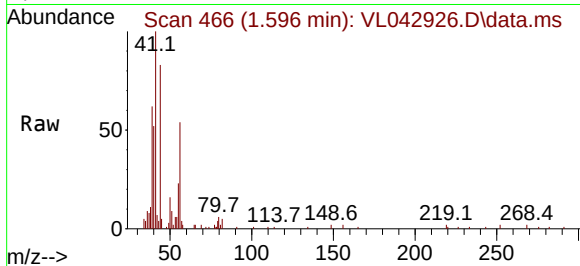




#16
1,3-Butadiene
Concen: 0.233 ppbv
RT: 1.596 min Scan# 41
Delta R.T. -0.007 min
Lab File: VL042926.D
Acq: 10 Sep 2025 13:33

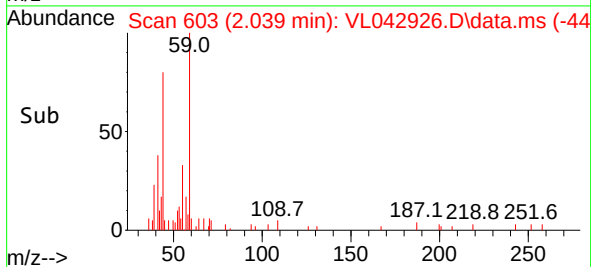
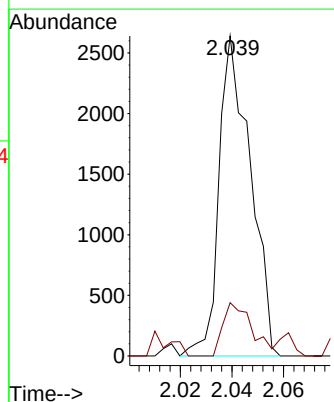
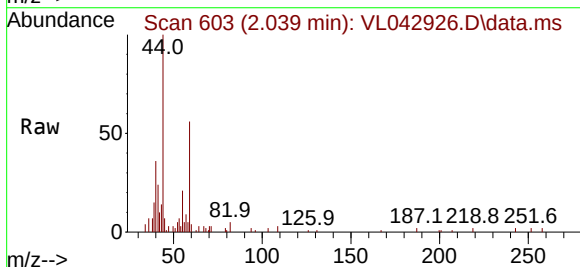
Instrument :
MSVOA_L
ClientSampleId :
SV2DLDUP

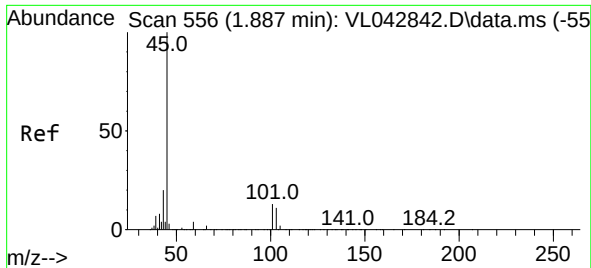
Tgt Ion: 39 Resp: 1971
Ion Ratio Lower Upper
39 100
54 29.8 63.6 95.4#



#17
tert-Butyl alcohol
Concen: 0.101 ppbv
RT: 2.039 min Scan# 603
Delta R.T. 0.006 min
Lab File: VL042926.D
Acq: 10 Sep 2025 13:33

Tgt Ion: 59 Resp: 2226
Ion Ratio Lower Upper
59 100
57 27.7 9.0 13.4#

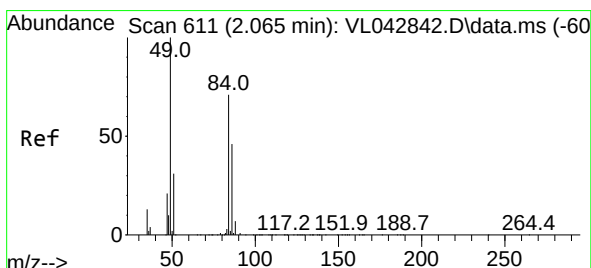
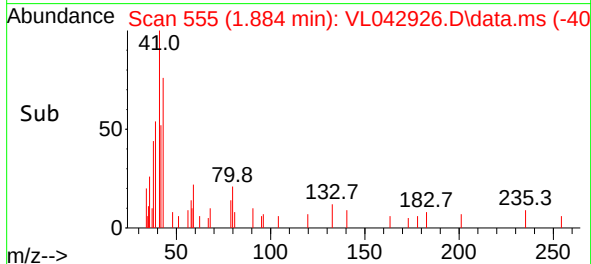
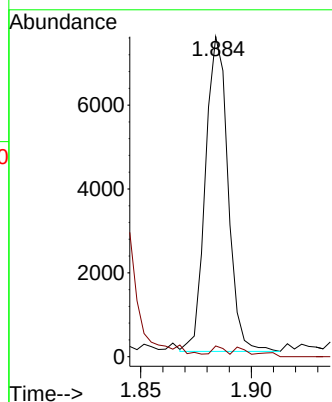
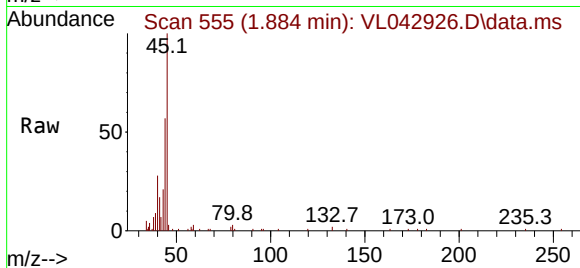




#19
Isopropyl Alcohol
Concen: 0.479 ppbv
RT: 1.884 min Scan# 51
Delta R.T. 0.003 min
Lab File: VL042926.D
Acq: 10 Sep 2025 13:33

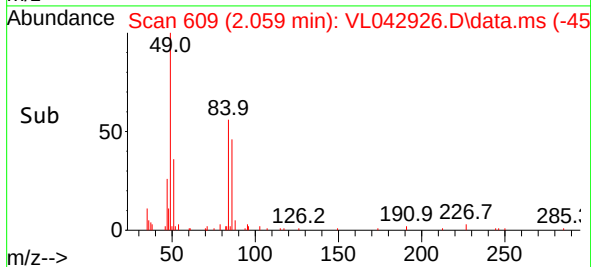
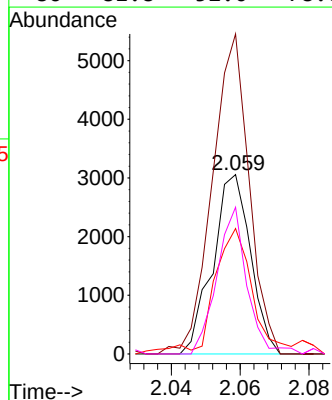
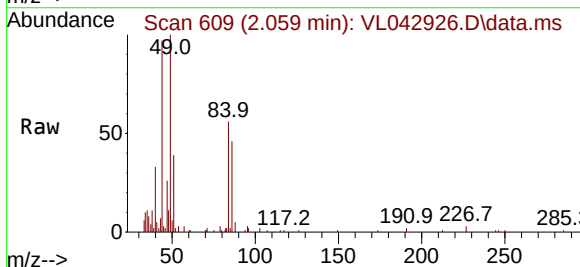
Instrument :
MSVOA_L
ClientSampleId :
SV2DLDUP

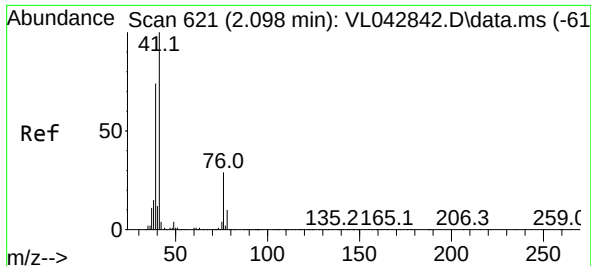
Tgt Ion: 45 Resp: 5337
Ion Ratio Lower Upper
45 100
58 1238.6 32.7 49.1#



#20
Methylene Chloride
Concen: 0.299 ppbv
RT: 2.059 min Scan# 609
Delta R.T. 0.003 min
Lab File: VL042926.D
Acq: 10 Sep 2025 13:33

Tgt Ion: 84 Resp: 2335
Ion Ratio Lower Upper
84 100
49 178.5 112.3 168.5#
51 64.9 36.0 54.0#
86 81.8 52.0 78.0#

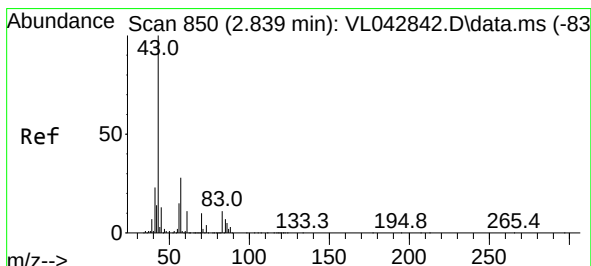
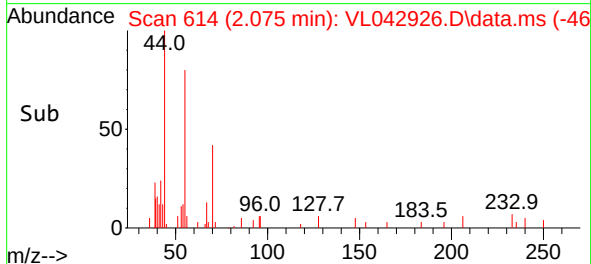
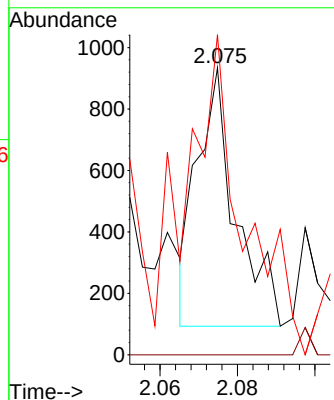
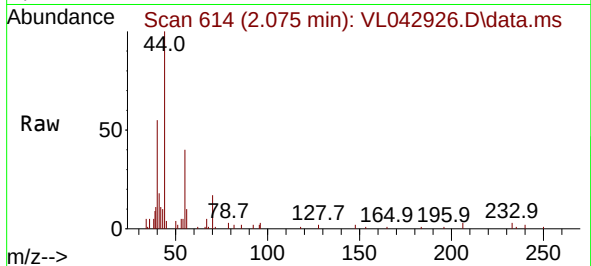




#21
 Allyl Chloride
 Concen: 0.044 ppbv
 RT: 2.075 min Scan# 61
 Delta R.T. -0.013 min
 Lab File: VL042926.D
 Acq: 10 Sep 2025 13:33

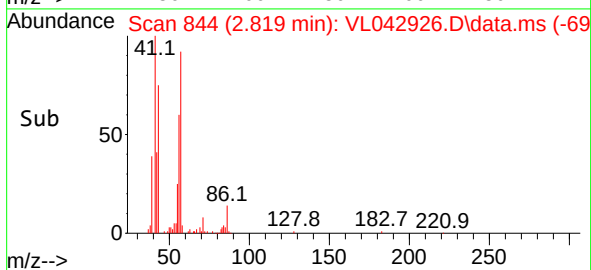
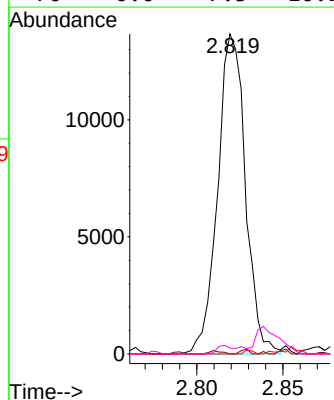
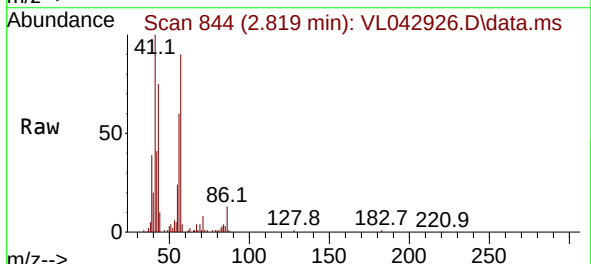
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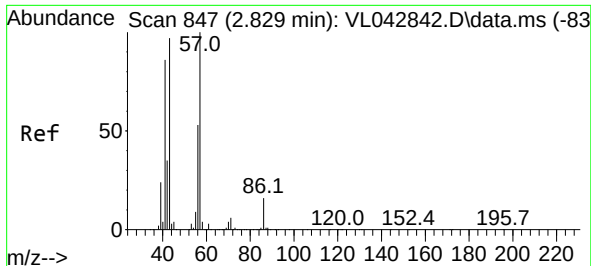
Tgt Ion: 41 Resp: 580
 Ion Ratio Lower Upper
 41 100
 76 0.0 23.9 35.9#
 39 103.6 57.8 86.6#



#25
 Ethyl Acetate
 Concen: 0.339 ppbv
 RT: 2.819 min Scan# 844
 Delta R.T. -0.007 min
 Lab File: VL042926.D
 Acq: 10 Sep 2025 13:33

Tgt Ion: 43 Resp: 15312
 Ion Ratio Lower Upper
 43 100
 45 0.4 8.1 12.1#
 61 0.0 7.4 11.2#
 70 0.0 7.3 10.9#

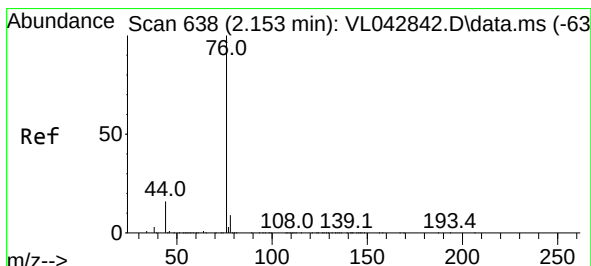
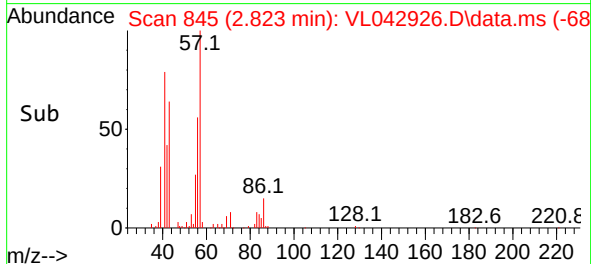
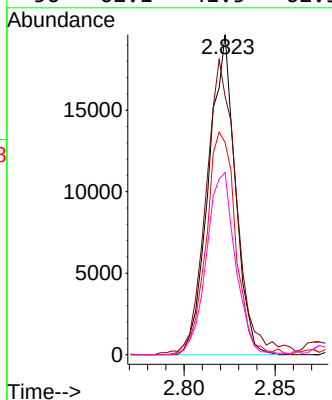
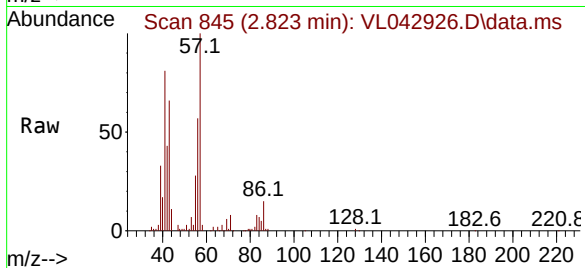




#26
Hexane
Concen: 0.956 ppbv
RT: 2.823 min Scan# 847
Delta R.T. 0.006 min
Lab File: VL042926.D
Acq: 10 Sep 2025 13:33

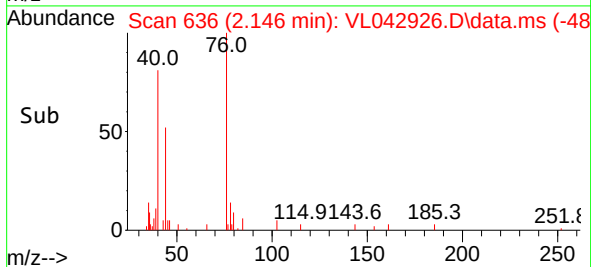
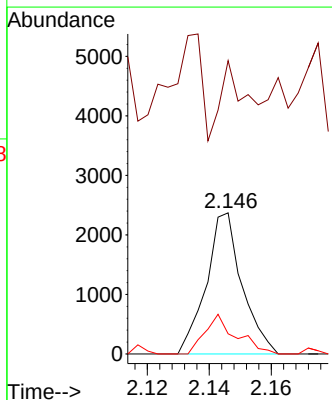
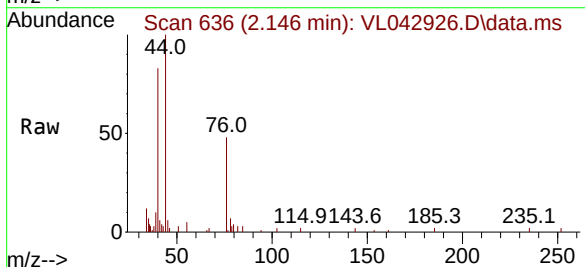
Instrument :
MSVOA_L
ClientSampleId :
SV2DLDUP

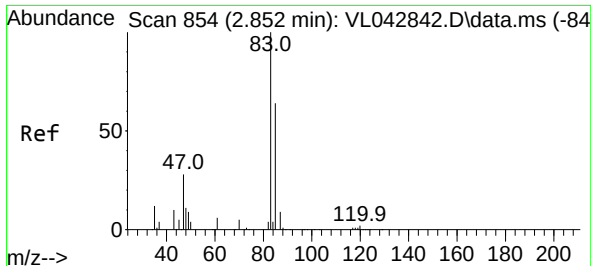
Tgt Ion: 57 Resp: 19929
Ion Ratio Lower Upper
57 100
41 107.0 68.6 103.0#
43 79.6 168.5 252.7#
56 62.1 41.5 62.3



#27
Carbon Disulfide
Concen: 0.094 ppbv
RT: 2.146 min Scan# 636
Delta R.T. 0.003 min
Lab File: VL042926.D
Acq: 10 Sep 2025 13:33

Tgt Ion: 76 Resp: 1902
Ion Ratio Lower Upper
76 100
44 163.2 15.9 23.9#
78 28.0 9.5 14.3#





#29

Chloroform

Concen: 3.663 ppbv

RT: 2.842 min Scan# 81

Delta R.T. 0.003 min

Lab File: VL042926.D

Acq: 10 Sep 2025 13:33

Instrument :

MSVOA_L

ClientSampleId :

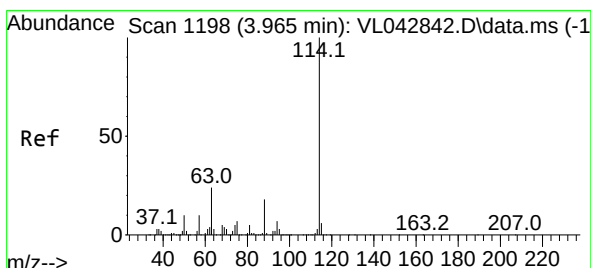
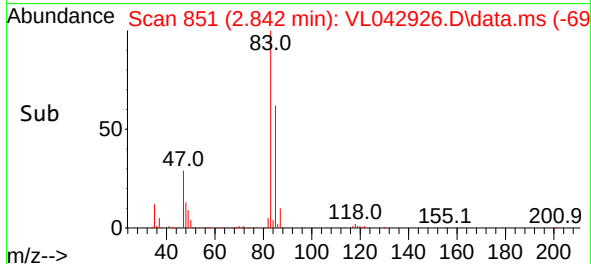
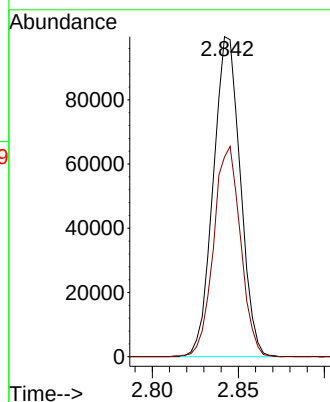
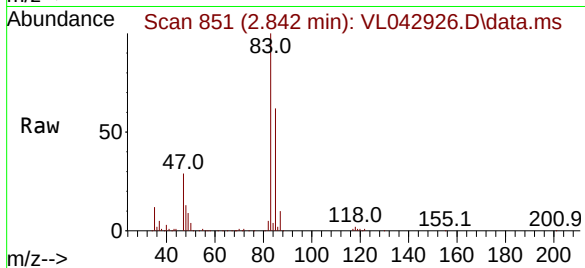
SV2DLDUP

Tgt Ion: 83 Resp: 109000

Ion Ratio Lower Upper

83 100

85 62.4 51.1 76.7



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.949 min Scan# 1193

Delta R.T. 0.006 min

Lab File: VL042926.D

Acq: 10 Sep 2025 13:33

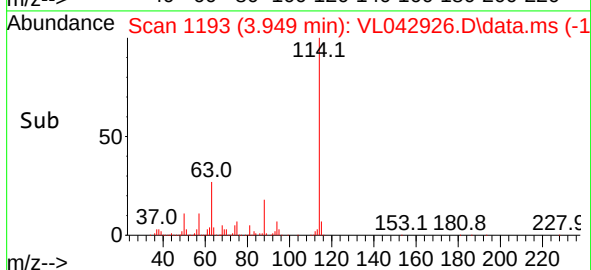
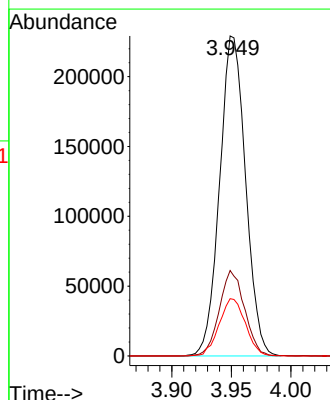
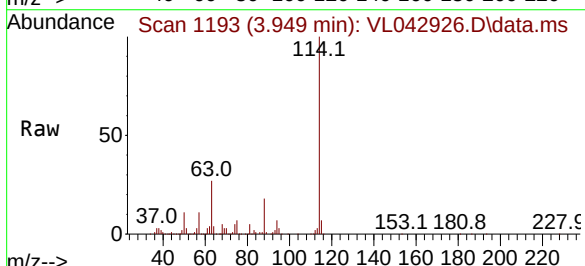
Tgt Ion: 114 Resp: 346694

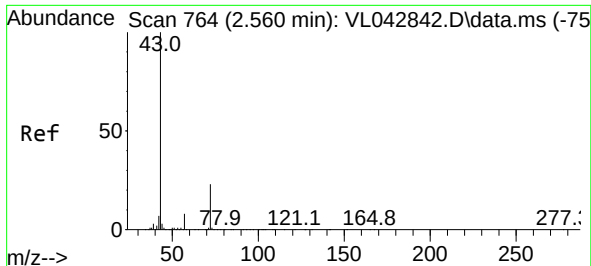
Ion Ratio Lower Upper

114 100

63 26.0 19.7 29.5

88 18.1 14.4 21.6

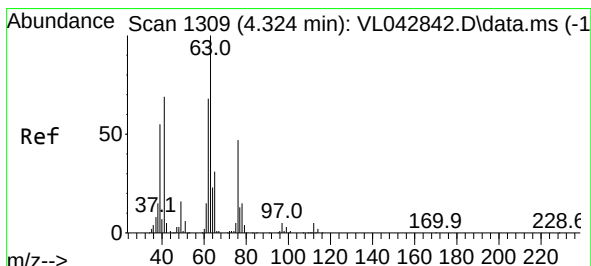
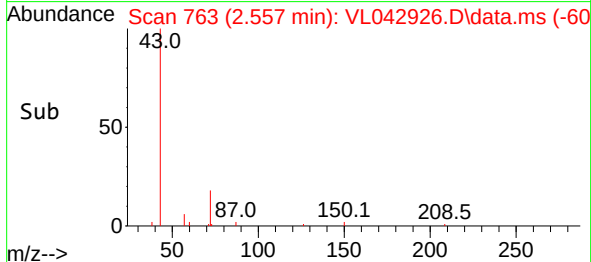
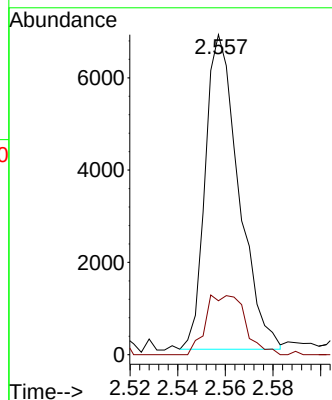
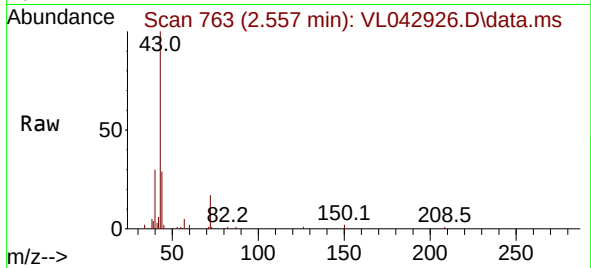




#34
2-Butanone
Concen: 0.284 ppbv
RT: 2.557 min Scan# 763
Delta R.T. 0.010 min
Lab File: VL042926.D
Acq: 10 Sep 2025 13:33

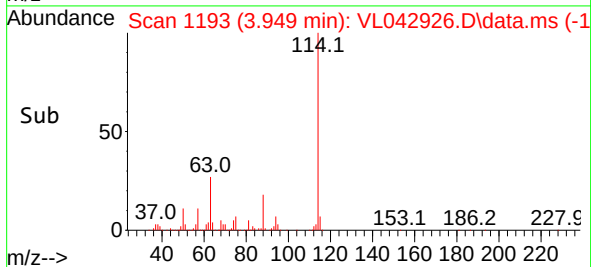
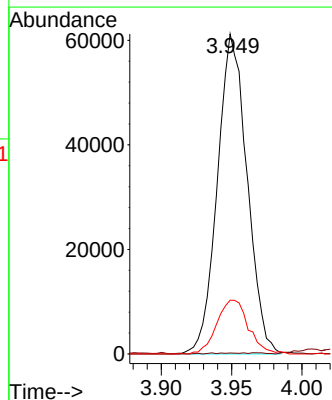
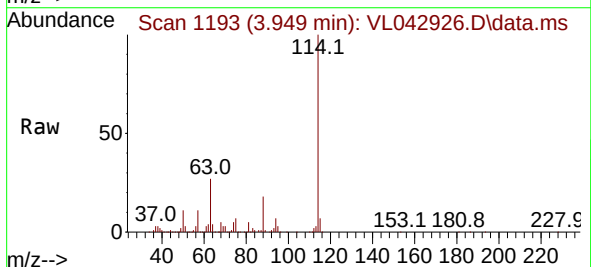
Instrument :
MSVOA_1
ClientSampleId :
SV2DLDUP

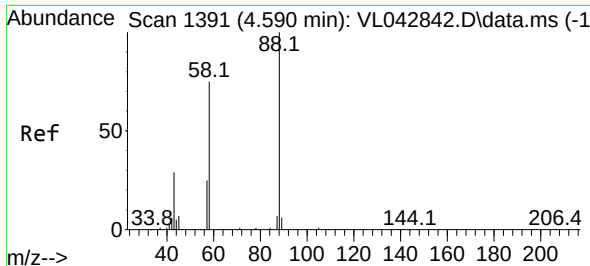
Tgt Ion: 43 Resp: 6656
Ion Ratio Lower Upper
43 100
72 22.5 18.6 28.0



#39
1,2-Dichloropropane
Concen: 7.407 ppbv
RT: 3.949 min Scan# 1193
Delta R.T. -0.350 min
Lab File: VL042926.D
Acq: 10 Sep 2025 13:33

Tgt Ion: 63 Resp: 89813
Ion Ratio Lower Upper
63 100
41 0.0 55.0 82.4#
62 16.8 54.4 81.6#

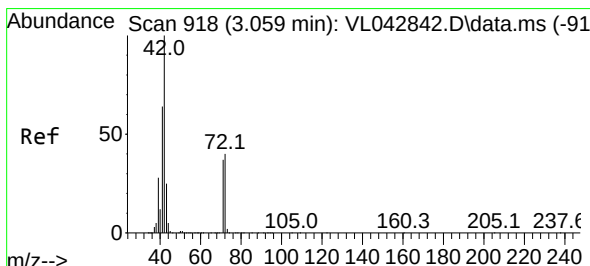
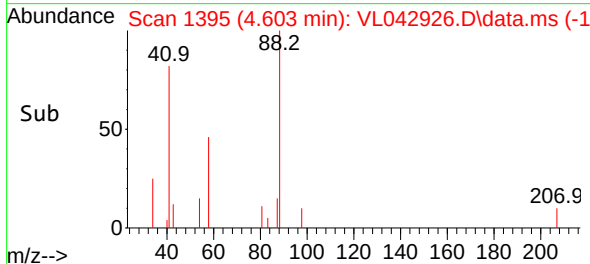
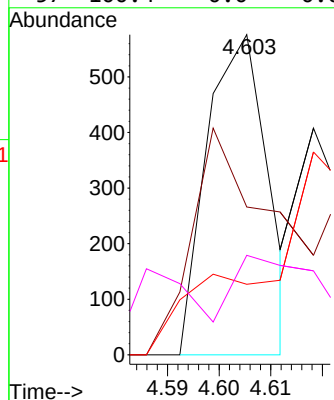
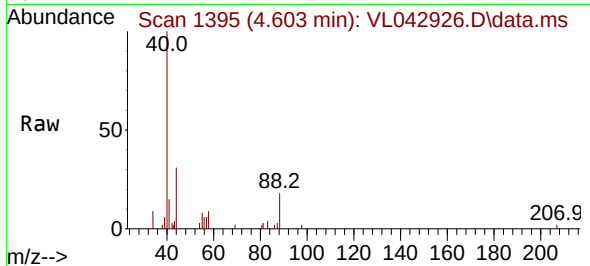




#40
1,4-Dioxane
Concen: 0.042 ppbv
RT: 4.603 min Scan# 1395
Delta R.T. 0.042 min
Lab File: VL042926.D
Acq: 10 Sep 2025 13:33

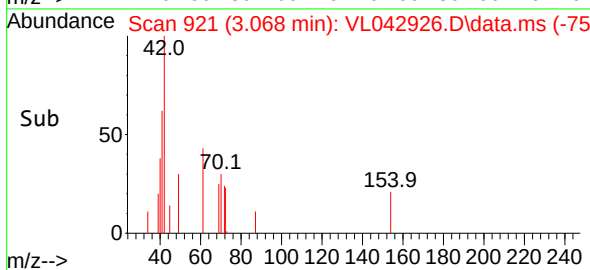
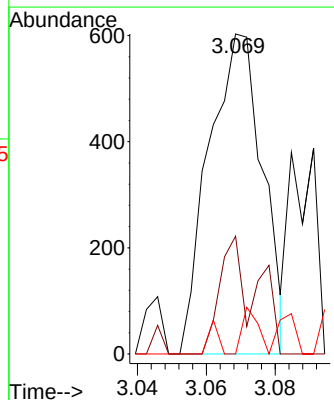
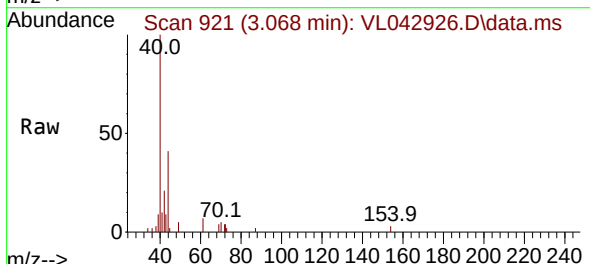
Instrument :
MSVOA_L
ClientSampleId :
SV2DLDUP

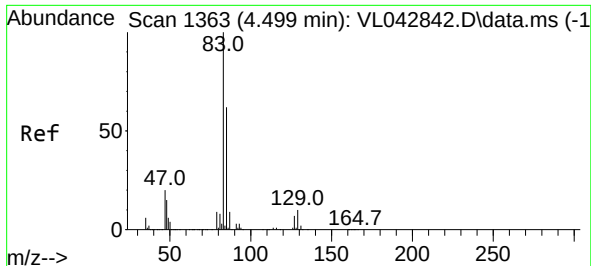
Tgt Ion: 88 Resp: 240
Ion Ratio Lower Upper
88 100
58 0.0 53.8 80.6#
43 622.1 22.8 34.2#
57 100.4 0.0 0.0#



#41
Tetrahydrofuran
Concen: 0.050 ppbv
RT: 3.068 min Scan# 921
Delta R.T. 0.026 min
Lab File: VL042926.D
Acq: 10 Sep 2025 13:33

Tgt Ion: 42 Resp: 654
Ion Ratio Lower Upper
42 100
72 26.1 32.6 48.8#
71 12.8 30.0 45.0#





#42

Bromodichloromethane

Concen: 0.062 ppbv

RT: 4.493 min Scan# 11

Delta R.T. 0.019 min

Lab File: VL042926.D

Acq: 10 Sep 2025 13:33

Instrument :

MSVOA_L

ClientSampleId :

SV2DLDUP

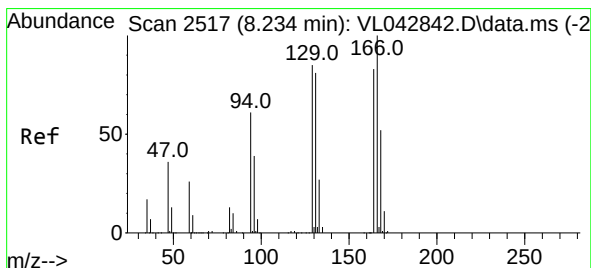
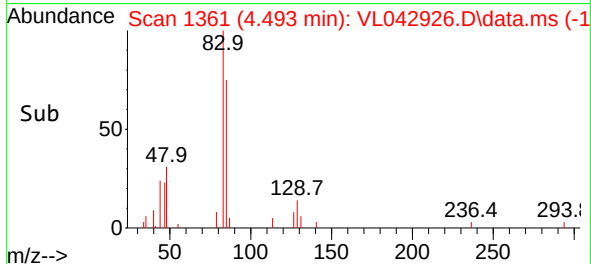
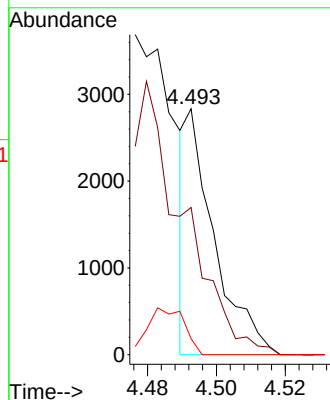
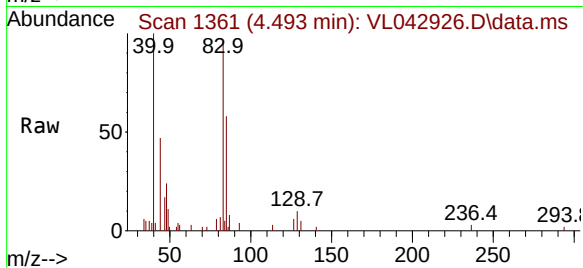
Tgt Ion: 83 Resp: 1613

Ion Ratio Lower Upper

83 100

85 59.9 49.8 74.8

127 6.5 5.8 8.6



#52

Tetrachloroethene

Concen: 9.121 ppbv

RT: 8.221 min Scan# 2513

Delta R.T. 0.010 min

Lab File: VL042926.D

Acq: 10 Sep 2025 13:33

Tgt Ion: 164 Resp: 109548

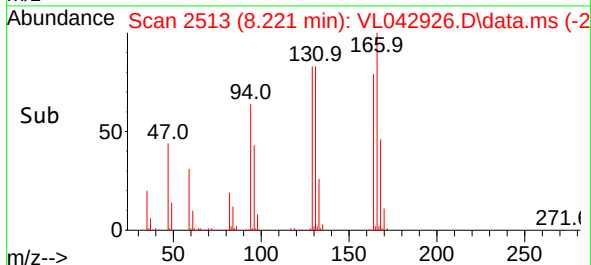
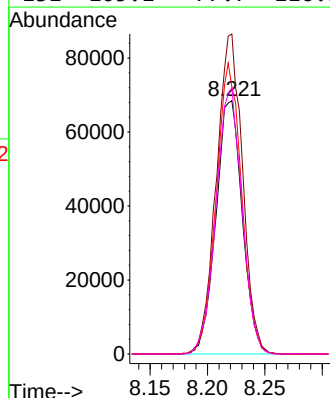
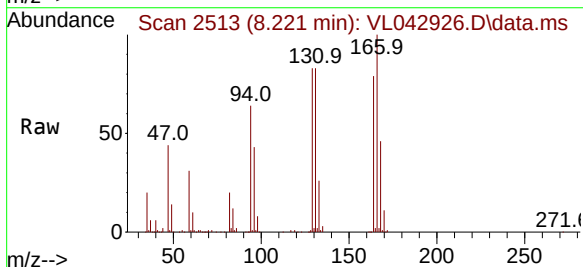
Ion Ratio Lower Upper

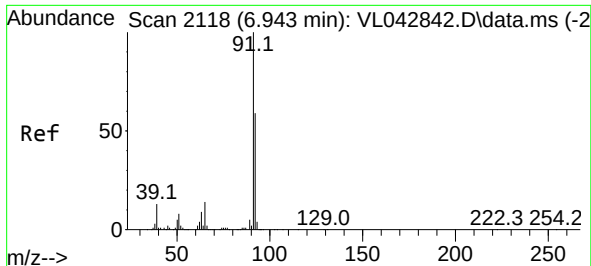
164 100

166 126.3 96.5 144.7

129 105.4 81.8 122.6

131 105.1 77.7 116.5

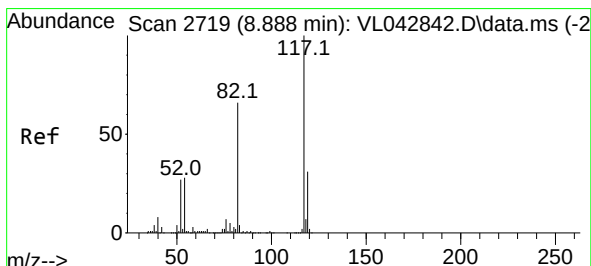
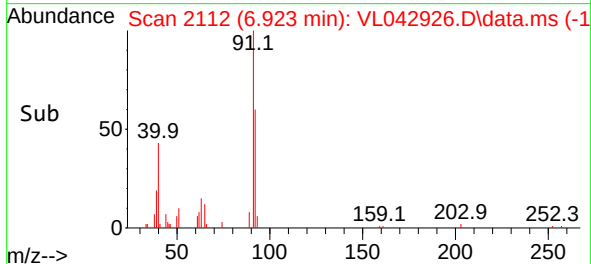
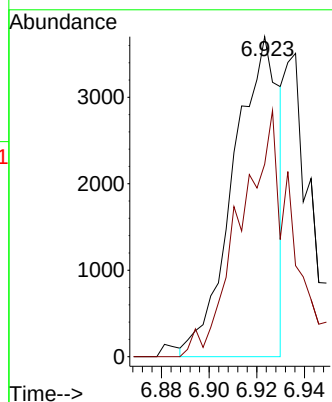
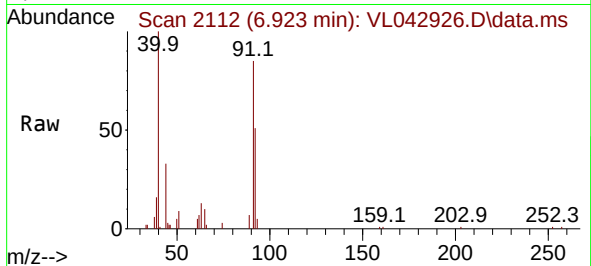




#53
Toluene
Concen: 0.124 ppbv
RT: 6.923 min Scan# 2118
Delta R.T. 0.010 min
Lab File: VL042926.D
Acq: 10 Sep 2025 13:33

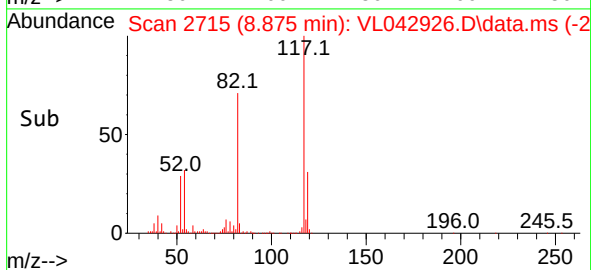
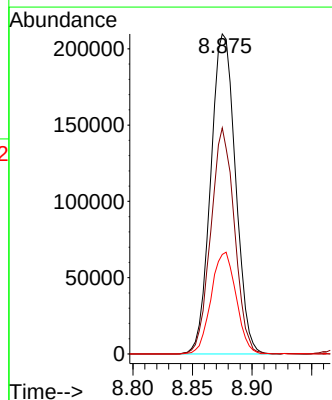
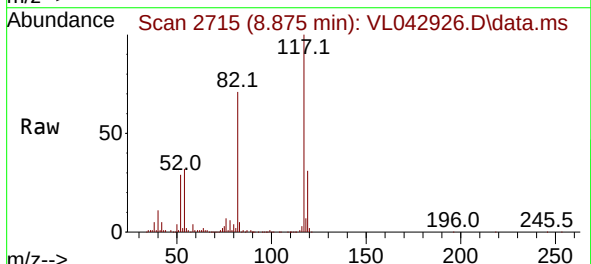
Instrument :
MSVOA_L
ClientSampleId :
SV2DLDUP

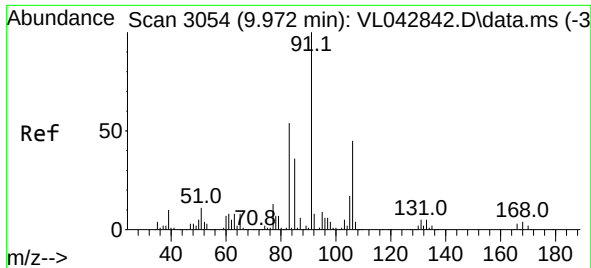
Tgt Ion: 91 Resp: 4902
Ion Ratio Lower Upper
91 100
92 88.4 47.8 71.6#



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 2715
Delta R.T. 0.006 min
Lab File: VL042926.D
Acq: 10 Sep 2025 13:33

Tgt Ion: 117 Resp: 303060
Ion Ratio Lower Upper
117 100
82 67.4 54.6 81.8
119 32.1 25.9 38.9

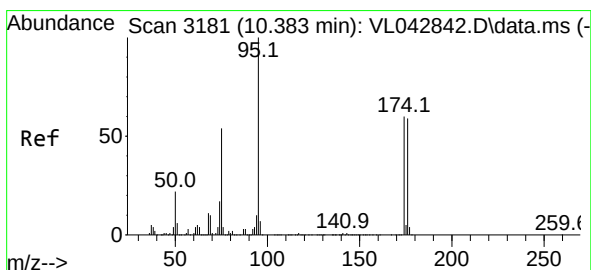
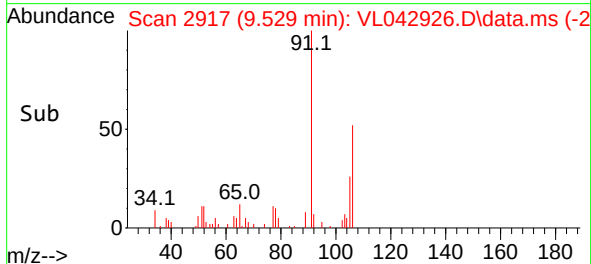
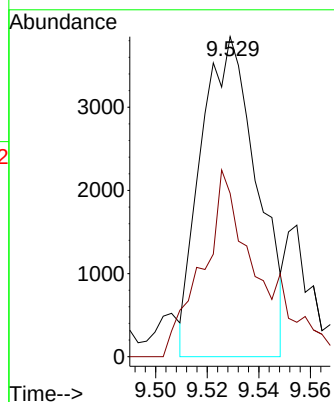
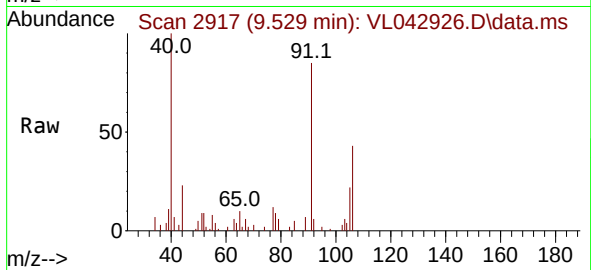




#60
o-Xylene
Concen: 0.137 ppbv
RT: 9.529 min Scan# 2177
Delta R.T. -0.424 min
Lab File: VL042926.D
Acq: 10 Sep 2025 13:33

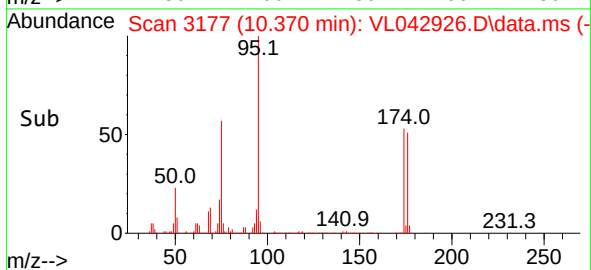
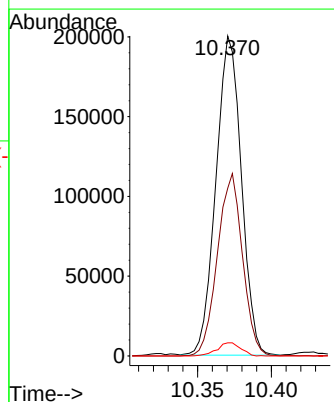
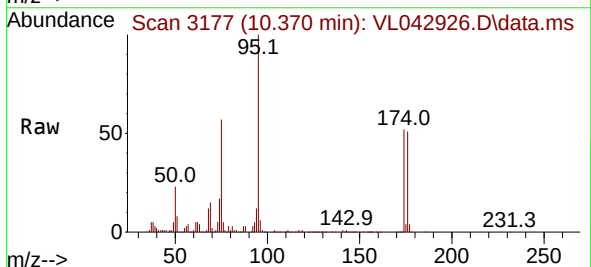
Instrument :
MSVOA_1
ClientSampleId :
SV2DLDUP

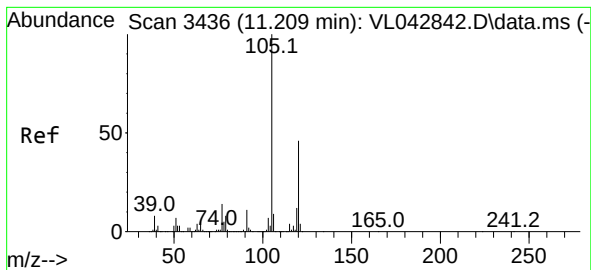
Tgt Ion: 91 Resp: 5790
Ion Ratio Lower Upper
91 100
106 58.6 21.8 65.4



#68
1-Bromo-4-Fluorobenzene
Concen: 10.567 ppbv
RT: 10.370 min Scan# 3177
Delta R.T. 0.006 min
Lab File: VL042926.D
Acq: 10 Sep 2025 13:33

Tgt Ion: 95 Resp: 240184
Ion Ratio Lower Upper
95 100
174 56.5 48.4 72.6
175 3.9 3.8 5.8





#73
 1,3,5-Trimethylbenzene
 Concen: 0.032 ppbv
 RT: 11.202 min Scan# 34
 Delta R.T. 0.006 min
 Lab File: VL042926.D
 Acq: 10 Sep 2025 13:33

Instrument :
 MSVOA_L
 ClientSampleId :
 SV2DLDUP

Tgt Ion:105 Resp: 1372
 Ion Ratio Lower Upper
 105 100
 120 47.0 36.6 54.8

