

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
 Data File : VL042381.D
 Acq On : 18 Apr 2025 04:05
 Operator : SY/MD
 Sample : Q1726-06DL 20X
 Misc : 400mL/MSVOA_L
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-B2-3-03312025DL

Quant Time: Apr 18 04:42:23 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Fri Apr 18 02:14:00 2025
 Response via : Initial Calibration

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

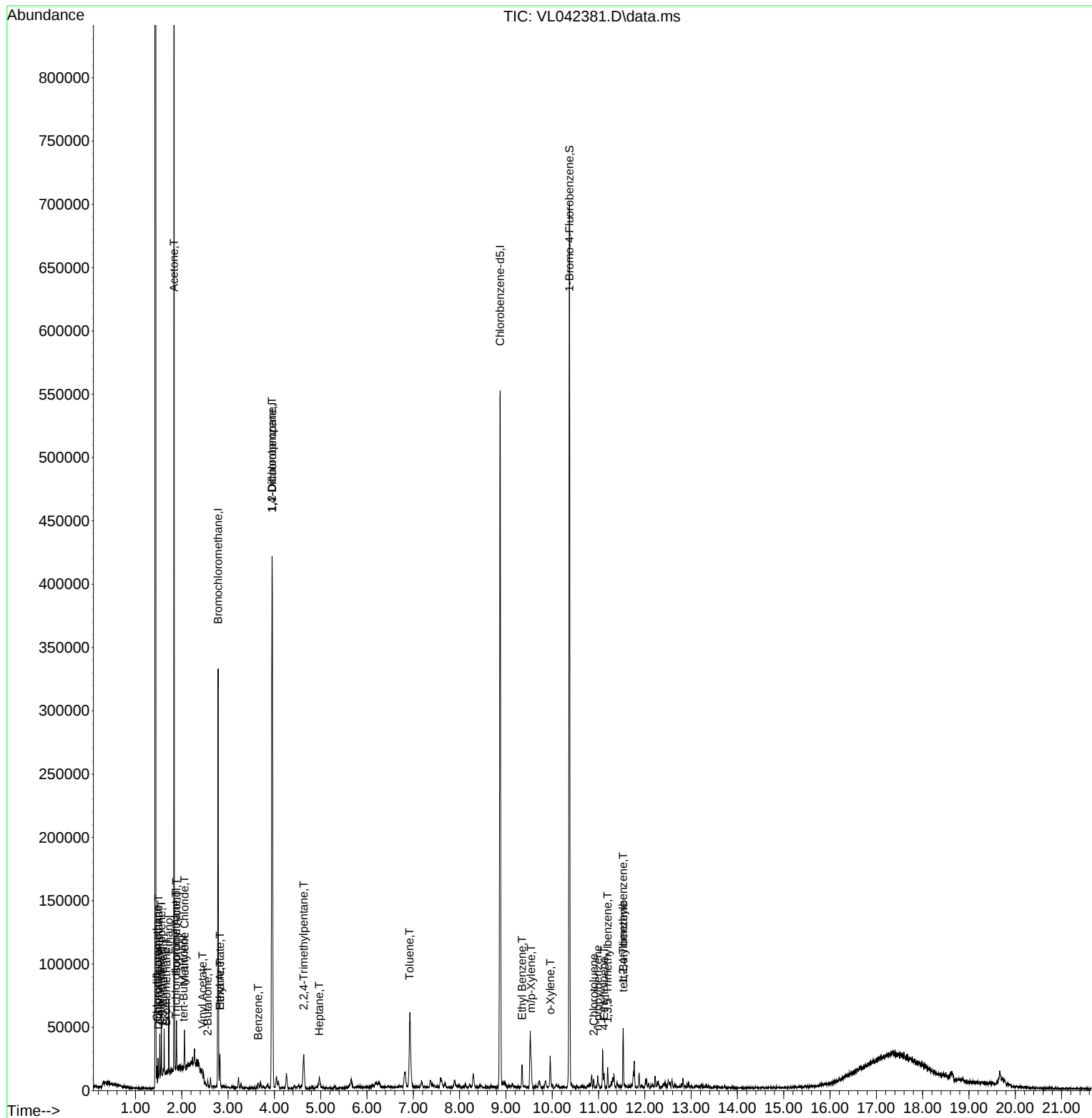
Internal Standards						
1) Bromochloromethane	2.784	49	87593	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	246915	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.875	117	211054	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.370	95	179405	10.344	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.400%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.495	85	894	0.058	ppbv	93
3) Chlorodifluoromethane	1.463	51	3346	0.227	ppbv #	66
4) Chloromethane	1.531	50	759	0.124	ppbv #	44
6) Bromomethane	1.670	94	191	0.067	ppbv #	38
9) Propene	1.557	41	4626	0.689	ppbv	91
10) Heptane	4.965	43	1342	0.071	ppbv #	1
11) Trichlorofluoromethane	1.874	101	451	0.031	ppbv	92
13) Ethanol	1.719	45	19745	18.510	ppbv	80
15) Acetone	1.832	43	477735	33.317	ppbv	98
16) 1,3-Butadiene	1.596	39	417	0.061	ppbv #	9
17) tert-Butyl alcohol	2.039	59	1001	0.056	ppbv #	1
19) Isopropyl Alcohol	1.884	45	17914	2.249	ppbv #	1
20) Methylene Chloride	2.059	84	4126	0.735	ppbv #	82
23) Vinyl Acetate	2.450	43	1889	0.325	ppbv #	1
25) Ethyl Acetate	2.822	43	5205	0.147	ppbv #	89
26) Hexane	2.822	57	5952	0.416	ppbv #	35
34) 2-Butanone	2.557	43	2882	0.148	ppbv #	85
36) Benzene	3.651	78	1608	0.060	ppbv	96
39) 1,2-Dichloropropane	3.949	63	65524	6.602	ppbv #	23
44) 2,2,4-Trimethylpentane	4.635	57	22777	0.495	ppbv	93
53) Toluene	6.917	91	15104	0.473	ppbv #	1
58) Ethyl Benzene	9.348	91	9155	0.219	ppbv	90
59) m/p-Xylene	9.542	91	7000	0.208	ppbv #	32
60) o-Xylene	9.959	91	10141	0.299	ppbv	100
64) n-propylbenzene	10.982	120	805	0.064	ppbv	99
65) tert-Butylbenzene	11.536	119	1537	0.034	ppbv #	52
71) 2-Chlorotoluene	10.898	91	2092	0.054	ppbv	95
72) 4-Ethyltoluene	11.118	105	3845	0.093	ppbv #	56
73) 1,3,5-Trimethylbenzene	11.196	105	4940	0.135	ppbv	87
74) 1,2,4-Trimethylbenzene	11.532	105	16215	0.379	ppbv #	61

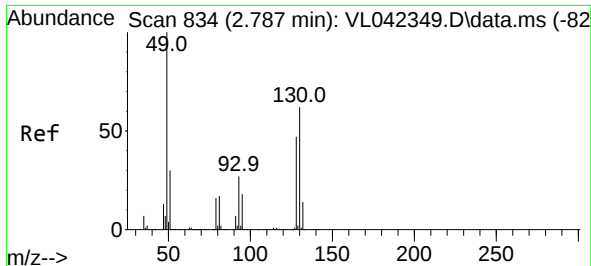
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042381.D
Acq On : 18 Apr 2025 04:05
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Misc : 400mL/MSVOA_L
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Instrument :
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ClientSampleId :
IA-B2-3-03312025DL

Quant Time: Apr 18 04:42:23 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

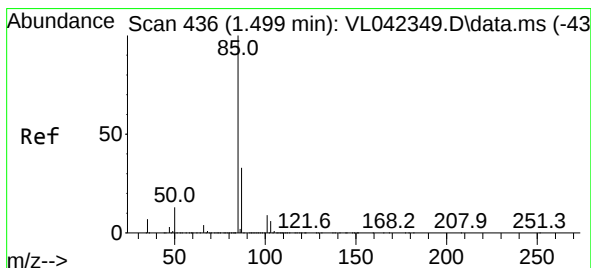
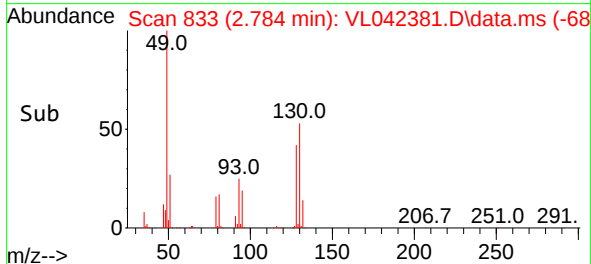
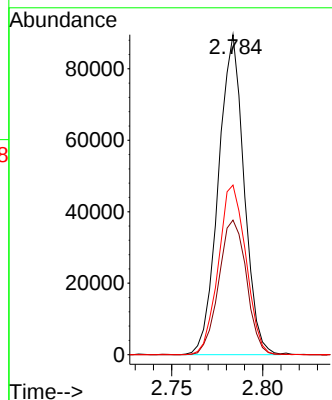
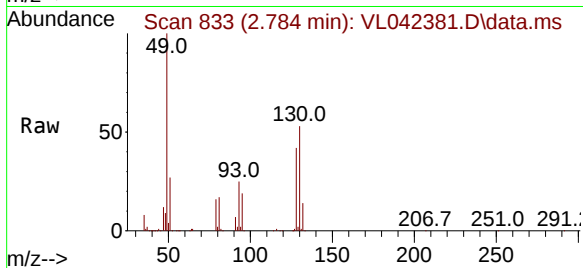




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 81
Delta R.T. -0.003 min
Lab File: VL042381.D
Acq: 18 Apr 2025 04:05

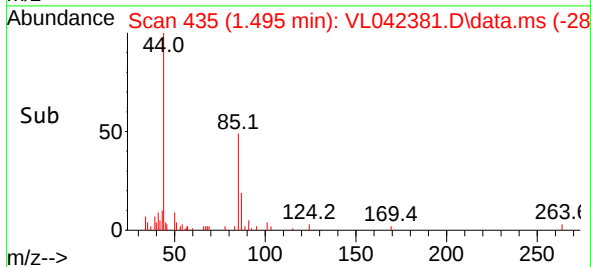
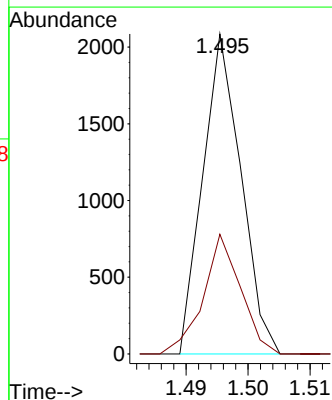
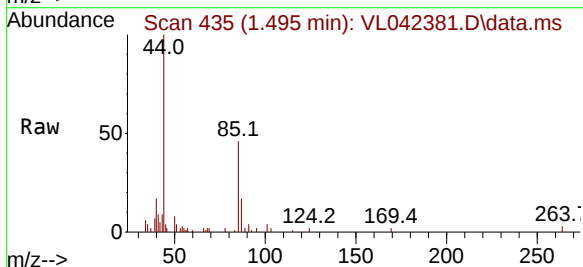
Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-03312025DL

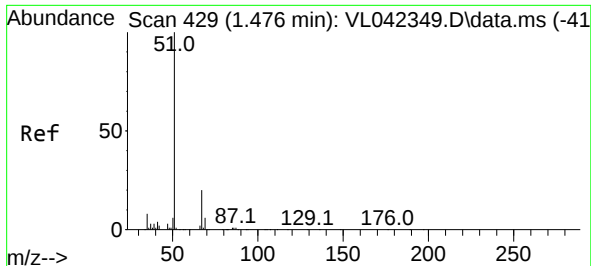
Tgt Ion: 49 Resp: 87593
Ion Ratio Lower Upper
49 100
128 45.3 22.8 68.4
130 56.9 29.3 88.0



#2
Dichlorodifluoromethane
Concen: 0.058 ppbv
RT: 1.495 min Scan# 435
Delta R.T. -0.003 min
Lab File: VL042381.D
Acq: 18 Apr 2025 04:05

Tgt Ion: 85 Resp: 894
Ion Ratio Lower Upper
85 100
87 37.4 26.6 39.8

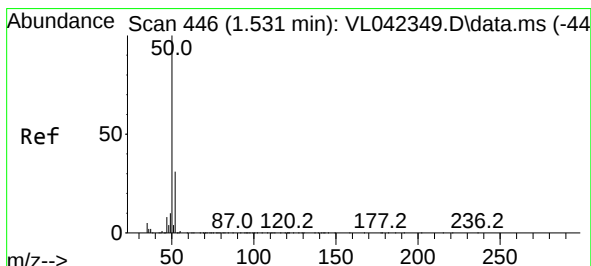
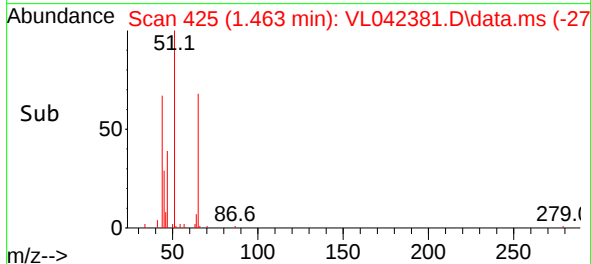
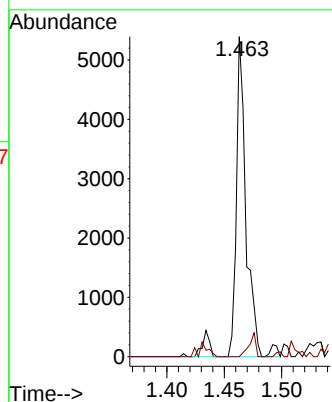
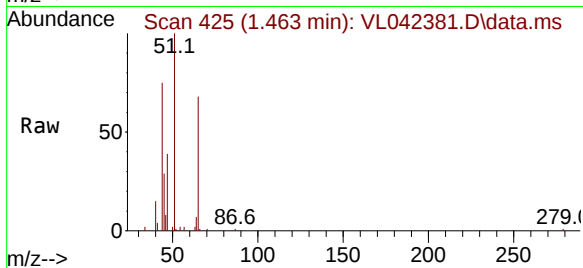




#3
Chlorodifluoromethane
Concen: 0.227 ppbv
RT: 1.463 min Scan# 41
Delta R.T. -0.013 min
Lab File: VL042381.D
Acq: 18 Apr 2025 04:05

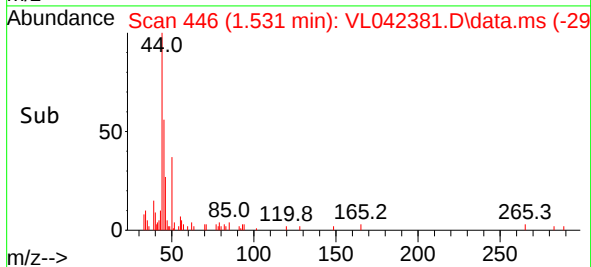
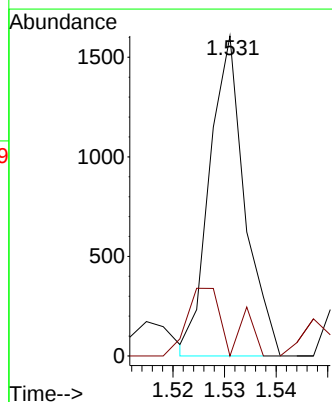
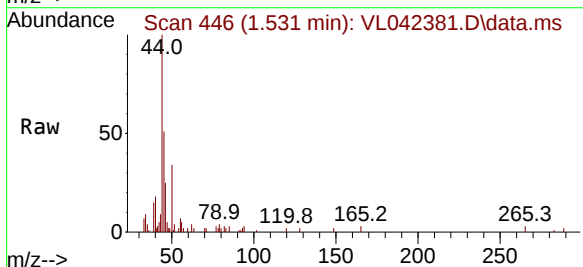
Instrument :
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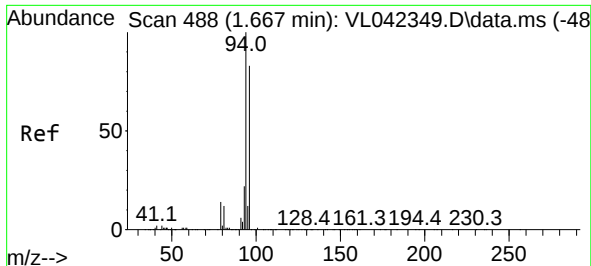
Tgt Ion: 51 Resp: 3346
Ion Ratio Lower Upper
51 100
67 4.8 16.2 24.4#



#4
Chloromethane
Concen: 0.124 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042381.D
Acq: 18 Apr 2025 04:05

Tgt Ion: 50 Resp: 759
Ion Ratio Lower Upper
50 100
52 0.0 24.7 37.1#

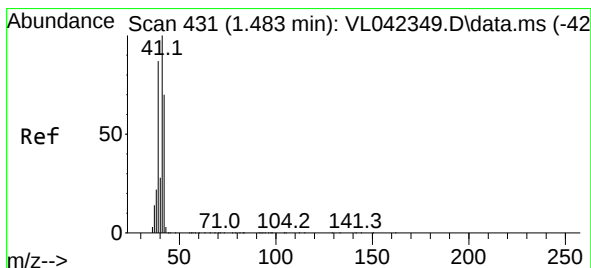
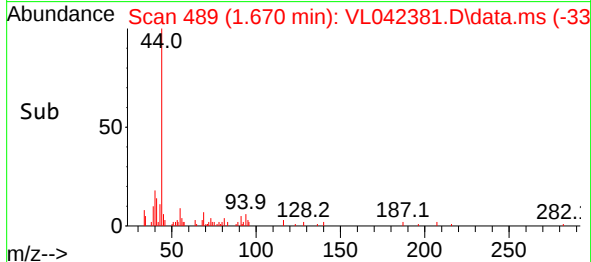
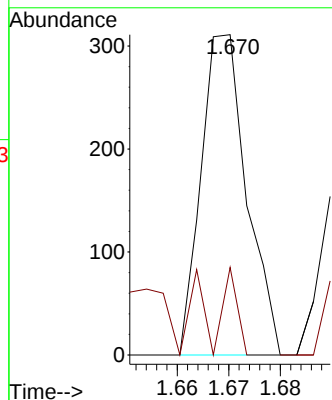
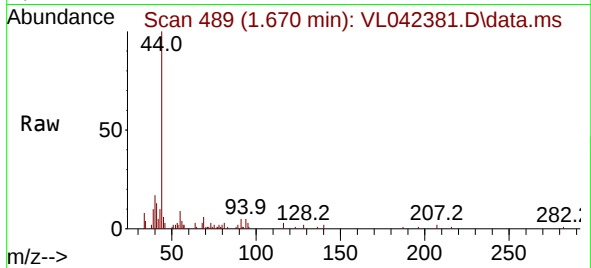




#6
Bromomethane
Concen: 0.067 ppbv
RT: 1.670 min Scan# 41
Delta R.T. 0.003 min
Lab File: VL042381.D
Acq: 18 Apr 2025 04:05

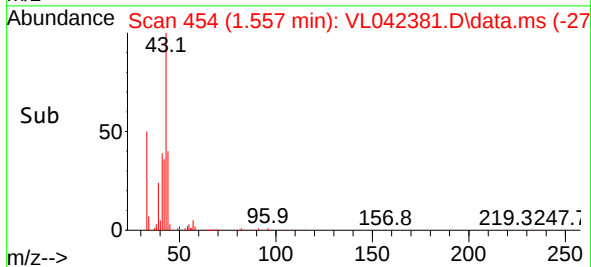
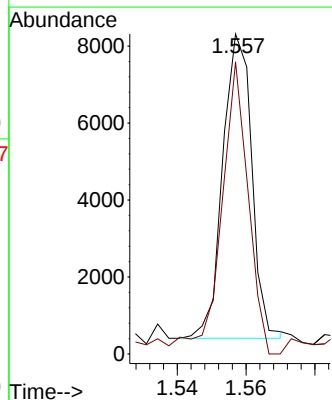
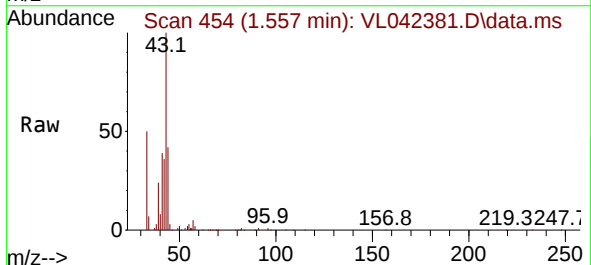
Instrument :
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ClientSampleId :
IA-B2-3-03312025DL

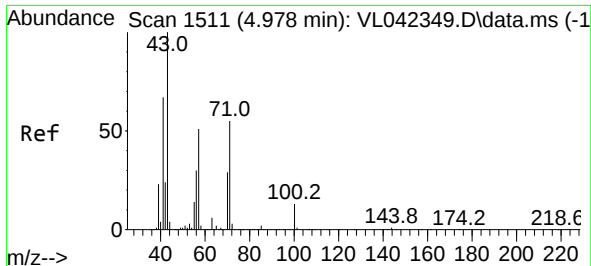
Tgt Ion: 94 Resp: 191
Ion Ratio Lower Upper
94 100
96 27.3 66.2 99.2#



#9
Propene
Concen: 0.689 ppbv
RT: 1.557 min Scan# 454
Delta R.T. 0.074 min
Lab File: VL042381.D
Acq: 18 Apr 2025 04:05

Tgt Ion: 41 Resp: 4626
Ion Ratio Lower Upper
41 100
42 77.8 56.2 84.4

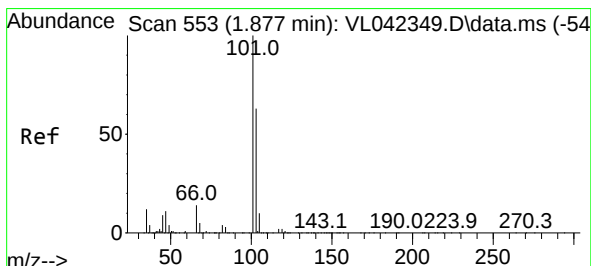
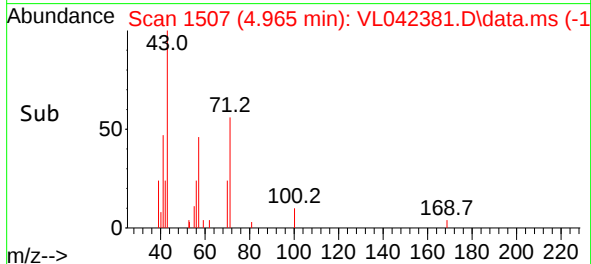
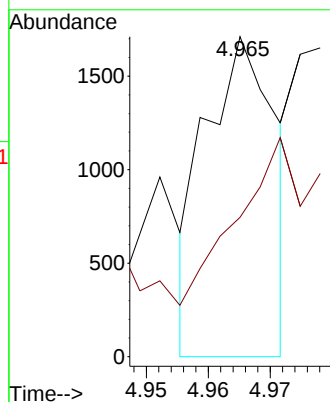
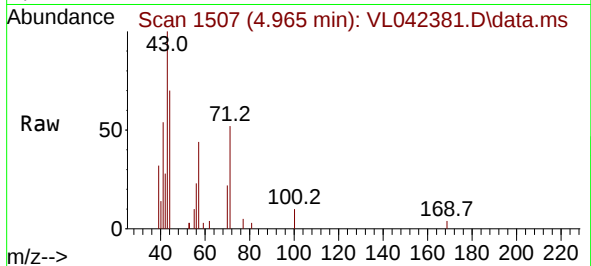




#10
Heptane
Concen: 0.071 ppbv
RT: 4.965 min Scan# 11
Delta R.T. -0.013 min
Lab File: VL042381.D
Acq: 18 Apr 2025 04:05

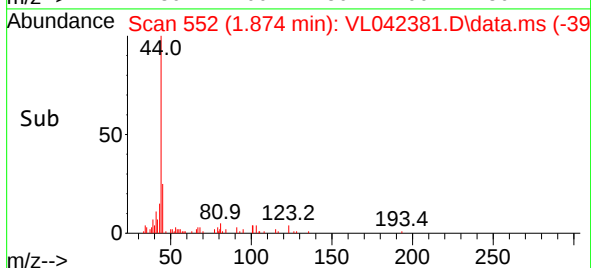
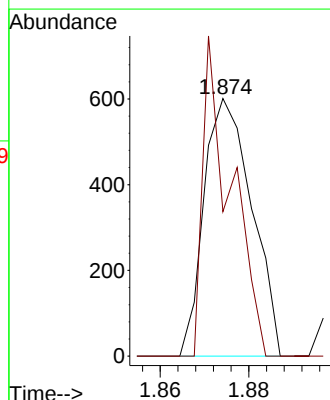
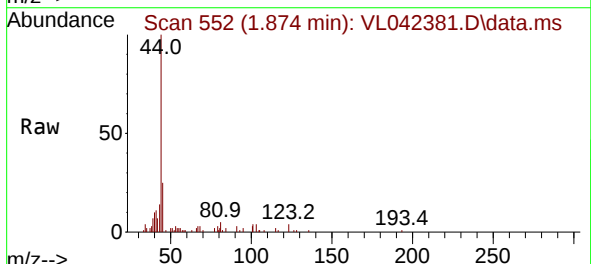
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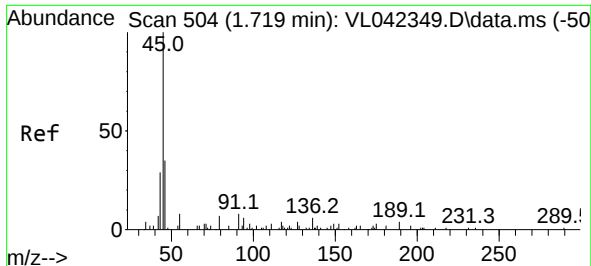
Tgt Ion: 43 Resp: 1342
Ion Ratio Lower Upper
43 100
57 149.6 39.9 59.9#



#11
Trichlorofluoromethane
Concen: 0.031 ppbv
RT: 1.874 min Scan# 552
Delta R.T. -0.003 min
Lab File: VL042381.D
Acq: 18 Apr 2025 04:05

Tgt Ion:101 Resp: 451
Ion Ratio Lower Upper
101 100
103 56.1 50.1 75.1

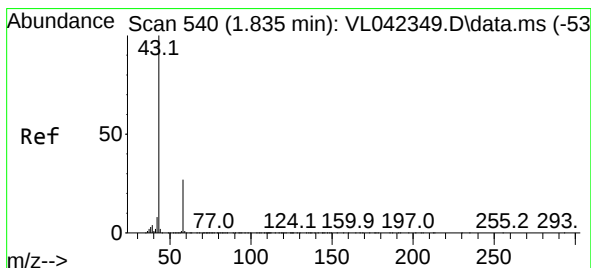
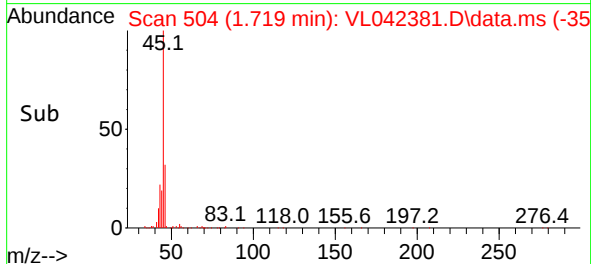
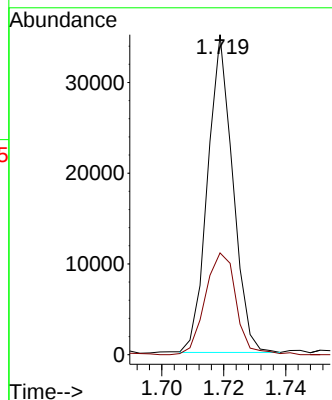
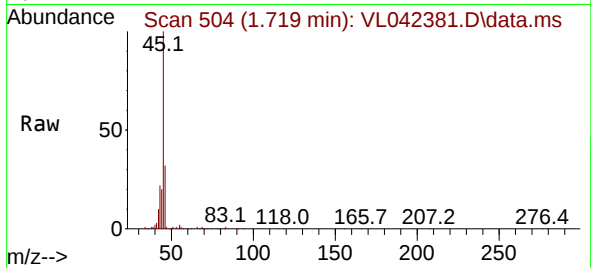




#13
Ethanol
Concen: 18.510 ppbv
RT: 1.719 min Scan# 504
Delta R.T. -0.000 min
Lab File: VL042381.D
Acq: 18 Apr 2025 04:05

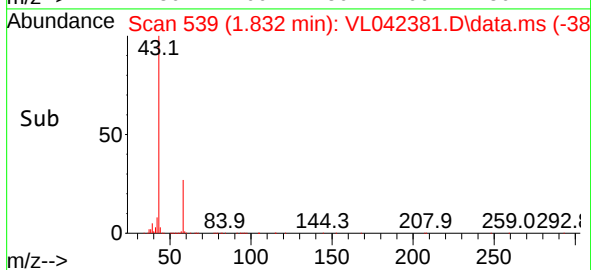
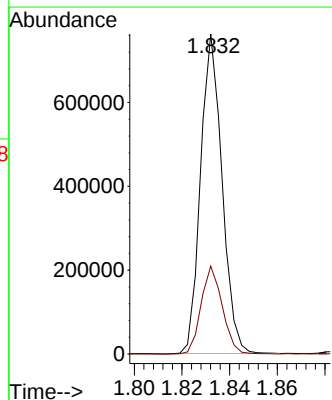
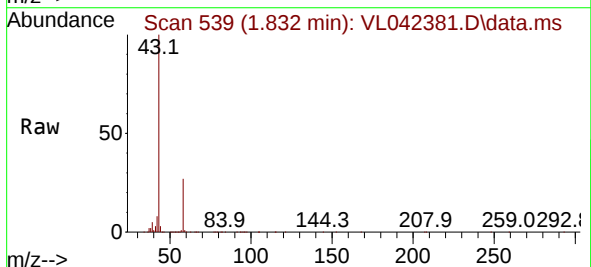
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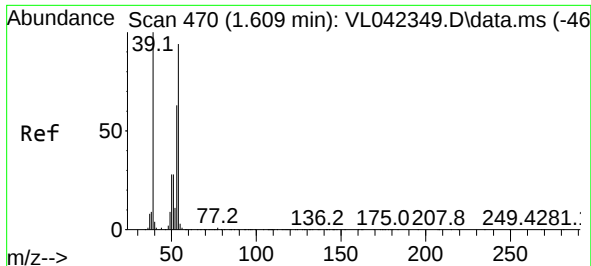
Tgt Ion: 45 Resp: 19745
Ion Ratio Lower Upper
45 100
46 40.4 21.9 87.7



#15
Acetone
Concen: 33.317 ppbv
RT: 1.832 min Scan# 539
Delta R.T. -0.003 min
Lab File: VL042381.D
Acq: 18 Apr 2025 04:05

Tgt Ion: 43 Resp: 477735
Ion Ratio Lower Upper
43 100
58 27.2 22.4 33.6

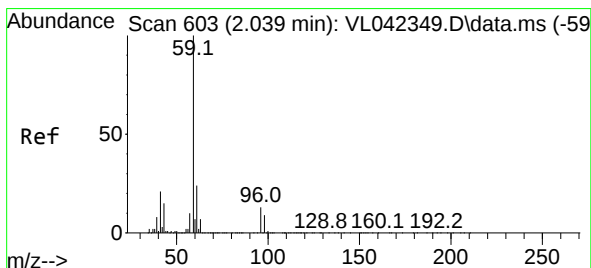
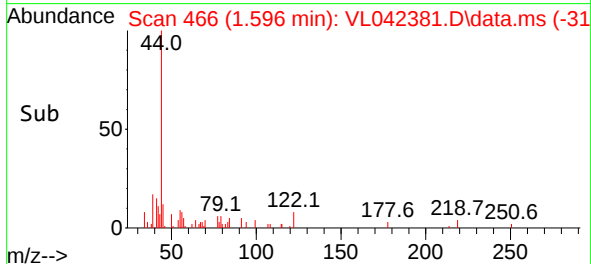
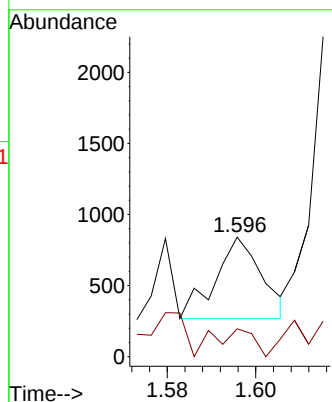
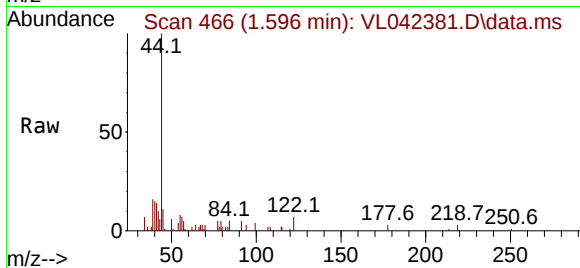




#16
1,3-Butadiene
Concen: 0.061 ppbv
RT: 1.596 min Scan# 417
Delta R.T. -0.013 min
Lab File: VL042381.D
Acq: 18 Apr 2025 04:05

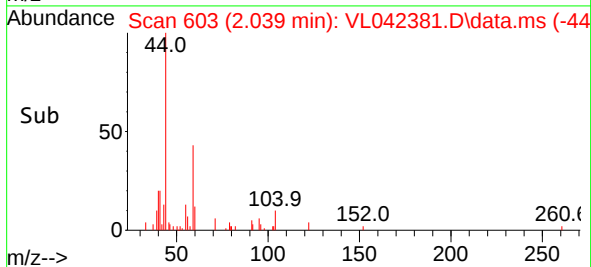
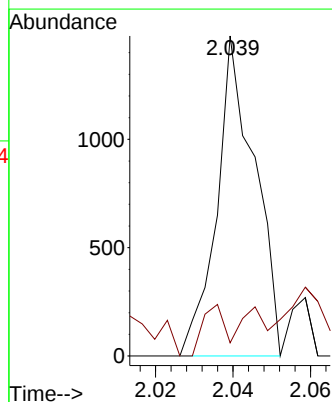
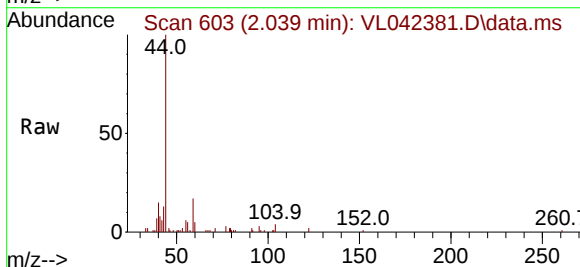
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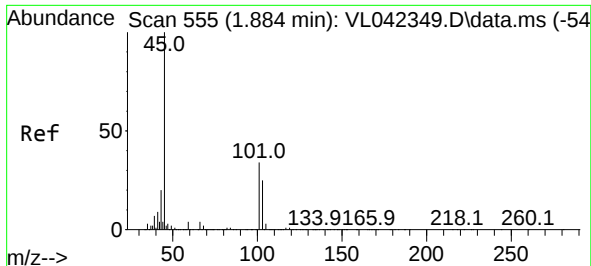
Tgt Ion: 39 Resp: 417
Ion Ratio Lower Upper
39 100
54 0.0 64.9 97.3#



#17
tert-Butyl alcohol
Concen: 0.056 ppbv
RT: 2.039 min Scan# 603
Delta R.T. -0.000 min
Lab File: VL042381.D
Acq: 18 Apr 2025 04:05

Tgt Ion: 59 Resp: 1001
Ion Ratio Lower Upper
59 100
57 62.3 8.7 13.1#

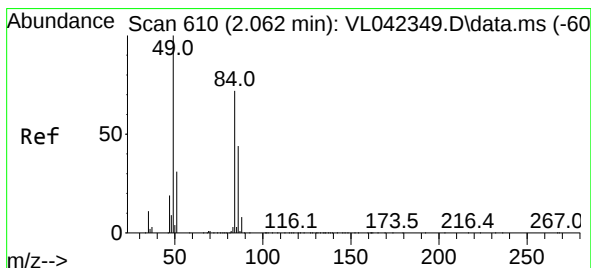
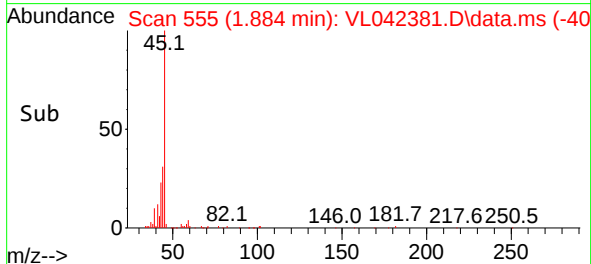
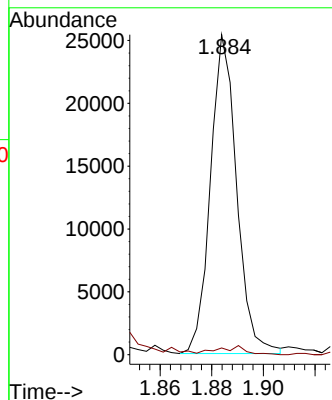
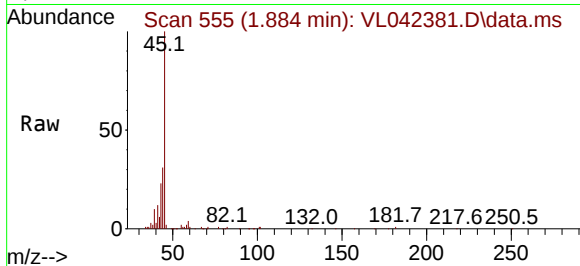




#19
Isopropyl Alcohol
Concen: 2.249 ppbv
RT: 1.884 min Scan# 51
Delta R.T. -0.000 min
Lab File: VL042381.D
Acq: 18 Apr 2025 04:05

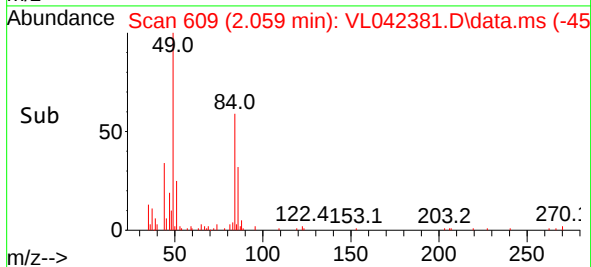
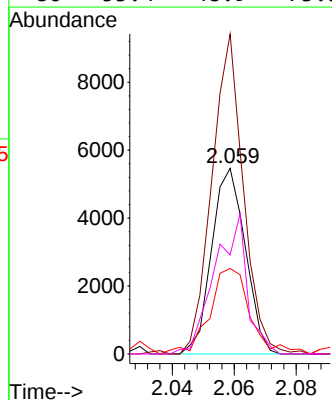
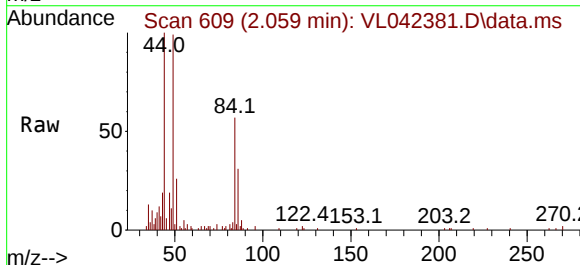
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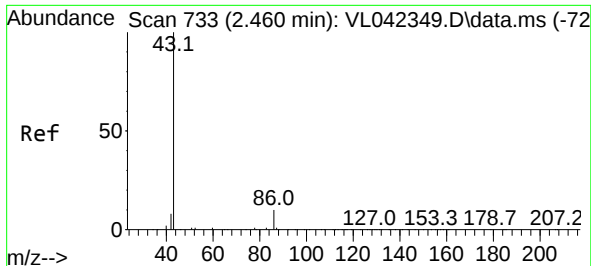
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Ion Ratio Lower Upper
45 100
58 724.8 34.5 51.7#



#20
Methylene Chloride
Concen: 0.735 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.003 min
Lab File: VL042381.D
Acq: 18 Apr 2025 04:05

Tgt Ion: 84 Resp: 4126
Ion Ratio Lower Upper
84 100
49 172.4 111.6 167.4#
51 42.3 35.1 52.7
86 53.4 48.9 73.3

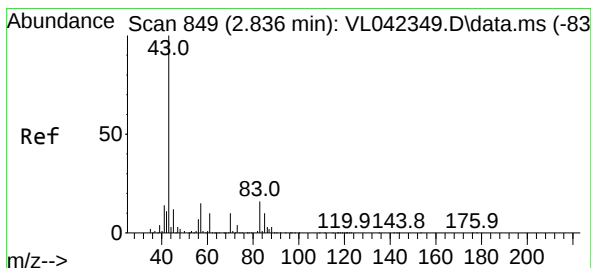
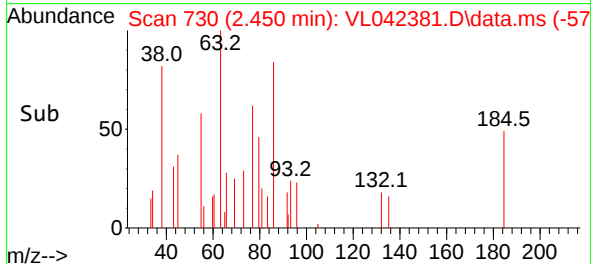
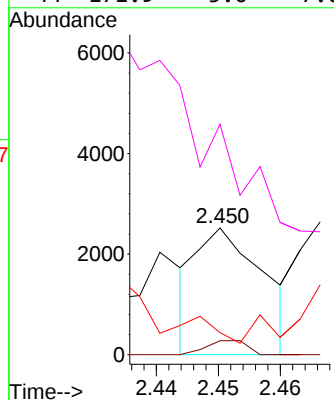
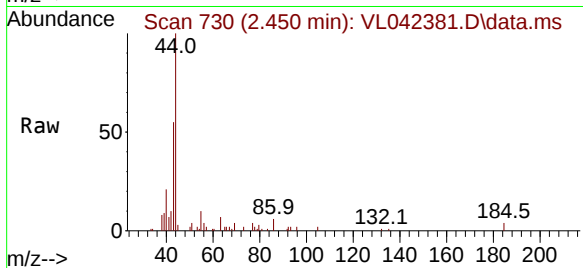




#23
 Vinyl Acetate
 Concen: 0.325 ppbv
 RT: 2.450 min Scan# 71
 Delta R.T. -0.010 min
 Lab File: VL042381.D
 Acq: 18 Apr 2025 04:05

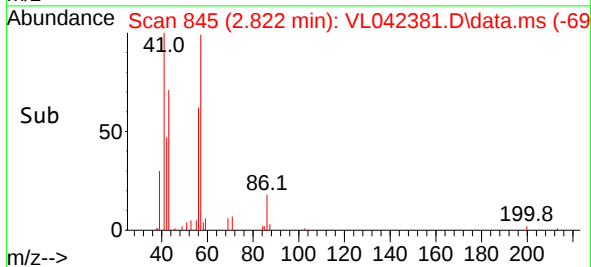
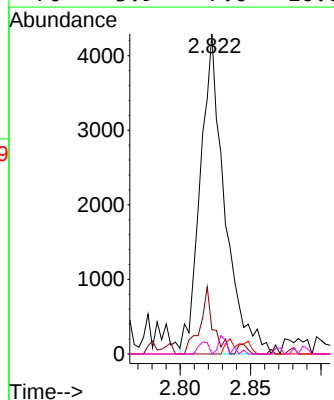
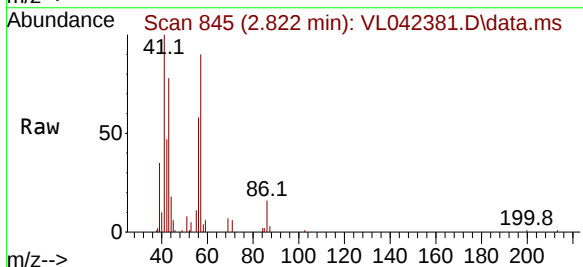
Instrument :
 MSVOA_L
 ClientSampleId :
 IA-B2-3-03312025DL

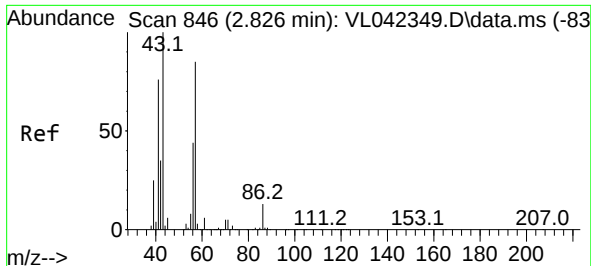
Tgt Ion: 43	Resp: 1889
Ion Ratio	Lower Upper
43 100	
86 24.4	6.5 9.7#
42 8.3	7.8 11.8
44 171.9	5.0 7.6#



#25
 Ethyl Acetate
 Concen: 0.147 ppbv
 RT: 2.822 min Scan# 845
 Delta R.T. -0.013 min
 Lab File: VL042381.D
 Acq: 18 Apr 2025 04:05

Tgt	Ion: 43	Resp:	5205
Ion	Ratio	Lower	Upper
43	100		
45	12.6	8.3	12.5#
61	3.4	7.3	10.9#
70	3.9	7.0	10.6#

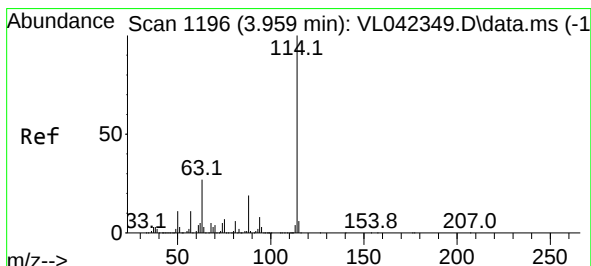
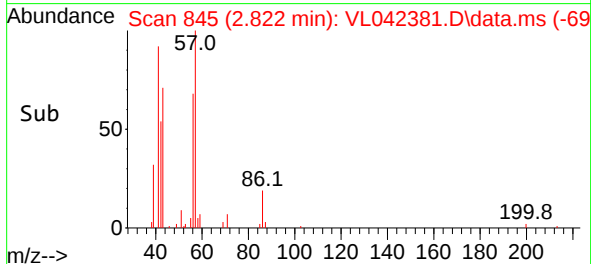
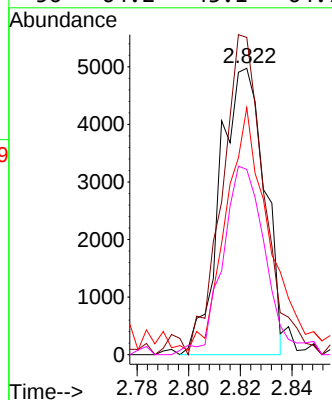
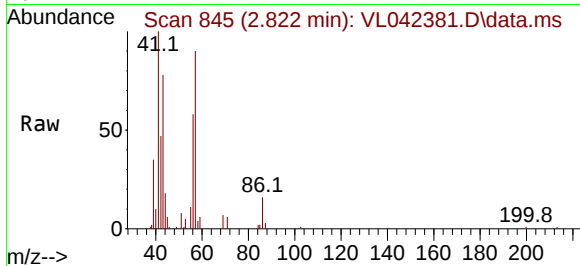




#26
Hexane
Concen: 0.416 ppbv
RT: 2.822 min Scan# 846
Delta R.T. -0.003 min
Lab File: VL042381.D
Acq: 18 Apr 2025 04:05

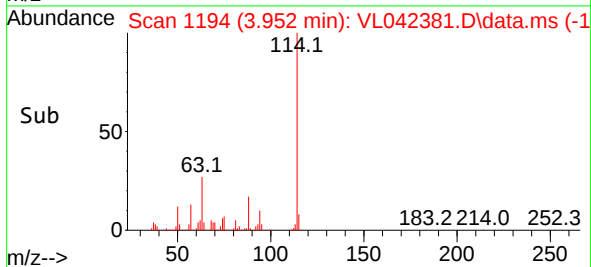
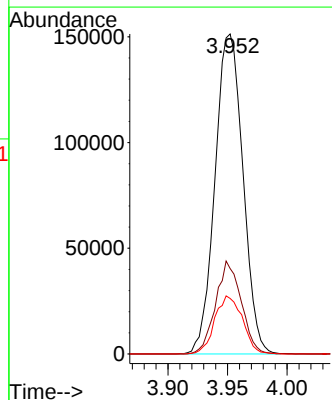
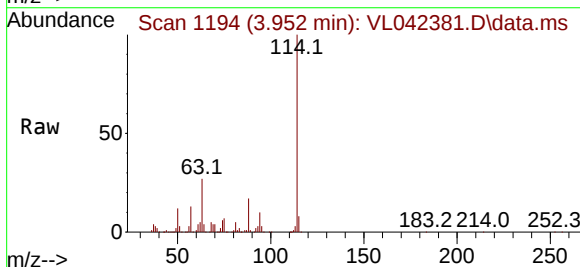
Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-03312025DL

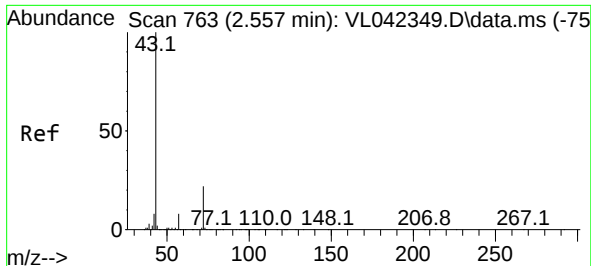
Tgt Ion:	57	Resp:	5952
Ion	Ratio	Lower	Upper
57	100		
41	102.6	77.9	116.9
43	84.8	208.4	312.6#
56	64.2	43.1	64.7



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 1194
Delta R.T. -0.007 min
Lab File: VL042381.D
Acq: 18 Apr 2025 04:05

Tgt Ion:	114	Resp:	246915
Ion	Ratio	Lower	Upper
114	100		
63	26.6	21.8	32.6
88	17.9	15.5	23.3





#34

2-Butanone

Concen: 0.148 ppbv

RT: 2.557 min Scan# 7

Delta R.T. -0.000 min

Lab File: VL042381.D

Acq: 18 Apr 2025 04:05

Instrument :

MSVOA_L

ClientSampleId :

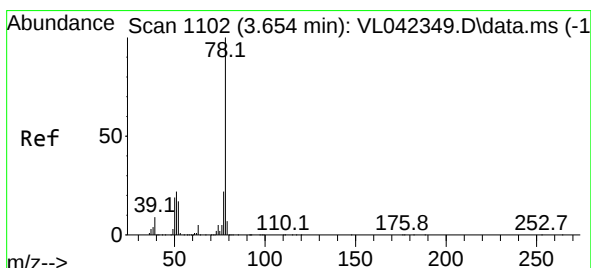
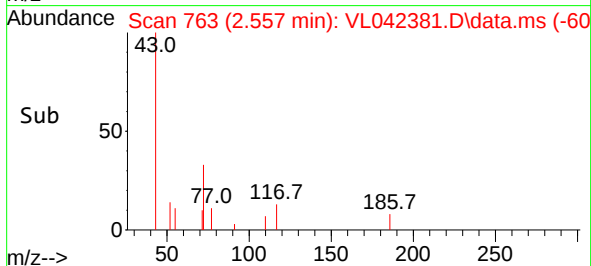
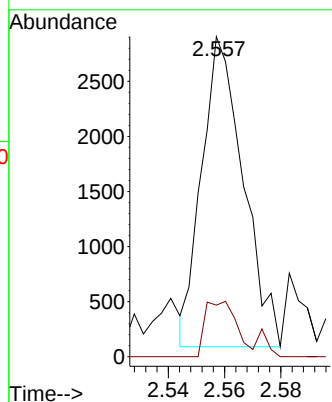
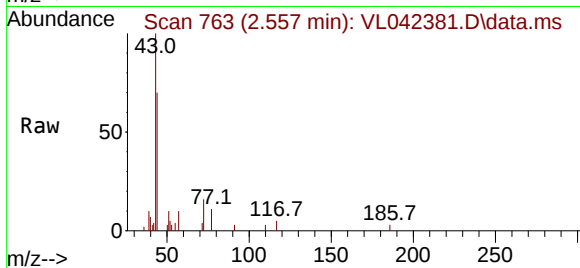
IA-B2-3-03312025DL

Tgt Ion: 43 Resp: 2882

Ion Ratio Lower Upper

43 100

72 15.7 18.2 27.2#



#36

Benzene

Concen: 0.060 ppbv

RT: 3.651 min Scan# 1101

Delta R.T. -0.003 min

Lab File: VL042381.D

Acq: 18 Apr 2025 04:05

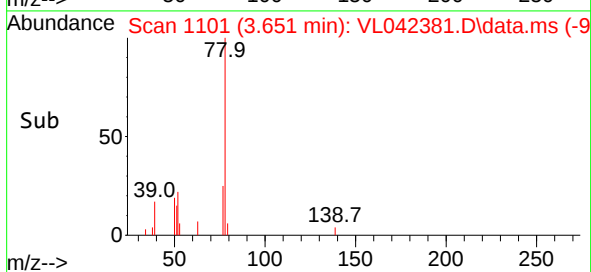
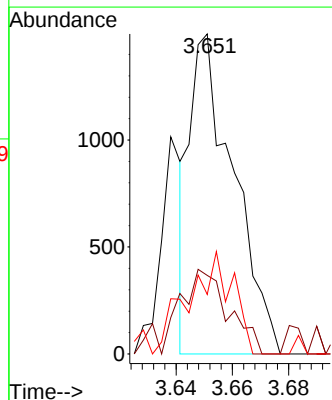
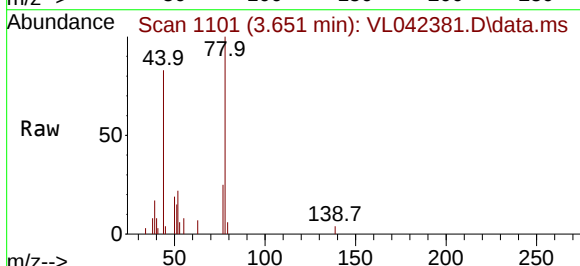
Tgt Ion: 78 Resp: 1608

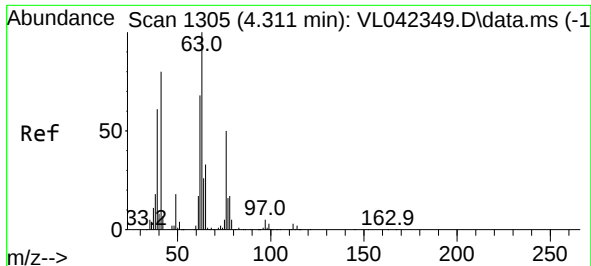
Ion Ratio Lower Upper

78 100

77 24.5 17.4 26.0

50 18.6 15.5 23.3





#39

1,2-Dichloropropane

Concen: 6.602 ppbv

RT: 3.949 min Scan# 1193

Delta R.T. -0.363 min

Lab File: VL042381.D

Acq: 18 Apr 2025 04:05

Instrument :

MSVOA_L

ClientSampleId :

IA-B2-3-03312025DL

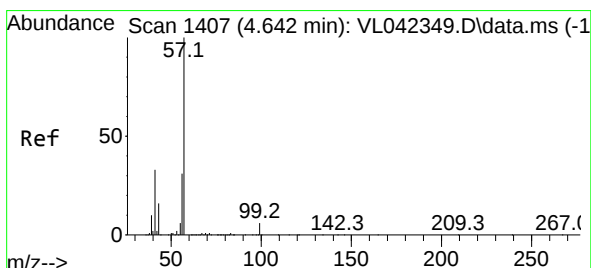
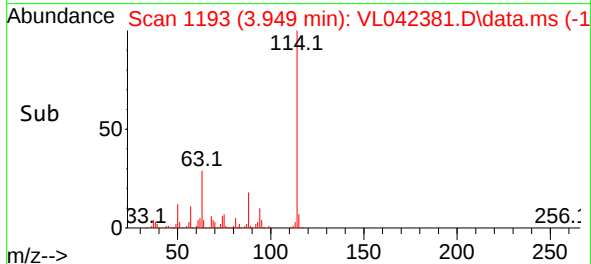
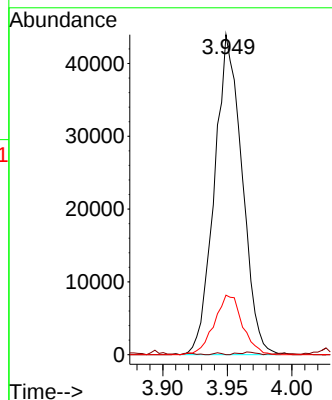
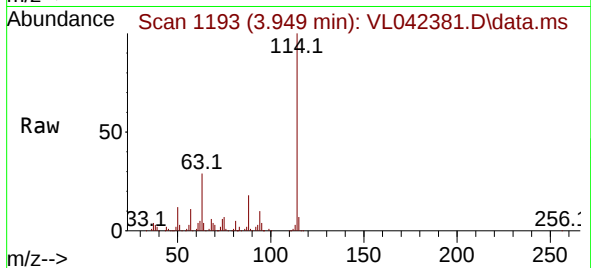
Tgt Ion: 63 Resp: 65524

Ion Ratio Lower Upper

63 100

41 0.0 64.2 96.2#

62 18.6 54.3 81.5#



#44

2,2,4-Trimethylpentane

Concen: 0.495 ppbv

RT: 4.635 min Scan# 1405

Delta R.T. -0.007 min

Lab File: VL042381.D

Acq: 18 Apr 2025 04:05

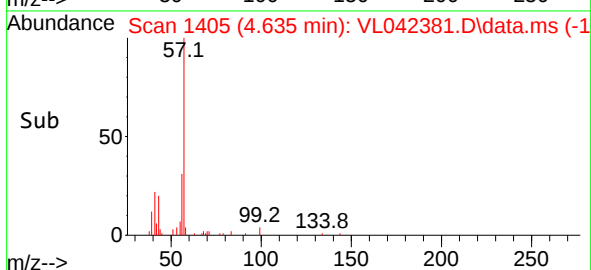
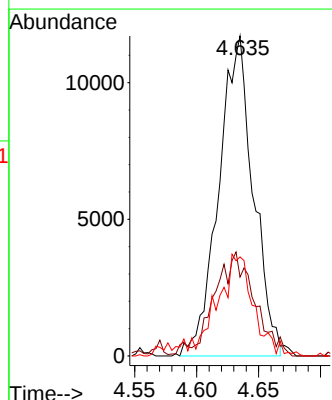
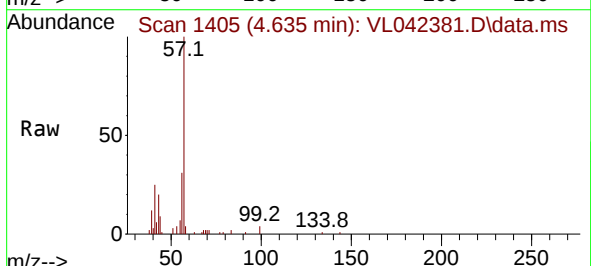
Tgt Ion: 57 Resp: 22777

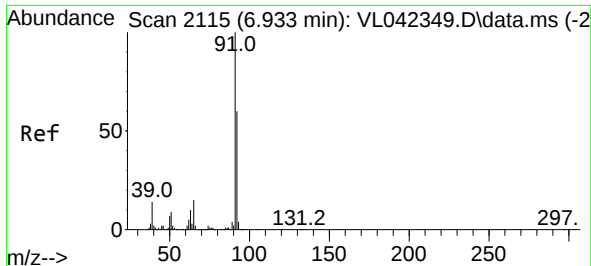
Ion Ratio Lower Upper

57 100

41 38.3 27.2 40.8

56 35.7 25.7 38.5

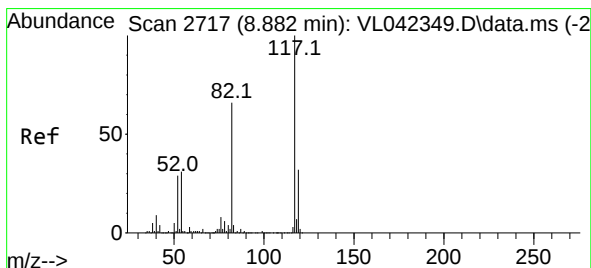
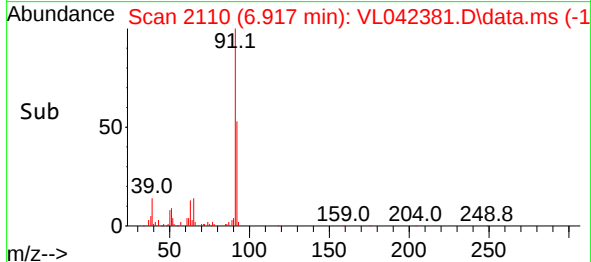
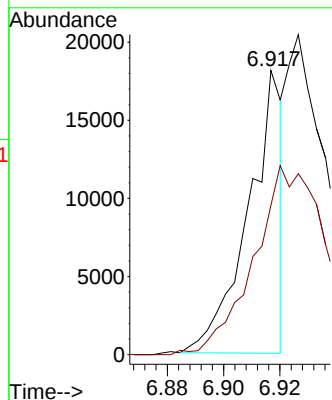
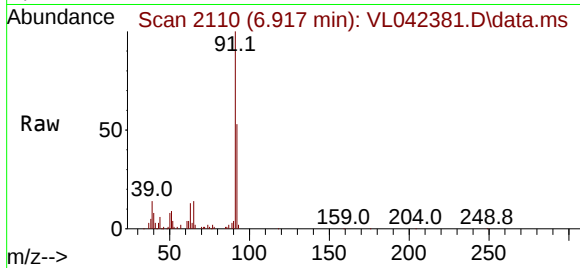




#53
Toluene
Concen: 0.473 ppbv
RT: 6.917 min Scan# 2110
Delta R.T. -0.016 min
Lab File: VL042381.D
Acq: 18 Apr 2025 04:05

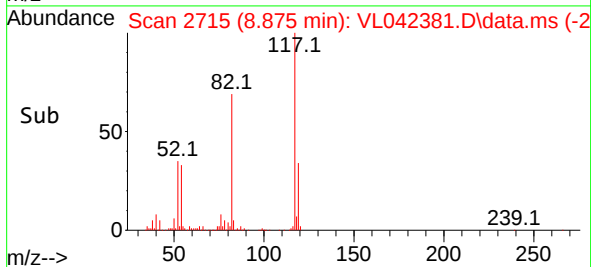
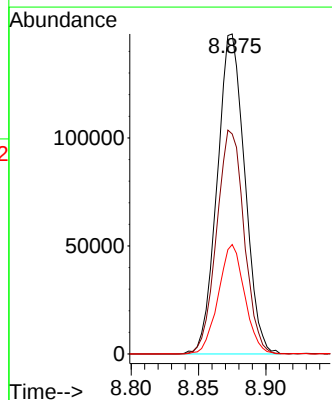
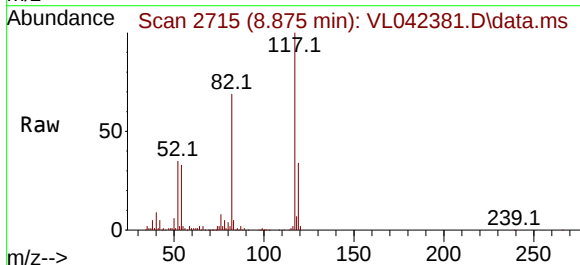
Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-03312025DL

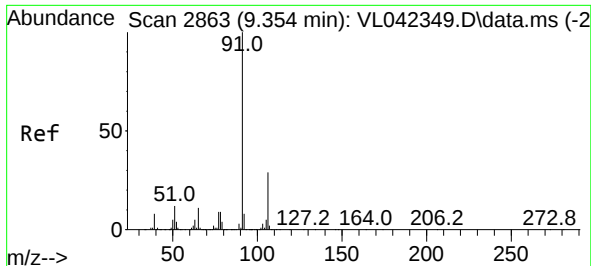
Tgt Ion: 91 Resp: 15104
Ion Ratio Lower Upper
91 100
92 147.7 48.2 72.4#



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 2715
Delta R.T. -0.007 min
Lab File: VL042381.D
Acq: 18 Apr 2025 04:05

Tgt Ion: 117 Resp: 211054
Ion Ratio Lower Upper
117 100
82 69.8 57.8 86.6
119 32.7 25.2 37.8

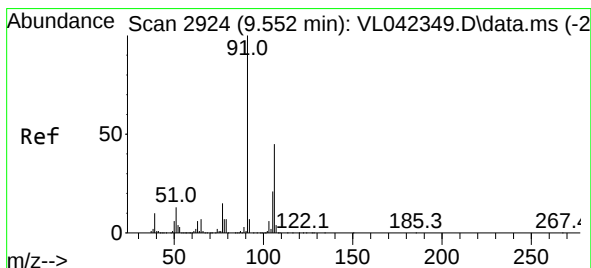
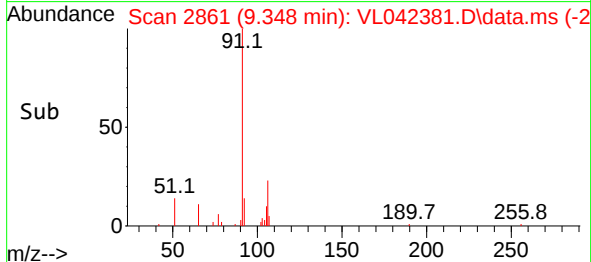
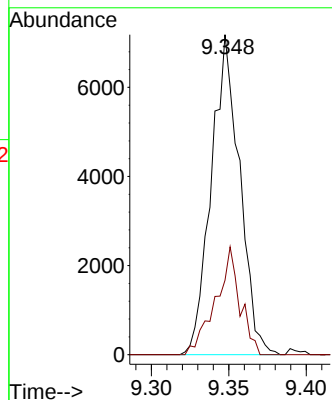
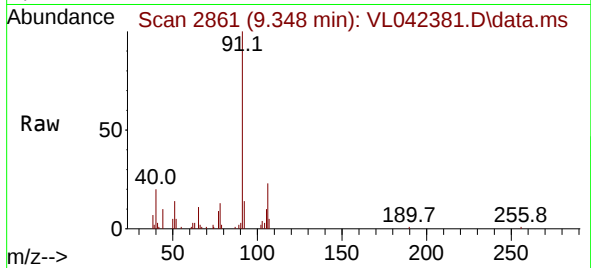




#58
Ethyl Benzene
Concen: 0.219 ppbv
RT: 9.348 min Scan# 21
Delta R.T. -0.007 min
Lab File: VL042381.D
Acq: 18 Apr 2025 04:05

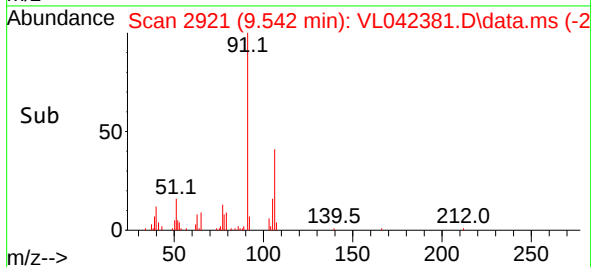
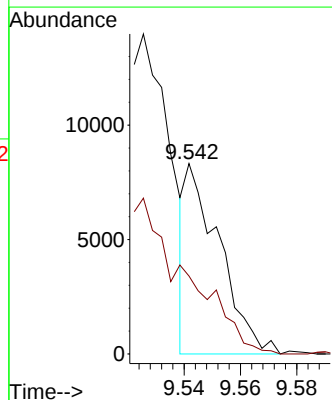
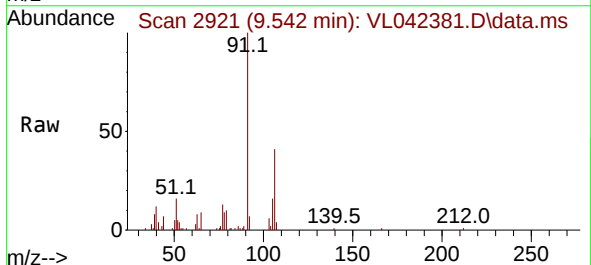
Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-03312025DL

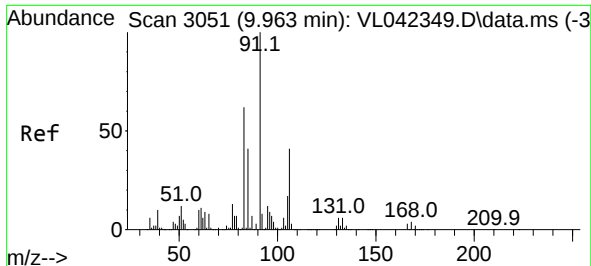
Tgt Ion: 91 Resp: 9155
Ion Ratio Lower Upper
91 100
106 23.3 23.0 34.4



#59
m/p-Xylene
Concen: 0.208 ppbv
RT: 9.542 min Scan# 2921
Delta R.T. -0.010 min
Lab File: VL042381.D
Acq: 18 Apr 2025 04:05

Tgt Ion: 91 Resp: 7000
Ion Ratio Lower Upper
91 100
106 0.0 35.4 53.2#

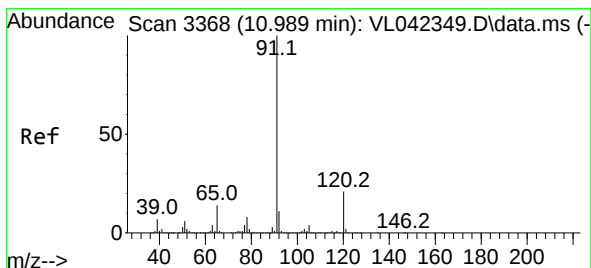
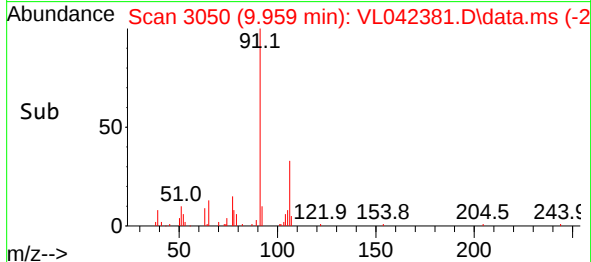
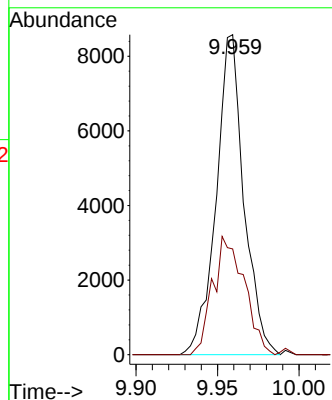
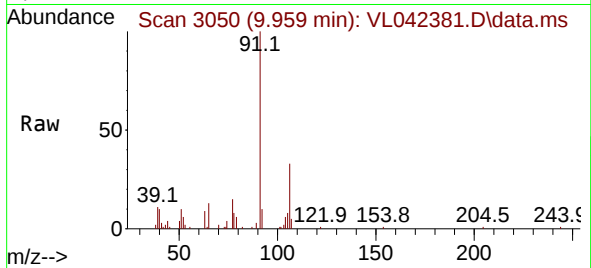




#60
o-Xylene
Concen: 0.299 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.003 min
Lab File: VL042381.D
Acq: 18 Apr 2025 04:05

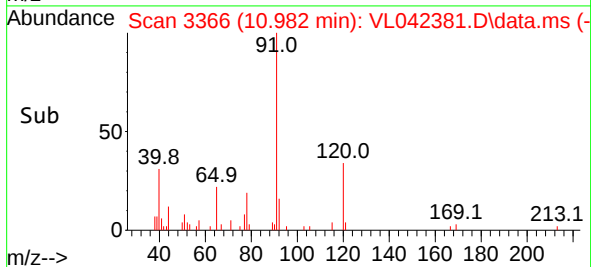
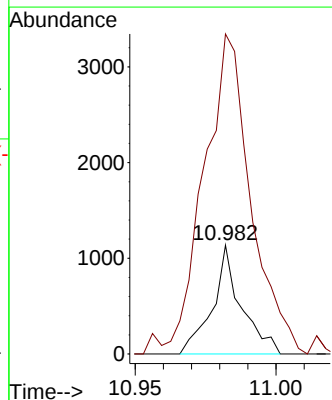
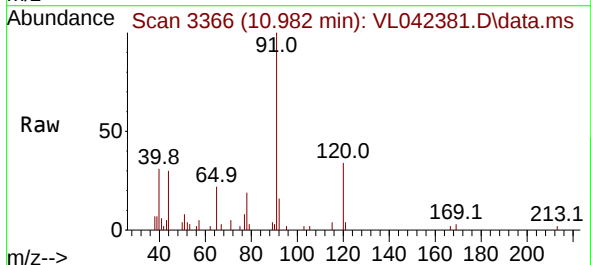
Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-03312025DL

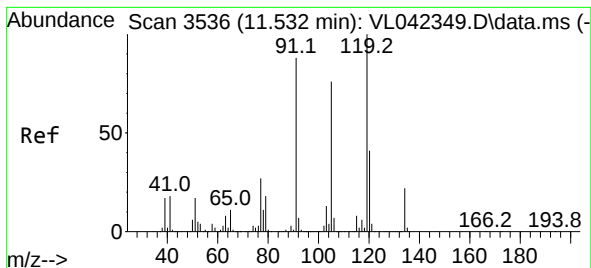
Tgt Ion: 91 Resp: 10141
Ion Ratio Lower Upper
91 100
106 42.6 21.1 63.4



#64
n-propylbenzene
Concen: 0.064 ppbv
RT: 10.982 min Scan# 3366
Delta R.T. -0.007 min
Lab File: VL042381.D
Acq: 18 Apr 2025 04:05

Tgt Ion: 120 Resp: 805
Ion Ratio Lower Upper
120 100
91 492.0 392.4 588.6





#65

tert-Butylbenzene

Concen: 0.034 ppbv

RT: 11.536 min Scan# 3177

Delta R.T. 0.003 min

Lab File: VL042381.D

Acq: 18 Apr 2025 04:05

Instrument :

MSVOA_L

ClientSampleId :

IA-B2-3-03312025DL

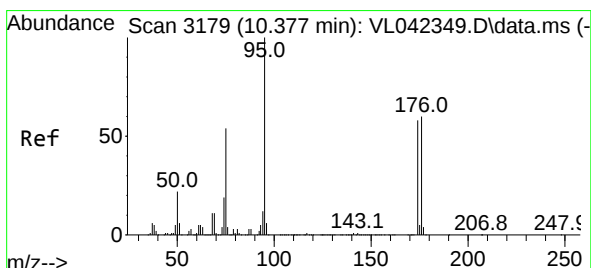
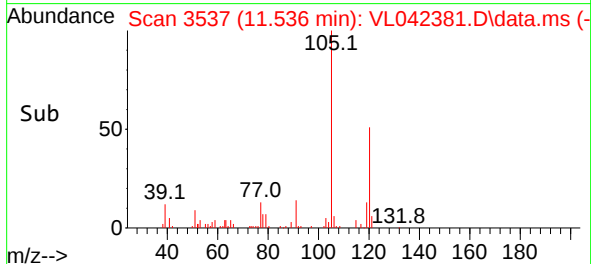
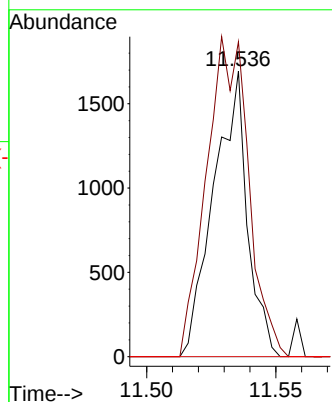
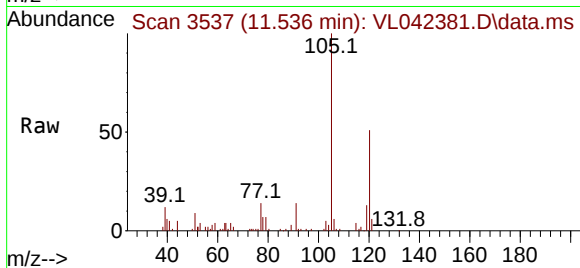
Tgt Ion:119 Resp: 1537

Ion Ratio Lower Upper

119 100

91 139.7 74.6 111.8#

134 0.0 18.8 28.2#



#68

1-Bromo-4-Fluorobenzene

Concen: 10.344 ppbv

RT: 10.370 min Scan# 3177

Delta R.T. -0.007 min

Lab File: VL042381.D

Acq: 18 Apr 2025 04:05

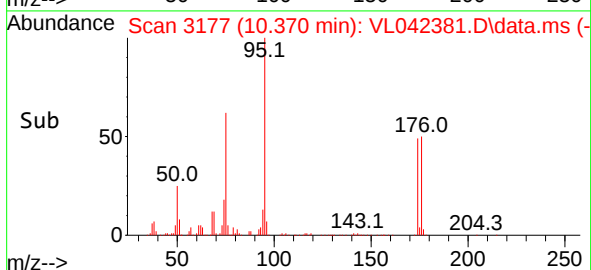
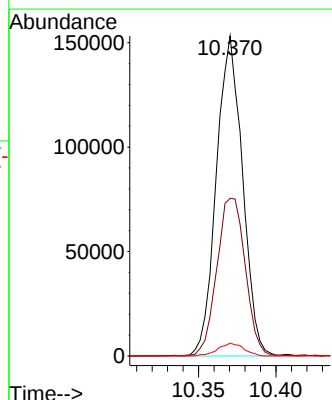
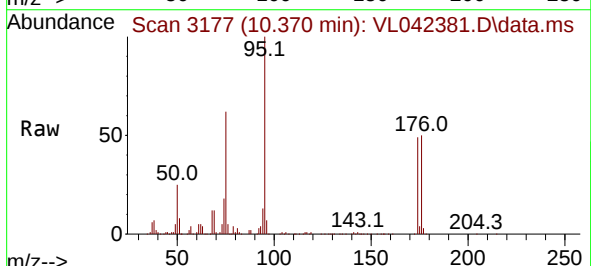
Tgt Ion: 95 Resp: 179405

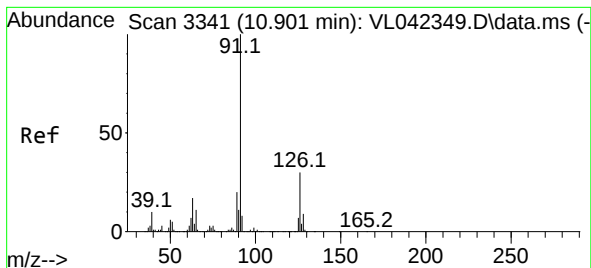
Ion Ratio Lower Upper

95 100

174 53.8 48.5 72.7

175 4.0 3.7 5.5

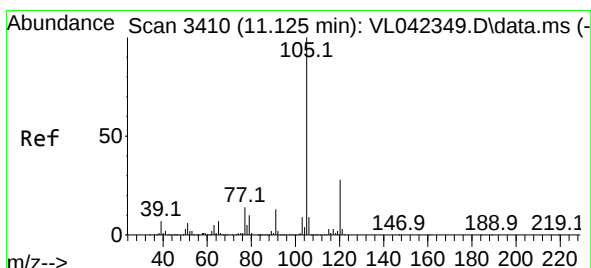
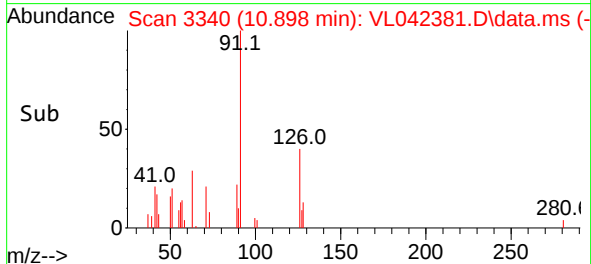
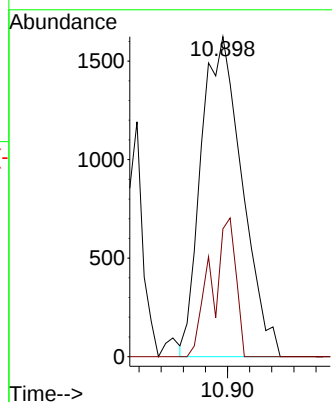
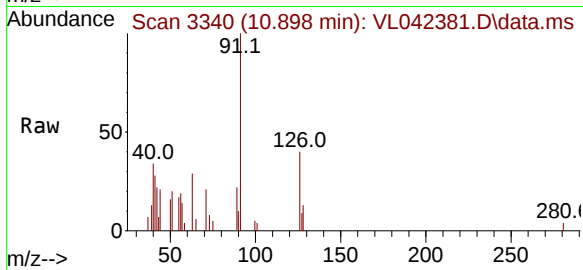




#71
2-Chlorotoluene
Concen: 0.054 ppbv
RT: 10.898 min Scan# 31
Delta R.T. -0.003 min
Lab File: VL042381.D
Acq: 18 Apr 2025 04:05

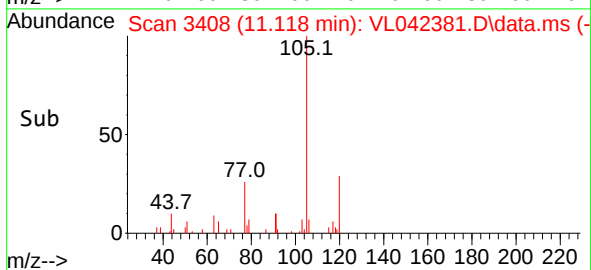
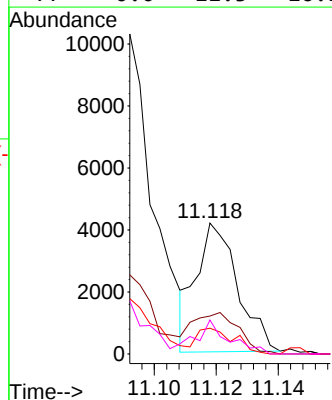
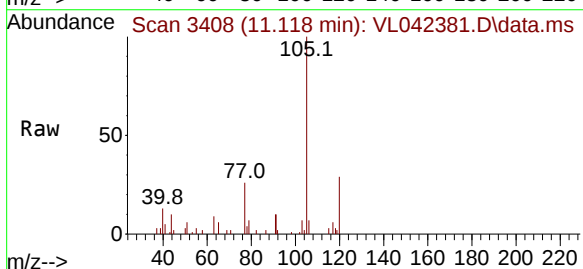
Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-03312025DL

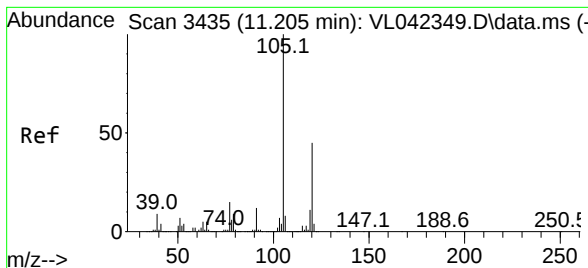
Tgt Ion: 91 Resp: 2092
Ion Ratio Lower Upper
91 100
126 25.6 11.4 45.4



#72
4-Ethyltoluene
Concen: 0.093 ppbv
RT: 11.118 min Scan# 3408
Delta R.T. -0.007 min
Lab File: VL042381.D
Acq: 18 Apr 2025 04:05

Tgt Ion:105 Resp: 3845
Ion Ratio Lower Upper
105 100
120 0.0 23.2 34.8#
91 0.0 10.4 15.6#
77 0.0 11.3 16.9#





#73

1,3,5-Trimethylbenzene

Concen: 0.135 ppbv

RT: 11.196 min Scan# 3435

Delta R.T. -0.010 min

Lab File: VL042381.D

Acq: 18 Apr 2025 04:05

Instrument :

MSVOA_L

ClientSampleId :

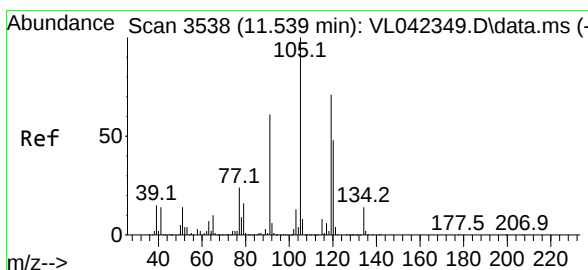
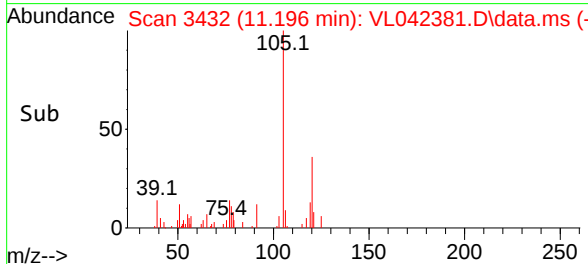
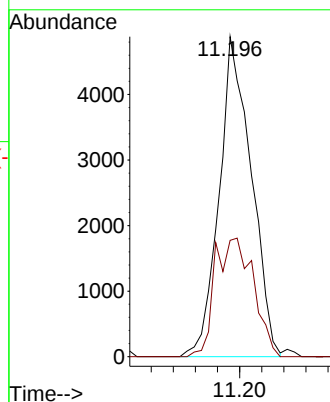
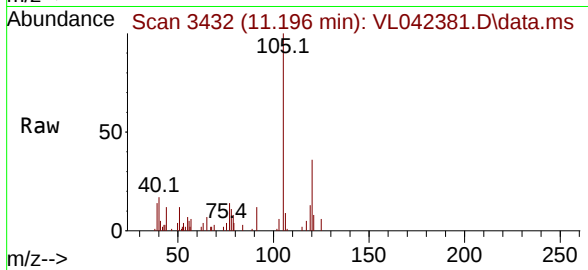
IA-B2-3-03312025DL

Tgt Ion:105 Resp: 4940

Ion Ratio Lower Upper

105 100

120 36.4 35.6 53.4



#74

1,2,4-Trimethylbenzene

Concen: 0.379 ppbv

RT: 11.532 min Scan# 3536

Delta R.T. -0.007 min

Lab File: VL042381.D

Acq: 18 Apr 2025 04:05

Tgt Ion:105 Resp: 16215

Ion Ratio Lower Upper

105 100

120 36.7 38.1 57.1#

91 10.5 48.8 73.2#

77 16.1 19.0 28.4#

