

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111125\
 Data File : VL043183.D
 Acq On : 11 Nov 2025 10:35
 Operator : SY/MD
 Sample : Q3594-01
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1A

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/13/2025
 Supervised By :Mahesh Dadoda 11/13/2025

Quant Time: Nov 12 00:15:10 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL101425AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2025

QLast Update : Wed Oct 15 02:12:58 2025

Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.800	49	140511	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.978	114	394645	10.000	ppbv	0.02
55) Chlorobenzene-d5	8.894	117	333593	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.387	95	256040	9.875	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.700%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.505	85	8708	0.436	ppbv	97
3) Chlorodifluoromethane	1.483	51	6386m	0.295	ppbv	
4) Chloromethane	1.538	50	2676	0.338	ppbv	90
9) Propene	1.489	41	25562	2.667	ppbv	90
10) Heptane	5.001	43	21728	0.787	ppbv #	82
11) Trichlorofluoromethane	1.887	101	4349	0.223	ppbv	87
13) Ethanol	1.729	45	68541	19.331	ppbv	97
15) Acetone	1.845	43	56506	2.984	ppbv	95
19) Isopropyl Alcohol	1.894	45	18322	1.553	ppbv #	21
20) Methylene Chloride	2.072	84	199716	26.678	ppbv	96
26) Hexane	2.842	57	394652	18.236	ppbv #	42
30) Cyclohexane	3.881	84	7769	0.411	ppbv #	87
34) 2-Butanone	2.573	43	5785	0.218	ppbv	100
35) Carbon Tetrachloride	3.777	117	2201m	0.078	ppbv	
36) Benzene	3.677	78	40587	1.092	ppbv	96
44) 2,2,4-Trimethylpentane	4.664	57	60409	0.963	ppbv #	87
52) Tetrachloroethene	8.234	164	599m	0.045	ppbv	
53) Toluene	6.956	91	114436	2.594	ppbv	98
58) Ethyl Benzene	9.370	91	28290	0.494	ppbv	96
59) m/p-Xylene	9.548	91	71135	1.558	ppbv	100
60) o-Xylene	9.979	91	25428	0.564	ppbv	99
62) Isopropylbenzene	10.552	105	11077	0.136	ppbv	100
72) 4-Ethyltoluene	11.134	105	7310	0.132	ppbv #	55
73) 1,3,5-Trimethylbenzene	11.218	105	6572	0.144	ppbv	90
74) 1,2,4-Trimethylbenzene	11.549	105	23748	0.464	ppbv #	49
76) 1,4-Dichlorobenzene	11.684	146	3083	0.103	ppbv	92

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

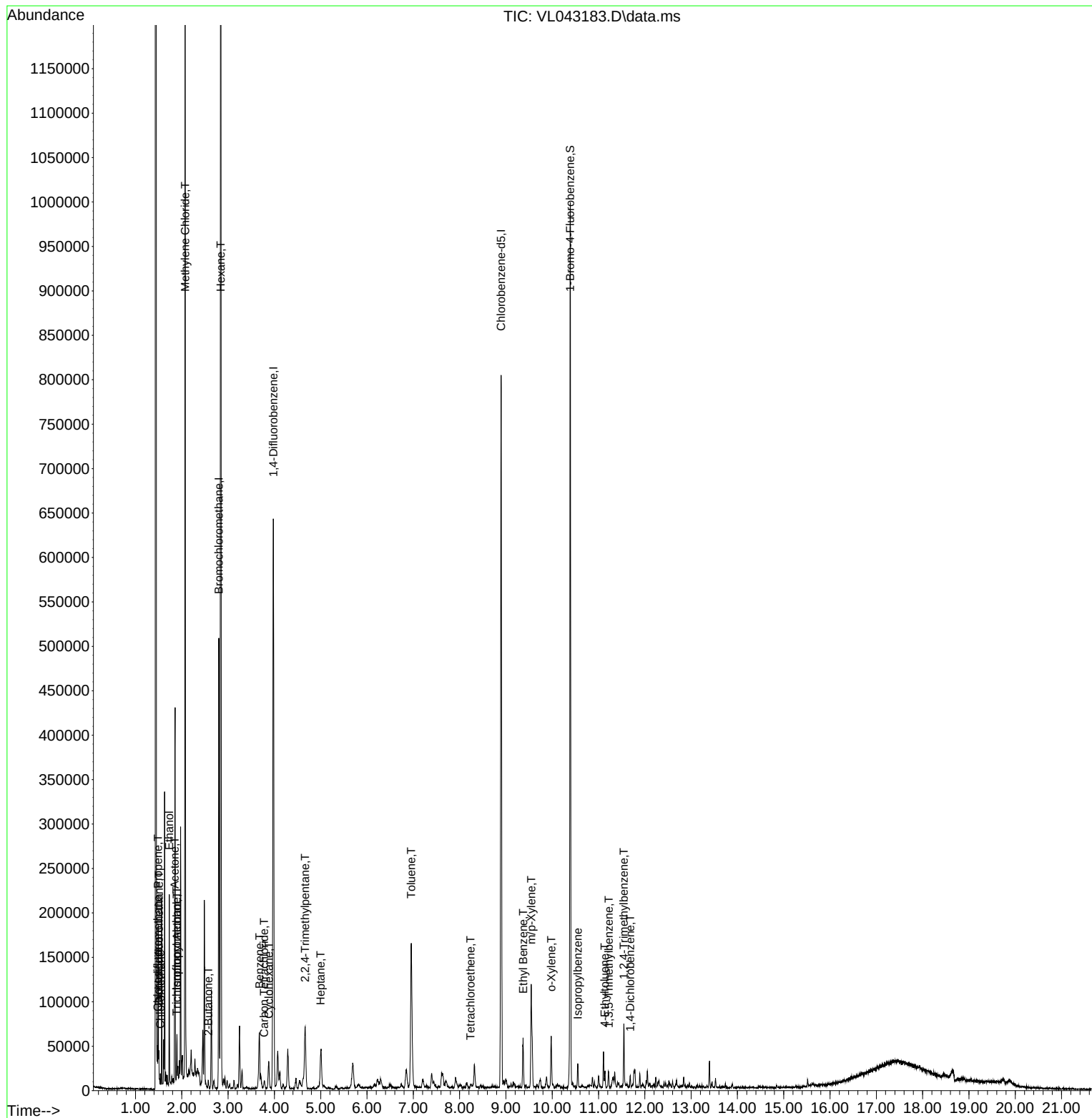
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111125\
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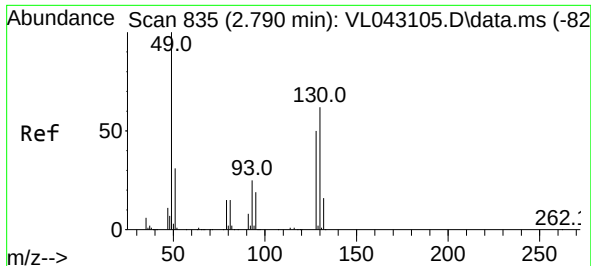
Instrument :
MSVOA_L
ClientSampleId :
IA1A

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Supervised By :Mahesh Dadoda 11/13/2025

Quant Time: Nov 12 00:15:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL101425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug
QLast Update : Wed Oct 15 02:12:58 2025
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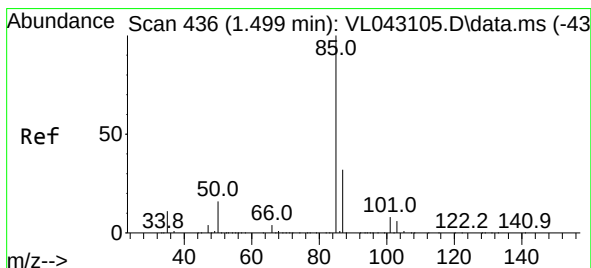
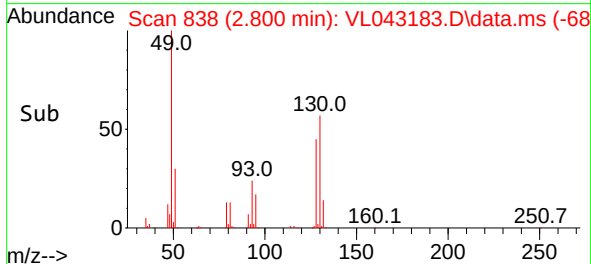
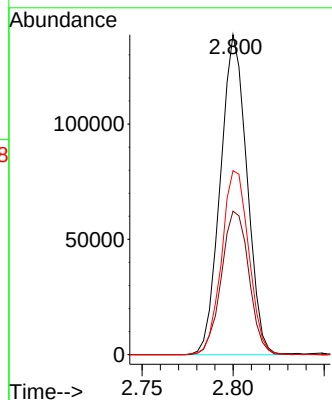
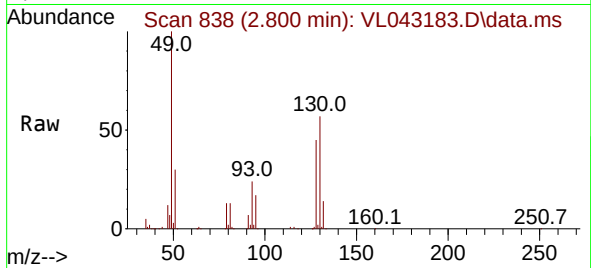
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.800 min Scan# 835
Delta R.T. 0.010 min
Lab File: VL043183.D
Acq: 11 Nov 2025 10:35

Instrument :
MSVOA_L
ClientSampleId :
IA1A

Tgt Ion: 49 Resp: 14051
Ion Ratio Lower Upper
49 100
128 46.6 24.4 73.4
130 59.0 31.0 93.0

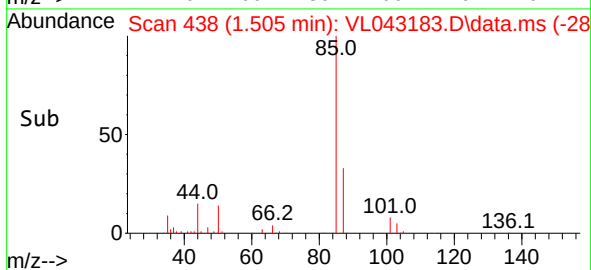
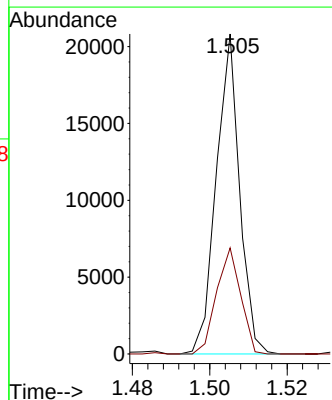
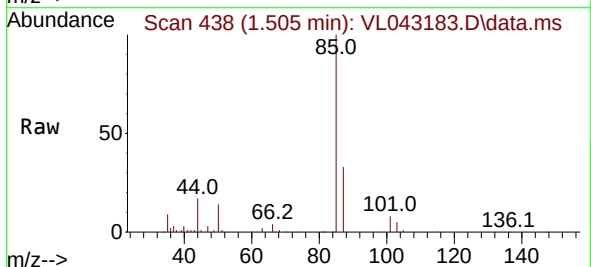
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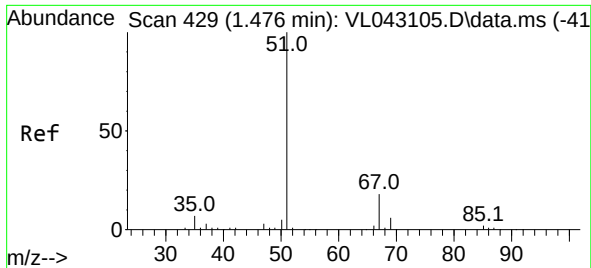
Reviewed By :Semsettin Yesilyurt 11/13/2025
Supervised By :Mahesh Dadoda 11/13/2025



#2
Dichlorodifluoromethane
Concen: 0.436 ppbv
RT: 1.505 min Scan# 438
Delta R.T. 0.006 min
Lab File: VL043183.D
Acq: 11 Nov 2025 10:35

Tgt Ion: 85 Resp: 8708
Ion Ratio Lower Upper
85 100
87 33.2 25.3 37.9





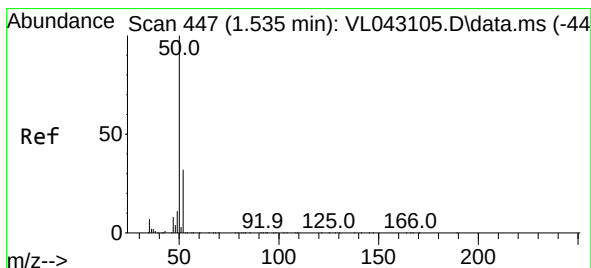
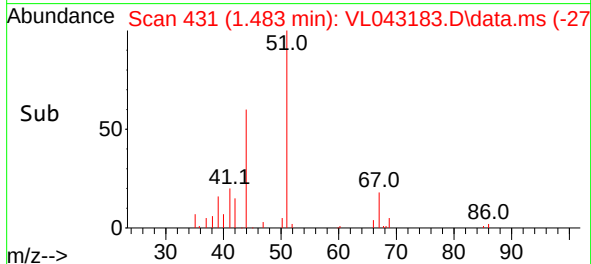
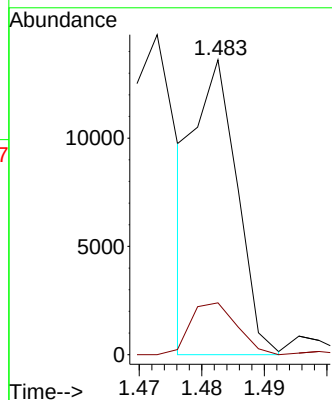
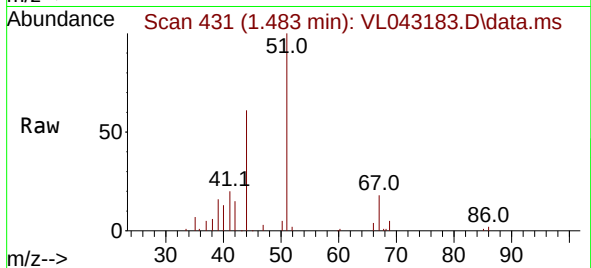
#3
Chlorodifluoromethane
Concen: 0.295 ppbv m
RT: 1.483 min Scan# 41
Delta R.T. 0.006 min
Lab File: VL043183.D
Acq: 11 Nov 2025 10:35

Instrument :
MSVOA_L
ClientSampleId :
IA1A

Tgt Ion: 51 Resp: 6380
Ion Ratio Lower Upper
51 100
67 1.7 15.1 22.7

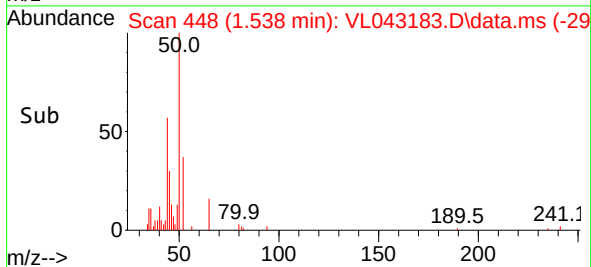
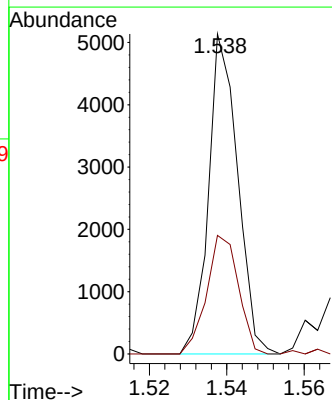
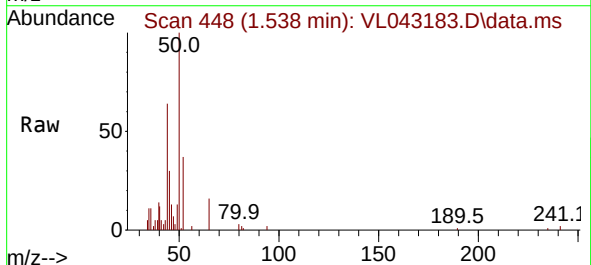
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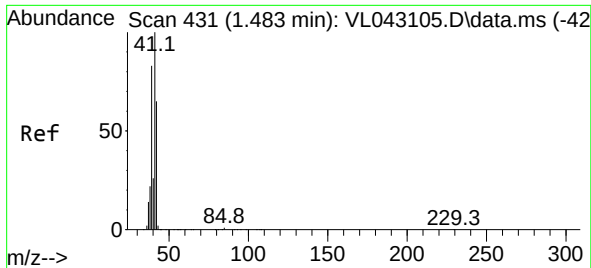
Reviewed By :Semsettin Yesilyurt 11/13/2025
Supervised By :Mahesh Dadoda 11/13/2025



#4
Chloromethane
Concen: 0.338 ppbv
RT: 1.538 min Scan# 448
Delta R.T. 0.003 min
Lab File: VL043183.D
Acq: 11 Nov 2025 10:35

Tgt Ion: 50 Resp: 2676
Ion Ratio Lower Upper
50 100
52 37.1 25.2 37.8





#9

Propene

Concen: 2.667 ppbv

RT: 1.489 min Scan# 41

Delta R.T. 0.006 min

Lab File: VL043183.D

Acq: 11 Nov 2025 10:35

Instrument :

MSVOA_L

ClientSampleId :

IA1A

Tgt Ion: 41 Resp: 2556

Ion Ratio Lower Upper

41 100

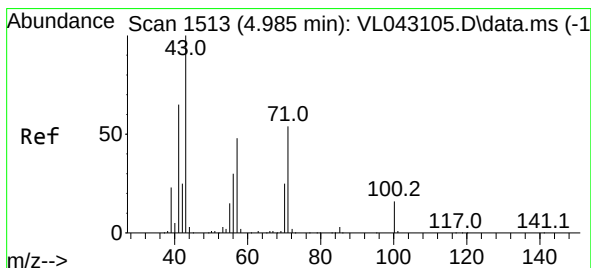
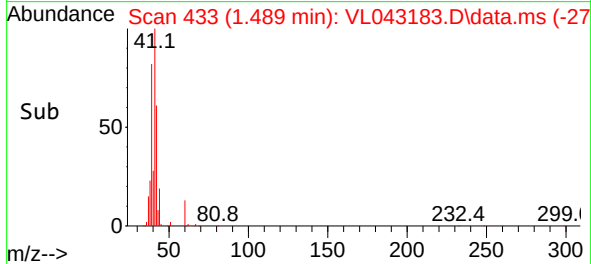
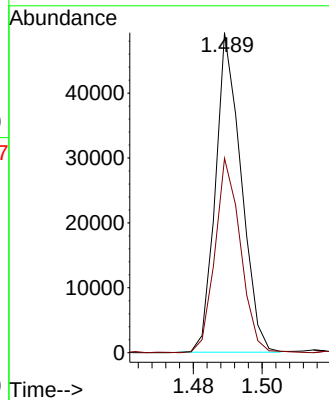
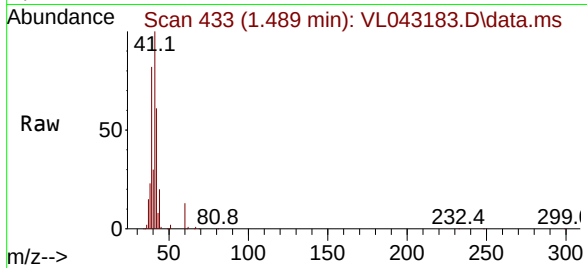
42 60.7 55.1 82.7

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 11/13/2025

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#10

Heptane

Concen: 0.787 ppbv

RT: 5.001 min Scan# 1518

Delta R.T. 0.016 min

Lab File: VL043183.D

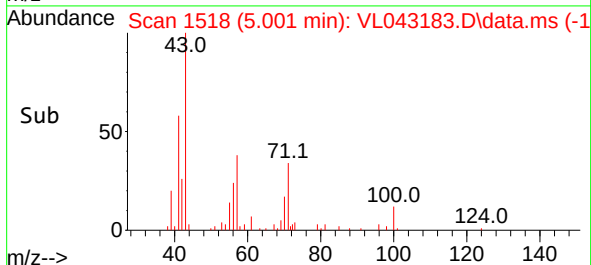
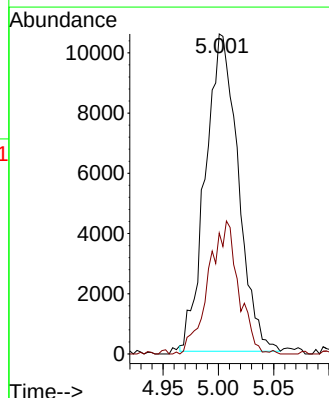
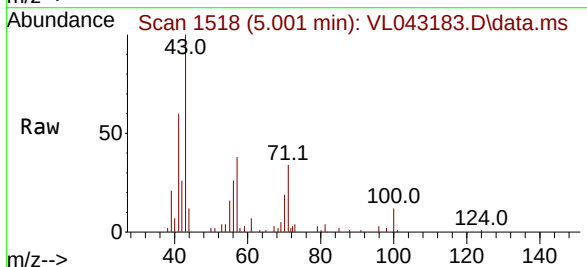
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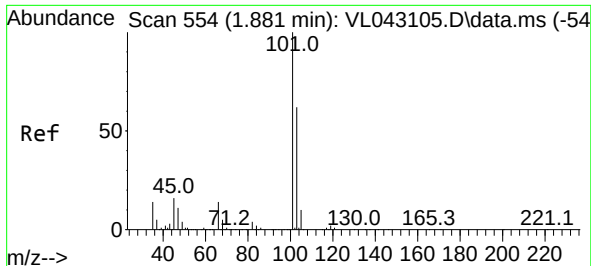
Tgt Ion: 43 Resp: 21728

Ion Ratio Lower Upper

43 100

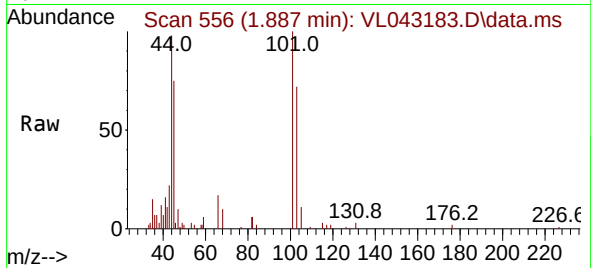
57 38.4 40.8 61.2#





#11
 Trichlorofluoromethane
 Concen: 0.223 ppbv
 RT: 1.887 min Scan# 507
 Delta R.T. 0.006 min
 Lab File: VL043183.D
 Acq: 11 Nov 2025 10:35

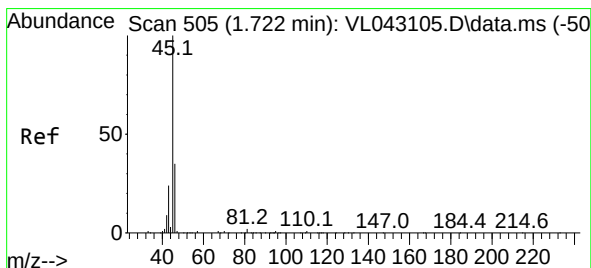
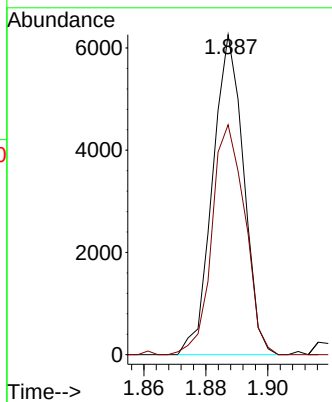
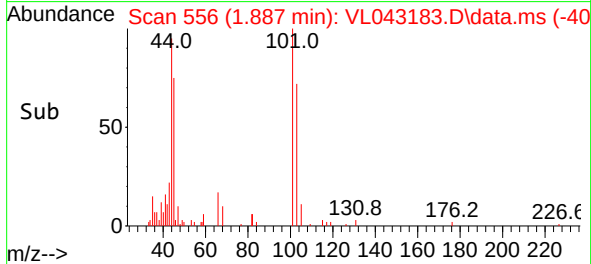
Instrument :
 MSVOA_L
 ClientSampleId :
 IA1A



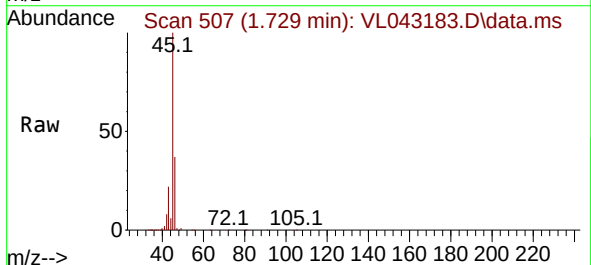
Tgt Ion:101 Resp: 4349
 Ion Ratio Lower Upper
 101 100
 103 71.9 49.3 73.9

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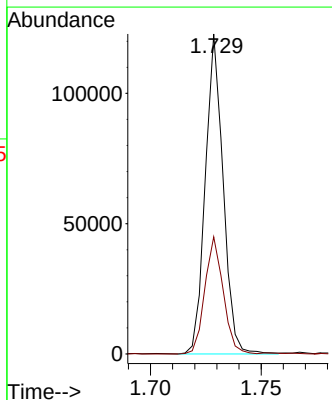
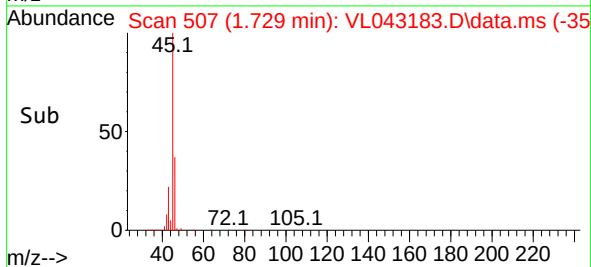
Reviewed By :Semsettin Yesilyurt 11/13/2025
 Supervised By :Mahesh Dadoda 11/13/2025

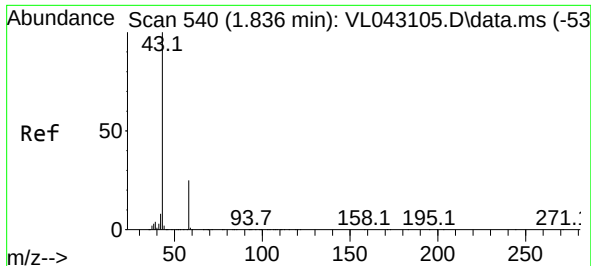


#13
 Ethanol
 Concen: 19.331 ppbv
 RT: 1.729 min Scan# 507
 Delta R.T. 0.006 min
 Lab File: VL043183.D
 Acq: 11 Nov 2025 10:35



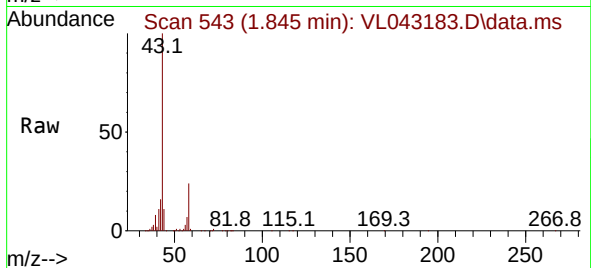
Tgt Ion: 45 Resp: 68541
 Ion Ratio Lower Upper
 45 100
 46 38.3 14.7 58.9





#15
Acetone
Concen: 2.984 ppbv
RT: 1.845 min Scan# 540
Delta R.T. 0.009 min
Lab File: VL043183.D
Acq: 11 Nov 2025 10:35

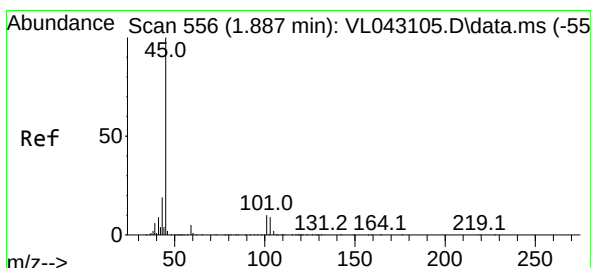
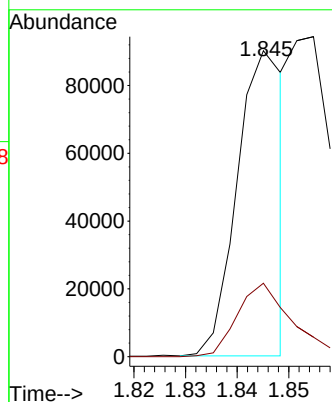
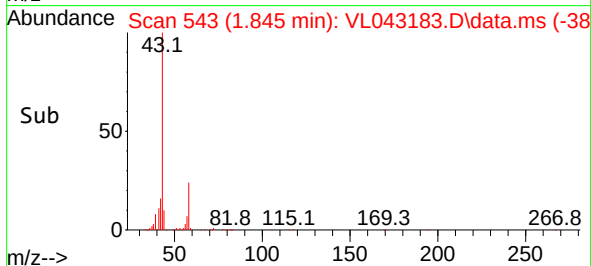
Instrument :
MSVOA_L
ClientSampleId :
IA1A



Tgt Ion: 43 Resp: 56500
Ion Ratio Lower Upper
43 100
58 28.4 20.8 31.2

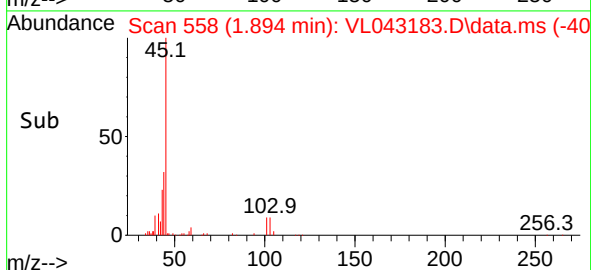
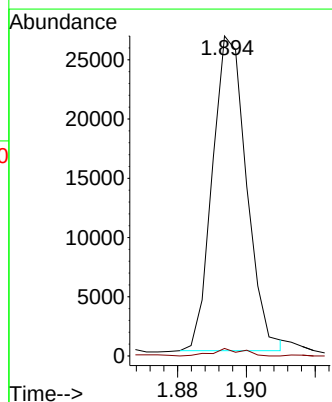
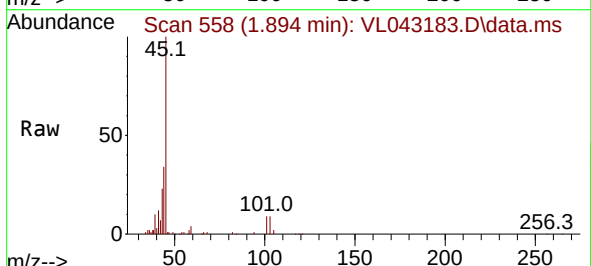
Manual Integrations
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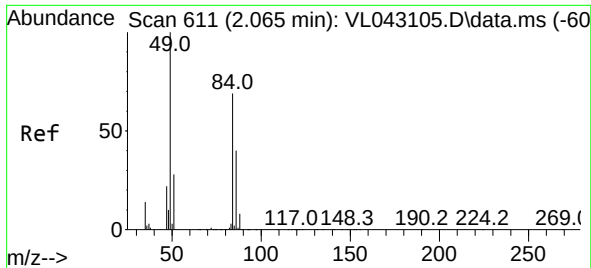
Reviewed By :Semsettin Yesilyurt 11/13/2025
Supervised By :Mahesh Dadoda 11/13/2025



#19
Isopropyl Alcohol
Concen: 1.553 ppbv
RT: 1.894 min Scan# 558
Delta R.T. 0.006 min
Lab File: VL043183.D
Acq: 11 Nov 2025 10:35

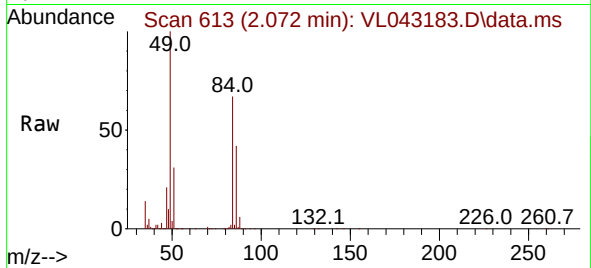
Tgt Ion: 45 Resp: 18322
Ion Ratio Lower Upper
45 100
58 87.5 31.3 46.9#





#20
Methylene Chloride
Concen: 26.678 ppbv
RT: 2.072 min Scan# 611
Delta R.T. 0.006 min
Lab File: VL043183.D
Acq: 11 Nov 2025 10:35

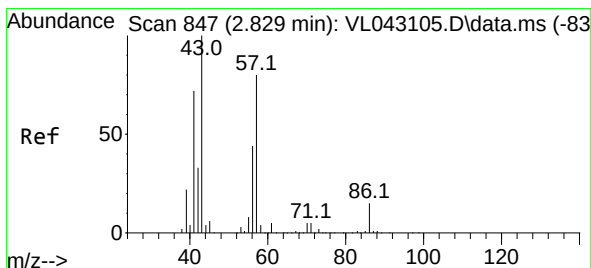
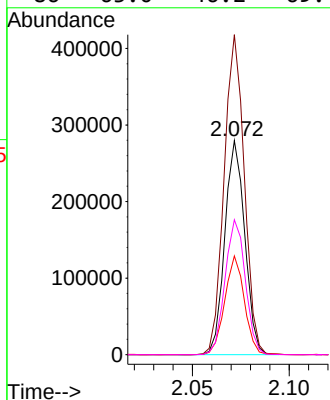
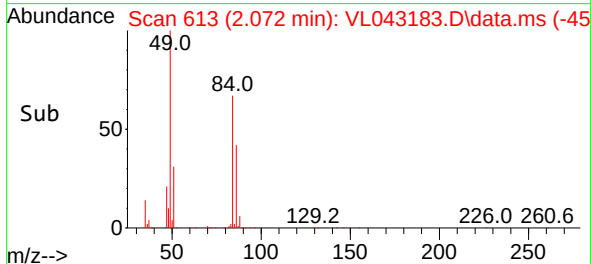
Instrument :
MSVOA_L
ClientSampleId :
IA1A



Tgt Ion: 84 Resp: 199710
Ion Ratio Lower Upper
84 100
49 149.4 116.6 175.0
51 46.0 34.8 52.2
86 63.0 46.2 69.4

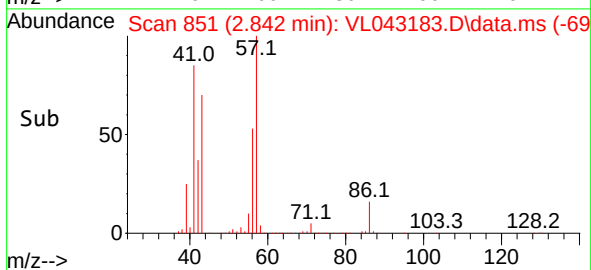
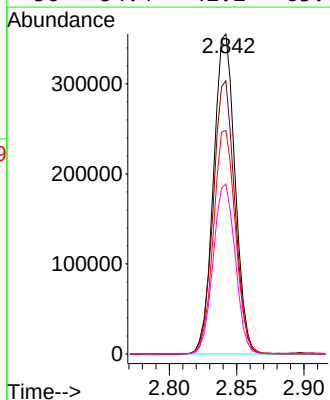
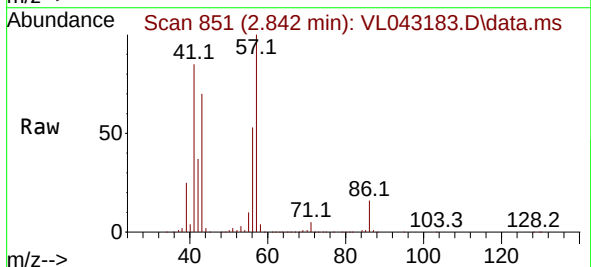
Manual Integrations
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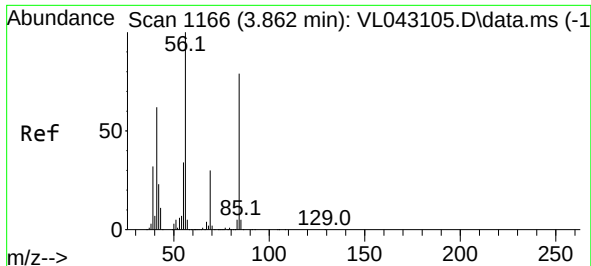
Reviewed By :Semsettin Yesilyurt 11/13/2025
Supervised By :Mahesh Dadoda 11/13/2025



#26
Hexane
Concen: 18.236 ppbv
RT: 2.842 min Scan# 851
Delta R.T. 0.013 min
Lab File: VL043183.D
Acq: 11 Nov 2025 10:35

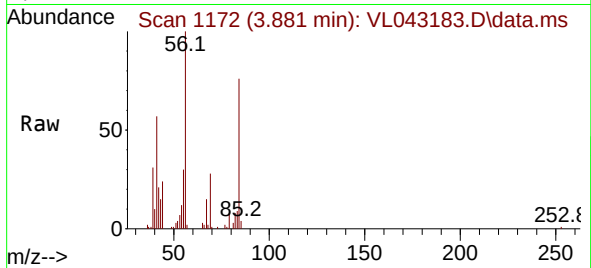
Tgt Ion: 57 Resp: 394652
Ion Ratio Lower Upper
57 100
41 85.6 71.4 107.0
43 72.1 178.5 267.7#
56 54.4 42.2 63.4





#30
Cyclohexane
Concen: 0.411 ppbv
RT: 3.881 min Scan# 1166
Delta R.T. 0.019 min
Lab File: VL043183.D
Acq: 11 Nov 2025 10:35

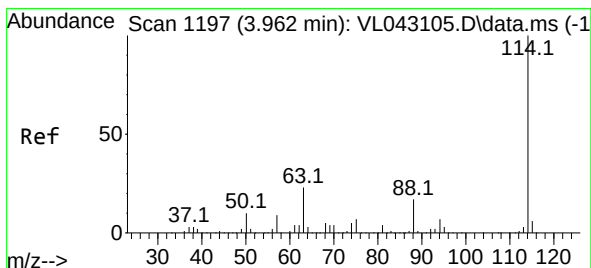
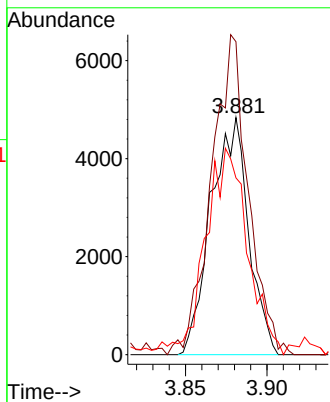
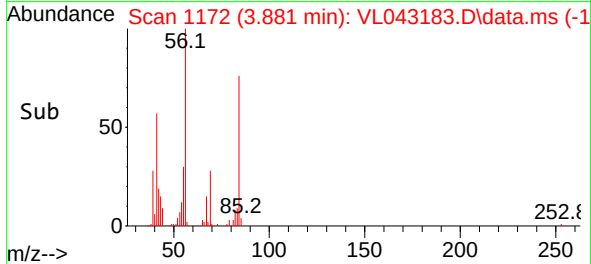
Instrument :
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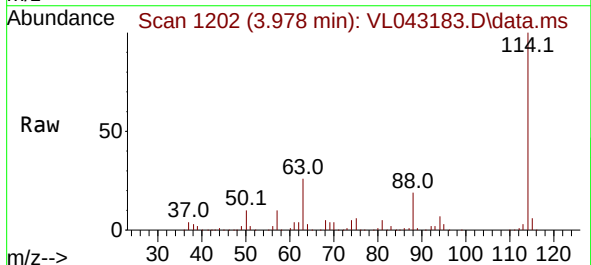
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Ion Ratio Lower Upper
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56 131.9 100.9 151.3
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Manual Integrations
APPROVED

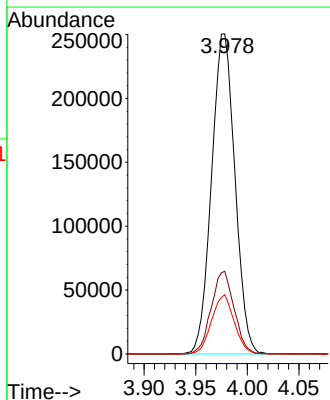
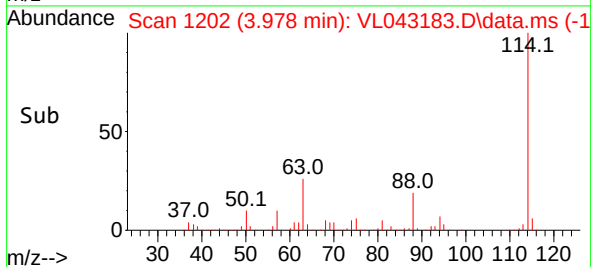
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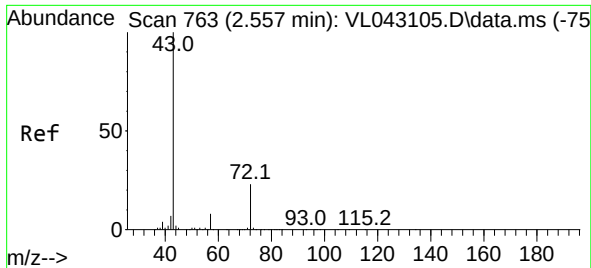


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.978 min Scan# 1202
Delta R.T. 0.016 min
Lab File: VL043183.D
Acq: 11 Nov 2025 10:35



Tgt Ion:114 Resp: 394645
Ion Ratio Lower Upper
114 100
63 25.4 19.3 28.9
88 17.8 13.9 20.9





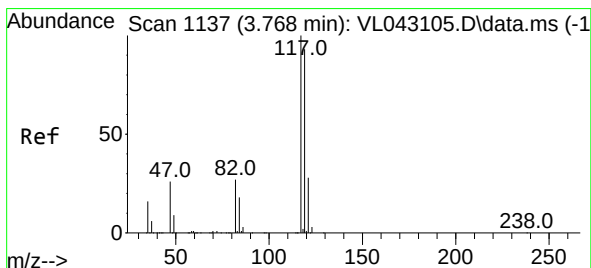
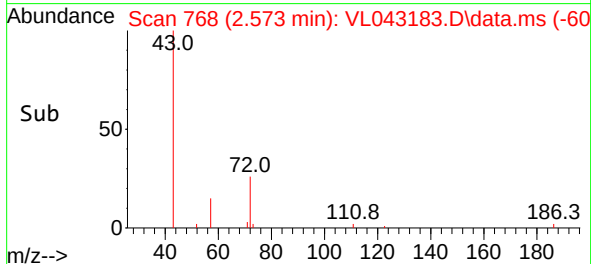
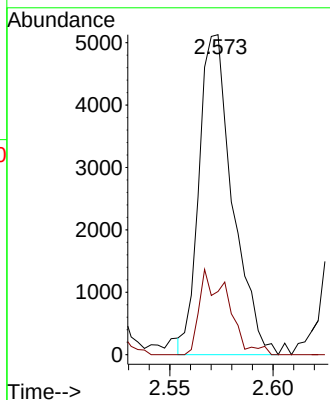
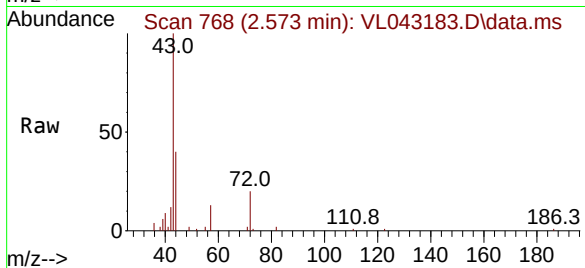
#34
2-Butanone
Concen: 0.218 ppbv
RT: 2.573 min Scan# 70
Delta R.T. 0.016 min
Lab File: VL043183.D
Acq: 11 Nov 2025 10:35

Instrument :
MSVOA_L
ClientSampleId :
IA1A

Tgt Ion: 43 Resp: 578
Ion Ratio Lower Upper
43 100
72 22.8 18.4 27.6

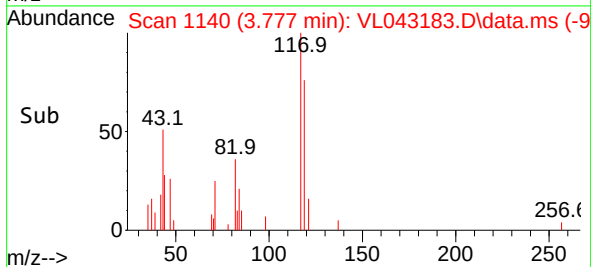
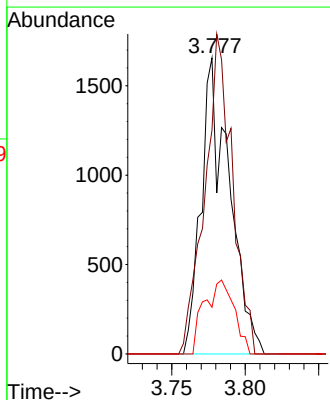
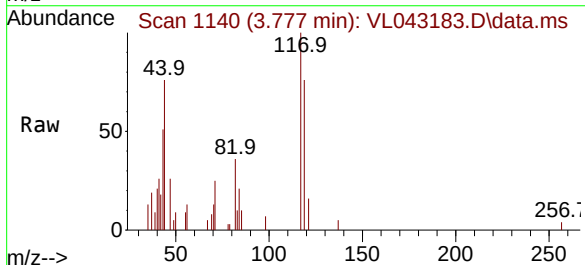
Manual Integrations
APPROVED

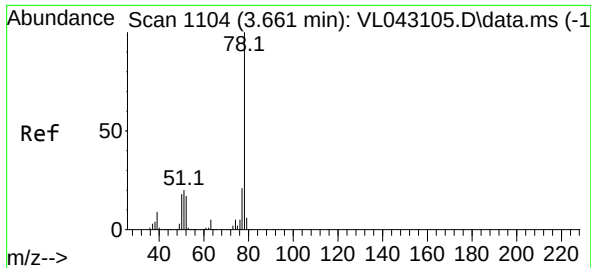
Reviewed By :Semsettin Yesilyurt 11/13/2025
Supervised By :Mahesh Dadoda 11/13/2025



#35
Carbon Tetrachloride
Concen: 0.078 ppbv m
RT: 3.777 min Scan# 1140
Delta R.T. 0.009 min
Lab File: VL043183.D
Acq: 11 Nov 2025 10:35

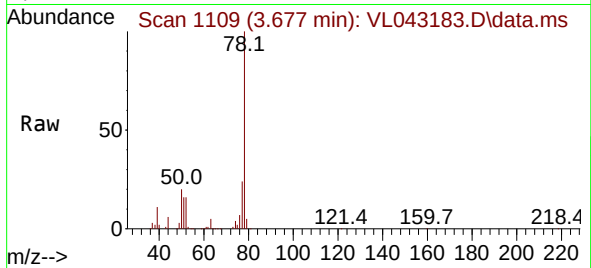
Tgt Ion:117 Resp: 2201
Ion Ratio Lower Upper
117 100
119 75.5 74.1 111.1
121 15.8 22.2 33.2#





#36
Benzene
Concen: 1.092 ppbv
RT: 3.677 min Scan# 1109
Delta R.T. 0.016 min
Lab File: VL043183.D
Acq: 11 Nov 2025 10:35

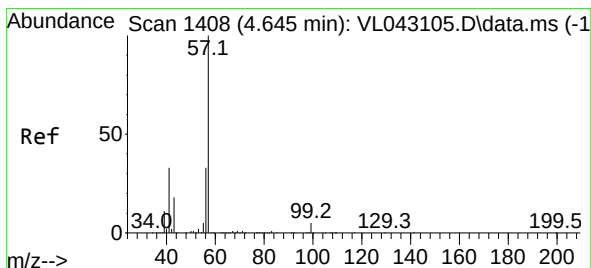
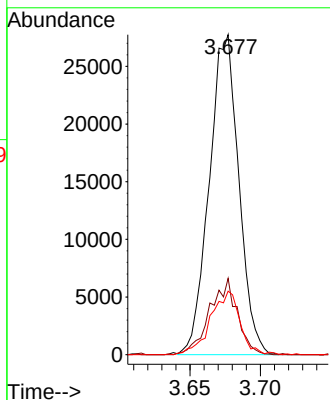
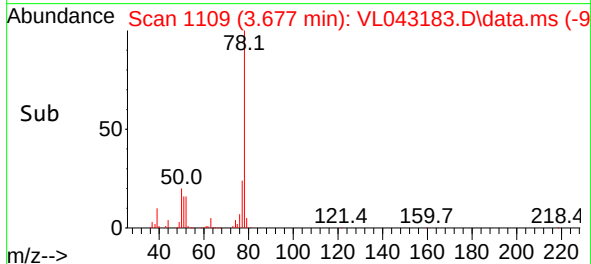
Instrument :
MSVOA_L
ClientSampleId :
IA1A



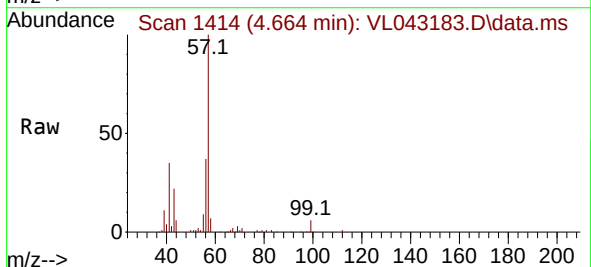
Tgt Ion: 78 Resp: 4058
Ion Ratio Lower Upper
78 100
77 23.9 17.0 25.6
50 19.6 14.6 22.0

Manual Integrations
APPROVED

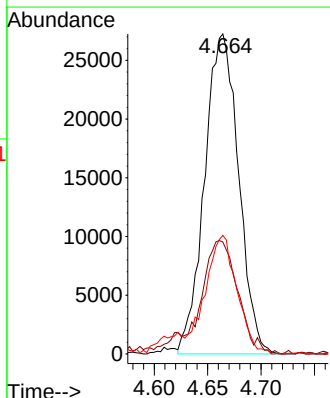
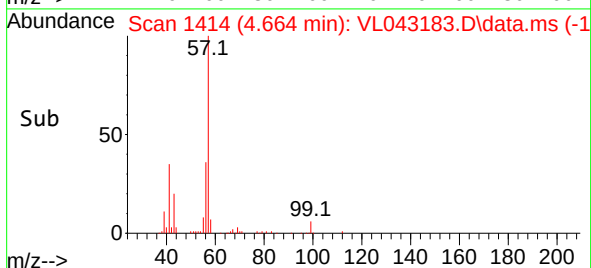
Reviewed By :Semsettin Yesilyurt 11/13/2025
Supervised By :Mahesh Dadoda 11/13/2025

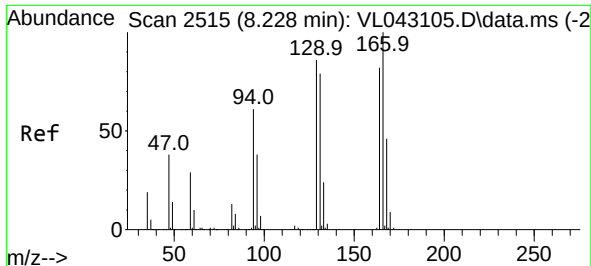


#44
2,2,4-Trimethylpentane
Concen: 0.963 ppbv
RT: 4.664 min Scan# 1414
Delta R.T. 0.019 min
Lab File: VL043183.D
Acq: 11 Nov 2025 10:35



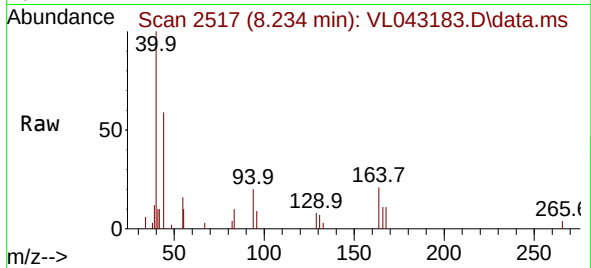
Tgt Ion: 57 Resp: 60409
Ion Ratio Lower Upper
57 100
41 39.9 26.3 39.5#
56 39.6 25.9 38.9#





#52
Tetrachloroethene
Concen: 0.045 ppbv m
RT: 8.234 min Scan# 2117
Delta R.T. 0.006 min
Lab File: VL043183.D
Acq: 11 Nov 2025 10:35

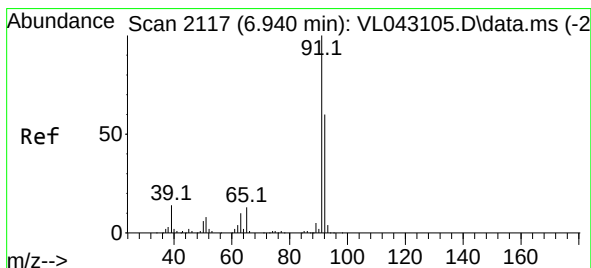
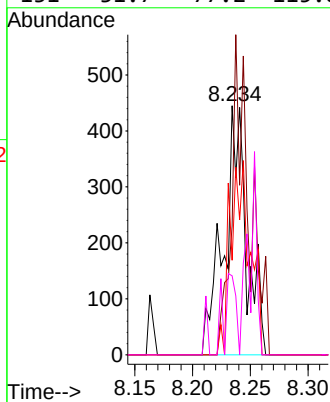
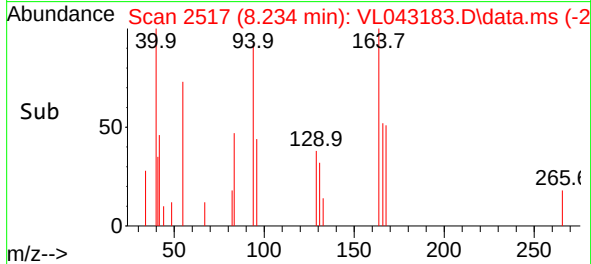
Instrument :
MSVOA_L
ClientSampleId :
IA1A



Tgt Ion:164 Resp: 599
Ion Ratio Lower Upper
164 100
166 51.7 97.6 146.4
129 38.0 84.5 126.7
131 31.7 77.2 115.8

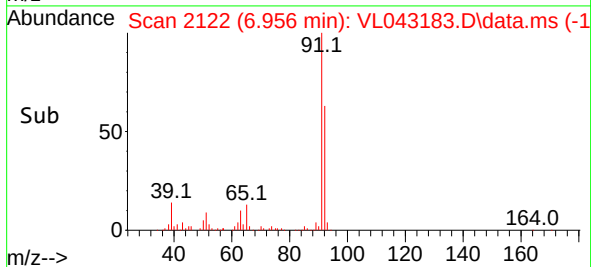
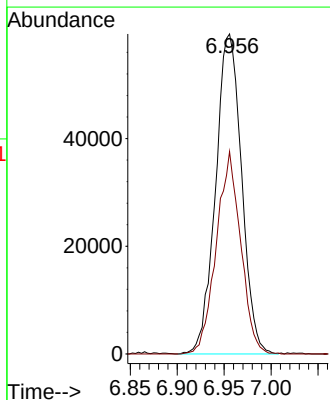
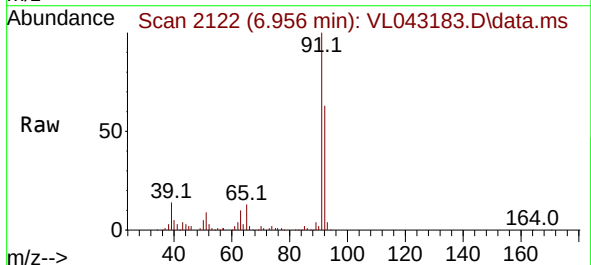
Manual Integrations
APPROVED

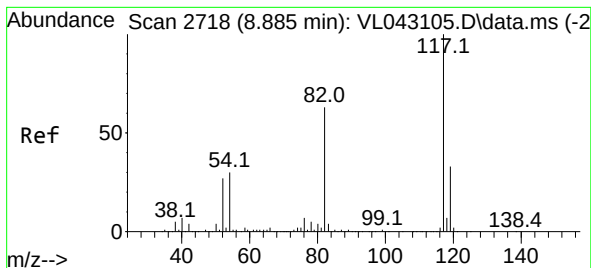
Reviewed By :Semsettin Yesilyurt 11/13/2025
Supervised By :Mahesh Dadoda 11/13/2025



#53
Toluene
Concen: 2.594 ppbv
RT: 6.956 min Scan# 2122
Delta R.T. 0.016 min
Lab File: VL043183.D
Acq: 11 Nov 2025 10:35

Tgt Ion: 91 Resp: 114436
Ion Ratio Lower Upper
91 100
92 59.3 48.8 73.2





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.894 min Scan# 2718

Delta R.T. 0.009 min

Lab File: VL043183.D

Acq: 11 Nov 2025 10:35

Instrument :

MSVOA_L

ClientSampleId :

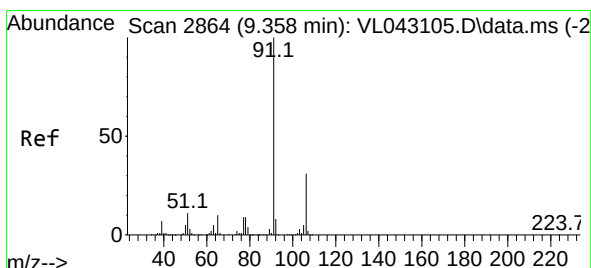
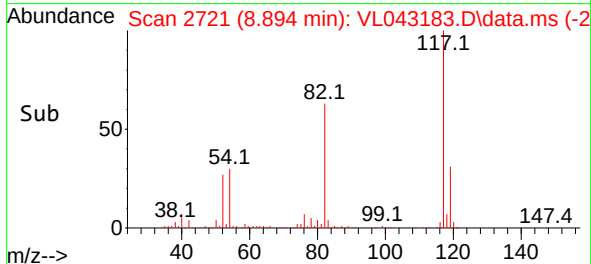
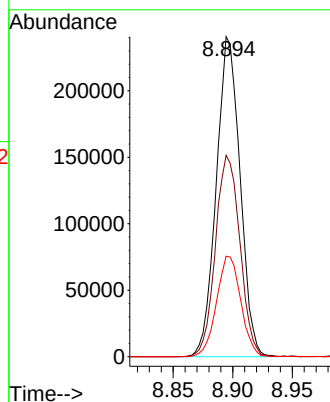
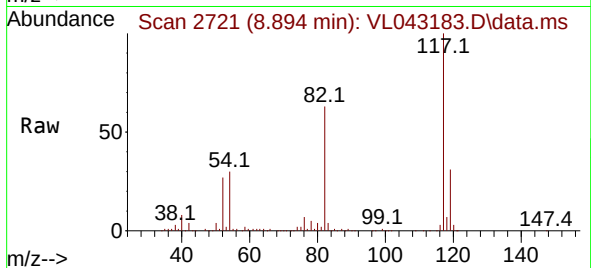
IA1A

Tgt Ion:117	Resp: 33359
Ion Ratio	Lower Upper
117 100	
82 64.8	53.8 80.8
119 32.1	25.4 38.0

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 11/13/2025
Supervised By :Mahesh Dadoda 11/13/2025



#58

Ethyl Benzene

Concen: 0.494 ppbv

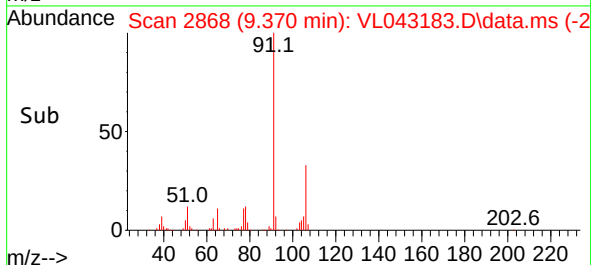
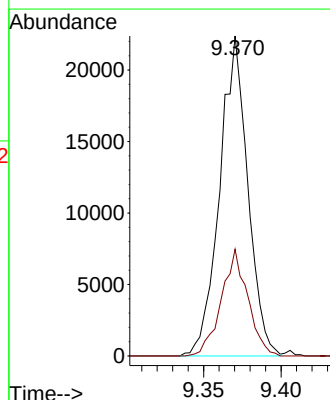
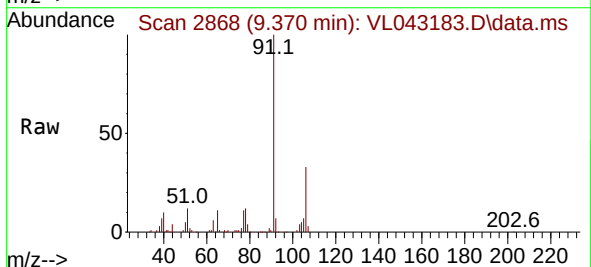
RT: 9.370 min Scan# 2868

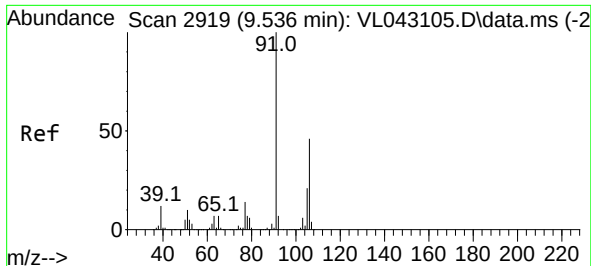
Delta R.T. 0.013 min

Lab File: VL043183.D

Acq: 11 Nov 2025 10:35

Tgt Ion: 91	Resp: 28290
Ion Ratio	Lower Upper
91 100	
106 33.4	24.8 37.2





#59

m/p-Xylene

Concen: 1.558 ppbv

RT: 9.548 min Scan# 2919

Delta R.T. 0.013 min

Lab File: VL043183.D

Acq: 11 Nov 2025 10:35

Instrument :

MSVOA_L

ClientSampleId :

IA1A

Tgt Ion: 91 Resp: 7113

Ion Ratio Lower Upper

91 100

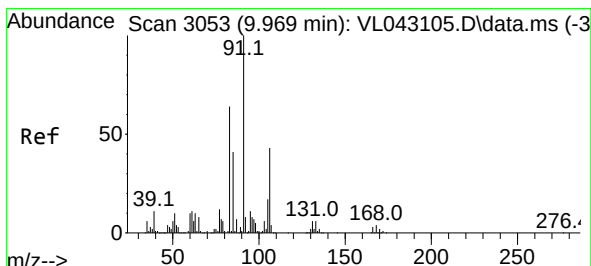
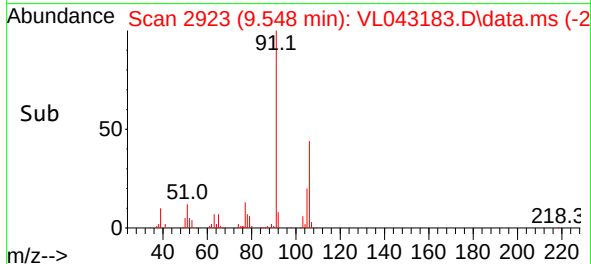
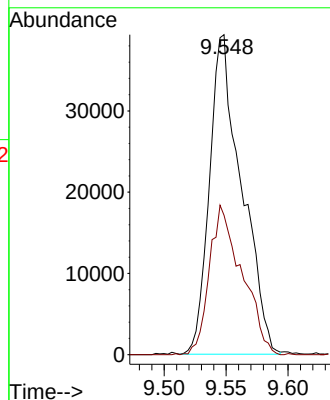
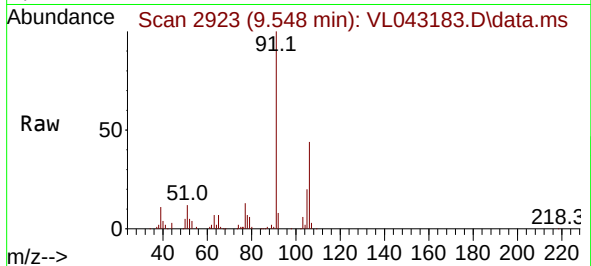
106 47.4 38.0 57.0

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 11/13/2025

Supervised By :Mahesh Dadoda 11/13/2025



#60

o-Xylene

Concen: 0.564 ppbv

RT: 9.979 min Scan# 3056

Delta R.T. 0.009 min

Lab File: VL043183.D

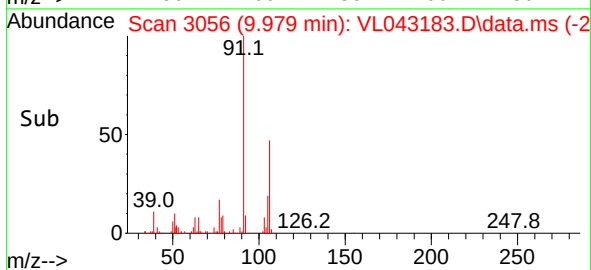
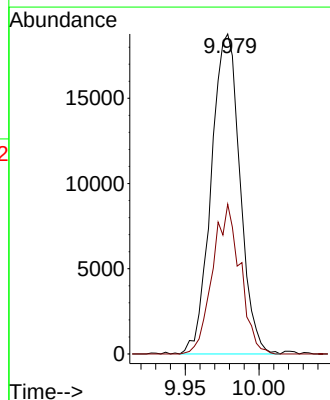
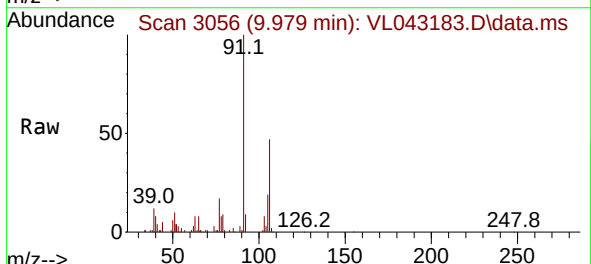
Acq: 11 Nov 2025 10:35

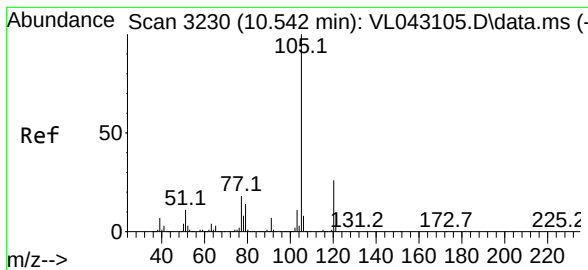
Tgt Ion: 91 Resp: 25428

Ion Ratio Lower Upper

91 100

106 44.8 21.9 65.8





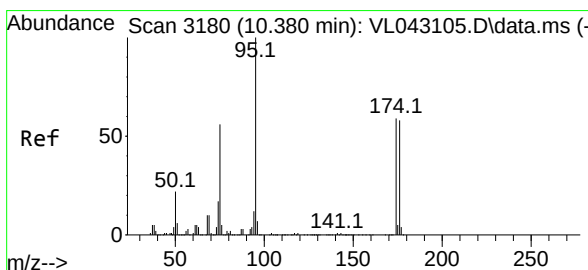
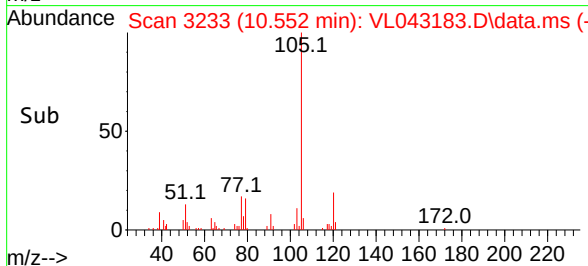
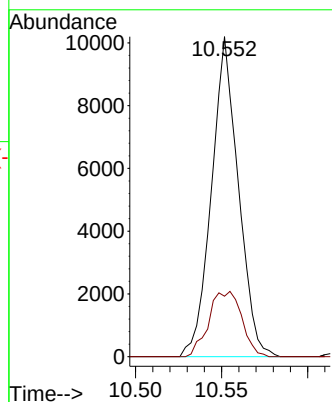
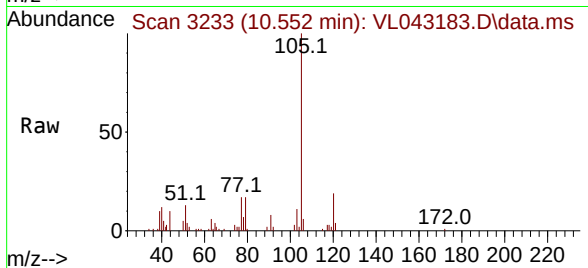
#62
Isopropylbenzene
Concen: 0.136 ppbv
RT: 10.552 min Scan# 311
Delta R.T. 0.009 min
Lab File: VL043183.D
Acq: 11 Nov 2025 10:35

Instrument :
MSVOA_L
ClientSampleId :
IA1A

Tgt Ion:105 Resp: 1107
Ion Ratio Lower Upper
105 100
120 25.1 20.2 30.4

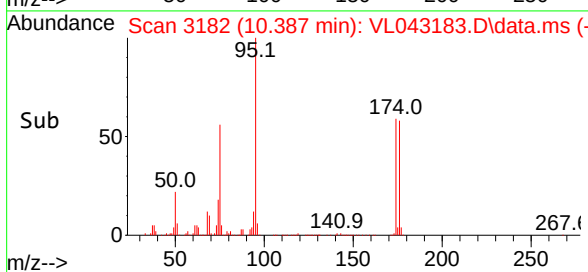
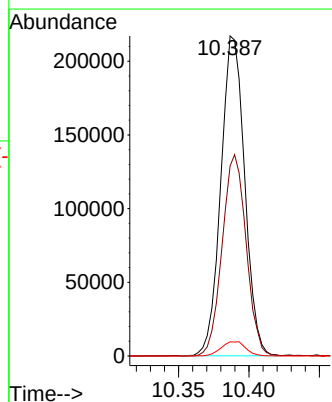
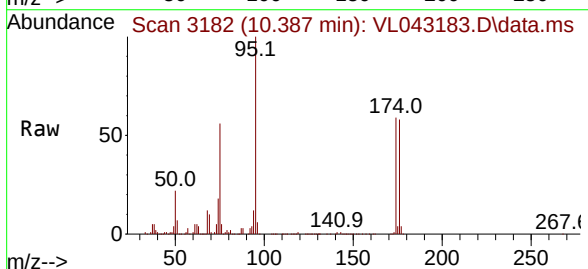
Manual Integrations
APPROVED

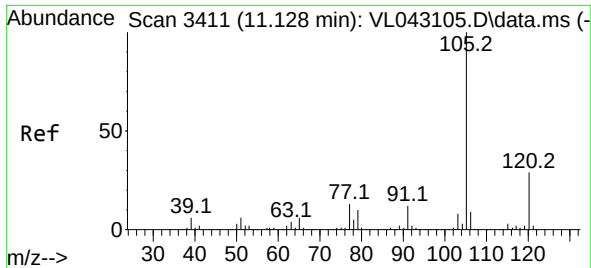
Reviewed By :Semsettin Yesilyurt 11/13/2025
Supervised By :Mahesh Dadoda 11/13/2025



#68
1-Bromo-4-Fluorobenzene
Concen: 9.875 ppbv
RT: 10.387 min Scan# 3182
Delta R.T. 0.006 min
Lab File: VL043183.D
Acq: 11 Nov 2025 10:35

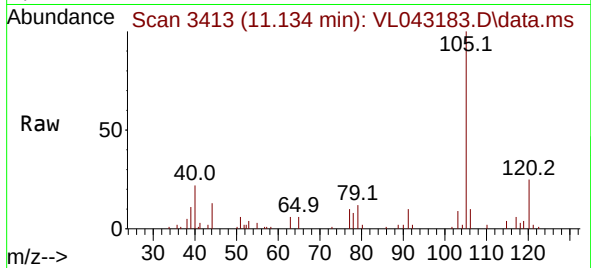
Tgt Ion: 95 Resp: 256040
Ion Ratio Lower Upper
95 100
174 63.4 48.3 72.5
175 4.6 3.8 5.8





#72
4-Ethyltoluene
Concen: 0.132 ppbv
RT: 11.134 min Scan# 3411
Delta R.T. 0.006 min
Lab File: VL043183.D
Acq: 11 Nov 2025 10:35

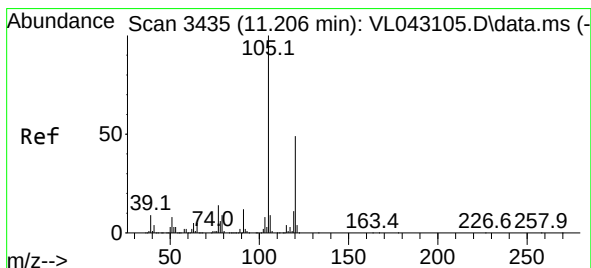
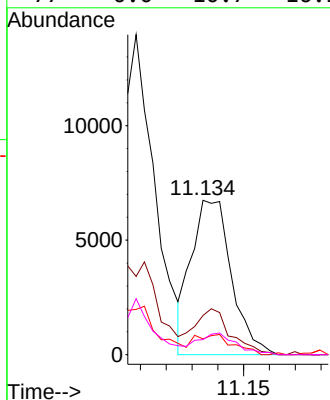
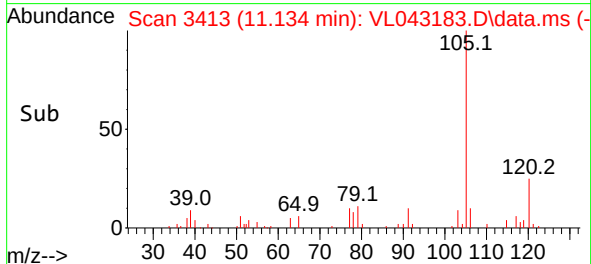
Instrument :
MSVOA_L
ClientSampleId :
IA1A



Tgt Ion:105 Resp: 7310
Ion Ratio Lower Upper
105 100
120 0.0 24.2 36.4
91 0.0 10.0 15.0
77 0.0 10.7 16.1

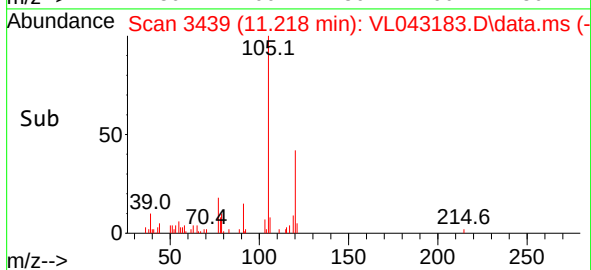
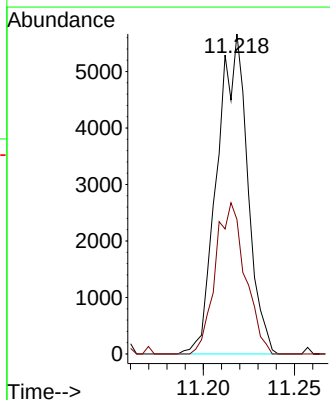
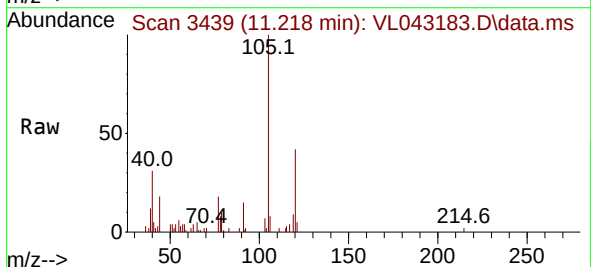
Manual Integrations
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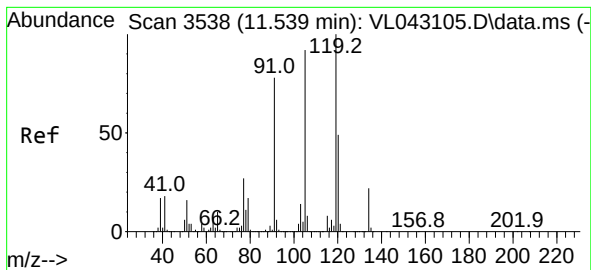
Reviewed By :Semsettin Yesilyurt 11/13/2025
Supervised By :Mahesh Dadoda 11/13/2025



#73
1,3,5-Trimethylbenzene
Concen: 0.144 ppbv
RT: 11.218 min Scan# 3439
Delta R.T. 0.013 min
Lab File: VL043183.D
Acq: 11 Nov 2025 10:35

Tgt Ion:105 Resp: 6572
Ion Ratio Lower Upper
105 100
120 42.0 39.0 58.6





#74

1,2,4-Trimethylbenzene

Concen: 0.464 ppbv

RT: 11.549 min Scan# 3541

Delta R.T. 0.009 min

Lab File: VL043183.D

Acq: 11 Nov 2025 10:35

Instrument :

MSVOA_L

ClientSampleId :

IA1A

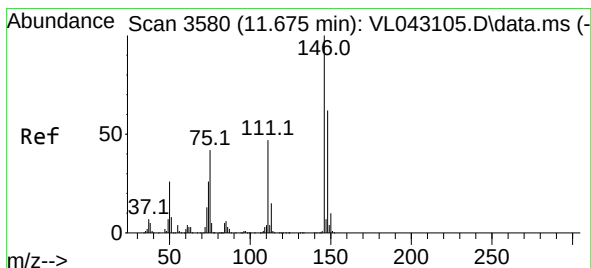
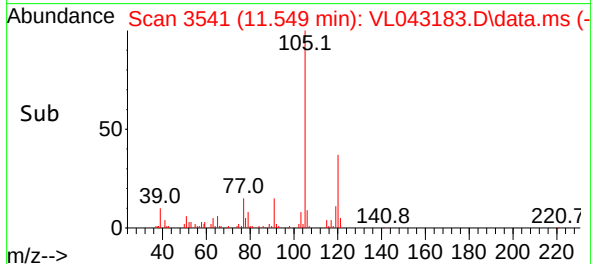
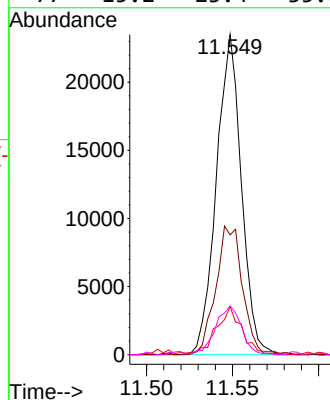
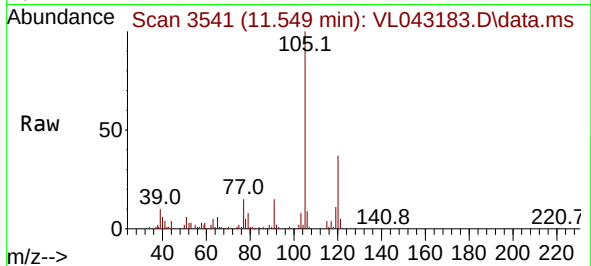
Tgt Ion:	105	Resp:	2374
Ion Ratio	Lower	Upper	
105	100		
120	37.4	42.8	64.2
91	14.5	68.3	102.5
77	15.2	23.4	35.0

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 11/13/2025

Supervised By :Mahesh Dadoda 11/13/2025



#76

1,4-Dichlorobenzene

Concen: 0.103 ppbv

RT: 11.684 min Scan# 3583

Delta R.T. 0.009 min

Lab File: VL043183.D

Acq: 11 Nov 2025 10:35

Tgt Ion:	146	Resp:	3083
Ion Ratio	Lower	Upper	
146	100		
111	52.1	22.4	67.0
148	67.7	31.6	94.7

