

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091025\
 Data File : VL042924.D
 Acq On : 10 Sep 2025 12:05
 Operator : SY/MD
 Sample : Q3052-02 4X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV2

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 09/11/2025
 Supervised By :Mahesh Dadoda 09/11/2025

Quant Time: Sep 11 01:11:52 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M

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

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	2.784	49	145473	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	373895	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.878	117	348255	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	272828	10.446	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	104.500%
Target Compounds						
					Qvalue	
3) Chlorodifluoromethane	1.473	51	4797	0.204	ppbv #	89
10) Heptane	4.972	43	131938	4.840	ppbv	100
13) Ethanol	1.719	45	238775	256.588	ppbv	91
15) Acetone	1.832	43	1819220	94.537	ppbv #	86
17) tert-Butyl alcohol	2.039	59	17921	0.785	ppbv #	92
20) Methylene Chloride	2.059	84	12308	1.527	ppbv	88
23) Vinyl Acetate	2.470	43	96668	3.653	ppbv #	49
26) Hexane	2.819	57	265272	12.339	ppbv #	44
27) Carbon Disulfide	2.146	76	15790	0.755	ppbv #	74
29) Chloroform	2.845	83	1113904	36.292	ppbv	98
34) 2-Butanone	2.557	43	68301	2.705	ppbv	99
36) Benzene	3.648	78	14190	0.396	ppbv #	92
38) Trichloroethene	4.541	130	3918m	0.240	ppbv	
40) 1,4-Dioxane	4.596	88	9124m	1.467	ppbv	
41) Tetrahydrofuran	3.062	42	7463m	0.530	ppbv	
42) Bromodichloromethane	4.483	83	68189	2.446	ppbv #	85
50) 4-Methyl-2-Pentanone	5.778	43	6438m	0.189	ppbv	
51) 2-Hexanone	7.432	43	106411m	3.963	ppbv	
52) Tetrachloroethene	8.225	164	1128682	87.140	ppbv	92
53) Toluene	6.927	91	124472	2.924	ppbv	99
58) Ethyl Benzene	9.354	91	44896	0.731	ppbv #	88
59) m/p-Xylene	9.529	91	103451	2.148	ppbv #	100
60) o-Xylene	9.963	91	49722	1.026	ppbv	96
62) Isopropylbenzene	10.539	105	12682	0.179	ppbv	94
72) 4-Ethyltoluene	11.121	105	10749	0.183	ppbv #	42
73) 1,3,5-Trimethylbenzene	11.202	105	15100	0.302	ppbv	89
74) 1,2,4-Trimethylbenzene	11.536	105	30248	0.552	ppbv #	56

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

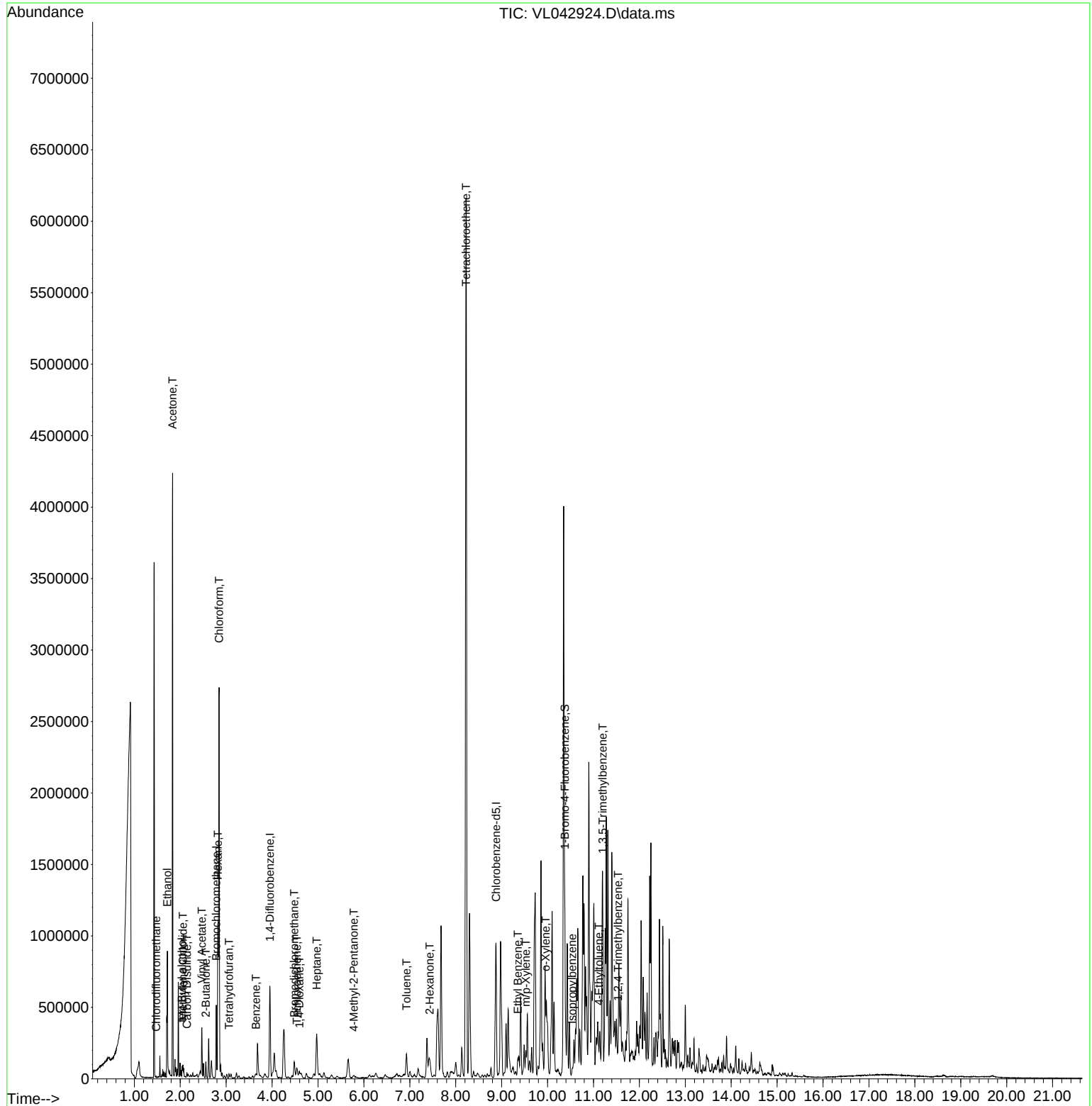
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL091025\
Data File : VL042924.D
Acq On : 10 Sep 2025 12:05
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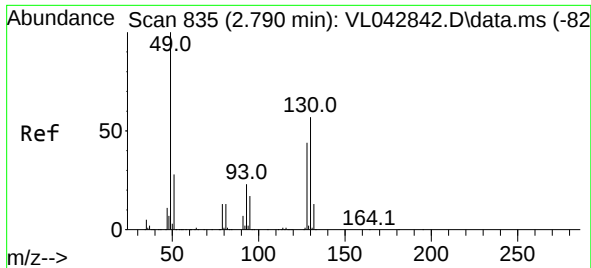
Instrument :
MSVOA_L
ClientSampleId :
SV2

Manual Integrations
APPROVED

Reviewed By : Semsettin Yesilyurt 09/11/2025
Supervised By : Mahesh Dadoda 09/11/2025

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





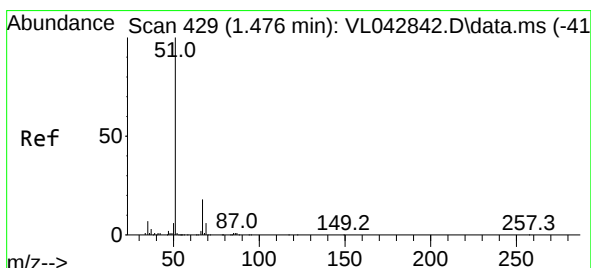
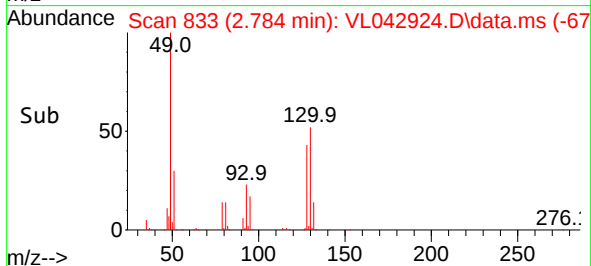
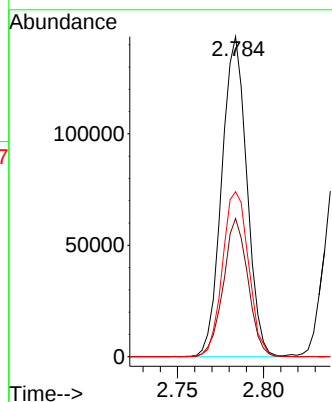
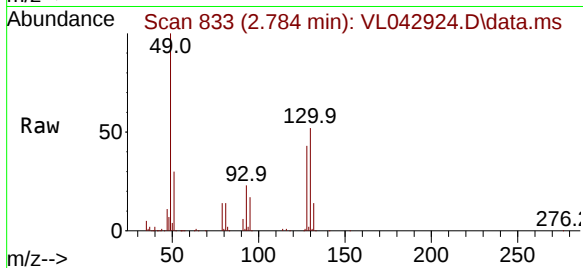
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 81
Delta R.T. 0.007 min
Lab File: VL042924.D
Acq: 10 Sep 2025 12:05

Instrument :
MSVOA_L
ClientSampleId :
SV2

Tgt Ion: 49 Resp: 14547
Ion Ratio Lower Upper
49 100
128 42.4 23.7 71.1
130 53.7 30.6 91.6

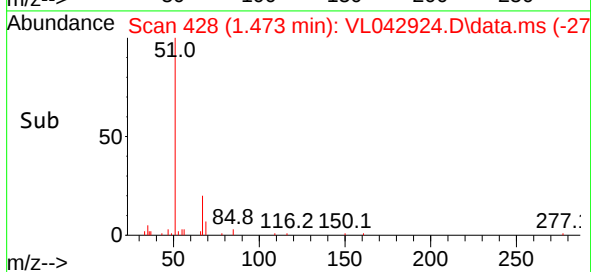
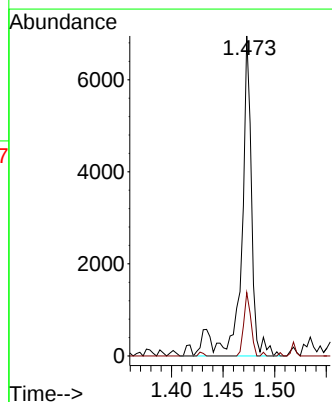
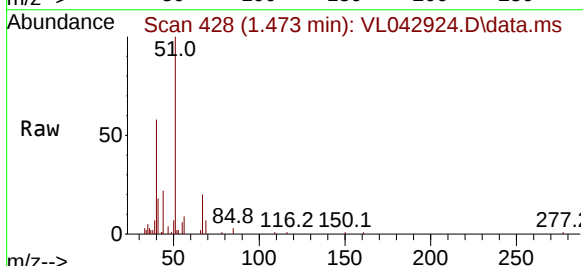
Manual Integrations
APPROVED

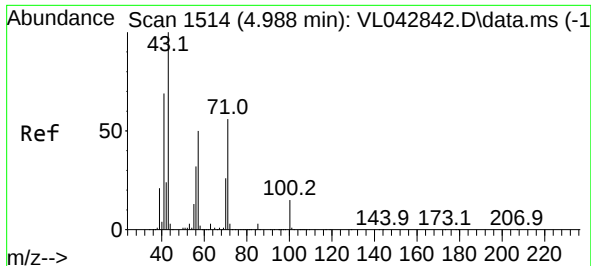
Reviewed By :Semsettin Yesilyurt 09/11/2025
Supervised By :Mahesh Dadoda 09/11/2025



#3
Chlorodifluoromethane
Concen: 0.204 ppbv
RT: 1.473 min Scan# 428
Delta R.T. 0.003 min
Lab File: VL042924.D
Acq: 10 Sep 2025 12:05

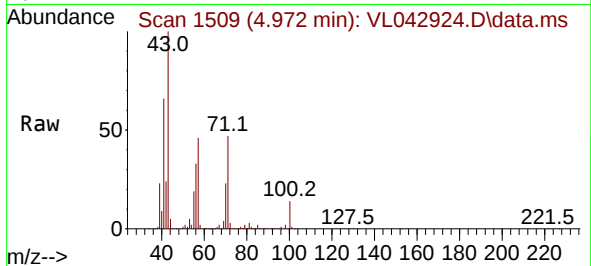
Tgt Ion: 51 Resp: 4797
Ion Ratio Lower Upper
51 100
67 13.8 14.9 22.3#





#10
Heptane
Concen: 4.840 ppbv
RT: 4.972 min Scan# 11
Delta R.T. 0.013 min
Lab File: VL042924.D
Acq: 10 Sep 2025 12:05

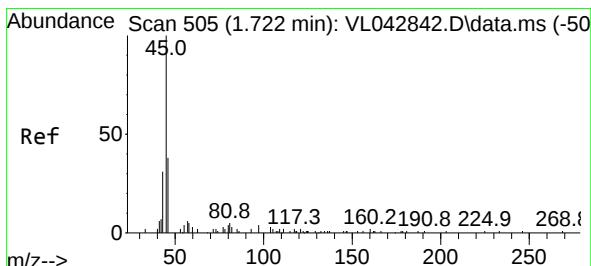
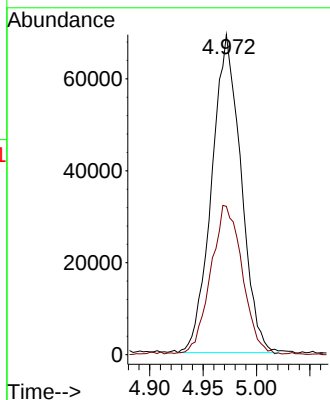
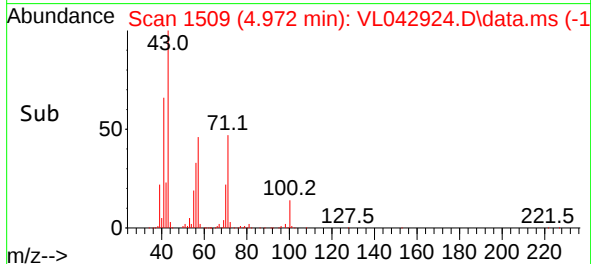
Instrument :
MSVOA_L
ClientSampleId :
SV2



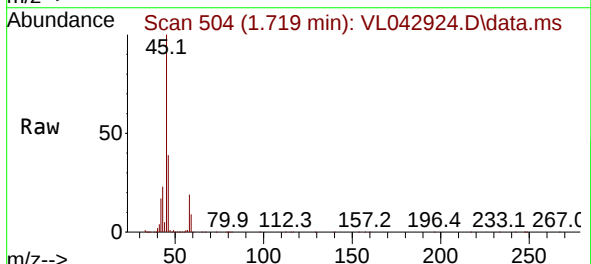
Tgt Ion: 43 Resp: 131938
Ion Ratio Lower Upper
43 100
57 51.9 41.4 62.0

Manual Integrations
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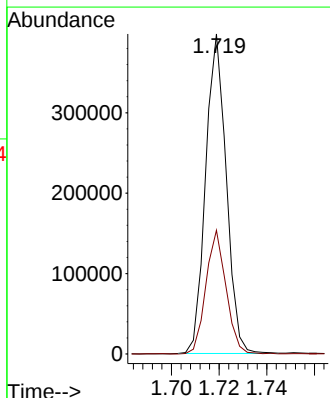
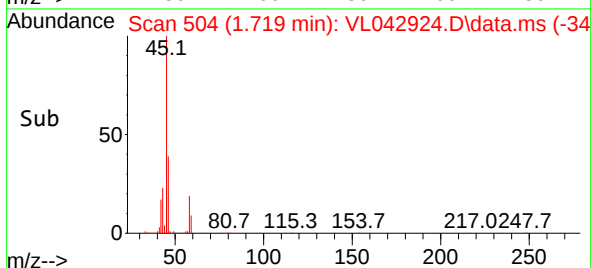
Reviewed By :Semsettin Yesilyurt 09/11/2025
Supervised By :Mahesh Dadoda 09/11/2025

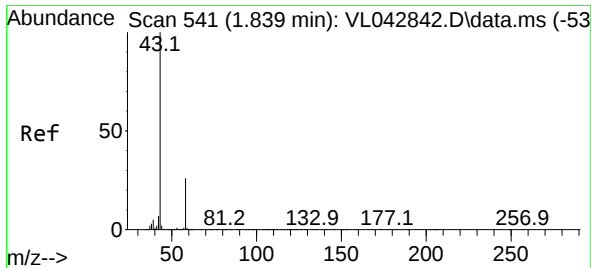


#13
Ethanol
Concen: 256.588 ppbv
RT: 1.719 min Scan# 504
Delta R.T. 0.003 min
Lab File: VL042924.D
Acq: 10 Sep 2025 12:05



Tgt Ion: 45 Resp: 238775
Ion Ratio Lower Upper
45 100
46 38.2 17.5 69.9





#15

Acetone

Concen: 94.537 ppbv

RT: 1.832 min Scan# 51

Delta R.T. 0.003 min

Lab File: VL042924.D

Acq: 10 Sep 2025 12:05

Instrument :

MSVOA_L

ClientSampleId :

SV2

Tgt Ion: 43 Resp: 1819220

Ion Ratio Lower Upper

43 100

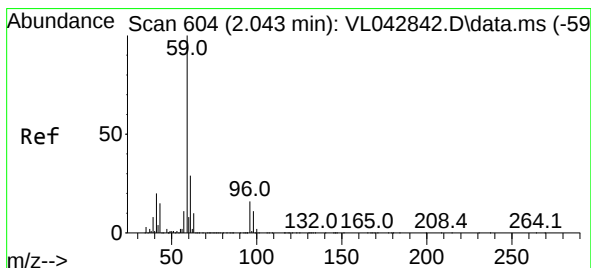
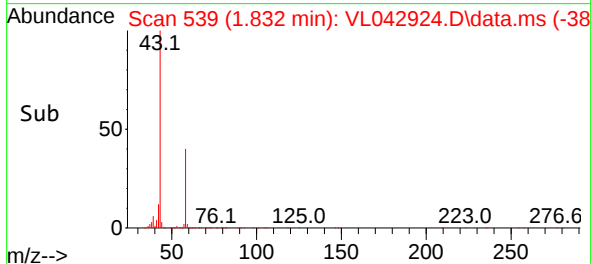
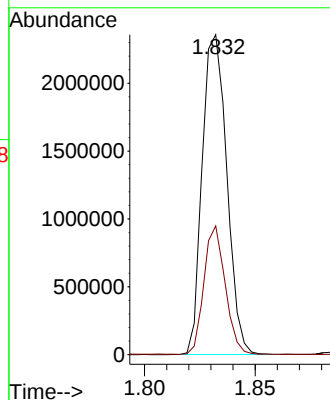
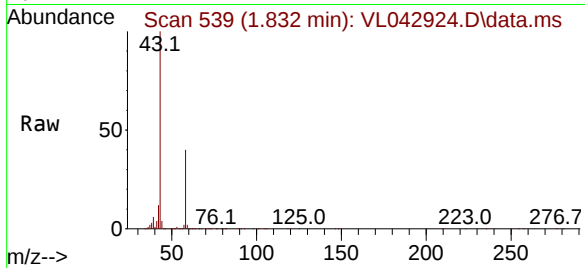
58 35.2 22.4 33.6

Manual Integrations

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Supervised By :Mahesh Dadoda 09/11/2025



#17

tert-Butyl alcohol

Concen: 0.785 ppbv

RT: 2.039 min Scan# 603

Delta R.T. 0.006 min

Lab File: VL042924.D

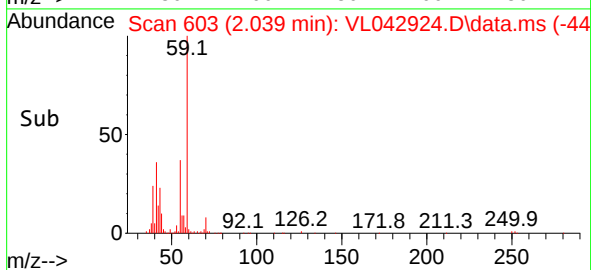
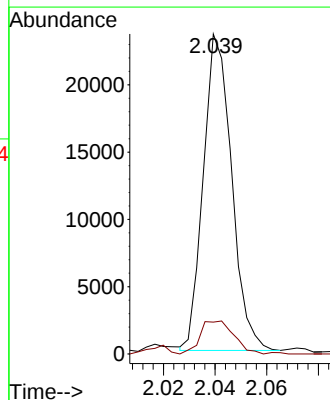
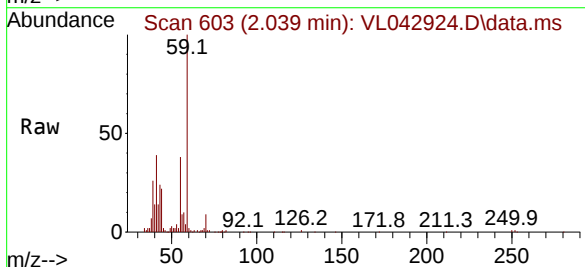
Acq: 10 Sep 2025 12:05

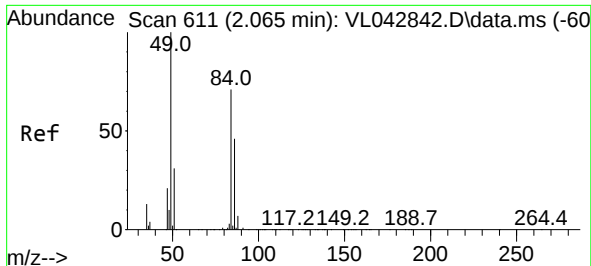
Tgt Ion: 59 Resp: 17921

Ion Ratio Lower Upper

59 100

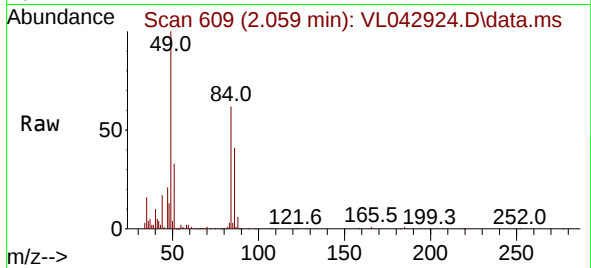
57 14.4 9.0 13.4





#20
Methylene Chloride
Concen: 1.527 ppbv
RT: 2.059 min Scan# 609
Delta R.T. 0.003 min
Lab File: VL042924.D
Acq: 10 Sep 2025 12:05

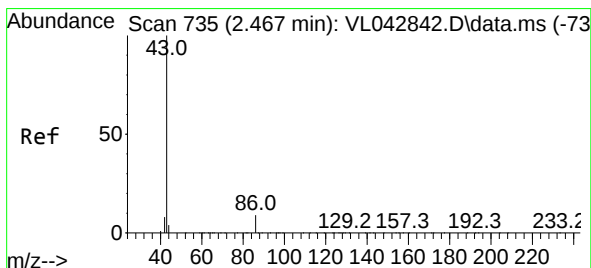
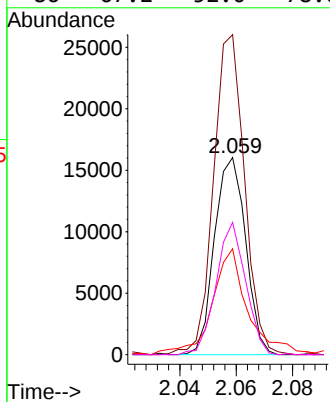
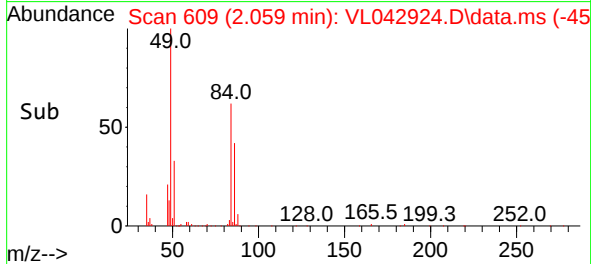
Instrument :
MSVOA_L
ClientSampleId :
SV2



Tgt Ion: 84 Resp: 12308
Ion Ratio Lower Upper
84 100
49 160.9 112.3 168.5
51 50.6 36.0 54.0
86 67.2 52.0 78.0

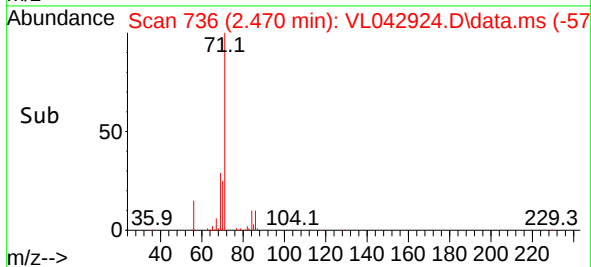
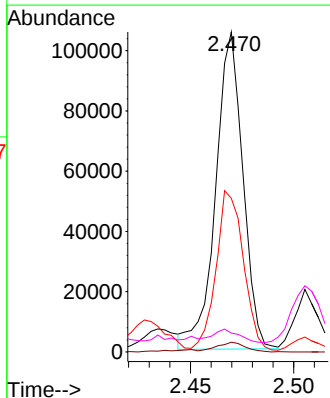
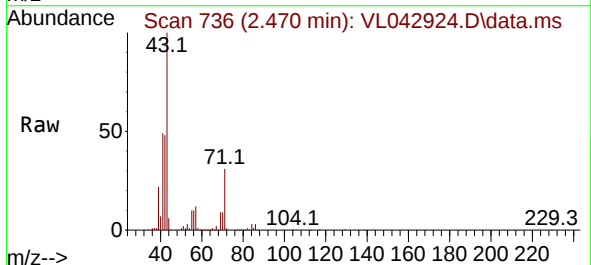
Manual Integrations
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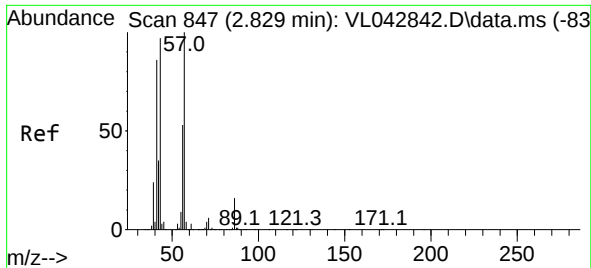
Reviewed By :Semsettin Yesilyurt 09/11/2025
Supervised By :Mahesh Dadoda 09/11/2025



#23
Vinyl Acetate
Concen: 3.653 ppbv
RT: 2.470 min Scan# 736
Delta R.T. 0.016 min
Lab File: VL042924.D
Acq: 10 Sep 2025 12:05

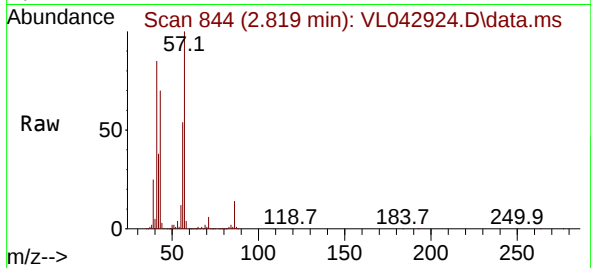
Tgt Ion: 43 Resp: 96668
Ion Ratio Lower Upper
43 100
86 3.0 6.6 9.8#
42 48.2 7.0 10.6#
44 2.3 4.0 6.0#





#26
Hexane
Concen: 12.339 ppbv
RT: 2.819 min Scan# 847
Delta R.T. 0.003 min
Lab File: VL042924.D
Acq: 10 Sep 2025 12:05

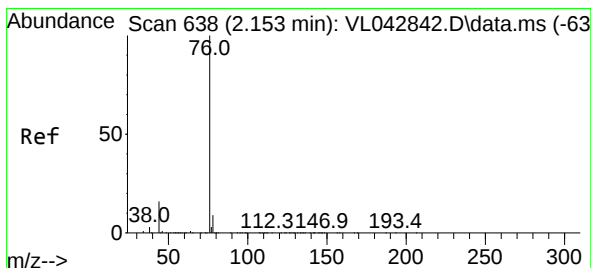
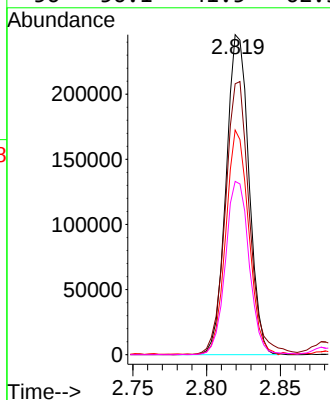
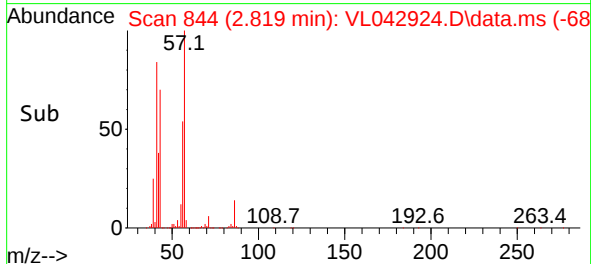
Instrument :
MSVOA_L
ClientSampleId :
SV2



Tgt Ion: 57 Resp: 265272
Ion Ratio Lower Upper
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41 90.2 68.6 103.0
43 70.3 168.5 252.7
56 56.1 41.5 62.3

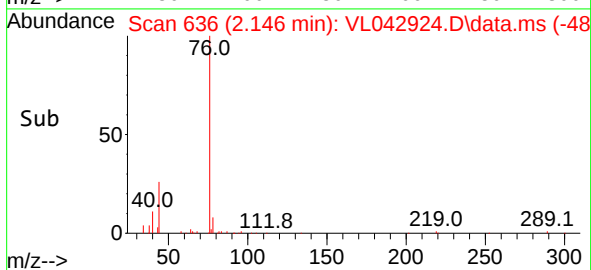
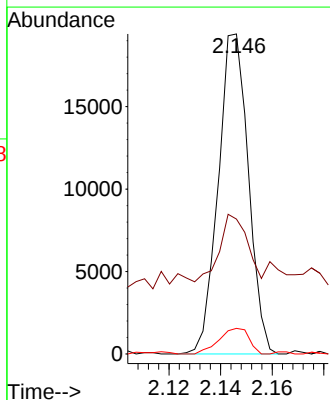
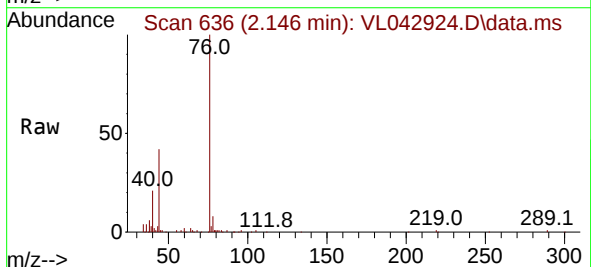
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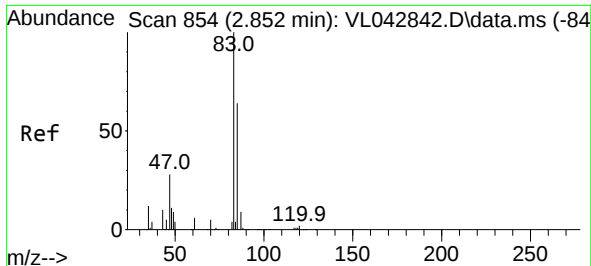
Reviewed By :Semsettin Yesilyurt 09/11/2025
Supervised By :Mahesh Dadoda 09/11/2025



#27
Carbon Disulfide
Concen: 0.755 ppbv
RT: 2.146 min Scan# 636
Delta R.T. 0.003 min
Lab File: VL042924.D
Acq: 10 Sep 2025 12:05

Tgt Ion: 76 Resp: 15790
Ion Ratio Lower Upper
76 100
44 36.8 15.9 23.9#
78 9.2 9.5 14.3#





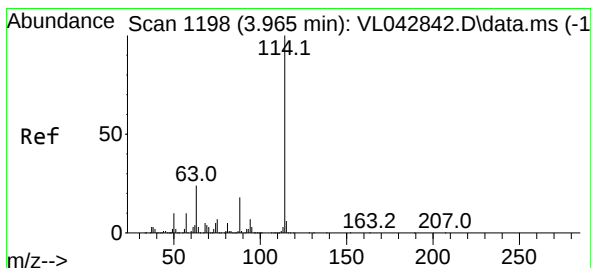
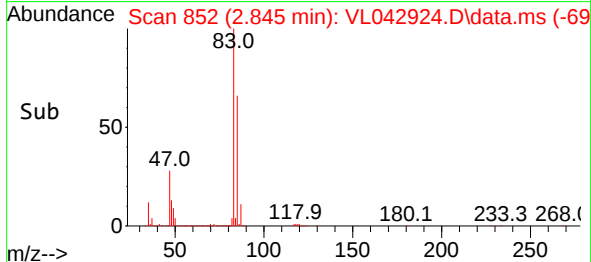
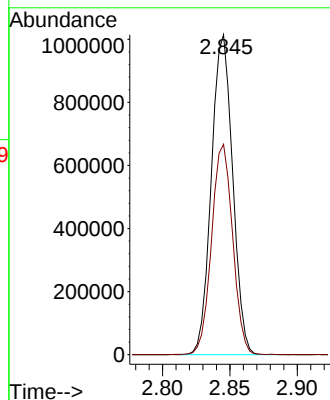
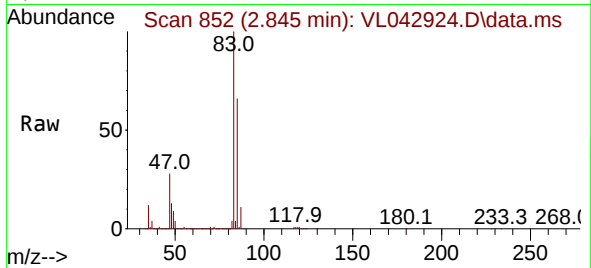
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Chloroform
Concen: 36.292 ppbv
RT: 2.845 min Scan# 81
Delta R.T. 0.006 min
Lab File: VL042924.D
Acq: 10 Sep 2025 12:05

Instrument :
MSVOA_L
ClientSampleId :
SV2

Tgt Ion: 83 Resp: 1113904
Ion Ratio Lower Upper
83 100
85 65.7 51.1 76.7

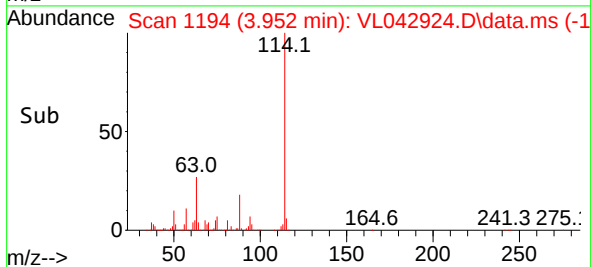
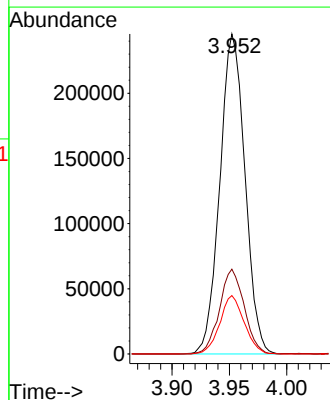
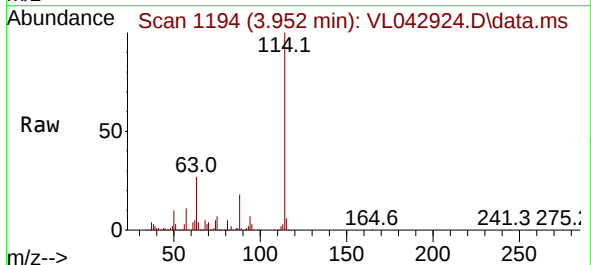
Manual Integrations
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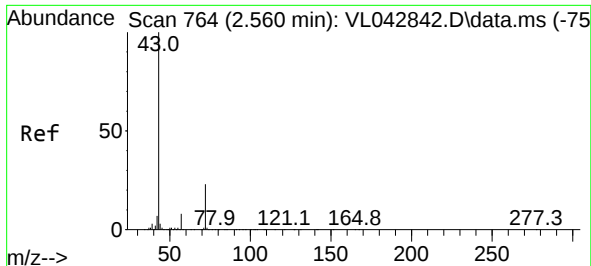
Reviewed By :Semsettin Yesilyurt 09/11/2025
Supervised By :Mahesh Dadoda 09/11/2025



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 1194
Delta R.T. 0.010 min
Lab File: VL042924.D
Acq: 10 Sep 2025 12:05

Tgt Ion:114 Resp: 373895
Ion Ratio Lower Upper
114 100
63 26.1 19.7 29.5
88 17.7 14.4 21.6





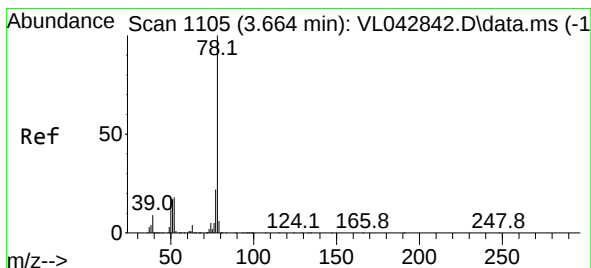
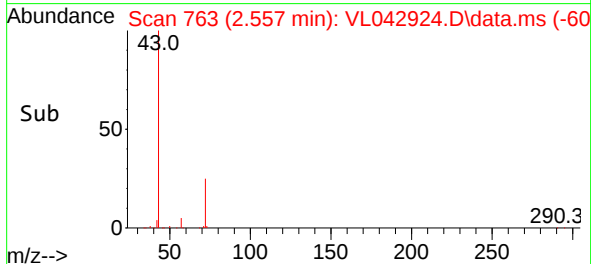
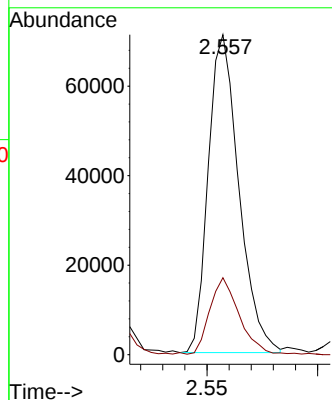
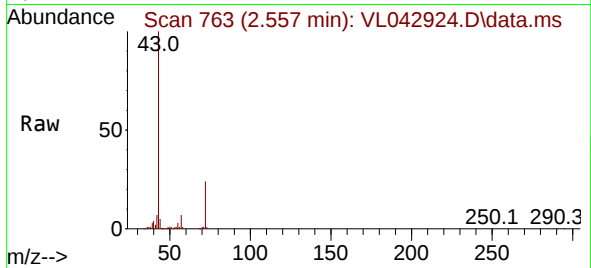
#34
2-Butanone
Concen: 2.705 ppbv
RT: 2.557 min Scan# 71
Delta R.T. 0.010 min
Lab File: VL042924.D
Acq: 10 Sep 2025 12:05

Instrument :
MSVOA_L
ClientSampleId :
SV2

Tgt Ion: 43 Resp: 6830
Ion Ratio Lower Upper
43 100
72 23.9 18.6 28.0

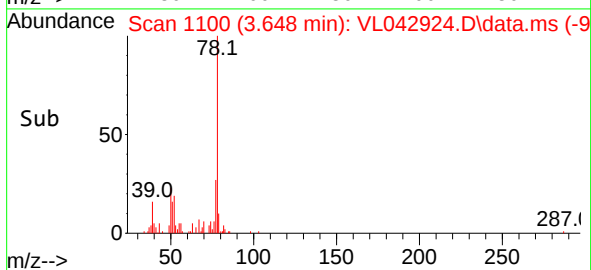
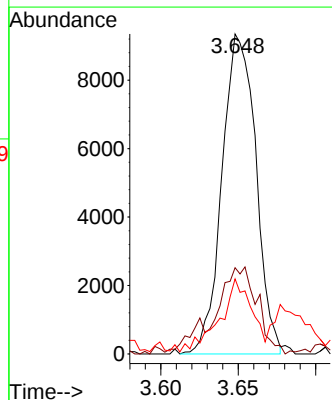
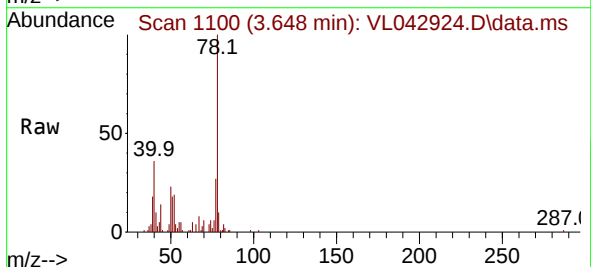
Manual Integrations
APPROVED

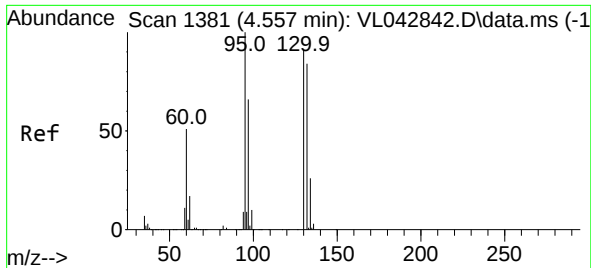
Reviewed By :Semsettin Yesilyurt 09/11/2025
Supervised By :Mahesh Dadoda 09/11/2025



#36
Benzene
Concen: 0.396 ppbv
RT: 3.648 min Scan# 1100
Delta R.T. 0.003 min
Lab File: VL042924.D
Acq: 10 Sep 2025 12:05

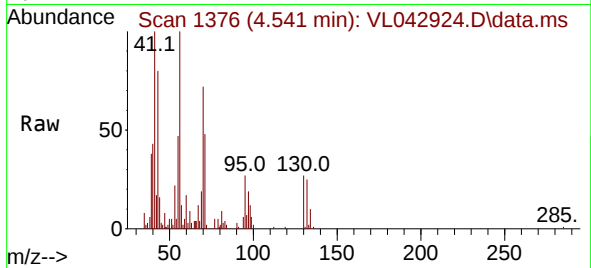
Tgt Ion: 78 Resp: 14190
Ion Ratio Lower Upper
78 100
77 24.2 17.7 26.5
50 22.8 13.9 20.9#





#38
 Trichloroethene
 Concen: 0.240 ppbv m
 RT: 4.541 min Scan# 1376
 Delta R.T. 0.010 min
 Lab File: VL042924.D
 Acq: 10 Sep 2025 12:05

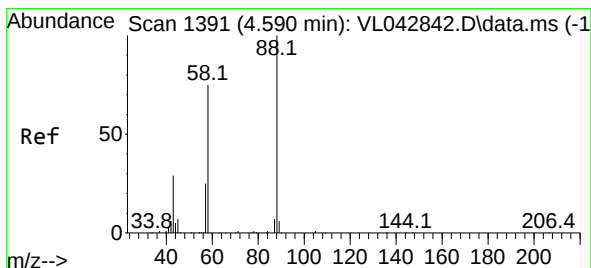
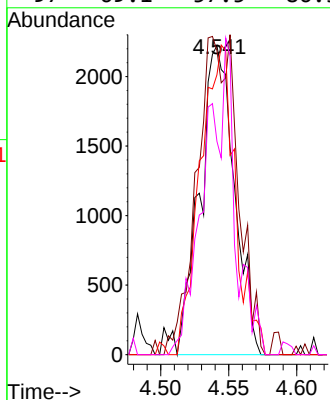
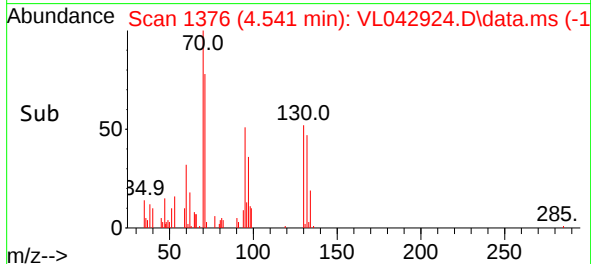
Instrument :
 MSVOA_L
 ClientSampleId :
 SV2



Tgt Ion	Ratio	Lower	Upper
130	100		
95	98.4	87.6	131.4
132	90.5	73.8	110.8
97	69.1	57.5	86.3

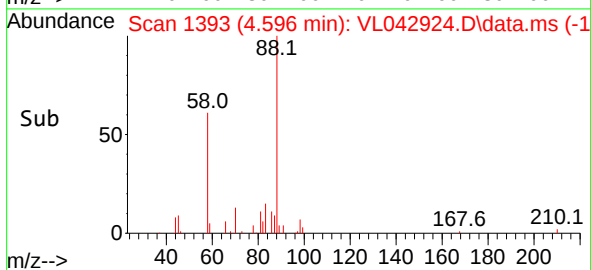
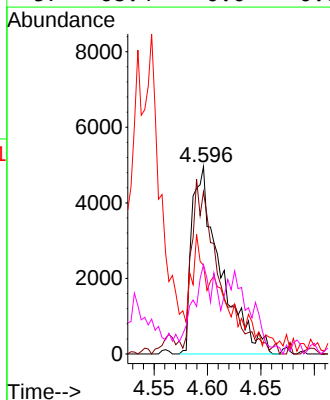
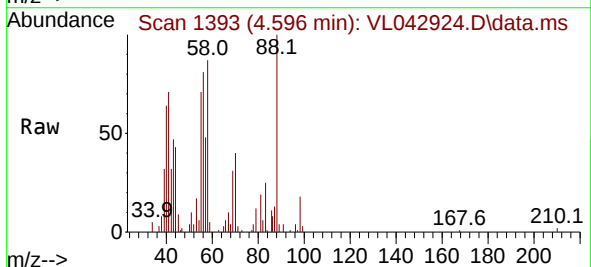
Manual Integrations
 APPROVED

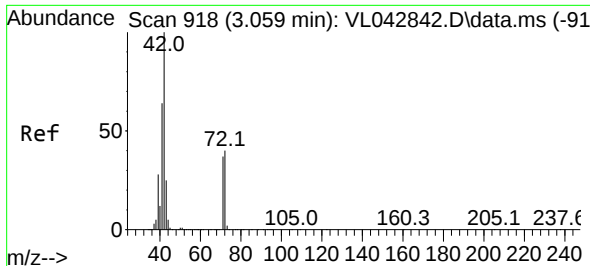
Reviewed By :Semsettin Yesilyurt 09/11/2025
 Supervised By :Mahesh Dadoda 09/11/2025



#40
 1,4-Dioxane
 Concen: 1.467 ppbv m
 RT: 4.596 min Scan# 1393
 Delta R.T. 0.035 min
 Lab File: VL042924.D
 Acq: 10 Sep 2025 12:05

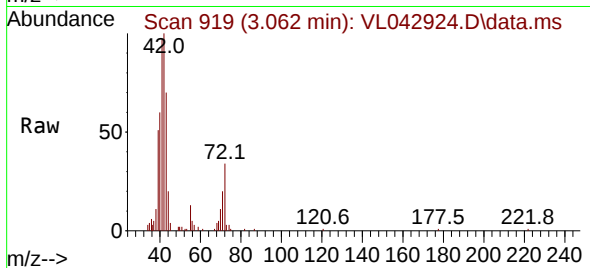
Tgt Ion	Ratio	Lower	Upper
88	100		
58	98.2	53.8	80.6#
43	69.7	22.8	34.2#
57	68.4	0.0	0.0#





#41
Tetrahydrofuran
Concen: 0.530 ppbv m
RT: 3.062 min Scan# 918
Delta R.T. 0.019 min
Lab File: VL042924.D
Acq: 10 Sep 2025 12:05

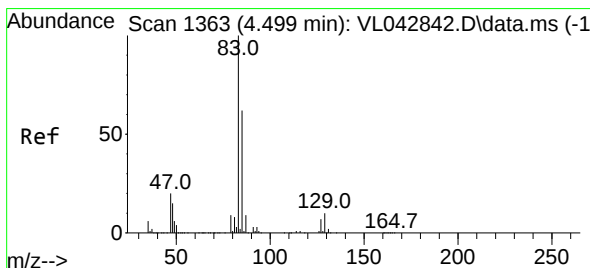
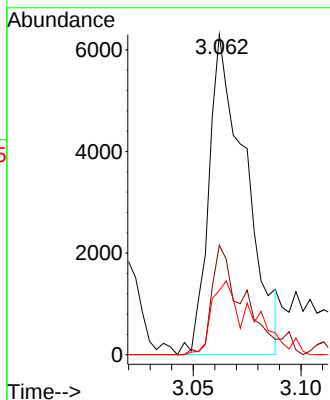
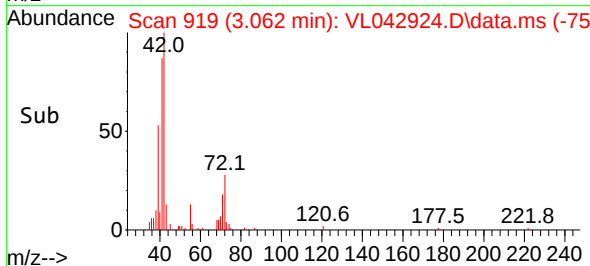
Instrument :
MSVOA_L
ClientSampleId :
SV2



Tgt Ion: 42 Resp: 746
Ion Ratio Lower Upper
42 100
72 0.0 32.6 48.8
71 0.0 30.0 45.0

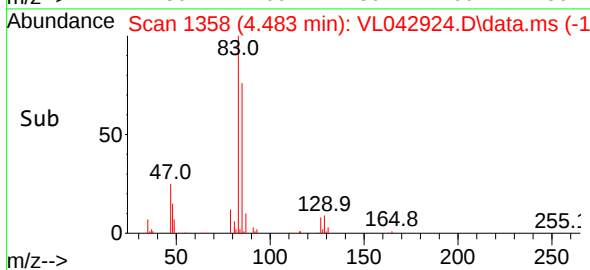
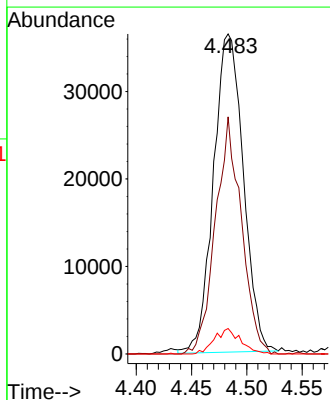
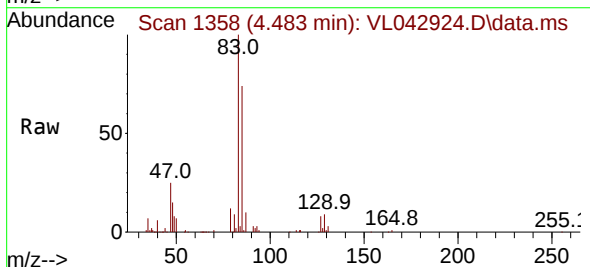
Manual Integrations
APPROVED

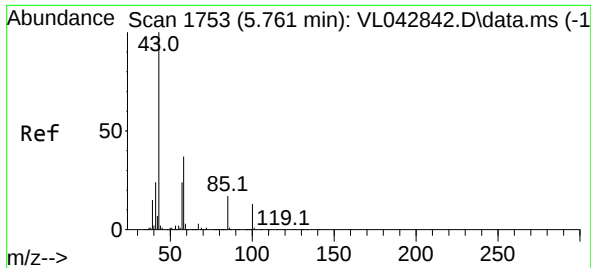
Reviewed By :Semsettin Yesilyurt 09/11/2025
Supervised By :Mahesh Dadoda 09/11/2025



#42
Bromodichloromethane
Concen: 2.446 ppbv
RT: 4.483 min Scan# 1358
Delta R.T. 0.010 min
Lab File: VL042924.D
Acq: 10 Sep 2025 12:05

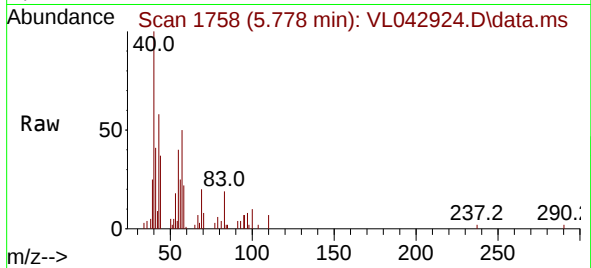
Tgt Ion: 83 Resp: 68189
Ion Ratio Lower Upper
83 100
85 74.8 49.8 74.8
127 8.0 5.8 8.6





#50
4-Methyl-2-Pentanone
Concen: 0.189 ppbv m
RT: 5.778 min Scan# 1758
Delta R.T. 0.048 min
Lab File: VL042924.D
Acq: 10 Sep 2025 12:05

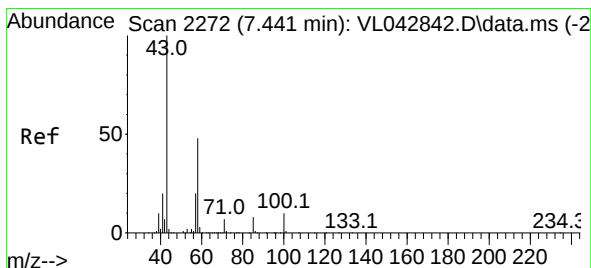
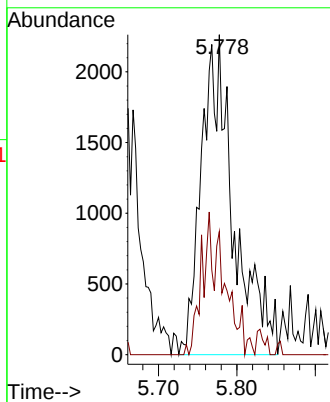
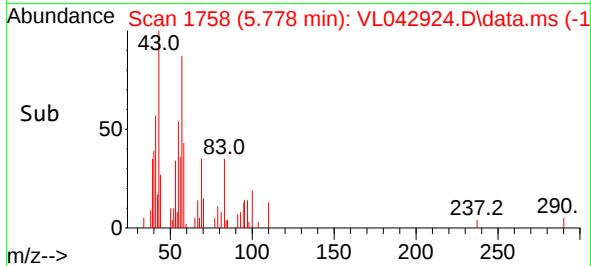
Instrument :
MSVOA_L
ClientSampleId :
SV2



Tgt Ion: 43 Resp: 6438
Ion Ratio Lower Upper
43 100
58 0.0 29.8 44.8

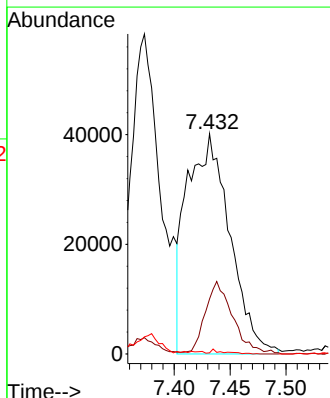
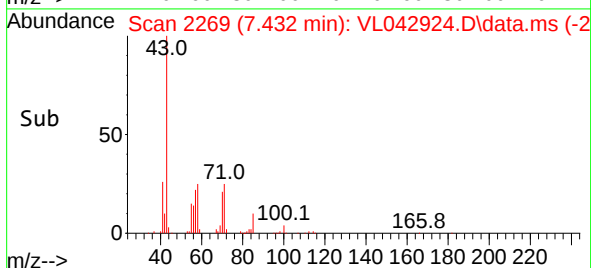
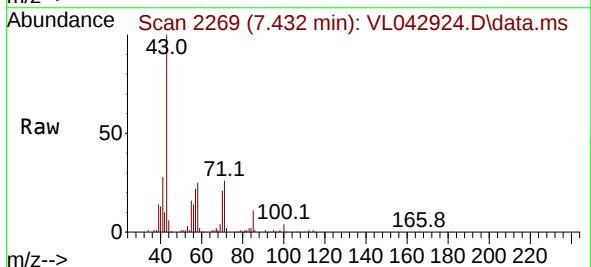
Manual Integrations
APPROVED

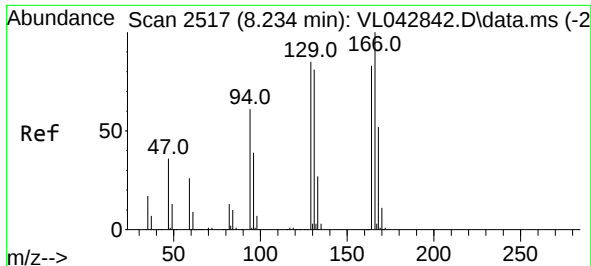
Reviewed By :Semsettin Yesilyurt 09/11/2025
Supervised By :Mahesh Dadoda 09/11/2025



#51
2-Hexanone
Concen: 3.963 ppbv m
RT: 7.432 min Scan# 2269
Delta R.T. 0.013 min
Lab File: VL042924.D
Acq: 10 Sep 2025 12:05

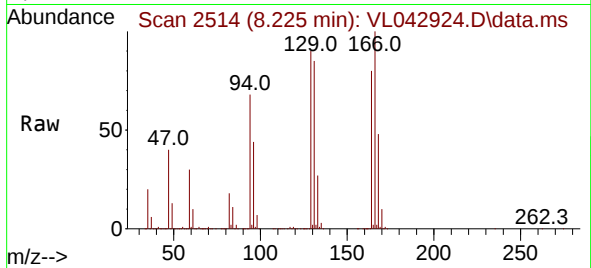
Tgt Ion: 43 Resp: 106411
Ion Ratio Lower Upper
43 100
58 21.5 41.0 61.6#
98 0.0 0.1 0.1#





#52
Tetrachloroethene
Concen: 87.140 ppbv
RT: 8.225 min Scan# 2113
Delta R.T. 0.013 min
Lab File: VL042924.D
Acq: 10 Sep 2025 12:05

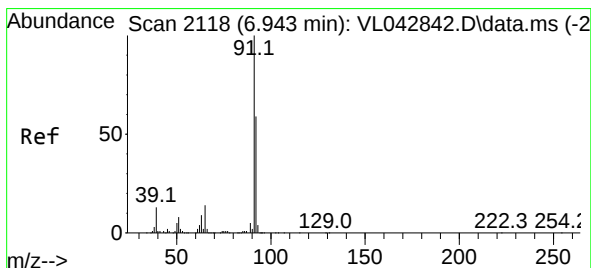
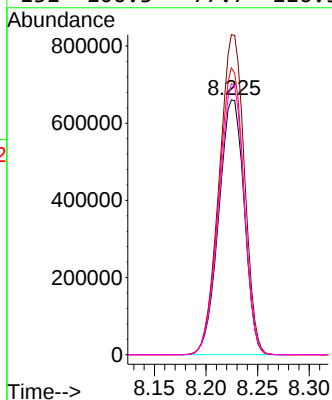
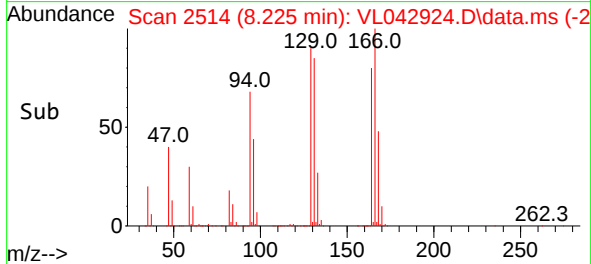
Instrument :
MSVOA_L
ClientSampleId :
SV2



Tgt Ion:164 Resp: 112868
Ion Ratio Lower Upper
164 100
166 125.6 96.5 144.7
129 112.6 81.8 122.6
131 106.3 77.7 116.5

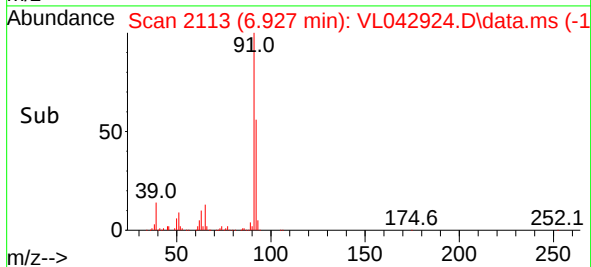
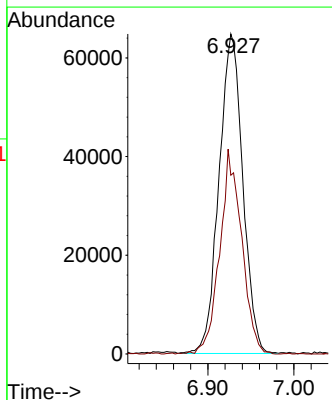
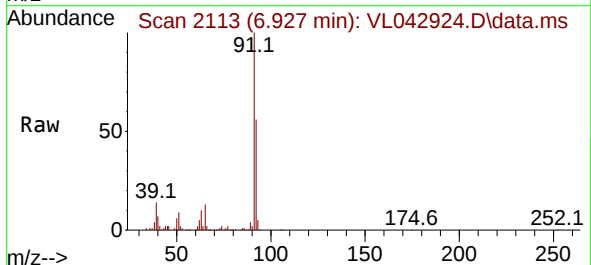
Manual Integrations
APPROVED

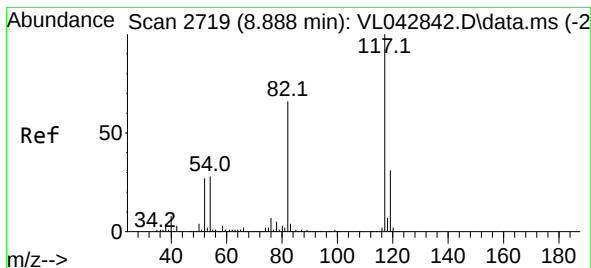
Reviewed By :Semsettin Yesilyurt 09/11/2025
Supervised By :Mahesh Dadoda 09/11/2025



#53
Toluene
Concen: 2.924 ppbv
RT: 6.927 min Scan# 2113
Delta R.T. 0.013 min
Lab File: VL042924.D
Acq: 10 Sep 2025 12:05

Tgt Ion: 91 Resp: 124472
Ion Ratio Lower Upper
91 100
92 59.2 47.8 71.6





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.878 min Scan# 2719

Delta R.T. 0.010 min

Lab File: VL042924.D

Acq: 10 Sep 2025 12:05

Instrument :

MSVOA_L

ClientSampleId :

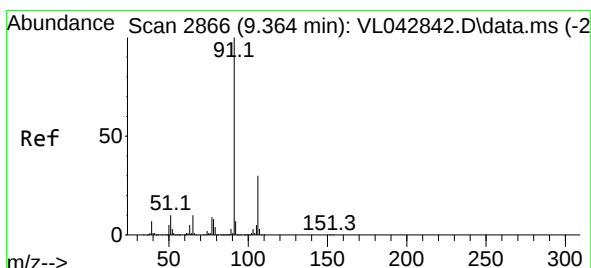
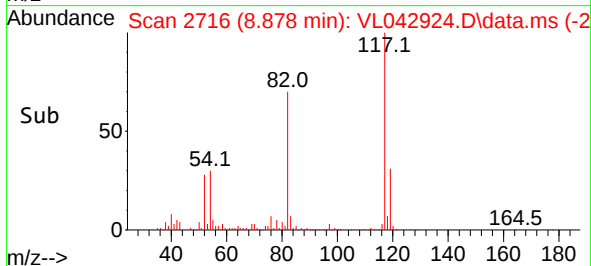
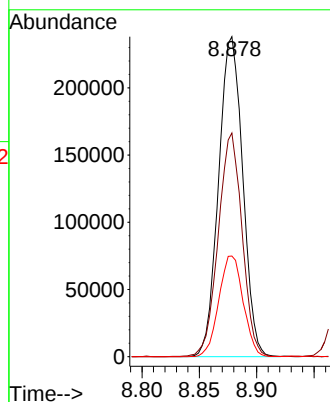
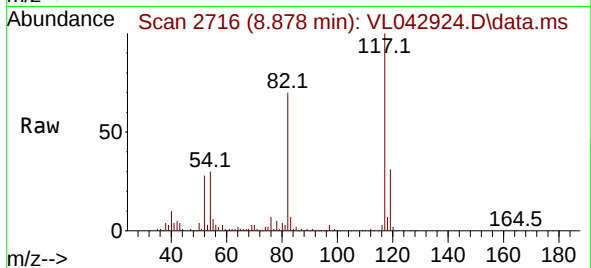
SV2

Tgt Ion:117 Resp: 34825
 Ion Ratio Lower Upper
 117 100
 82 69.2 54.6 81.8
 119 31.8 25.9 38.9

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 09/11/2025
 Supervised By :Mahesh Dadoda 09/11/2025



#58

Ethyl Benzene

Concen: 0.731 ppbv

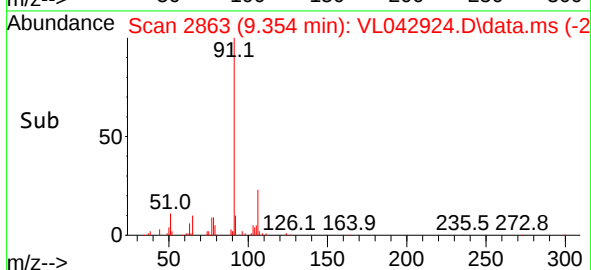
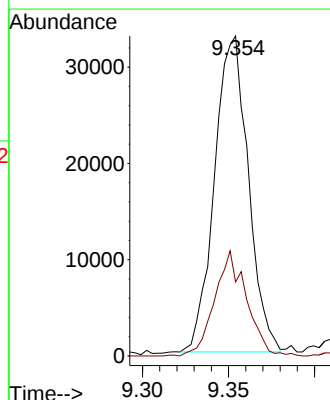
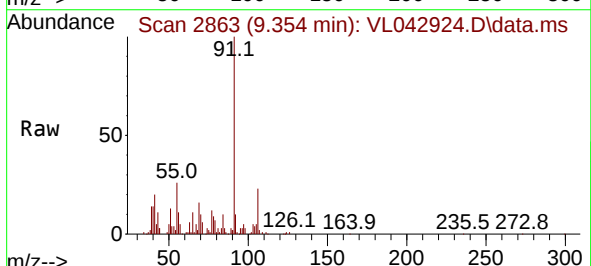
RT: 9.354 min Scan# 2863

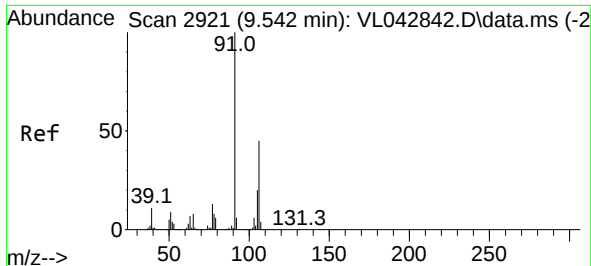
Delta R.T. 0.010 min

Lab File: VL042924.D

Acq: 10 Sep 2025 12:05

Tgt Ion: 91 Resp: 44896
 Ion Ratio Lower Upper
 91 100
 106 23.4 23.9 35.9#





#59

m/p-Xylene

Concen: 2.148 ppbv

RT: 9.529 min Scan# 2917

Delta R.T. -0.010 min

Lab File: VL042924.D

Acq: 10 Sep 2025 12:05

Instrument :

MSVOA_L

ClientSampleId :

SV2

Tgt Ion: 91 Resp: 10345

Ion Ratio Lower Upper

91 100

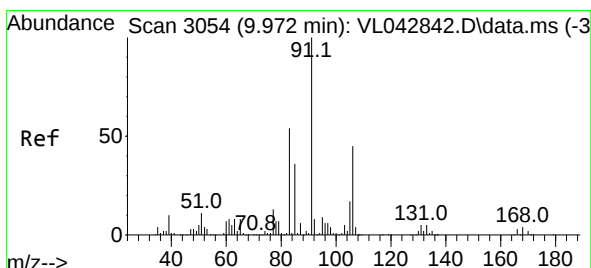
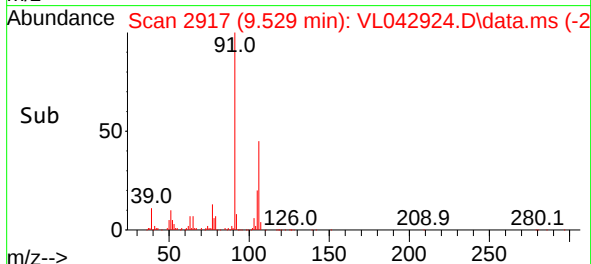
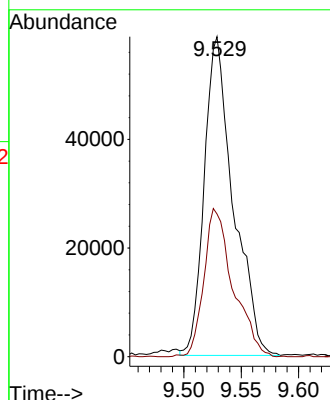
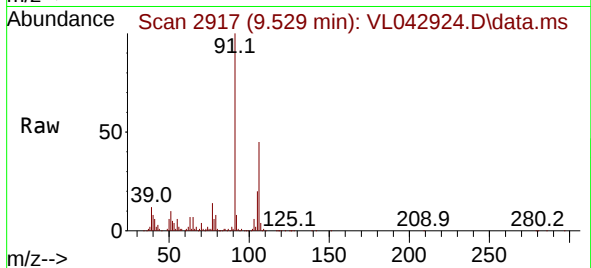
106 46.8 0.0 0.0

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 09/11/2025

Supervised By :Mahesh Dadoda 09/11/2025



#60

o-Xylene

Concen: 1.026 ppbv

RT: 9.963 min Scan# 3051

Delta R.T. 0.010 min

Lab File: VL042924.D

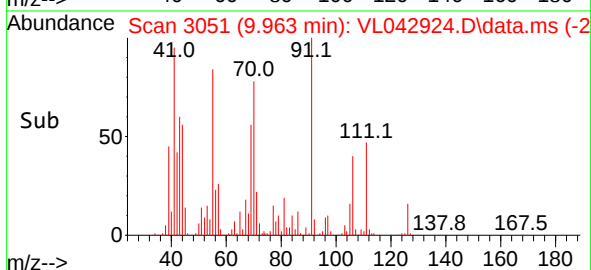
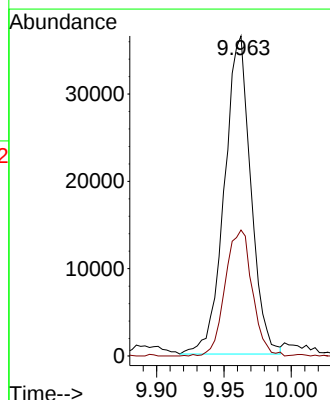
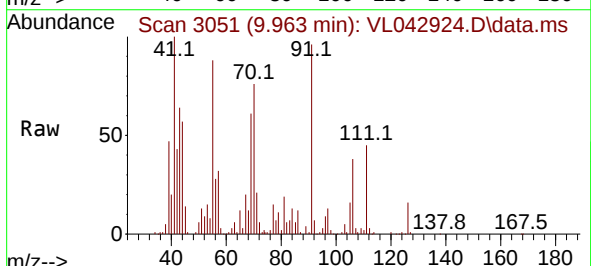
Acq: 10 Sep 2025 12:05

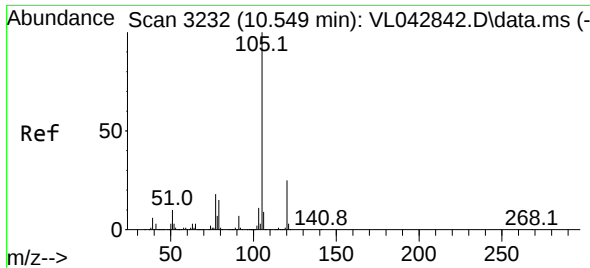
Tgt Ion: 91 Resp: 49722

Ion Ratio Lower Upper

91 100

106 40.8 21.8 65.4





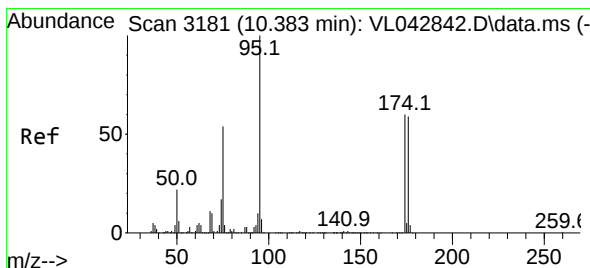
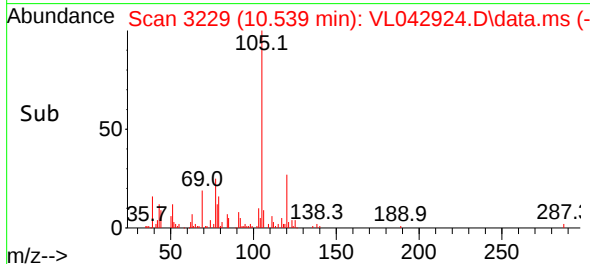
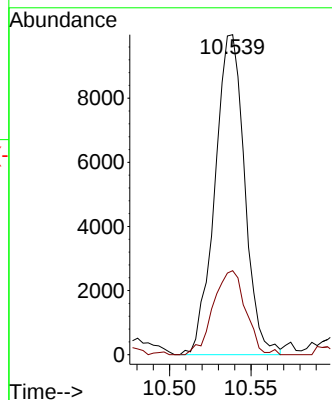
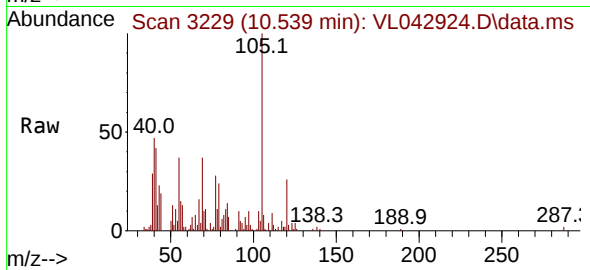
#62
Isopropylbenzene
Concen: 0.179 ppbv
RT: 10.539 min Scan# 31
Delta R.T. 0.010 min
Lab File: VL042924.D
Acq: 10 Sep 2025 12:05

Instrument :
MSVOA_L
ClientSampleId :
SV2

Tgt Ion:105 Resp: 1268
Ion Ratio Lower Upper
105 100
120 28.8 20.6 30.8

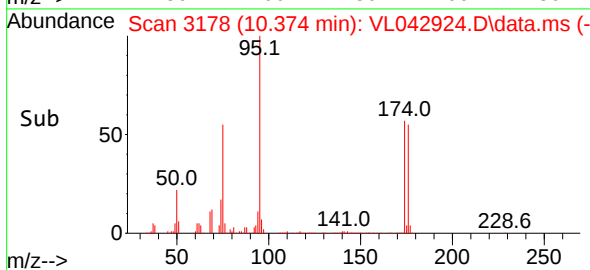
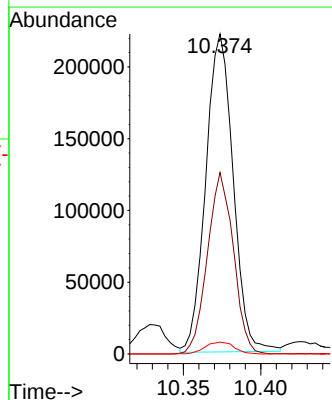
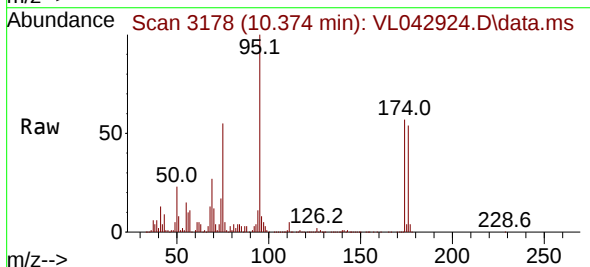
Manual Integrations
APPROVED

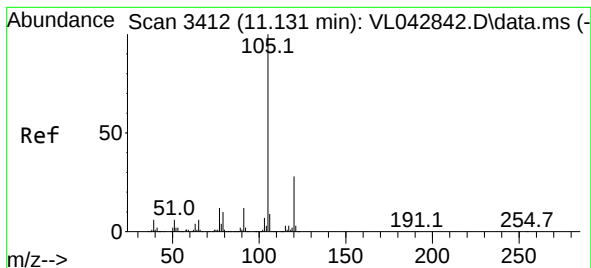
Reviewed By :Semsettin Yesilyurt 09/11/2025
Supervised By :Mahesh Dadoda 09/11/2025



#68
1-Bromo-4-Fluorobenzene
Concen: 10.446 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. 0.010 min
Lab File: VL042924.D
Acq: 10 Sep 2025 12:05

Tgt Ion: 95 Resp: 272828
Ion Ratio Lower Upper
95 100
174 54.0 48.4 72.6
175 4.0 3.8 5.8





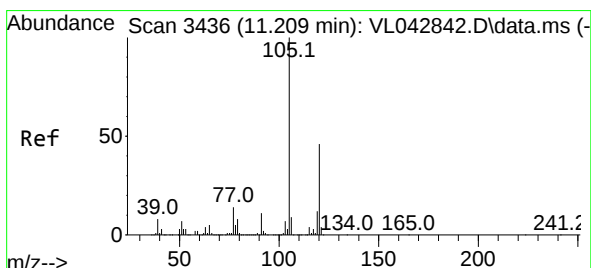
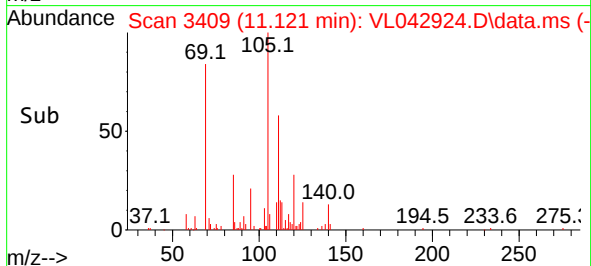
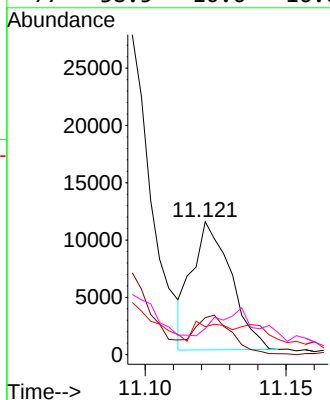
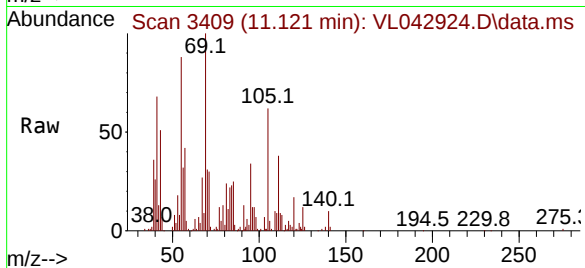
#72
4-Ethyltoluene
Concen: 0.183 ppbv
RT: 11.121 min Scan# 3412
Delta R.T. 0.003 min
Lab File: VL042924.D
Acq: 10 Sep 2025 12:05

Instrument :
MSVOA_L
ClientSampleId :
SV2

Tgt Ion:105 Resp: 10749
Ion Ratio Lower Upper
105 100
120 0.0 23.4 35.2
91 35.2 9.8 14.6
77 38.5 10.6 16.0

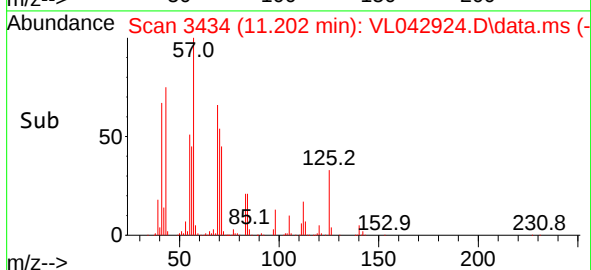
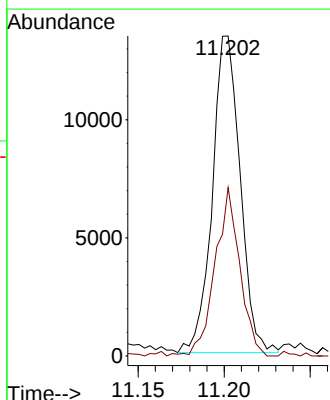
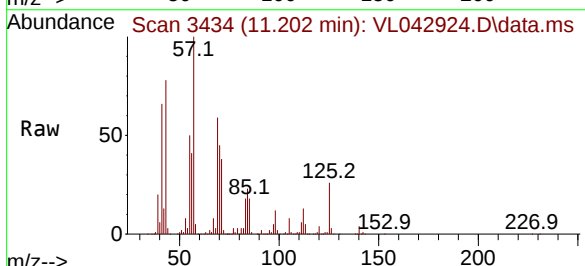
Manual Integrations
APPROVED

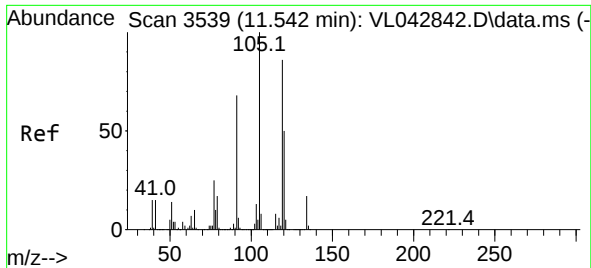
Reviewed By :Semsettin Yesilyurt 09/11/2025
Supervised By :Mahesh Dadoda 09/11/2025



#73
1,3,5-Trimethylbenzene
Concen: 0.302 ppbv
RT: 11.202 min Scan# 3434
Delta R.T. 0.006 min
Lab File: VL042924.D
Acq: 10 Sep 2025 12:05

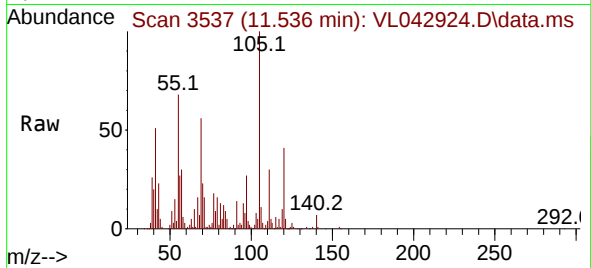
Tgt Ion:105 Resp: 15100
Ion Ratio Lower Upper
105 100
120 53.1 36.6 54.8





#74
1,2,4-Trimethylbenzene
Concen: 0.552 ppbv
RT: 11.536 min Scan# 3024
Delta R.T. 0.006 min
Lab File: VL042924.D
Acq: 10 Sep 2025 12:05

Instrument :
MSVOA_L
ClientSampleId :
SV2



Tgt Ion:	105	Resp:	3024
Ion	Ratio	Lower	Upper
105	100		
120	41.2	39.8	59.6
91	9.9	54.2	81.4
77	10.0	19.8	29.6

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 09/11/2025
Supervised By :Mahesh Dadoda 09/11/2025

