

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
 Data File : VL042424.D
 Acq On : 28 Apr 2025 14:00
 Operator : SY/MD
 Sample : Q1665-21
 Misc : 400mL/MSVOA_L
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-B2-1-3242025

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 04/29/2025
 Supervised By :Mahesh Dadoda 04/30/2025

Quant Time: Apr 29 01:37:10 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 2

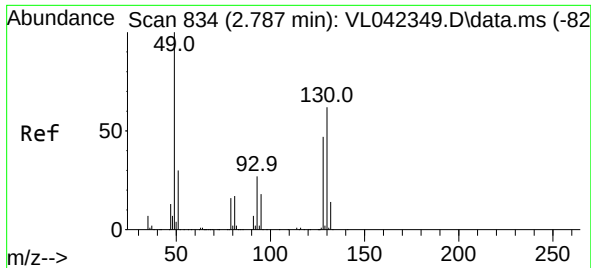
QLast Update : Fri Apr 18 02:14:00 2025

Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.784	49	134924	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.955	114	377834	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.878	117	330143	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	284407	10.483	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	104.800%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.499	85	10943	0.459	ppbv	93
3) Chlorodifluoromethane	1.476	51	6923m	0.305	ppbv	
4) Chloromethane	1.531	50	6517	0.691	ppbv	93
9) Propene	1.486	41	11972m	1.158	ppbv	
10) Heptane	4.978	43	11454m	0.394	ppbv	
11) Trichlorofluoromethane	1.877	101	4919	0.217	ppbv	92
13) Ethanol	1.722	45	1134596	690.509	ppbv	81
15) Acetone	1.835	43	335719	15.200	ppbv	100
17) tert-Butyl alcohol	2.043	59	7751	0.283	ppbv	97
19) Isopropyl Alcohol	1.884	45	490461	39.973	ppbv #	63
20) Methylene Chloride	2.059	84	13523	1.563	ppbv	95
26) Hexane	2.826	57	65044	2.951	ppbv #	42
30) Cyclohexane	3.855	84	5289	0.297	ppbv	92
34) 2-Butanone	2.560	43	21181	0.709	ppbv	100
35) Carbon Tetrachloride	3.761	117	2391m	0.070	ppbv	
36) Benzene	3.654	78	17661	0.433	ppbv #	94
44) 2,2,4-Trimethylpentane	4.642	57	34215m	0.486	ppbv	
53) Toluene	6.930	91	417734	8.542	ppbv	100
58) Ethyl Benzene	9.351	91	24772	0.379	ppbv	95
59) m/p-Xylene	9.529	91	65650	1.246	ppbv	93
60) o-Xylene	9.963	91	27701	0.522	ppbv	97
61) Styrene	9.865	104	6130	0.242	ppbv	91
71) 2-Chlorotoluene	10.901	91	6948	0.114	ppbv	82
72) 4-Ethyltoluene	11.125	105	7865	0.121	ppbv #	56
73) 1,3,5-Trimethylbenzene	11.205	105	7185	0.125	ppbv	95
74) 1,2,4-Trimethylbenzene	11.536	105	17740	0.265	ppbv #	68

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



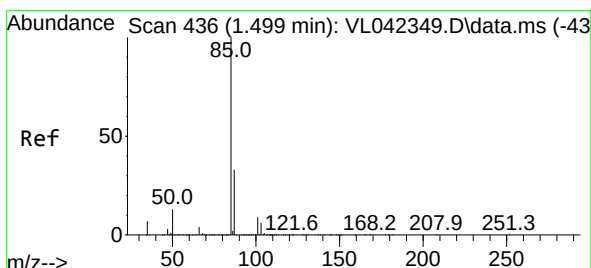
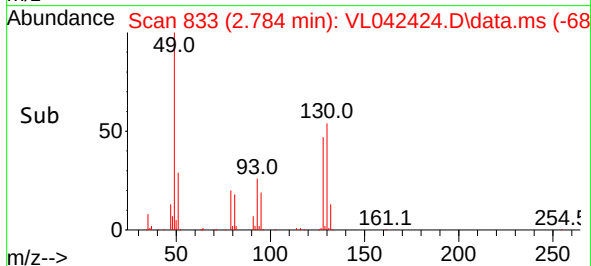
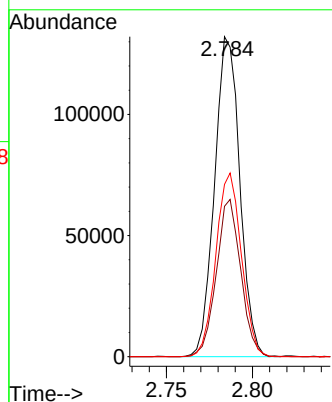
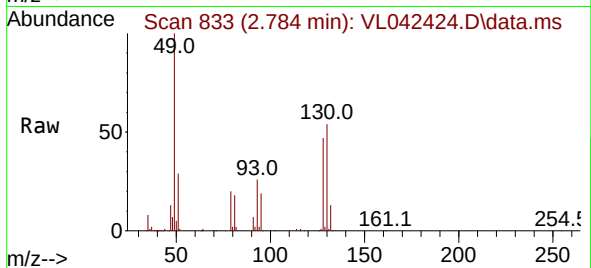
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 81
Delta R.T. -0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Tgt Ion: 49 Resp: 134924
Ion Ratio Lower Upper
49 100
128 47.5 22.8 68.4
130 57.9 29.3 88.0

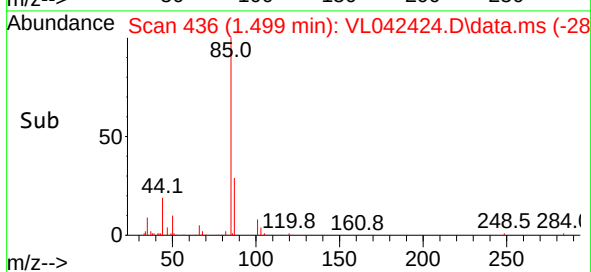
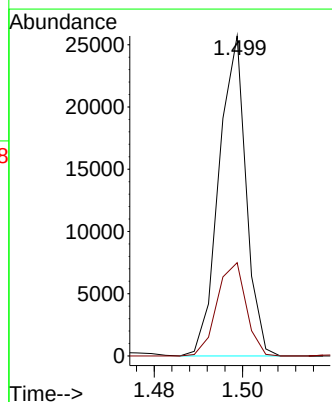
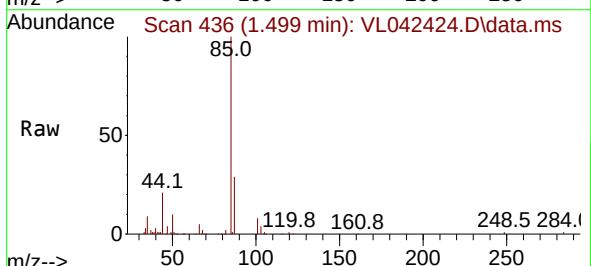
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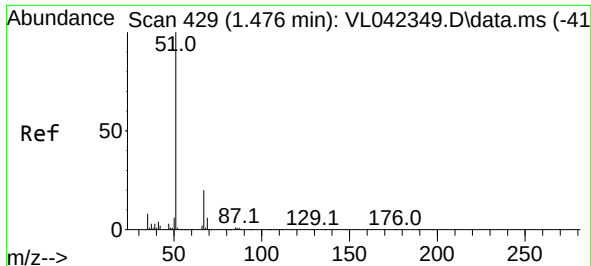
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025



#2
Dichlorodifluoromethane
Concen: 0.459 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

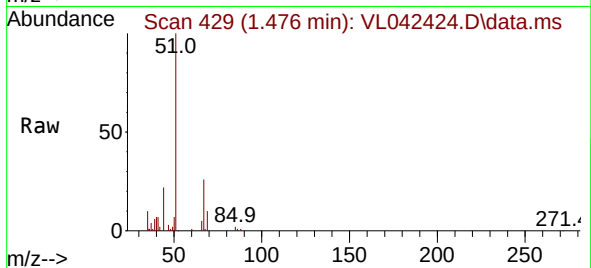
Tgt Ion: 85 Resp: 10943
Ion Ratio Lower Upper
85 100
87 29.1 26.6 39.8





#3
Chlorodifluoromethane
Concen: 0.305 ppbv m
RT: 1.476 min Scan# 429
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

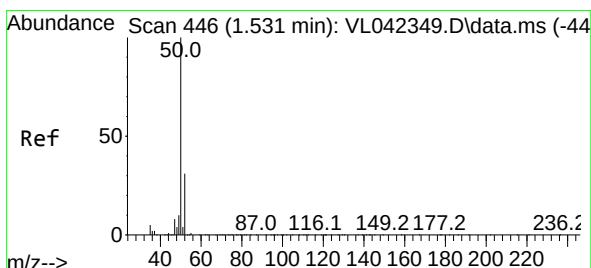
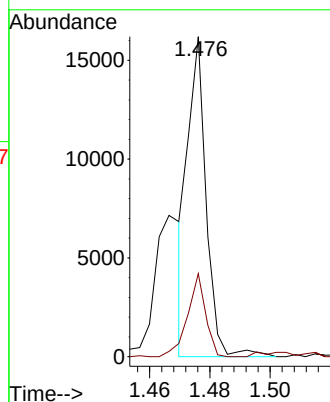
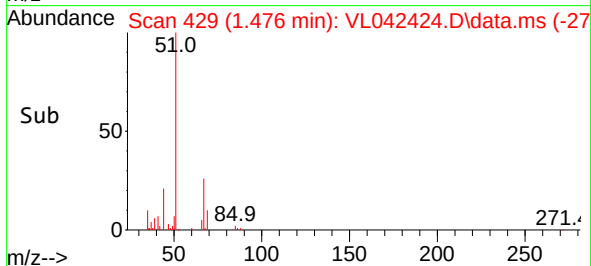
Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025



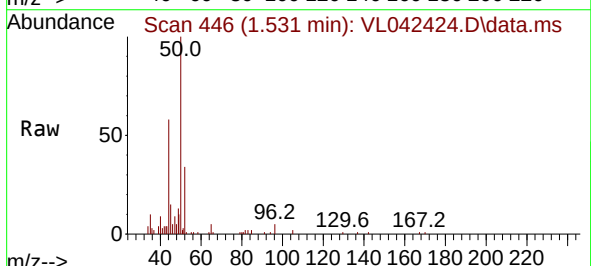
Tgt Ion: 51 Resp: 692
Ion Ratio Lower Upper
51 100
67 29.0 16.2 24.4

Manual Integrations
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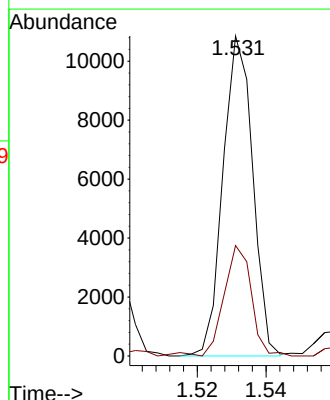
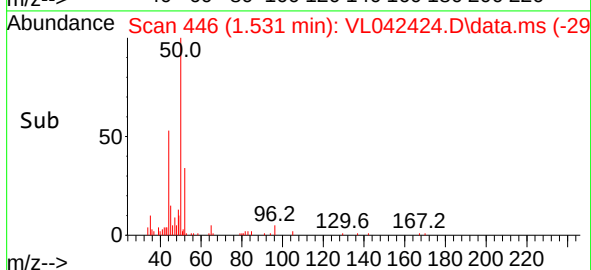
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

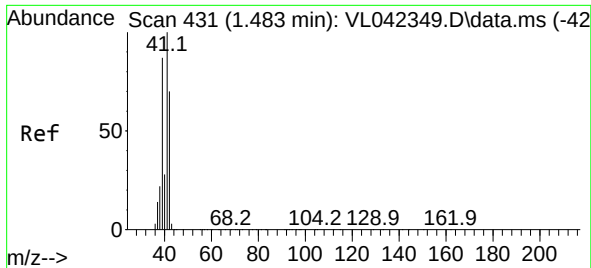


#4
Chloromethane
Concen: 0.691 ppbv
RT: 1.531 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00



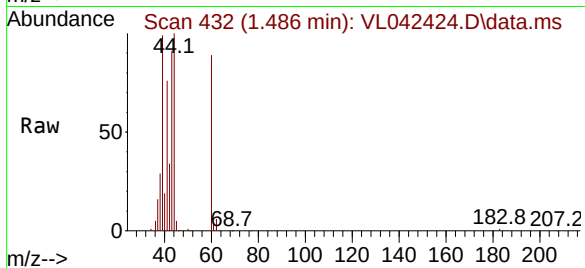
Tgt Ion: 50 Resp: 6517
Ion Ratio Lower Upper
50 100
52 34.6 24.7 37.1





#9
Propene
Concen: 1.158 ppbv m
RT: 1.486 min Scan# 41
Delta R.T. 0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

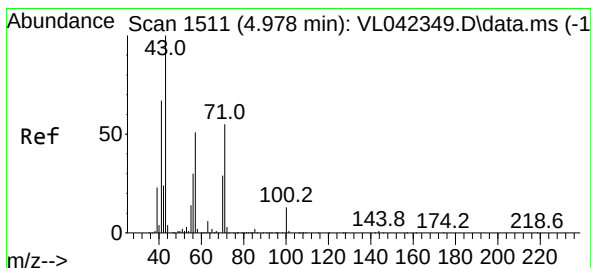
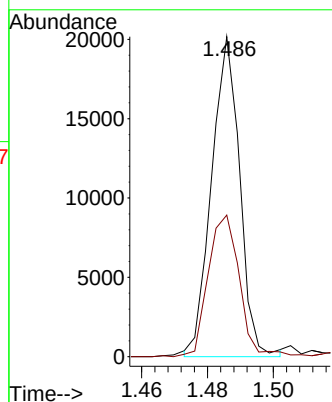
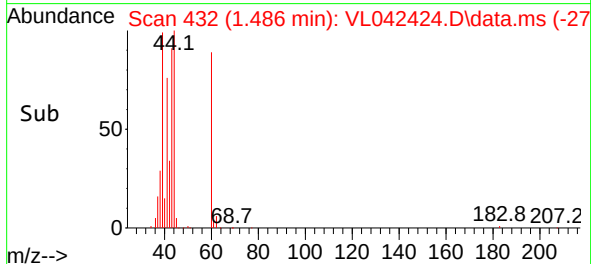
Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025



Tgt Ion: 41 Resp: 11972
Ion Ratio Lower Upper
41 100
42 217.8 56.2 84.4

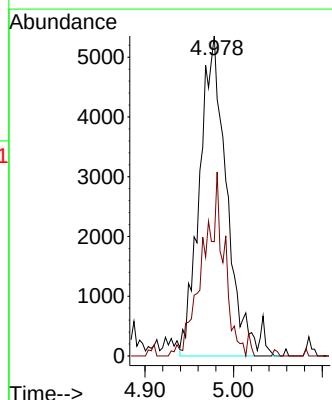
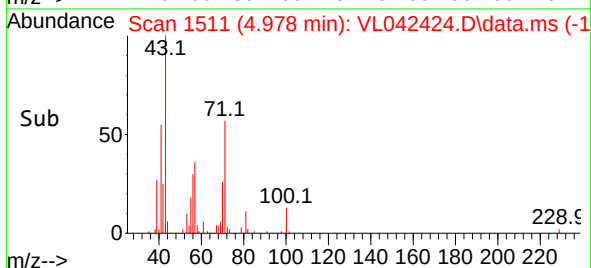
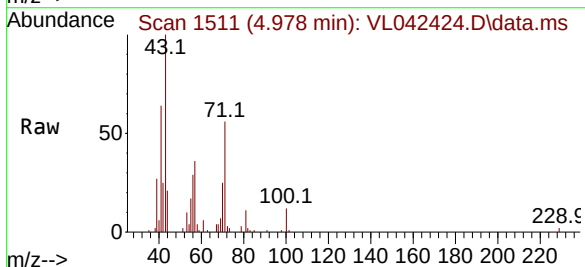
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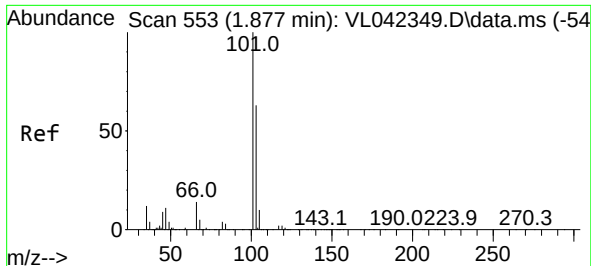
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025



#10
Heptane
Concen: 0.394 ppbv m
RT: 4.978 min Scan# 1511
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

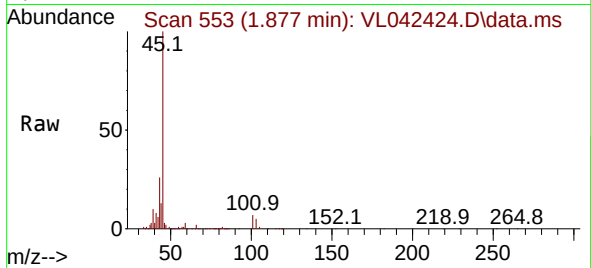
Tgt Ion: 43 Resp: 11454
Ion Ratio Lower Upper
43 100
57 0.0 39.9 59.9





#11
Trichlorofluoromethane
Concen: 0.217 ppbv
RT: 1.877 min Scan# 505
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

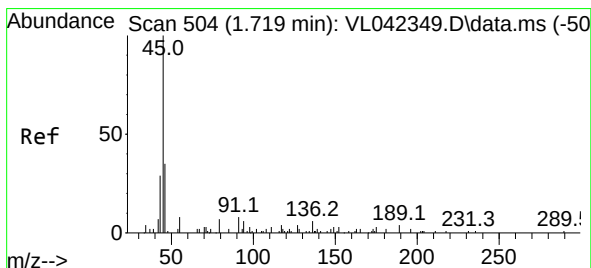
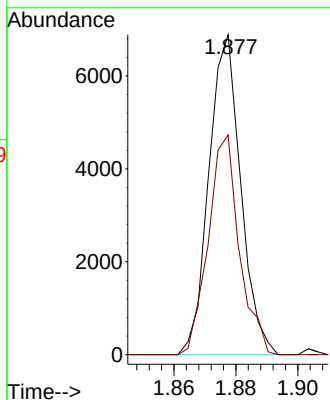
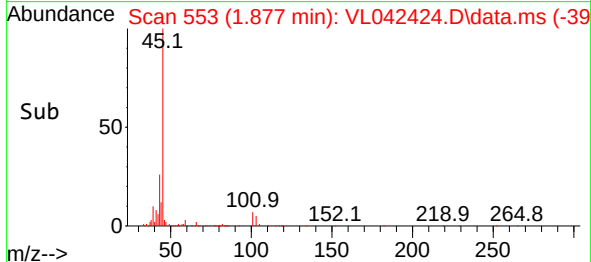
Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025



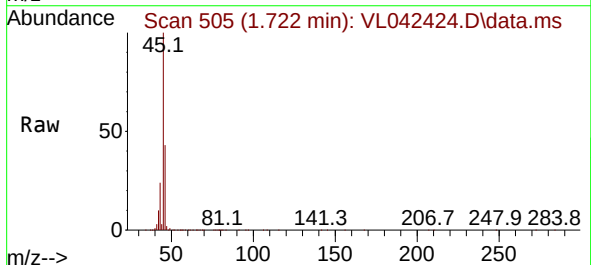
Tgt Ion:101 Resp: 4919
Ion Ratio Lower Upper
101 100
103 68.7 50.1 75.1

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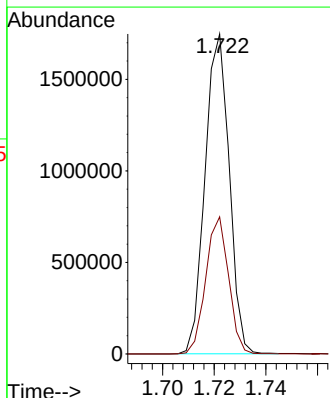
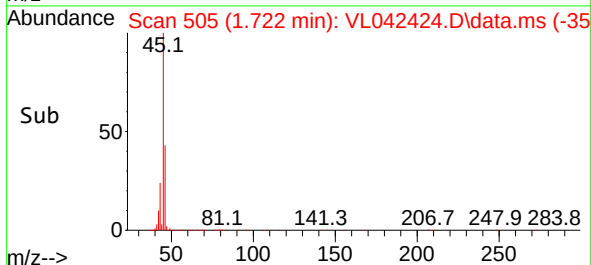
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

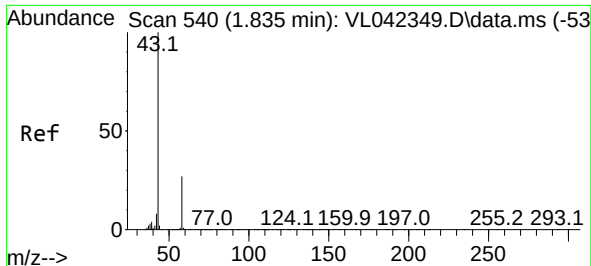


#13
Ethanol
Concen: 690.509 ppbv
RT: 1.722 min Scan# 505
Delta R.T. 0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00



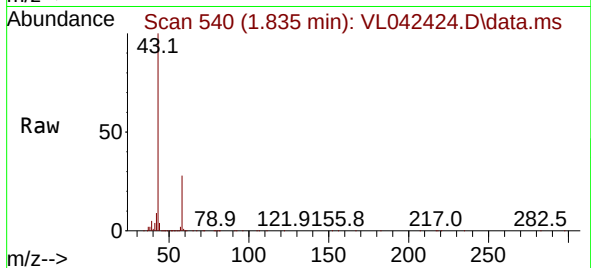
Tgt Ion: 45 Resp: 1134596
Ion Ratio Lower Upper
45 100
46 40.7 21.9 87.7





#15
Acetone
Concen: 15.200 ppbv
RT: 1.835 min Scan# 540
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

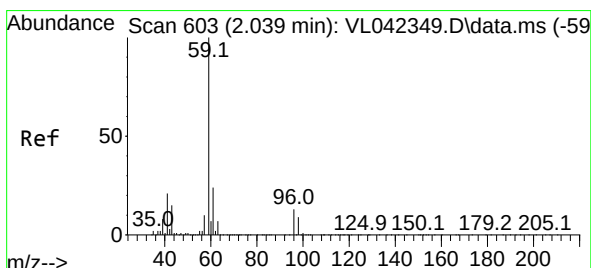
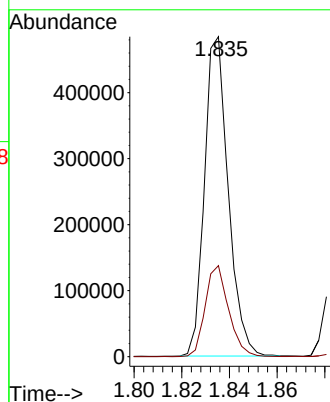
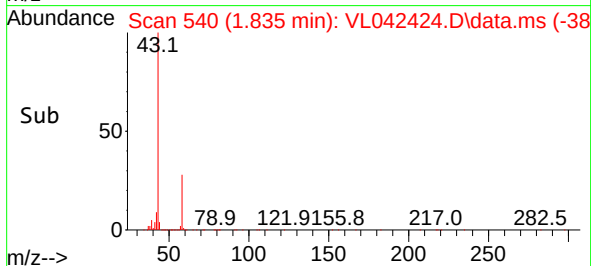
Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025



Tgt Ion: 43 Resp: 335719
Ion Ratio Lower Upper
43 100
58 28.2 22.4 33.6

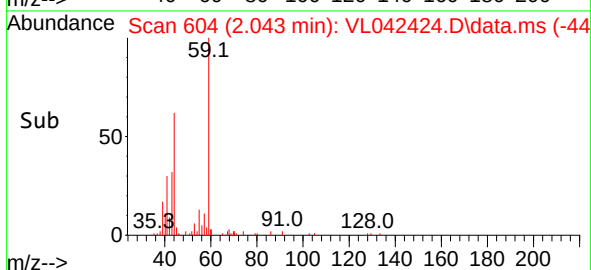
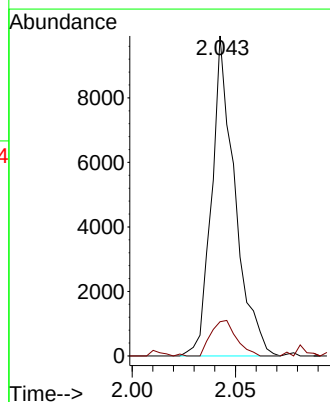
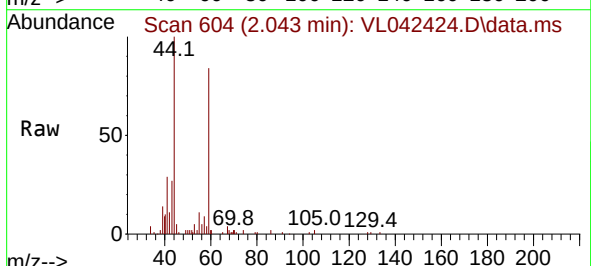
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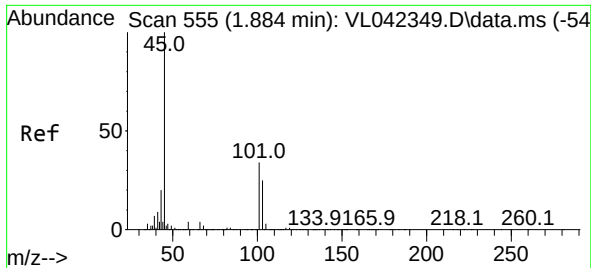
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025



#17
tert-Butyl alcohol
Concen: 0.283 ppbv
RT: 2.043 min Scan# 604
Delta R.T. 0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

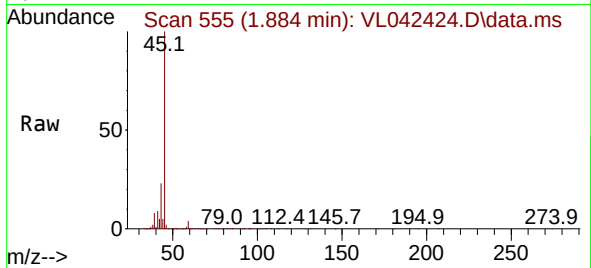
Tgt Ion: 59 Resp: 7751
Ion Ratio Lower Upper
59 100
57 12.1 8.7 13.1





#19
Isopropyl Alcohol
Concen: 39.973 ppbv
RT: 1.884 min Scan# 51
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

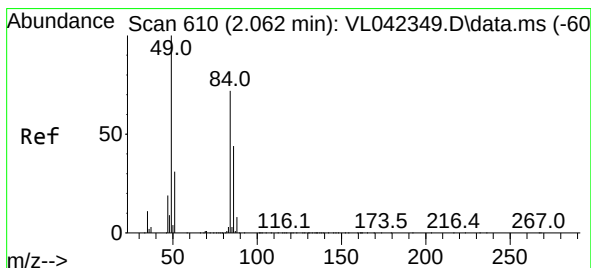
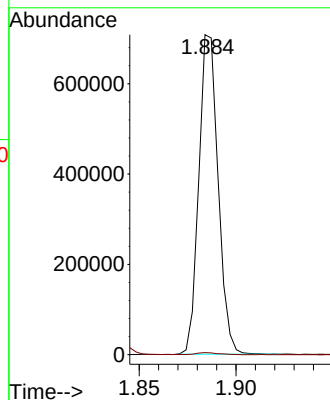
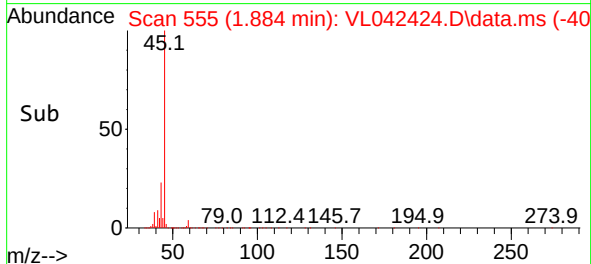
Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025



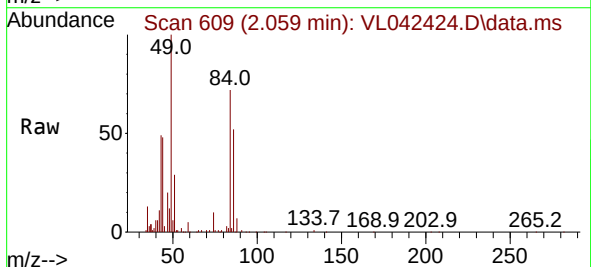
Tgt Ion: 45 Resp: 490463
Ion Ratio Lower Upper
45 100
58 19.3 34.5 51.7

Manual Integrations
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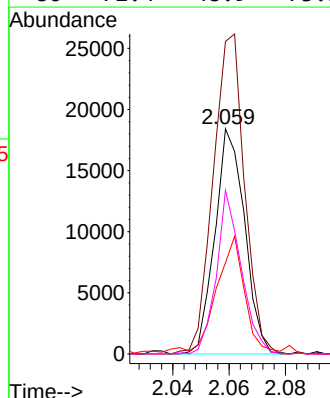
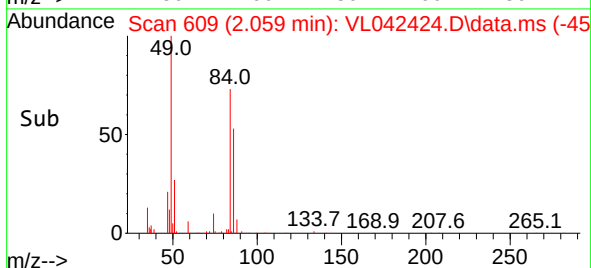
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

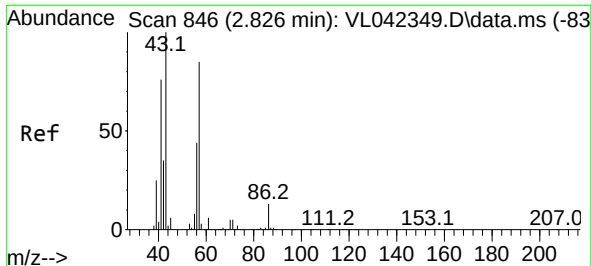


#20
Methylene Chloride
Concen: 1.563 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00



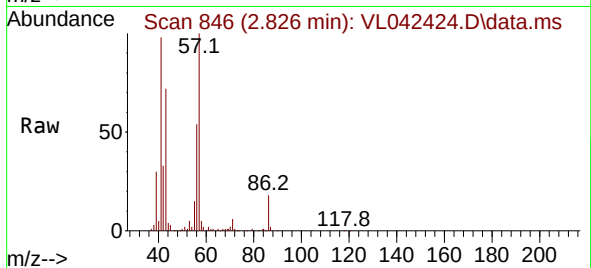
Tgt Ion: 84 Resp: 13523
Ion Ratio Lower Upper
84 100
49 138.8 111.6 167.4
51 39.3 35.1 52.7
86 72.4 48.9 73.3





#26
Hexane
Concen: 2.951 ppbv
RT: 2.826 min Scan# 846
Delta R.T. -0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

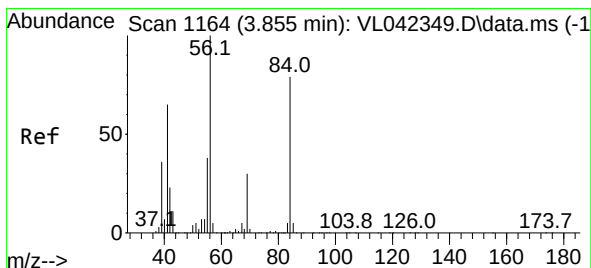
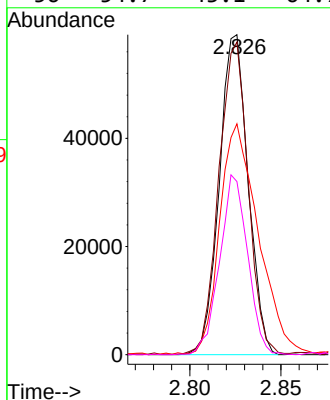
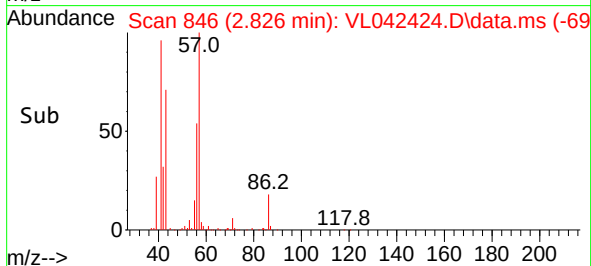
Instrument : MSVOA_L
ClientSampleId : IA-B2-1-3242025



Tgt Ion: 57 Resp: 65044
Ion Ratio Lower Upper
57 100
41 100.1 77.9 116.9
43 98.3 208.4 312.6
56 54.7 43.1 64.7

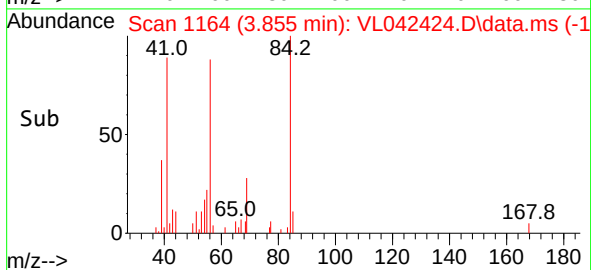
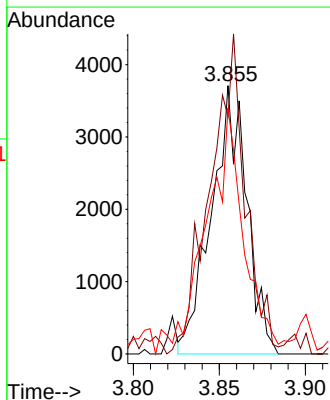
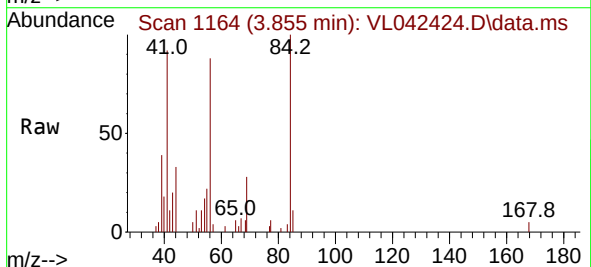
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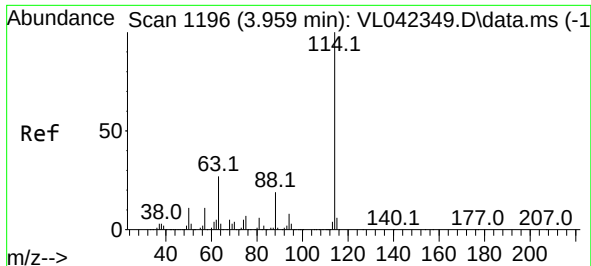
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025



#30
Cyclohexane
Concen: 0.297 ppbv
RT: 3.855 min Scan# 1164
Delta R.T. -0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 84 Resp: 5289
Ion Ratio Lower Upper
84 100
56 130.1 101.0 151.4
41 98.5 67.4 101.0





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.955 min Scan# 1195

Delta R.T. -0.003 min

Lab File: VL042424.D

Acq: 28 Apr 2025 14:00

Instrument :

MSVOA_L

ClientSampleId :

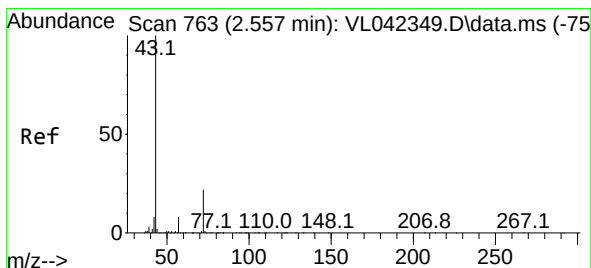
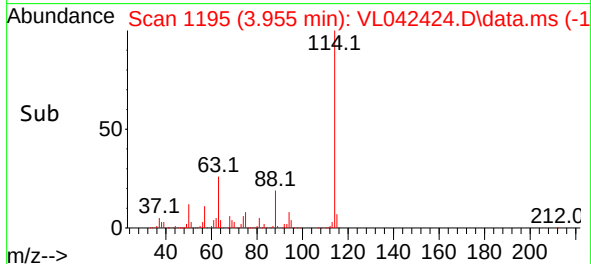
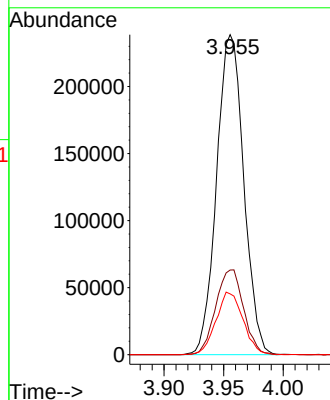
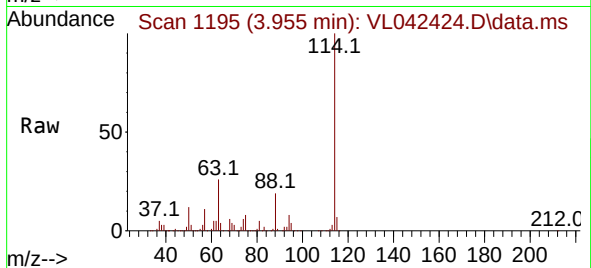
IA-B2-1-3242025

Tgt Ion:114 Resp: 377834
 Ion Ratio Lower Upper
 114 100
 63 27.2 21.8 32.6
 88 19.5 15.5 23.3

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Reviewed By :Semsettin Yesilyurt 04/29/2025
 Supervised By :Mahesh Dadoda 04/30/2025



#34

2-Butanone

Concen: 0.709 ppbv

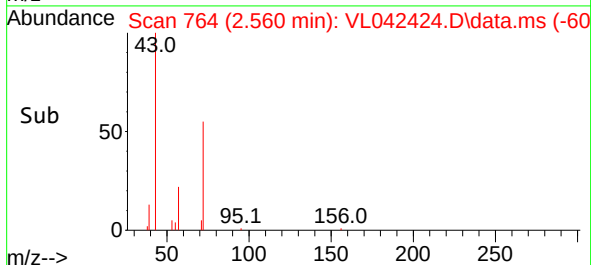
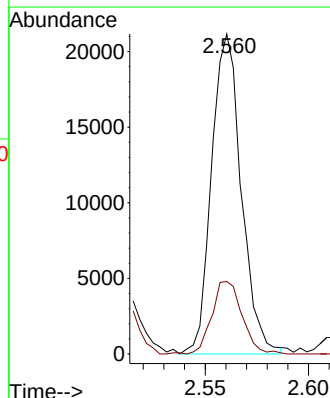
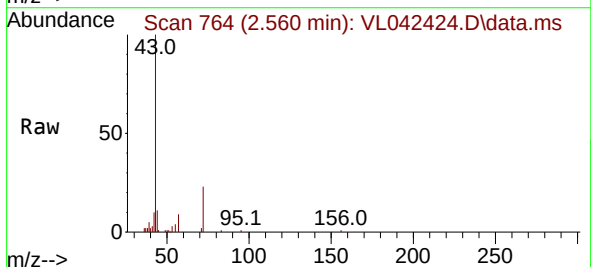
RT: 2.560 min Scan# 764

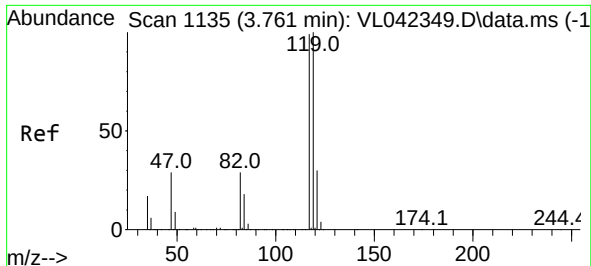
Delta R.T. 0.003 min

Lab File: VL042424.D

Acq: 28 Apr 2025 14:00

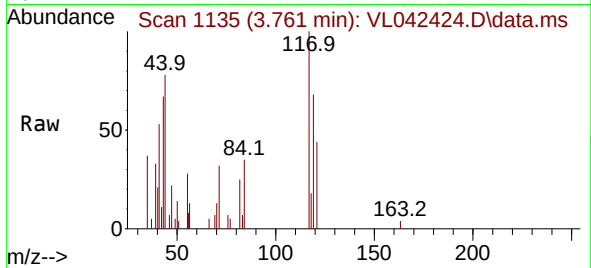
Tgt Ion: 43 Resp: 21181
 Ion Ratio Lower Upper
 43 100
 72 22.9 18.2 27.2





#35
Carbon Tetrachloride
Concen: 0.070 ppbv m
RT: 3.761 min Scan# 1135
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

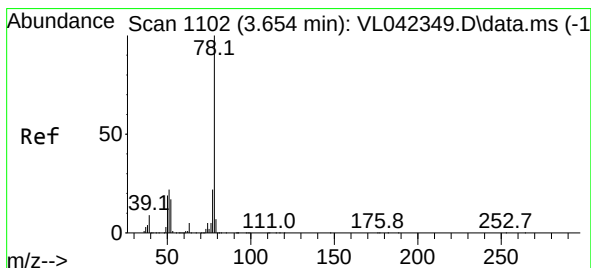
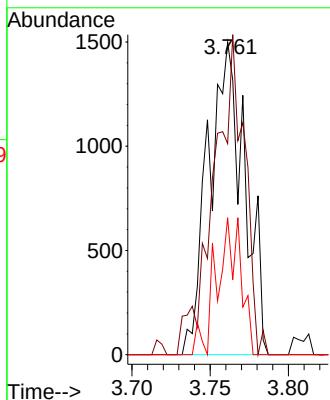
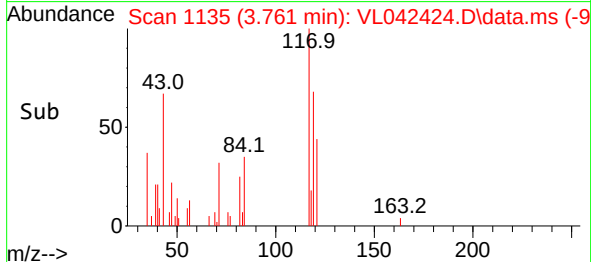
Instrument : MSVOA_L
ClientSampleId : IA-B2-1-3242025



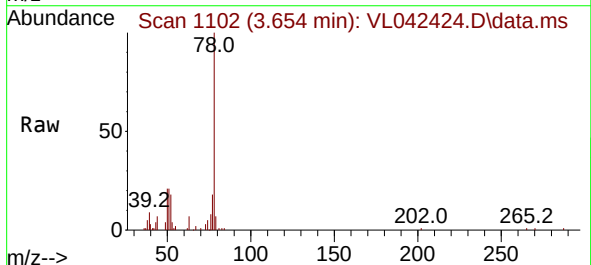
Tgt Ion:117 Resp: 239
Ion Ratio Lower Upper
117 100
119 67.5 80.5 120.7
121 43.8 24.2 36.2

Manual Integrations
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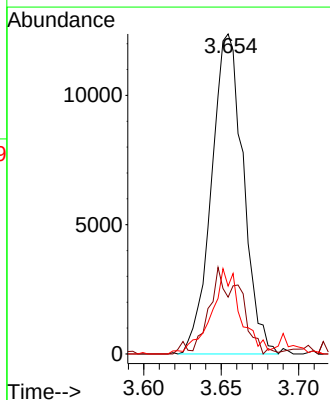
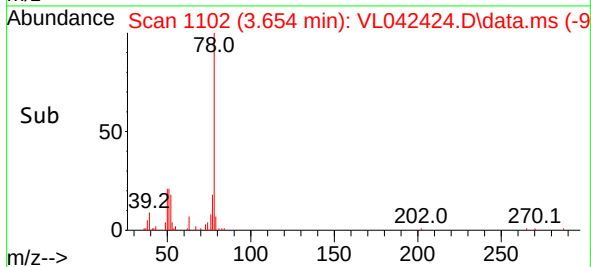
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

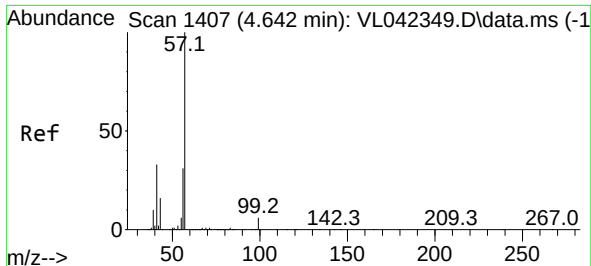


#36
Benzene
Concen: 0.433 ppbv
RT: 3.654 min Scan# 1102
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00



Tgt Ion: 78 Resp: 17661
Ion Ratio Lower Upper
78 100
77 17.3 17.4 26.0#
50 20.2 15.5 23.3





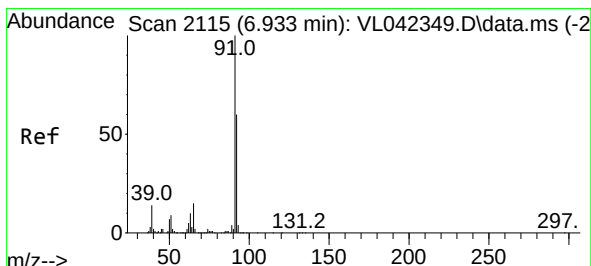
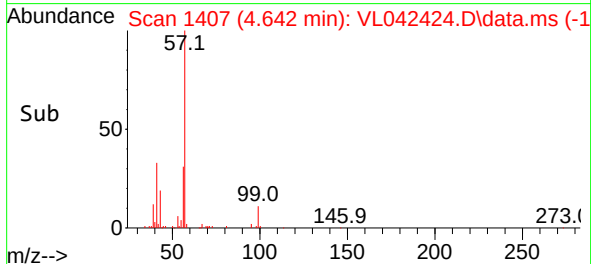
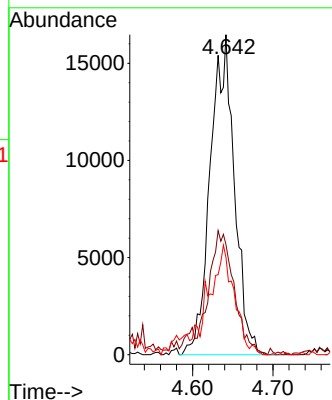
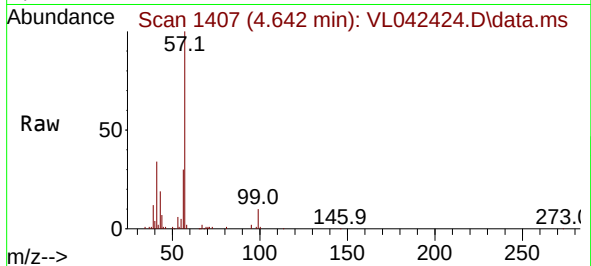
#44
2,2,4-Trimethylpentane
Concen: 0.486 ppbv m
RT: 4.642 min Scan# 1407
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Tgt Ion: 57 Resp: 34215
Ion Ratio Lower Upper
57 100
41 45.1 27.2 40.8
56 0.0 25.7 38.5

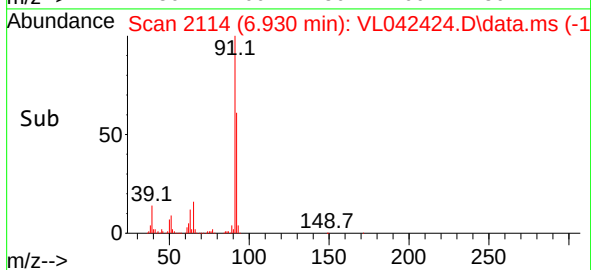
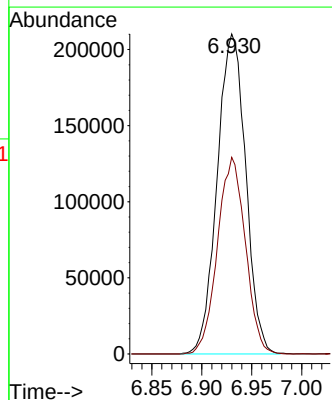
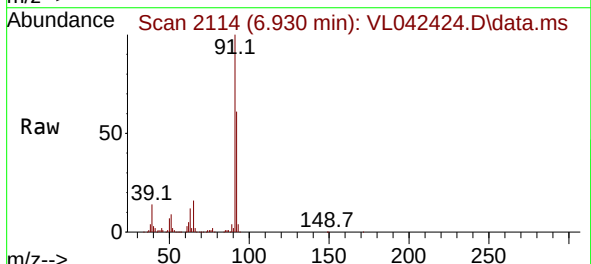
Manual Integrations
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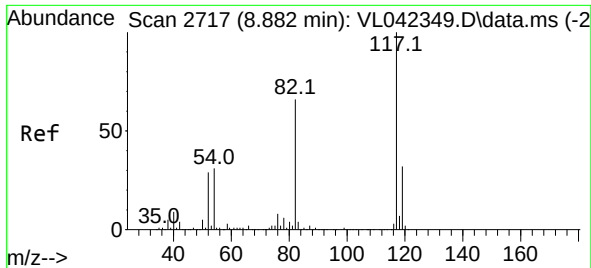
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025



#53
Toluene
Concen: 8.542 ppbv
RT: 6.930 min Scan# 2114
Delta R.T. -0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

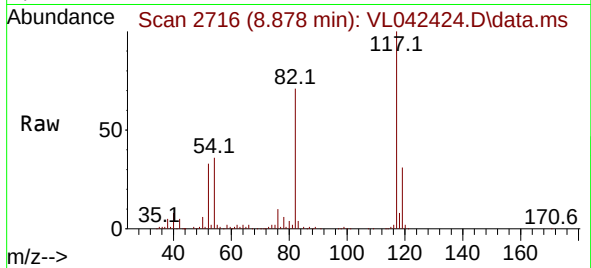
Tgt Ion: 91 Resp: 417734
Ion Ratio Lower Upper
91 100
92 60.0 48.2 72.4





#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2716
Delta R.T. -0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

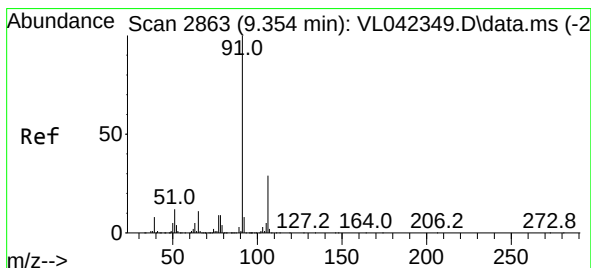
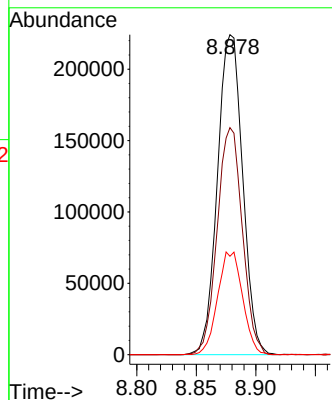
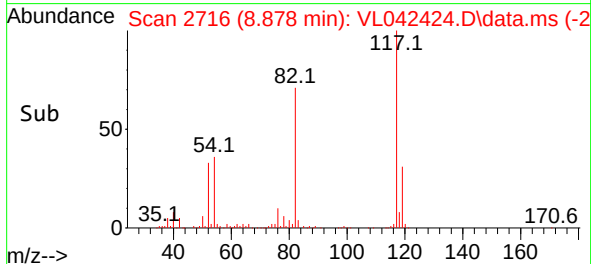
Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025



Tgt Ion: 117 Resp: 33014
Ion Ratio Lower Upper
117 100
82 70.7 57.8 86.6
119 31.8 25.2 37.8

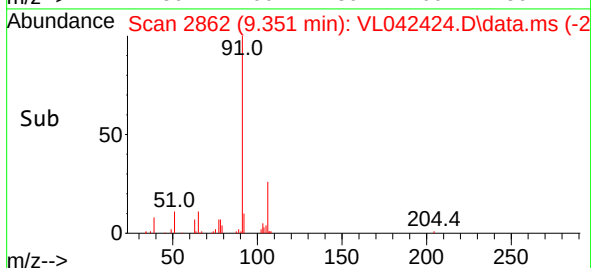
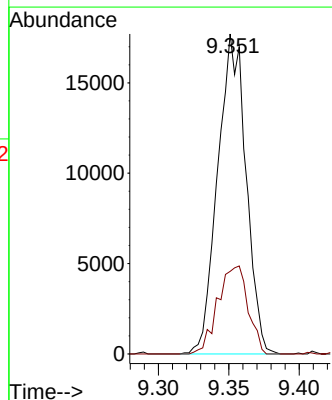
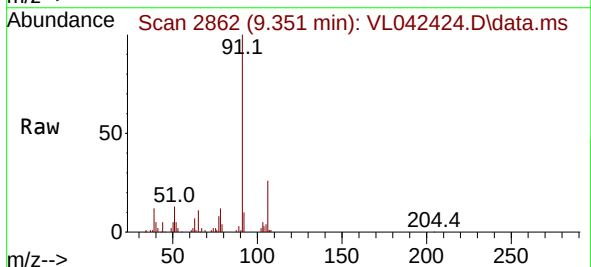
Manual Integrations
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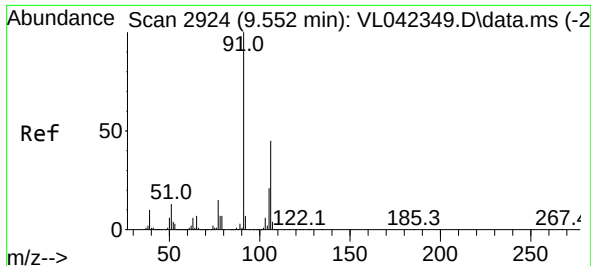
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025



#58
Ethyl Benzene
Concen: 0.379 ppbv
RT: 9.351 min Scan# 2862
Delta R.T. -0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 91 Resp: 24772
Ion Ratio Lower Upper
91 100
106 25.8 23.0 34.4





#59

m/p-Xylene

Concen: 1.246 ppbv

RT: 9.529 min Scan# 2917

Delta R.T. -0.023 min

Lab File: VL042424.D

Acq: 28 Apr 2025 14:00

Instrument :

MSVOA_L

ClientSampleId :

IA-B2-1-3242025

Tgt Ion: 91 Resp: 65650

Ion Ratio Lower Upper

91 100

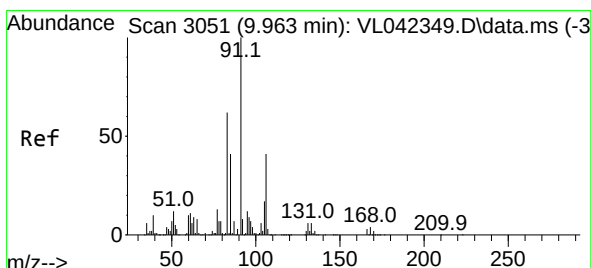
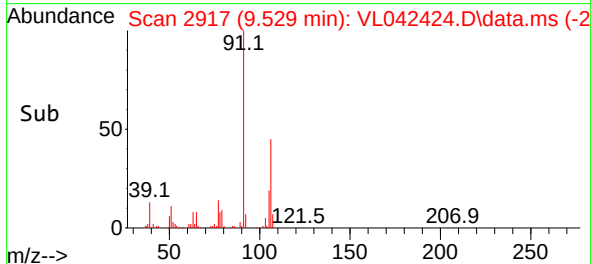
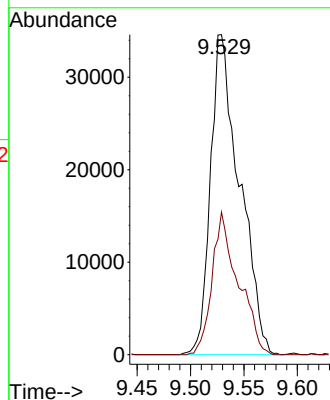
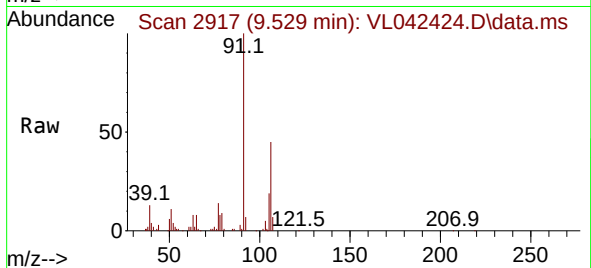
106 40.1 35.4 53.2

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 04/29/2025

Supervised By :Mahesh Dadoda 04/30/2025



#60

o-Xylene

Concen: 0.522 ppbv

RT: 9.963 min Scan# 3051

Delta R.T. 0.000 min

Lab File: VL042424.D

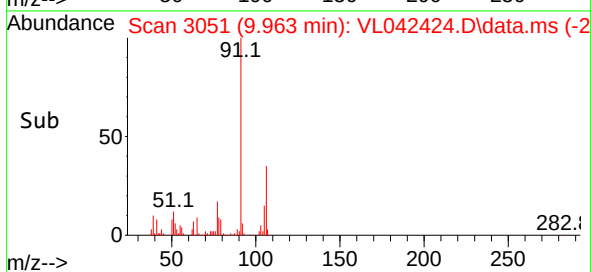
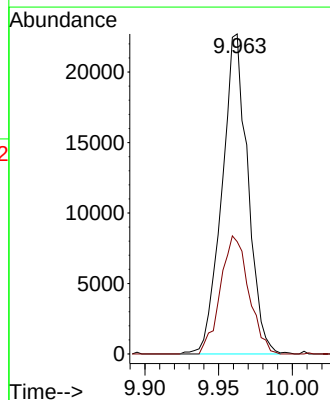
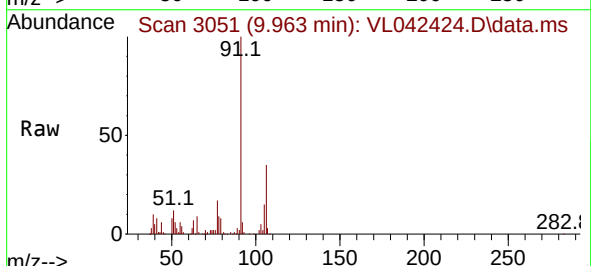
Acq: 28 Apr 2025 14:00

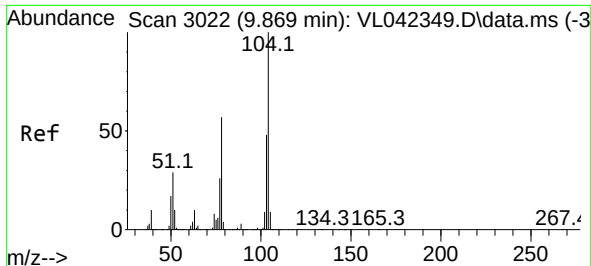
Tgt Ion: 91 Resp: 27701

Ion Ratio Lower Upper

91 100

106 40.5 21.1 63.4





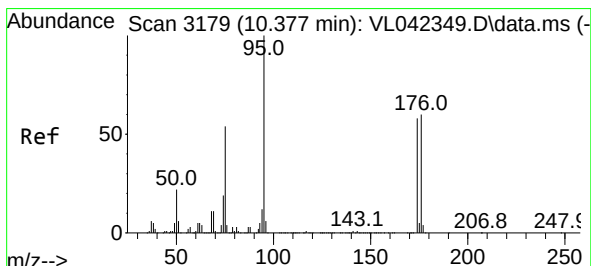
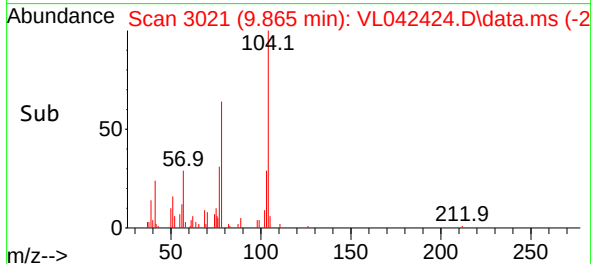
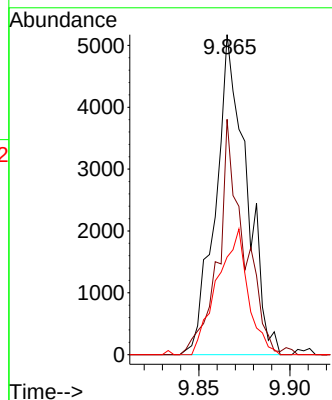
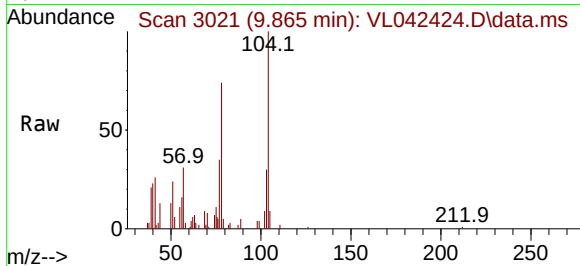
#61
Styrene
Concen: 0.242 ppbv
RT: 9.865 min Scan# 3022
Delta R.T. -0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Tgt Ion:104 Resp: 6130
Ion Ratio Lower Upper
104 100
78 61.0 44.6 66.8
103 39.2 37.4 56.0

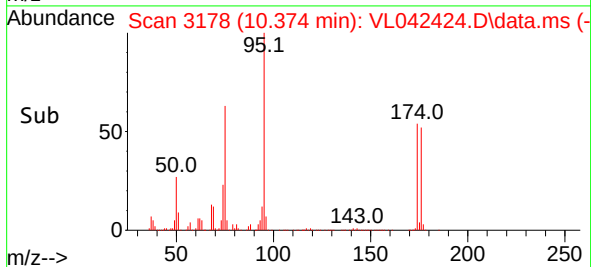
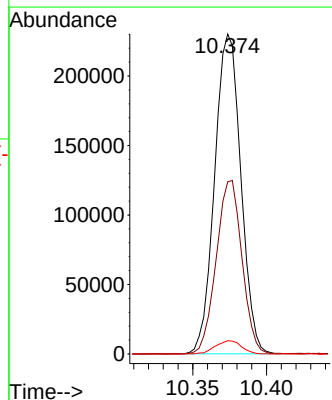
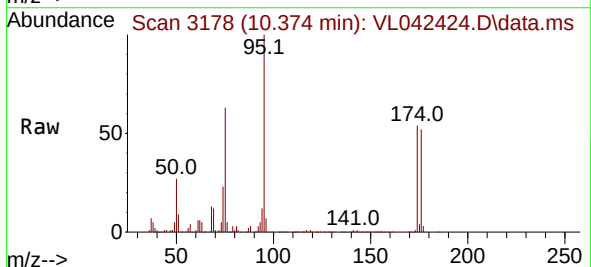
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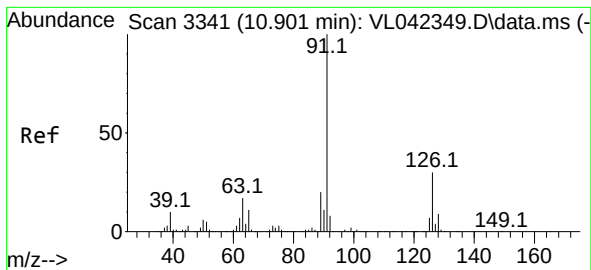
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025



#68
1-Bromo-4-Fluorobenzene
Concen: 10.483 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. -0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 95 Resp: 284407
Ion Ratio Lower Upper
95 100
174 53.4 48.5 72.7
175 4.1 3.7 5.5





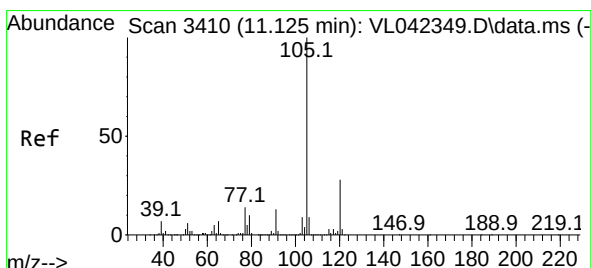
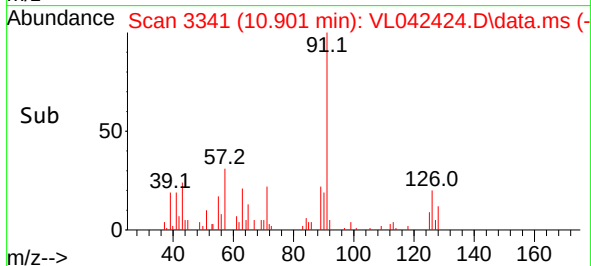
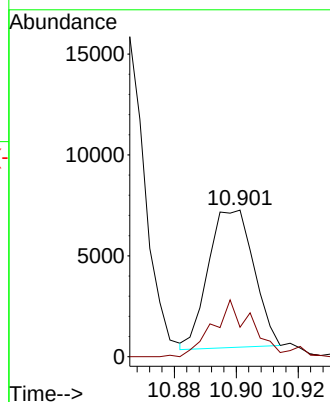
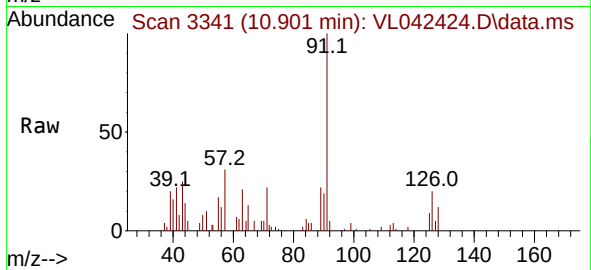
#71
2-Chlorotoluene
Concen: 0.114 ppbv
RT: 10.901 min Scan# 3341
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Tgt Ion: 91 Resp: 6948
Ion Ratio Lower Upper
91 100
126 37.9 11.4 45.4

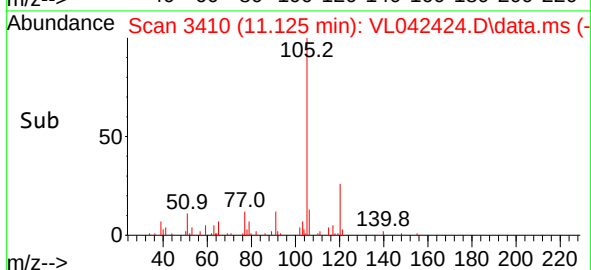
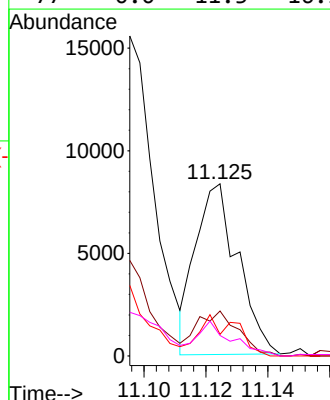
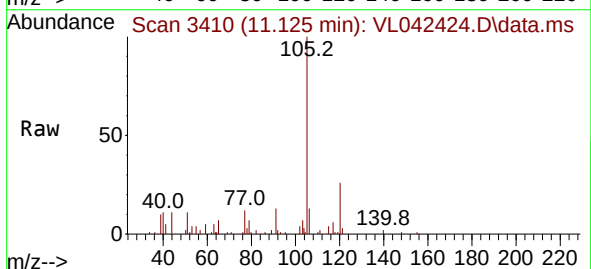
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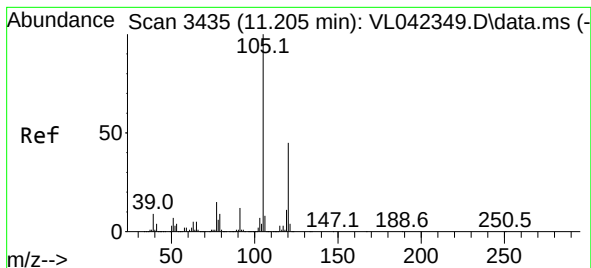
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025



#72
4-Ethyltoluene
Concen: 0.121 ppbv
RT: 11.125 min Scan# 3410
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion:105 Resp: 7865
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: 0.125 ppbv

RT: 11.205 min Scan# 3435

Delta R.T. 0.000 min

Lab File: VL042424.D

Acq: 28 Apr 2025 14:00

Instrument :

MSVOA_L

ClientSampleId :

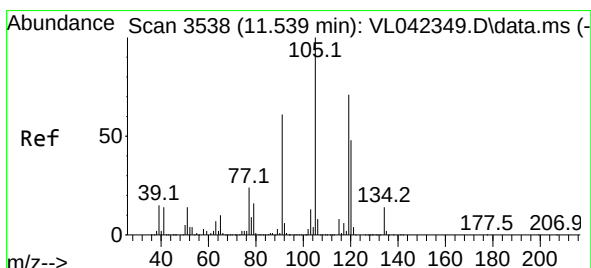
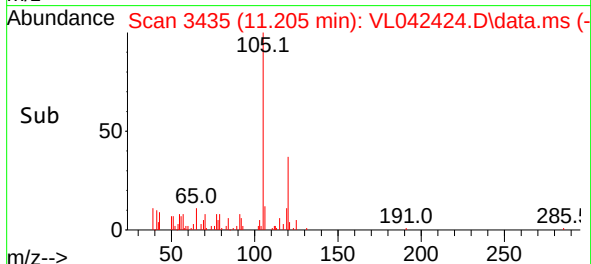
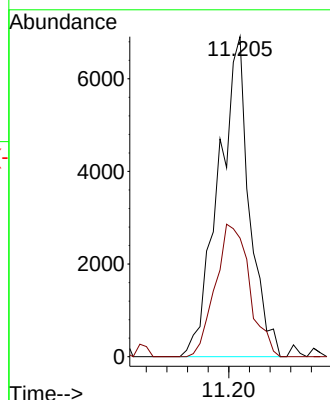
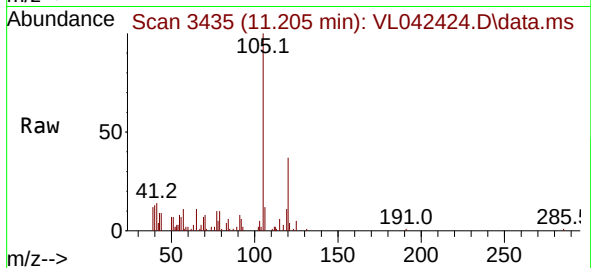
IA-B2-1-3242025

Tgt Ion:105 Resp: 7185
 Ion Ratio Lower Upper
 105 100
 120 41.4 35.6 53.4

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 04/29/2025
 Supervised By :Mahesh Dadoda 04/30/2025



#74

1,2,4-Trimethylbenzene

Concen: 0.265 ppbv

RT: 11.536 min Scan# 3537

Delta R.T. -0.003 min

Lab File: VL042424.D

Acq: 28 Apr 2025 14:00

Tgt Ion:105 Resp: 17740
 Ion Ratio Lower Upper
 105 100
 120 52.3 38.1 57.1
 91 16.4 48.8 73.2#
 77 16.1 19.0 28.4#

