

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111825\
 Data File : VL043224.D
 Acq On : 18 Nov 2025 21:33
 Operator : SY/MD
 Sample : Q3651-05 4X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV3

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/19/2025
 Supervised By :Mahesh Dadoda 11/19/2025

Quant Time: Nov 19 01:40:42 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M

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

QLast Update : Wed Nov 19 01:11:25 2025

Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.784	49	90209	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	238879	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.875	117	188275	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.370	95	141605	10.261	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.600%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.499	85	1368	0.108	ppbv #	88
3) Chlorodifluoromethane	1.476	51	1849	0.148	ppbv	93
9) Propene	1.486	41	2403	0.452	ppbv #	1
10) Heptane	4.972	43	5012m	0.317	ppbv	
13) Ethanol	1.719	45	7214	3.861	ppbv	98
15) Acetone	1.832	43	184177	14.695	ppbv	98
17) tert-Butyl alcohol	2.039	59	2672	0.162	ppbv #	63
26) Hexane	2.822	57	19430	1.640	ppbv #	41
27) Carbon Disulfide	2.149	76	3027	0.250	ppbv #	1
30) Cyclohexane	3.852	84	1053m	0.106	ppbv	
34) 2-Butanone	2.557	43	33383	1.980	ppbv	99
36) Benzene	3.648	78	2250m	0.098	ppbv	
41) Tetrahydrofuran	3.059	42	2145m	0.230	ppbv	
50) 4-Methyl-2-Pentanone	5.752	43	3909m	0.165	ppbv	
51) 2-Hexanone	7.431	43	8978m	0.487	ppbv	
52) Tetrachloroethene	8.221	164	421m	0.049	ppbv	
53) Toluene	6.923	91	49578m	1.830	ppbv	
58) Ethyl Benzene	9.351	91	5506m	0.152	ppbv	
59) m/p-Xylene	9.529	91	11158	0.384	ppbv	95
60) o-Xylene	9.956	91	5502	0.190	ppbv	95
74) 1,2,4-Trimethylbenzene	11.529	105	4159	0.128	ppbv #	48

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

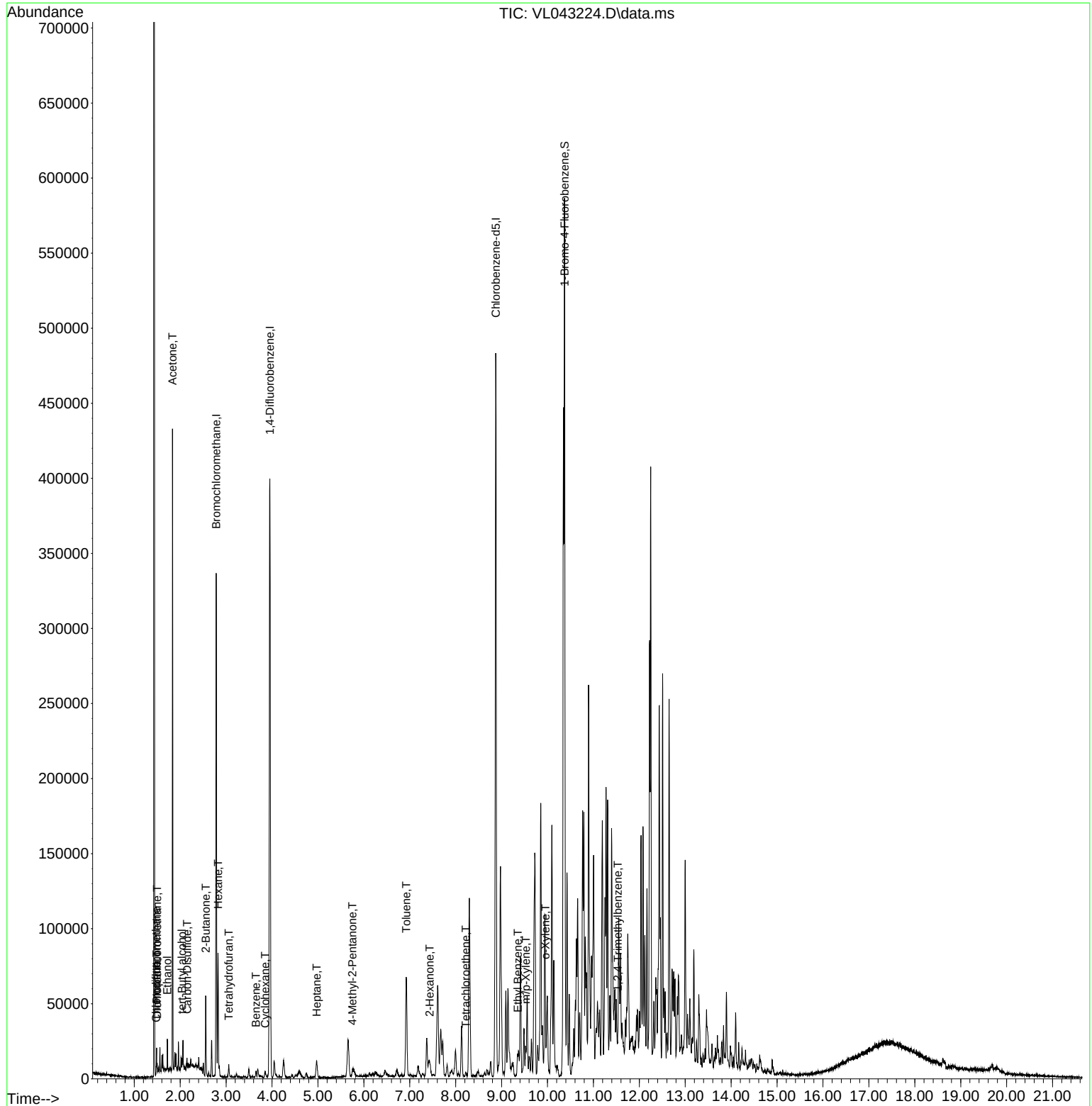
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111825\
Data File : VL043224.D
Acq On : 18 Nov 2025 21:33
Operator : SY/MD
Sample : Q3651-05 4X
Misc : 400mL/MSVOA_L
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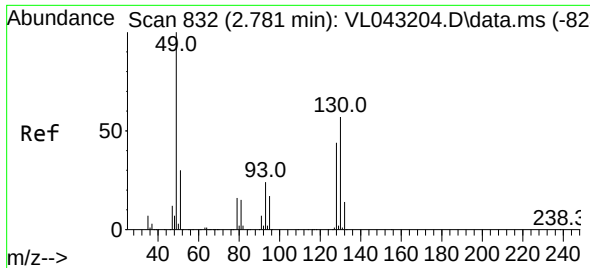
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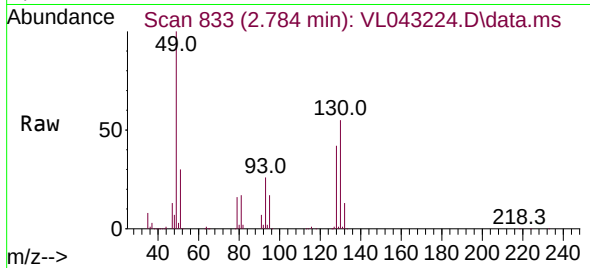
Quant Time: Nov 19 01:40:42 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Wed Nov 19 01:11:25 2025
Response via : Initial Calibration





#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 832
Delta R.T. 0.003 min
Lab File: VL043224.D
Acq: 18 Nov 2025 21:33

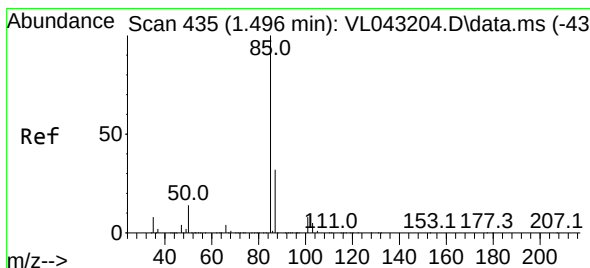
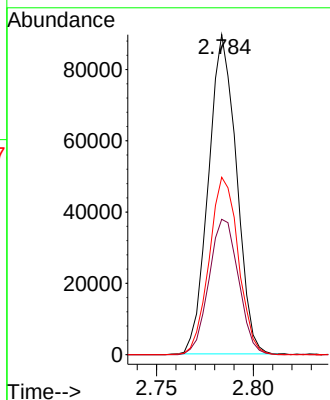
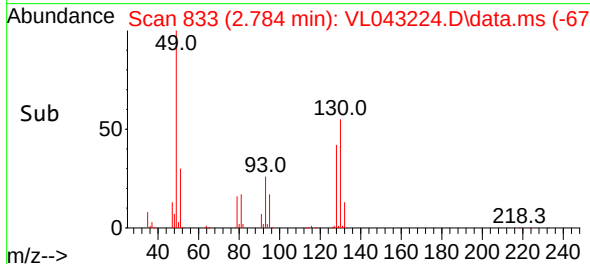
Instrument :
MSVOA_L
ClientSampleId :
SV3



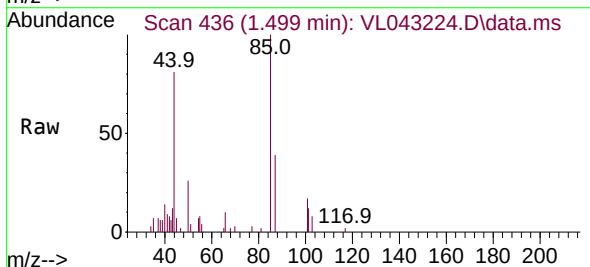
Tgt Ion: 49 Resp: 90209
Ion Ratio Lower Upper
49 100
128 44.7 23.0 69.0
130 57.7 29.9 89.7

Manual Integrations
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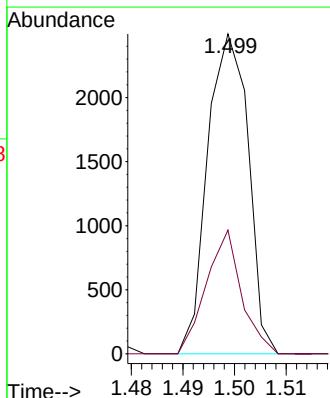
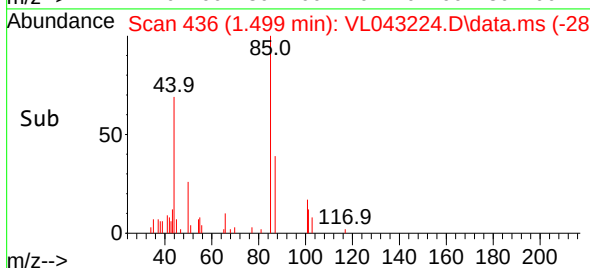
Reviewed By :Semsettin Yesilyurt 11/19/2025
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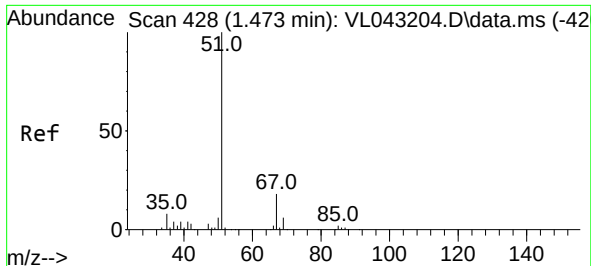


#2
Dichlorodifluoromethane
Concen: 0.108 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL043224.D
Acq: 18 Nov 2025 21:33



Tgt Ion: 85 Resp: 1368
Ion Ratio Lower Upper
85 100
87 38.7 25.4 38.2#





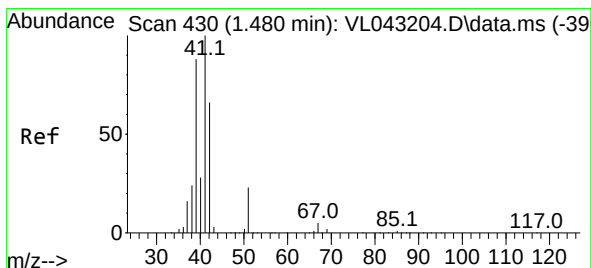
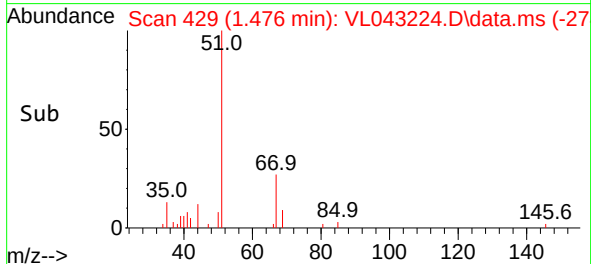
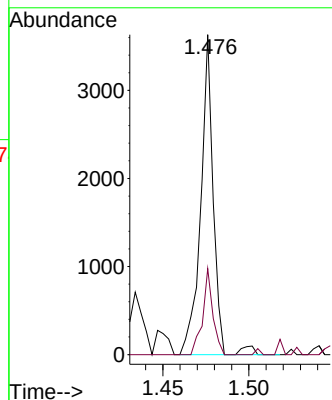
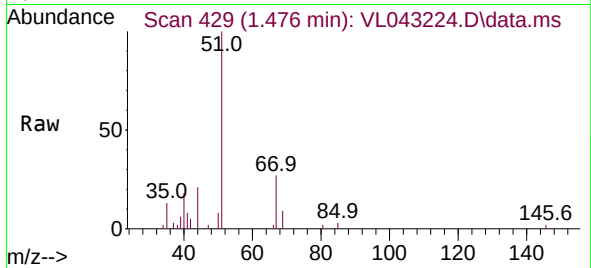
#3
Chlorodifluoromethane
Concen: 0.148 ppbv
RT: 1.476 min Scan# 428
Delta R.T. 0.003 min
Lab File: VL043224.D
Acq: 18 Nov 2025 21:33

Instrument :
MSVOA_L
ClientSampleId :
SV3

Tgt Ion: 51 Resp: 1849
Ion Ratio Lower Upper
51 100
67 21.6 14.9 22.3

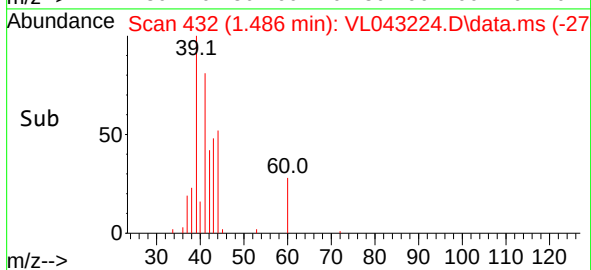
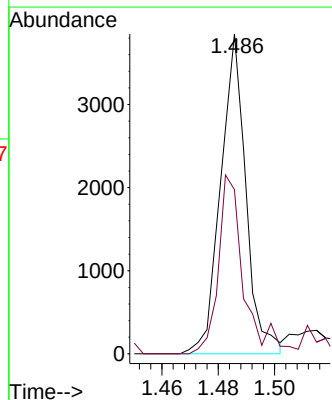
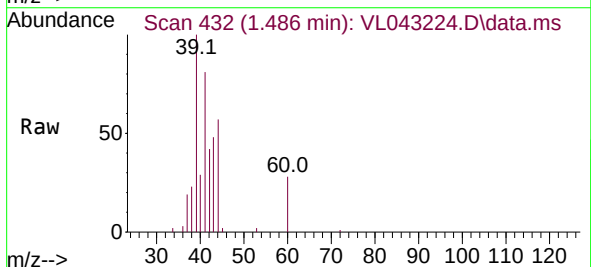
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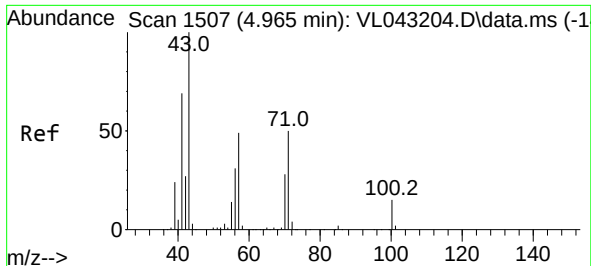
Reviewed By :Semsettin Yesilyurt 11/19/2025
Supervised By :Mahesh Dadoda 11/19/2025



#9
Propene
Concen: 0.452 ppbv
RT: 1.486 min Scan# 432
Delta R.T. 0.006 min
Lab File: VL043224.D
Acq: 18 Nov 2025 21:33

Tgt Ion: 41 Resp: 2403
Ion Ratio Lower Upper
41 100
42 55.6 3.7 5.5#





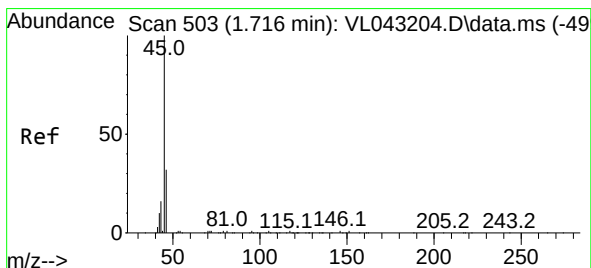
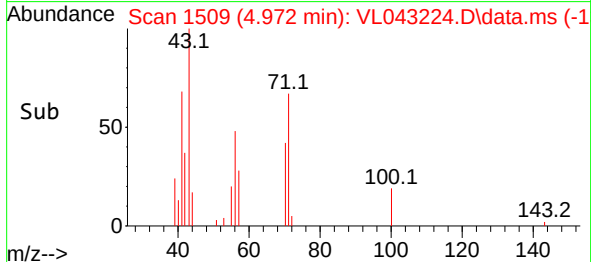
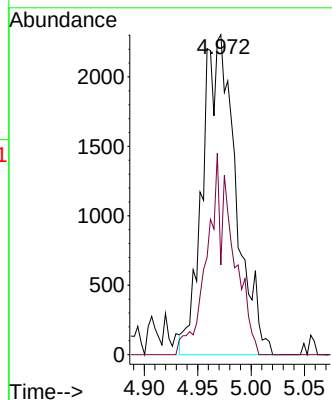
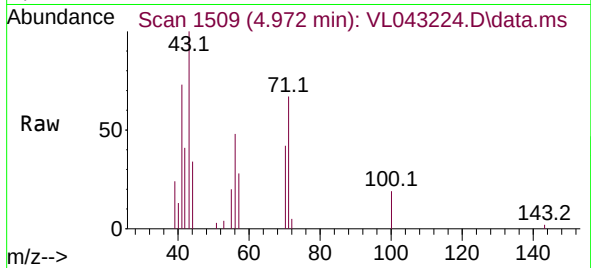
#10
Heptane
Concen: 0.317 ppbv m
RT: 4.972 min Scan# 11
Delta R.T. 0.006 min
Lab File: VL043224.D
Acq: 18 Nov 2025 21:33

Instrument :
MSVOA_L
ClientSampleId :
SV3

Tgt Ion: 43 Resp: 5012
Ion Ratio Lower Upper
43 100
57 48.7 39.7 59.5

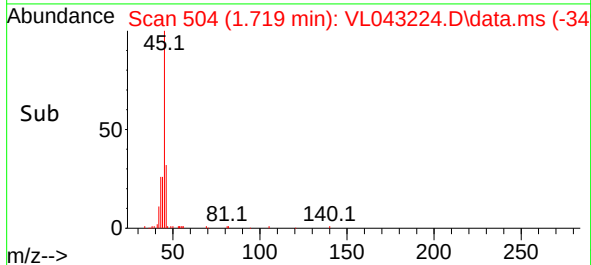
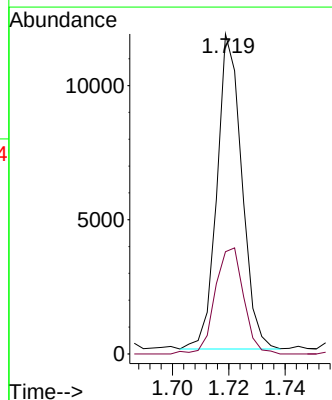
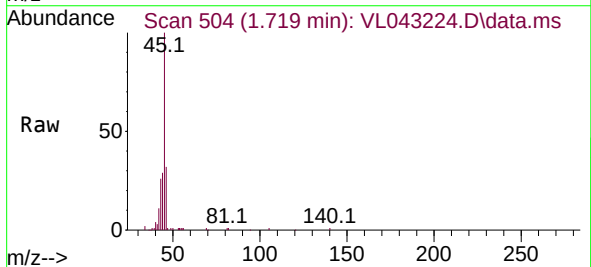
Manual Integrations
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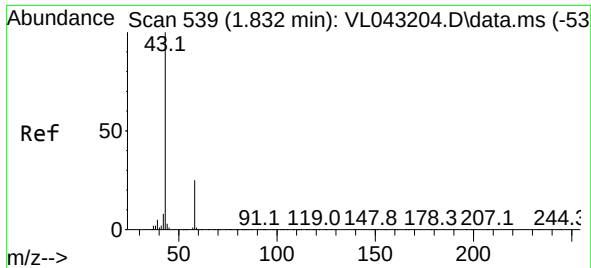
Reviewed By :Semsettin Yesilyurt 11/19/2025
Supervised By :Mahesh Dadoda 11/19/2025



#13
Ethanol
Concen: 3.861 ppbv
RT: 1.719 min Scan# 504
Delta R.T. 0.003 min
Lab File: VL043224.D
Acq: 18 Nov 2025 21:33

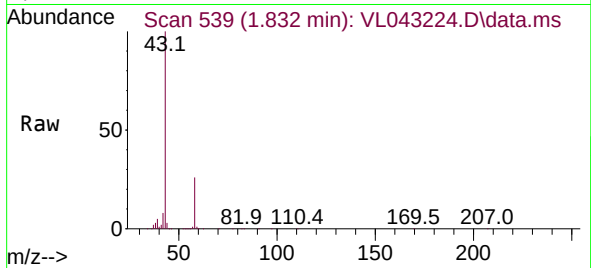
Tgt Ion: 45 Resp: 7214
Ion Ratio Lower Upper
45 100
46 38.5 15.0 59.8





#15
Acetone
Concen: 14.695 ppbv
RT: 1.832 min Scan# 539
Delta R.T. -0.000 min
Lab File: VL043224.D
Acq: 18 Nov 2025 21:33

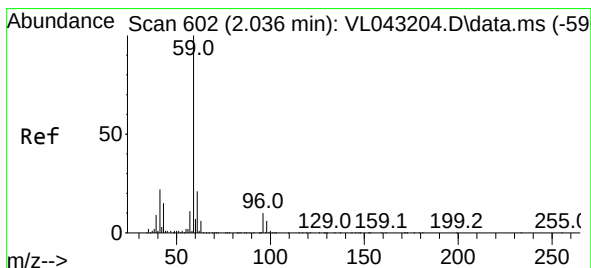
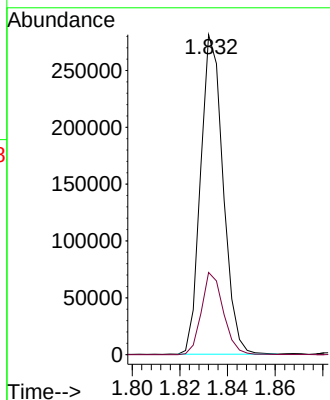
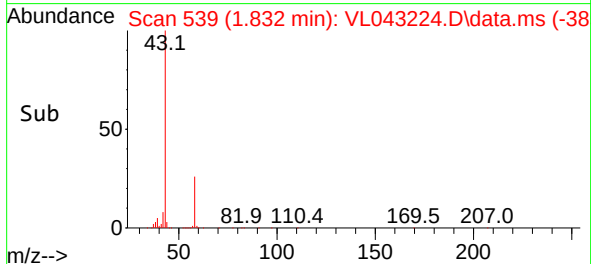
Instrument : MSVOA_L
ClientSampleId : SV3



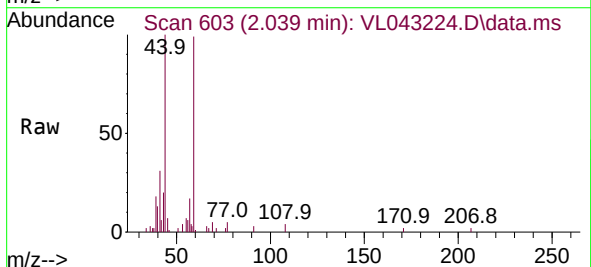
Tgt Ion: 43 Resp: 184172
Ion Ratio Lower Upper
43 100
58 25.0 20.7 31.1

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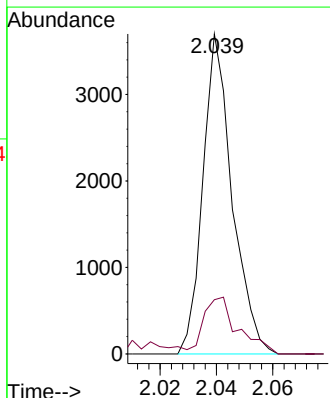
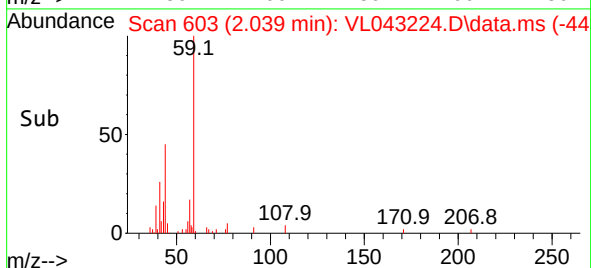
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Supervised By :Mahesh Dadoda 11/19/2025

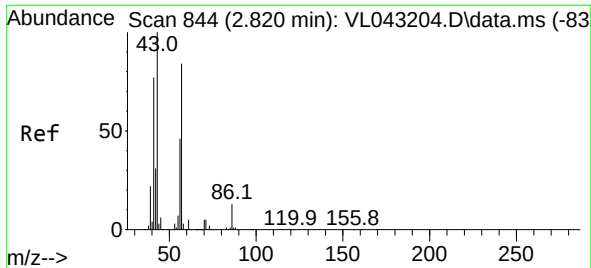


#17
tert-Butyl alcohol
Concen: 0.162 ppbv
RT: 2.039 min Scan# 603
Delta R.T. 0.003 min
Lab File: VL043224.D
Acq: 18 Nov 2025 21:33



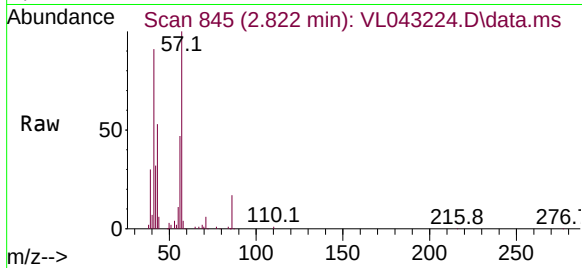
Tgt Ion: 59 Resp: 2672
Ion Ratio Lower Upper
59 100
57 25.3 9.0 13.4#





#26
Hexane
Concen: 1.640 ppbv
RT: 2.822 min Scan# 844
Delta R.T. 0.003 min
Lab File: VL043224.D
Acq: 18 Nov 2025 21:33

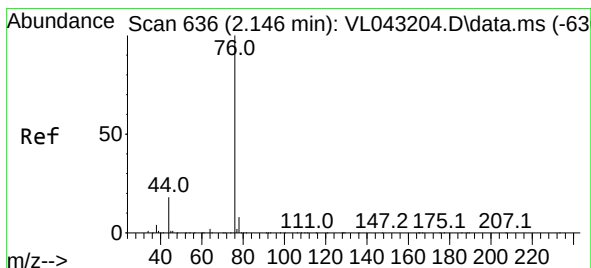
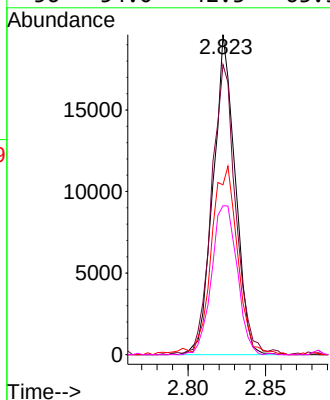
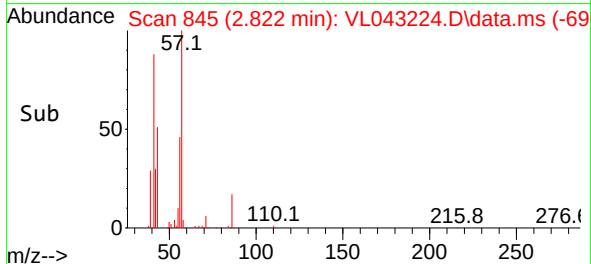
Instrument :
MSVOA_L
ClientSampleId :
SV3



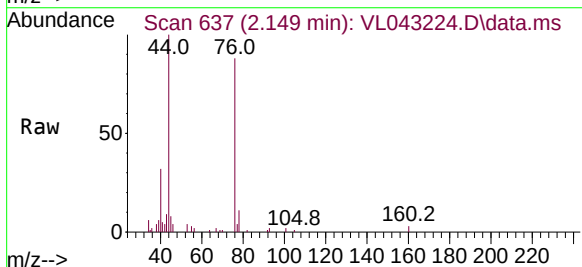
Tgt Ion: 57 Resp: 19430
Ion Ratio Lower Upper
57 100
41 99.4 74.6 111.8
43 70.8 179.0 268.4
56 54.0 42.3 63.5

Manual Integrations
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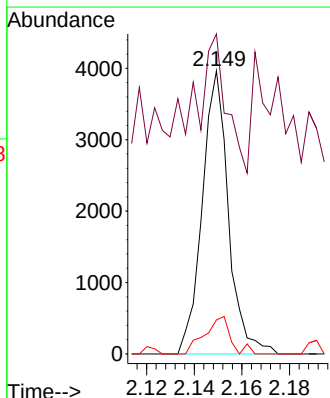
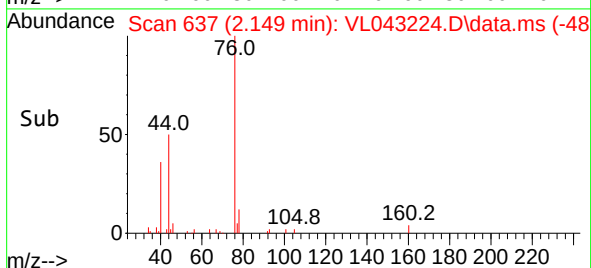
Reviewed By :Semsettin Yesilyurt 11/19/2025
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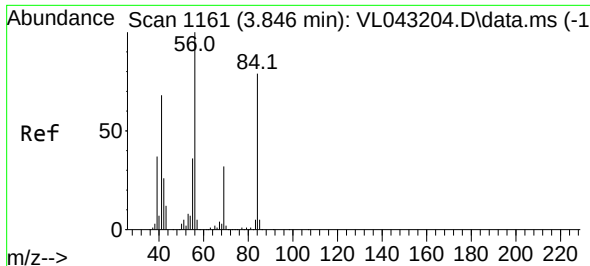


#27
Carbon Disulfide
Concen: 0.250 ppbv
RT: 2.149 min Scan# 637
Delta R.T. 0.003 min
Lab File: VL043224.D
Acq: 18 Nov 2025 21:33



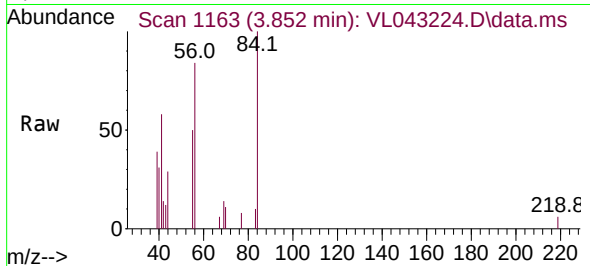
Tgt Ion: 76 Resp: 3027
Ion Ratio Lower Upper
76 100
44 201.9 16.1 24.1#
78 14.1 9.6 14.4





#30
Cyclohexane
Concen: 0.106 ppbv m
RT: 3.852 min Scan# 1163
Delta R.T. 0.006 min
Lab File: VL043224.D
Acq: 18 Nov 2025 21:33

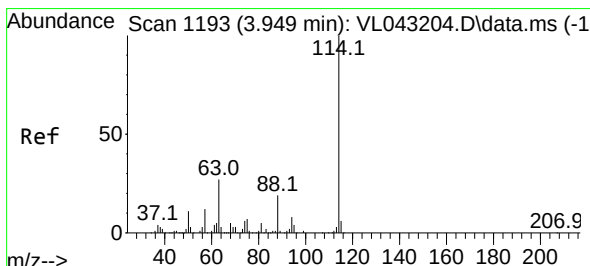
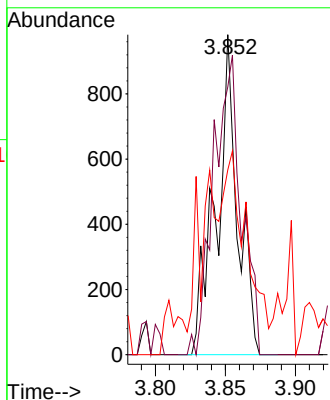
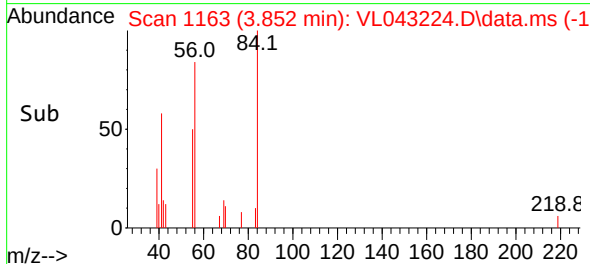
Instrument :
MSVOA_L
ClientSampleId :
SV3



Tgt Ion: 84 Resp: 1053
Ion Ratio Lower Upper
84 100
56 0.0 104.7 157.1
41 0.0 69.0 103.6

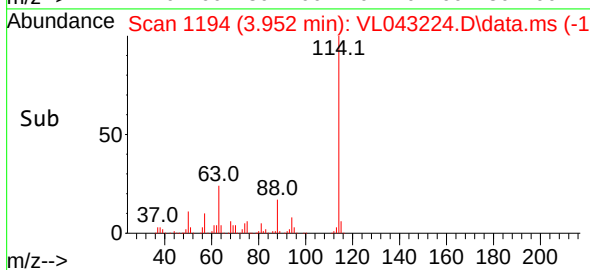
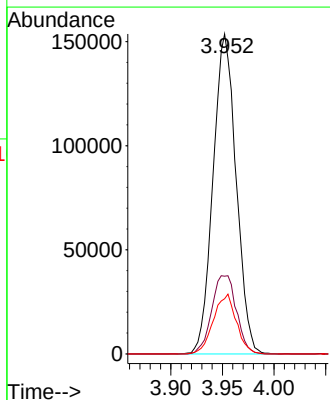
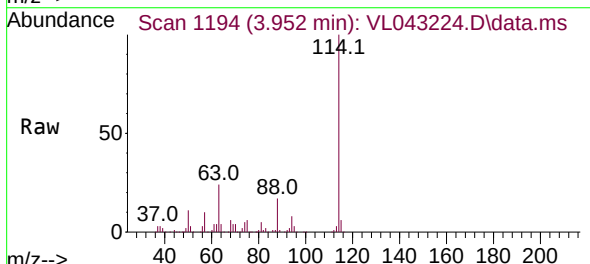
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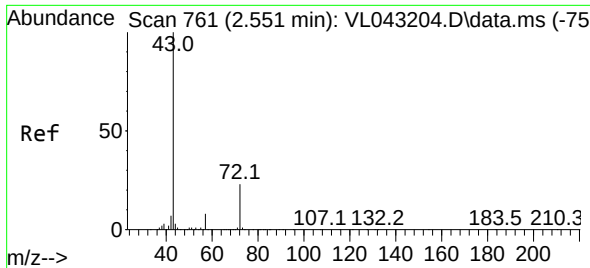
Reviewed By :Semsettin Yesilyurt 11/19/2025
Supervised By :Mahesh Dadoda 11/19/2025



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 1194
Delta R.T. 0.003 min
Lab File: VL043224.D
Acq: 18 Nov 2025 21:33

Tgt Ion:114 Resp: 238879
Ion Ratio Lower Upper
114 100
63 26.2 21.0 31.6
88 18.6 14.9 22.3





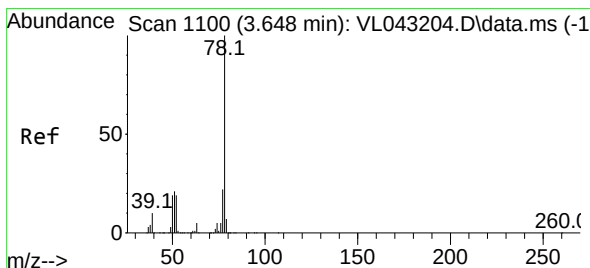
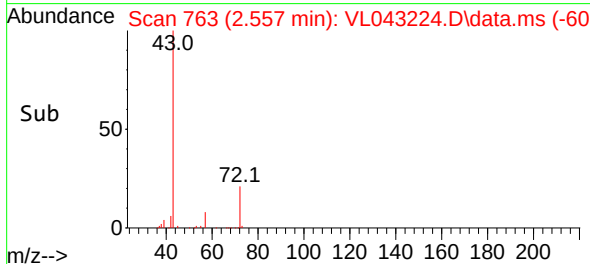
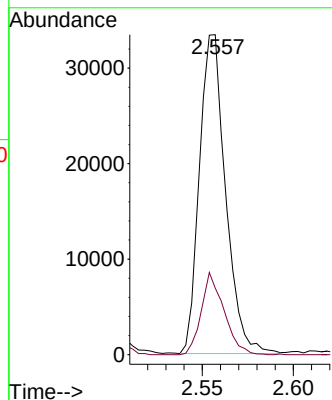
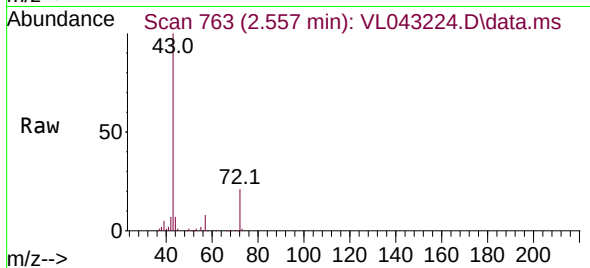
#34
2-Butanone
Concen: 1.980 ppbv
RT: 2.557 min Scan# 761
Delta R.T. 0.006 min
Lab File: VL043224.D
Acq: 18 Nov 2025 21:33

Instrument :
MSVOA_L
ClientSampleId :
SV3

Tgt Ion: 43 Resp: 33383
Ion Ratio Lower Upper
43 100
72 22.3 18.1 27.1

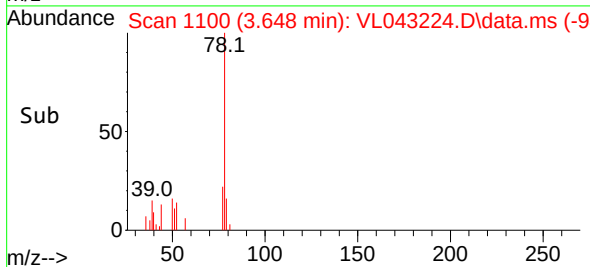
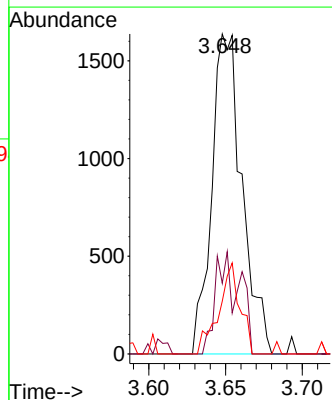
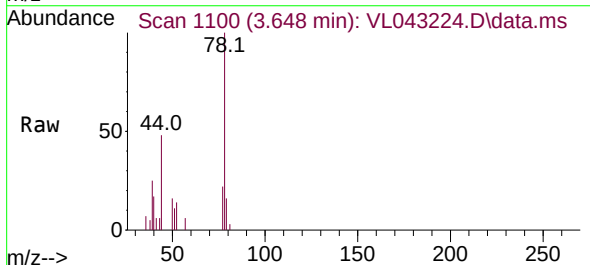
Manual Integrations
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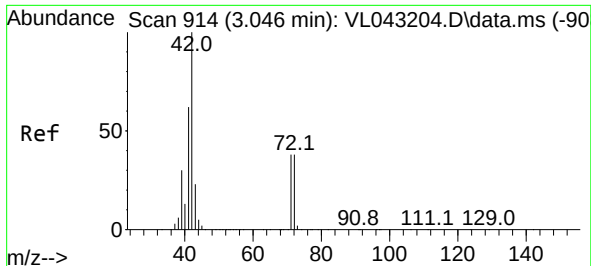
Reviewed By :Semsettin Yesilyurt 11/19/2025
Supervised By :Mahesh Dadoda 11/19/2025



#36
Benzene
Concen: 0.098 ppbv m
RT: 3.648 min Scan# 1100
Delta R.T. -0.000 min
Lab File: VL043224.D
Acq: 18 Nov 2025 21:33

Tgt Ion: 78 Resp: 2250
Ion Ratio Lower Upper
78 100
77 22.1 17.5 26.3
50 16.5 15.5 23.3





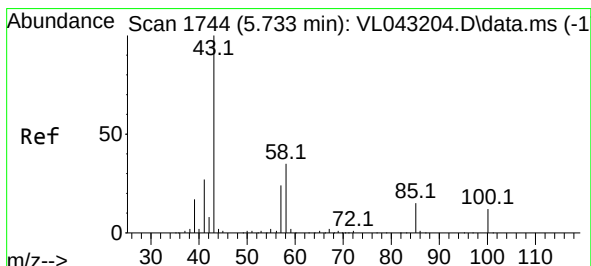
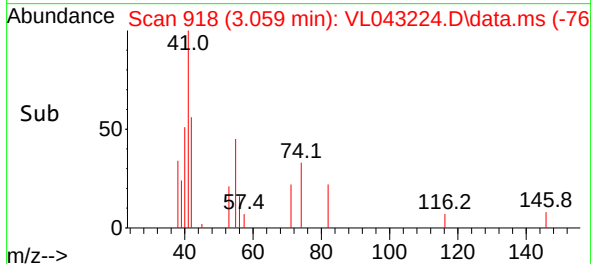
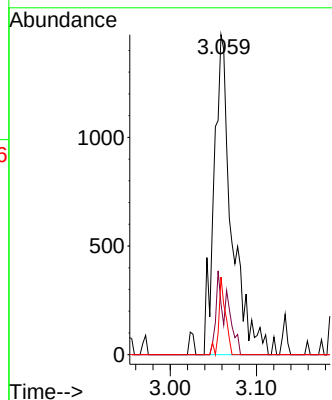
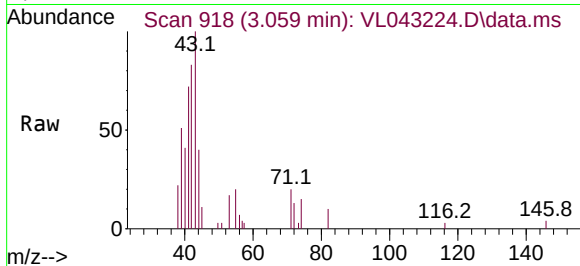
#41
Tetrahydrofuran
Concen: 0.230 ppbv m
RT: 3.059 min Scan# 914
Delta R.T. 0.013 min
Lab File: VL043224.D
Acq: 18 Nov 2025 21:33

Instrument :
MSVOA_L
ClientSampleId :
SV3

Tgt Ion: 42 Resp: 2145
Ion Ratio Lower Upper
42 100
72 0.0 30.6 46.0
71 0.0 30.5 45.7

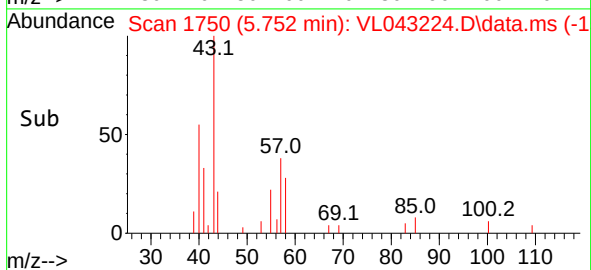
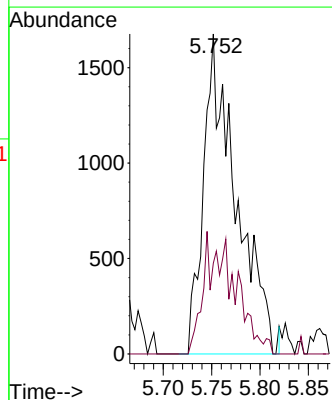
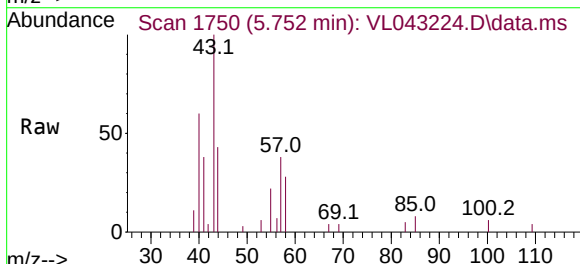
Manual Integrations
APPROVED

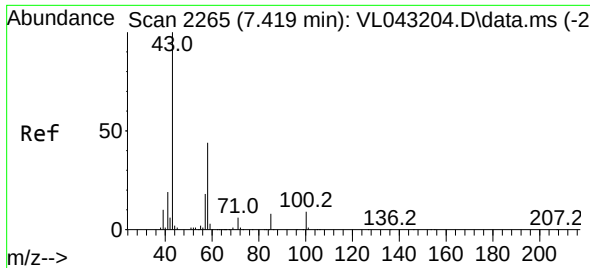
Reviewed By :Semsettin Yesilyurt 11/19/2025
Supervised By :Mahesh Dadoda 11/19/2025



#50
4-Methyl-2-Pentanone
Concen: 0.165 ppbv m
RT: 5.752 min Scan# 1750
Delta R.T. 0.019 min
Lab File: VL043224.D
Acq: 18 Nov 2025 21:33

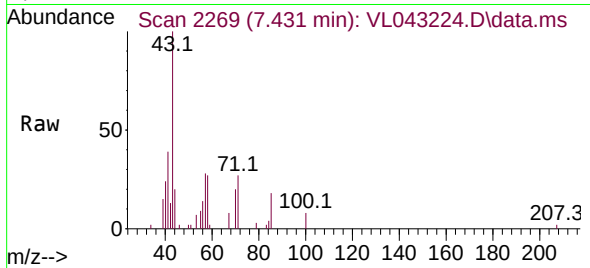
Tgt Ion: 43 Resp: 3909
Ion Ratio Lower Upper
43 100
58 36.0 28.4 42.6





#51
2-Hexanone
Concen: 0.487 ppbv m
RT: 7.431 min Scan# 21
Delta R.T. 0.013 min
Lab File: VL043224.D
Acq: 18 Nov 2025 21:33

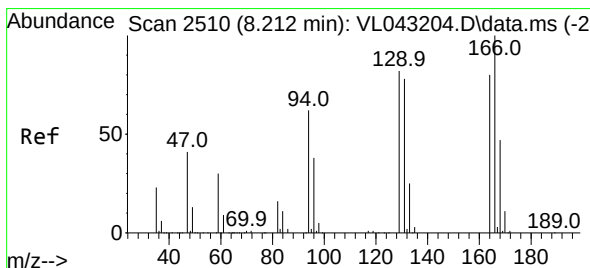
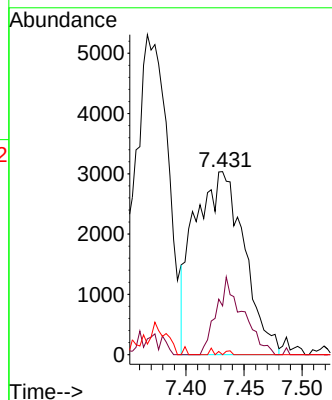
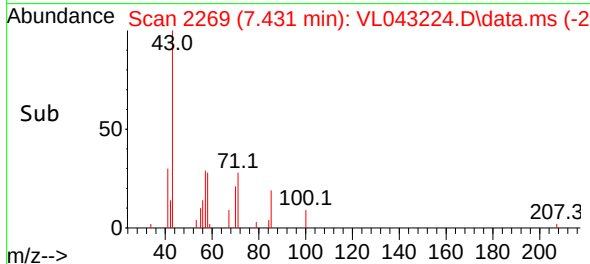
Instrument :
MSVOA_L
ClientSampleId :
SV3



Tgt Ion: 43 Resp: 8978
Ion Ratio Lower Upper
43 100
58 0.0 38.4 57.6
98 0.0 0.0 0.0

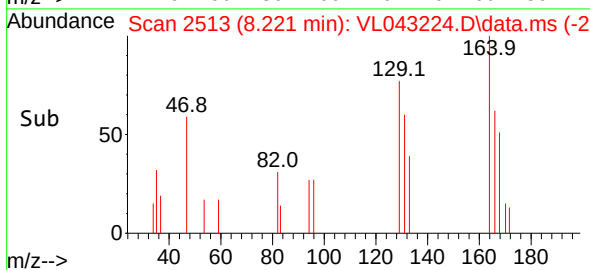
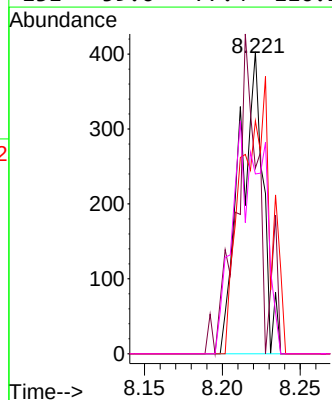
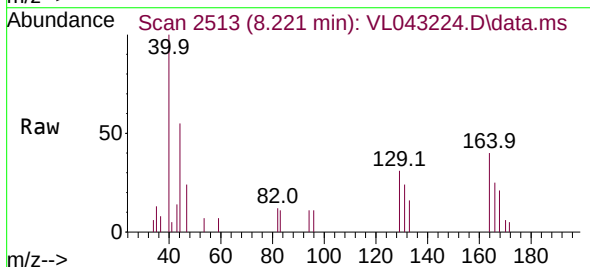
Manual Integrations
APPROVED

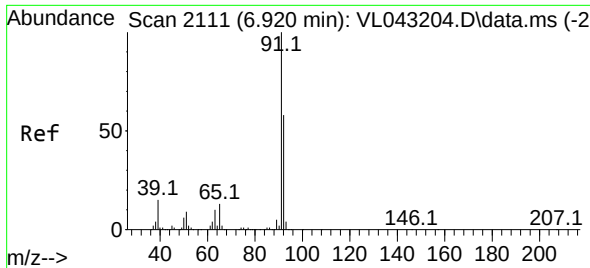
Reviewed By :Semsettin Yesilyurt 11/19/2025
Supervised By :Mahesh Dadoda 11/19/2025



#52
Tetrachloroethene
Concen: 0.049 ppbv m
RT: 8.221 min Scan# 2513
Delta R.T. 0.009 min
Lab File: VL043224.D
Acq: 18 Nov 2025 21:33

Tgt Ion:164 Resp: 421
Ion Ratio Lower Upper
164 100
166 61.5 99.4 149.2#
129 77.2 81.8 122.8#
131 59.6 77.4 116.2#





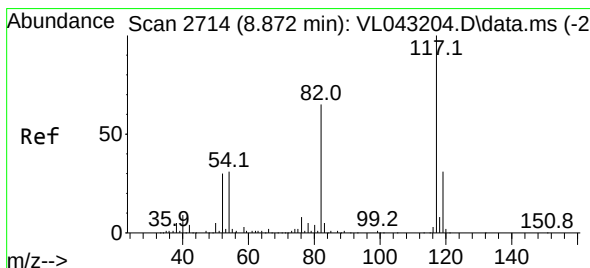
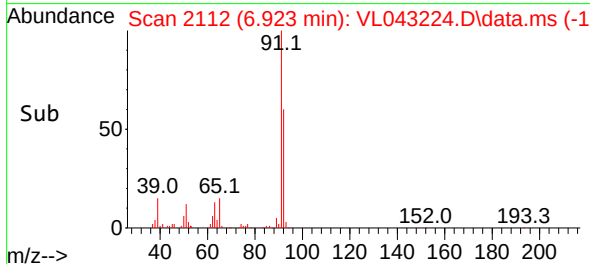
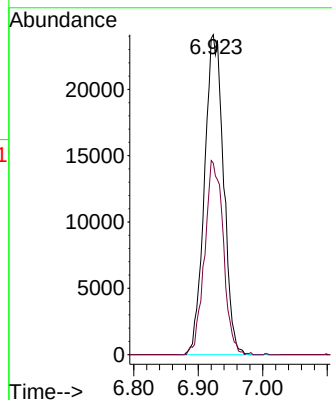
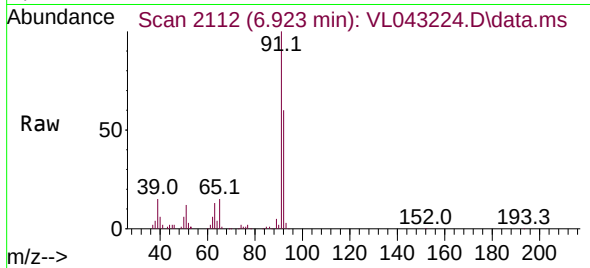
#53
Toluene
Concen: 1.830 ppbv m
RT: 6.923 min Scan# 2111
Delta R.T. 0.003 min
Lab File: VL043224.D
Acq: 18 Nov 2025 21:33

Instrument :
MSVOA_L
ClientSampleId :
SV3

Tgt Ion: 91 Resp: 49578
Ion Ratio Lower Upper
91 100
92 59.4 47.4 71.0

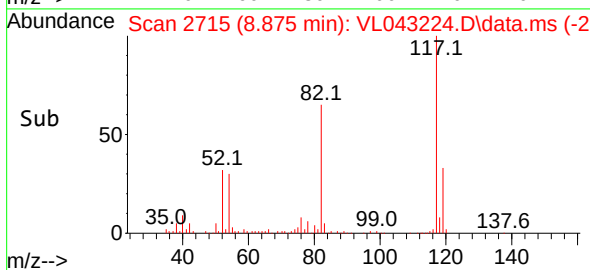
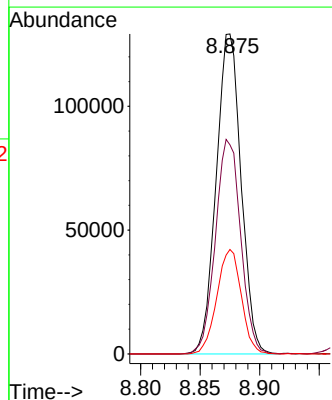
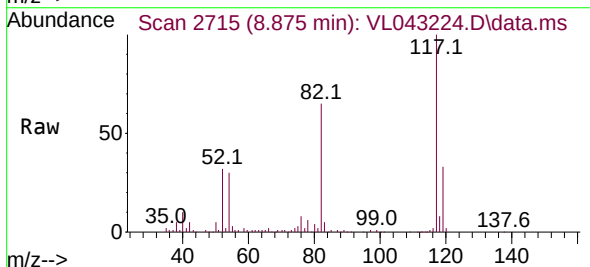
Manual Integrations
APPROVED

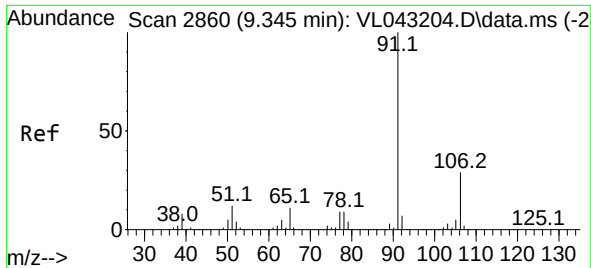
Reviewed By :Semsettin Yesilyurt 11/19/2025
Supervised By :Mahesh Dadoda 11/19/2025



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 2715
Delta R.T. 0.003 min
Lab File: VL043224.D
Acq: 18 Nov 2025 21:33

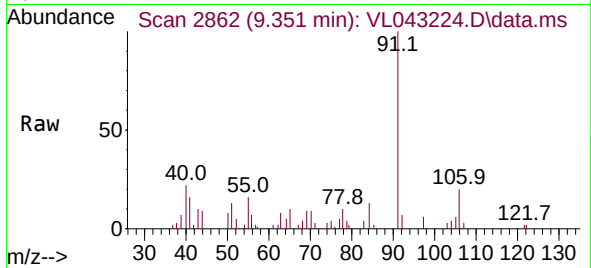
Tgt Ion:117 Resp: 188275
Ion Ratio Lower Upper
117 100
82 68.1 56.1 84.1
119 32.0 25.0 37.6





#58
Ethyl Benzene
Concen: 0.152 ppbv m
RT: 9.351 min Scan# 2862
Delta R.T. 0.006 min
Lab File: VL043224.D
Acq: 18 Nov 2025 21:33

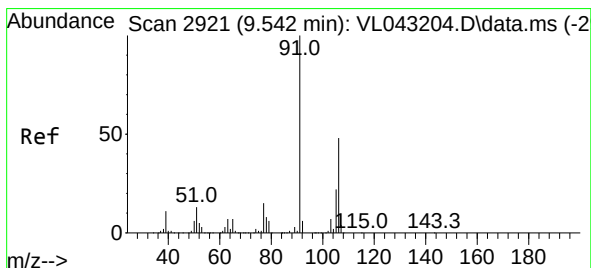
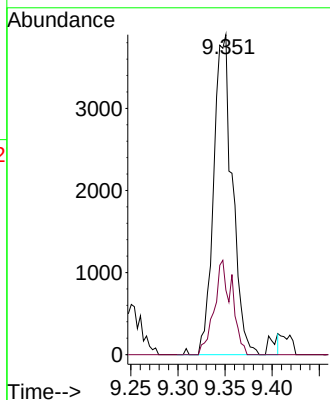
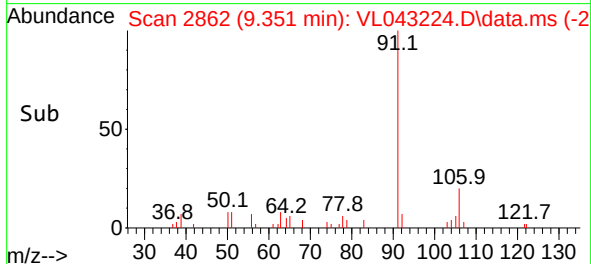
Instrument :
MSVOA_L
ClientSampleId :
SV3



Tgt Ion: 91 Resp: 5506
Ion Ratio Lower Upper
91 100
106 20.2 22.8 34.2

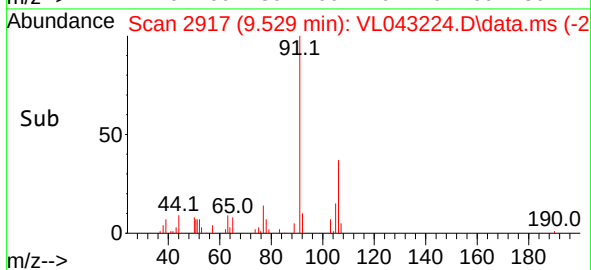
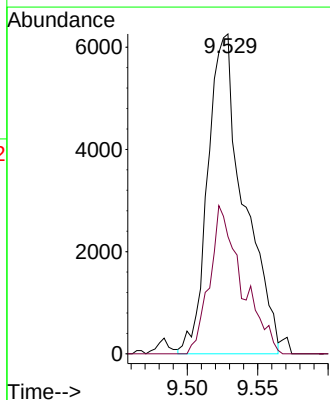
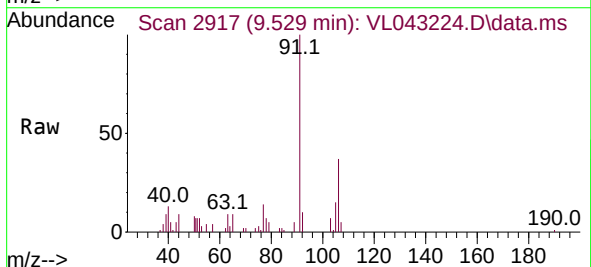
Manual Integrations
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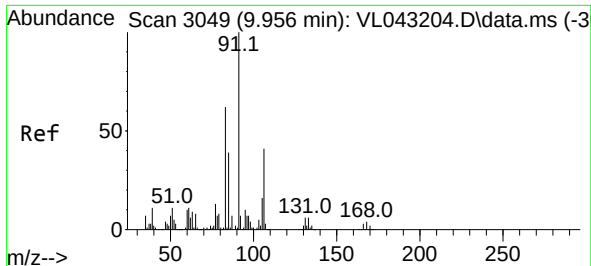
Reviewed By :Semsettin Yesilyurt 11/19/2025
Supervised By :Mahesh Dadoda 11/19/2025



#59
m/p-Xylene
Concen: 0.384 ppbv
RT: 9.529 min Scan# 2917
Delta R.T. -0.013 min
Lab File: VL043224.D
Acq: 18 Nov 2025 21:33

Tgt Ion: 91 Resp: 11158
Ion Ratio Lower Upper
91 100
106 41.5 36.1 54.1





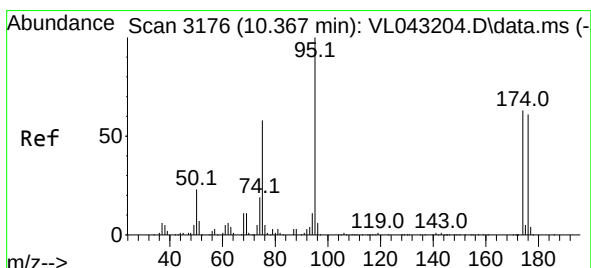
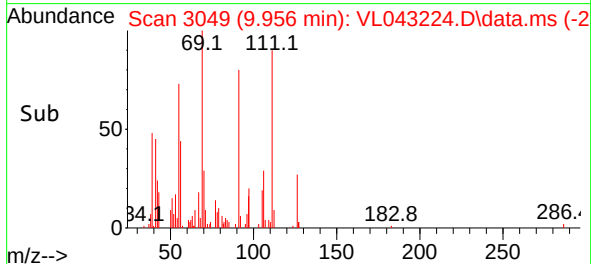
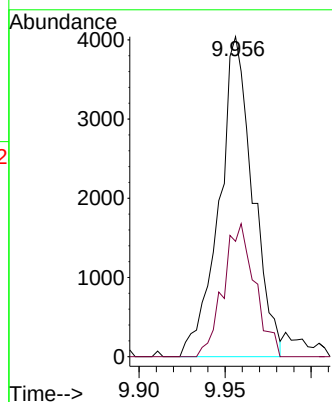
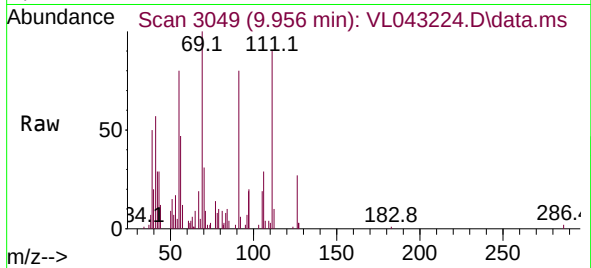
#60
o-Xylene
Concen: 0.190 ppbv
RT: 9.956 min Scan# 3049
Delta R.T. -0.000 min
Lab File: VL043224.D
Acq: 18 Nov 2025 21:33

Instrument :
MSVOA_L
ClientSampleId :
SV3

Tgt Ion: 91 Resp: 5502
Ion Ratio Lower Upper
91 100
106 38.8 20.9 62.8

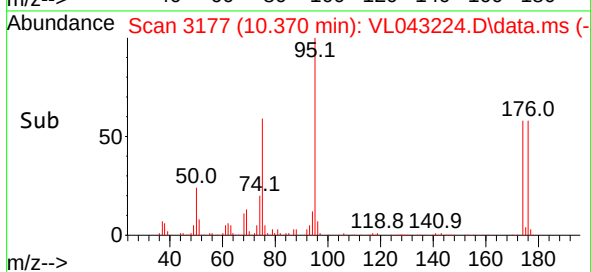
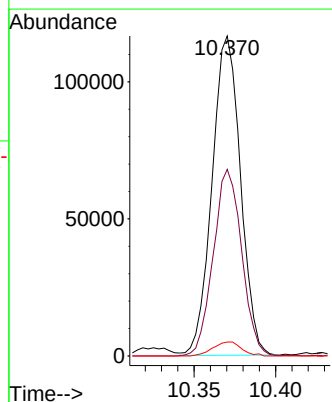
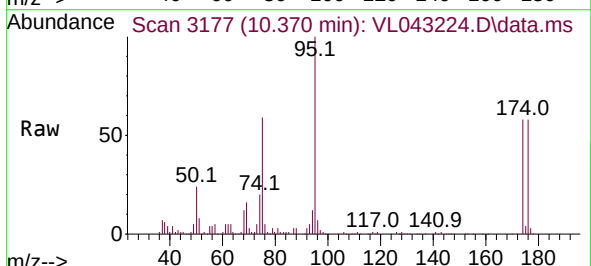
Manual Integrations
APPROVED

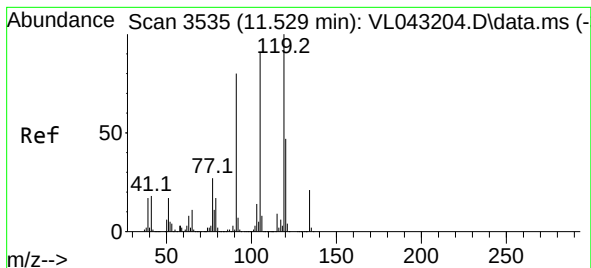
Reviewed By :Semsettin Yesilyurt 11/19/2025
Supervised By :Mahesh Dadoda 11/19/2025



#68
1-Bromo-4-Fluorobenzene
Concen: 10.261 ppbv
RT: 10.370 min Scan# 3177
Delta R.T. 0.003 min
Lab File: VL043224.D
Acq: 18 Nov 2025 21:33

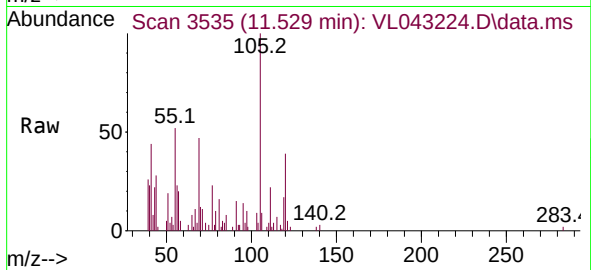
Tgt Ion: 95 Resp: 141605
Ion Ratio Lower Upper
95 100
174 58.3 50.2 75.2
175 4.4 4.1 6.1





#74
 1,2,4-Trimethylbenzene
 Concen: 0.128 ppbv
 RT: 11.529 min Scan# 3535
 Delta R.T. -0.000 min
 Lab File: VL043224.D
 Acq: 18 Nov 2025 21:33

Instrument :
 MSVOA_L
 ClientSampleId :
 SV3



Tgt Ion:	105	Resp:	4159
Ion Ratio	Lower	Upper	
105	100		
120	38.6	41.7	62.5
91	10.0	70.0	105.0
77	20.3	23.8	35.8

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 11/19/2025
 Supervised By :Mahesh Dadoda 11/19/2025

