

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
 Data File : VL042196.D
 Acq On : 28 Mar 2025 00:44
 Operator : SY/MD
 Sample : Q1669-01DUP
 Misc : 400mL/MSVOA_L
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-B9-3-3262025DUP

Manual Integrations
 APPROVED

Reviewed By : Semsettin Yesilyurt 03/31/2025
 Supervised By : Mahesh Dadoda 04/03/2025

Quant Time: Mar 28 02:20:24 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M

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

QLast Update : Fri Mar 28 02:00:52 2025

Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.784	49	169076	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.956	114	480272	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.879	117	439128	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	364412	10.105	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.100%
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.496	85	10520	0.421	ppbv	95
3) Chlorodifluoromethane	1.473	51	8616	0.338	ppbv	93
4) Chloromethane	1.532	50	3735	0.366	ppbv	90
9) Propene	1.483	41	9977	0.854	ppbv	88
10) Heptane	4.982	43	11183m	0.360	ppbv	
11) Trichlorofluoromethane	1.875	101	5375	0.221	ppbv	99
13) Ethanol	1.719	45	64469	58.343	ppbv	85
15) Acetone	1.833	43	856935	36.240	ppbv	98
17) tert-Butyl alcohol	2.043	59	15220	0.517	ppbv #	91
20) Methylene Chloride	2.059	84	3137	0.356	ppbv	94
26) Hexane	2.826	57	41919	1.768	ppbv #	34
30) Cyclohexane	3.852	84	3688m	0.179	ppbv	
34) 2-Butanone	2.561	43	32222	0.925	ppbv	99
35) Carbon Tetrachloride	3.758	117	2485	0.066	ppbv	88
36) Benzene	3.652	78	29626	0.622	ppbv #	88
44) 2,2,4-Trimethylpentane	4.639	57	21092m	0.262	ppbv	
50) 4-Methyl-2-Pentanone	5.772	43	19370m	0.351	ppbv	
53) Toluene	6.933	91	128886	2.284	ppbv	99
58) Ethyl Benzene	9.351	91	21749	0.279	ppbv	97
59) m/p-Xylene	9.526	91	65488	1.051	ppbv	98
60) o-Xylene	9.963	91	30665	0.491	ppbv	93
61) Styrene	9.866	104	3531	0.114	ppbv	97
73) 1,3,5-Trimethylbenzene	11.199	105	10625	0.156	ppbv	87
74) 1,2,4-Trimethylbenzene	11.536	105	38101	0.487	ppbv #	69

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

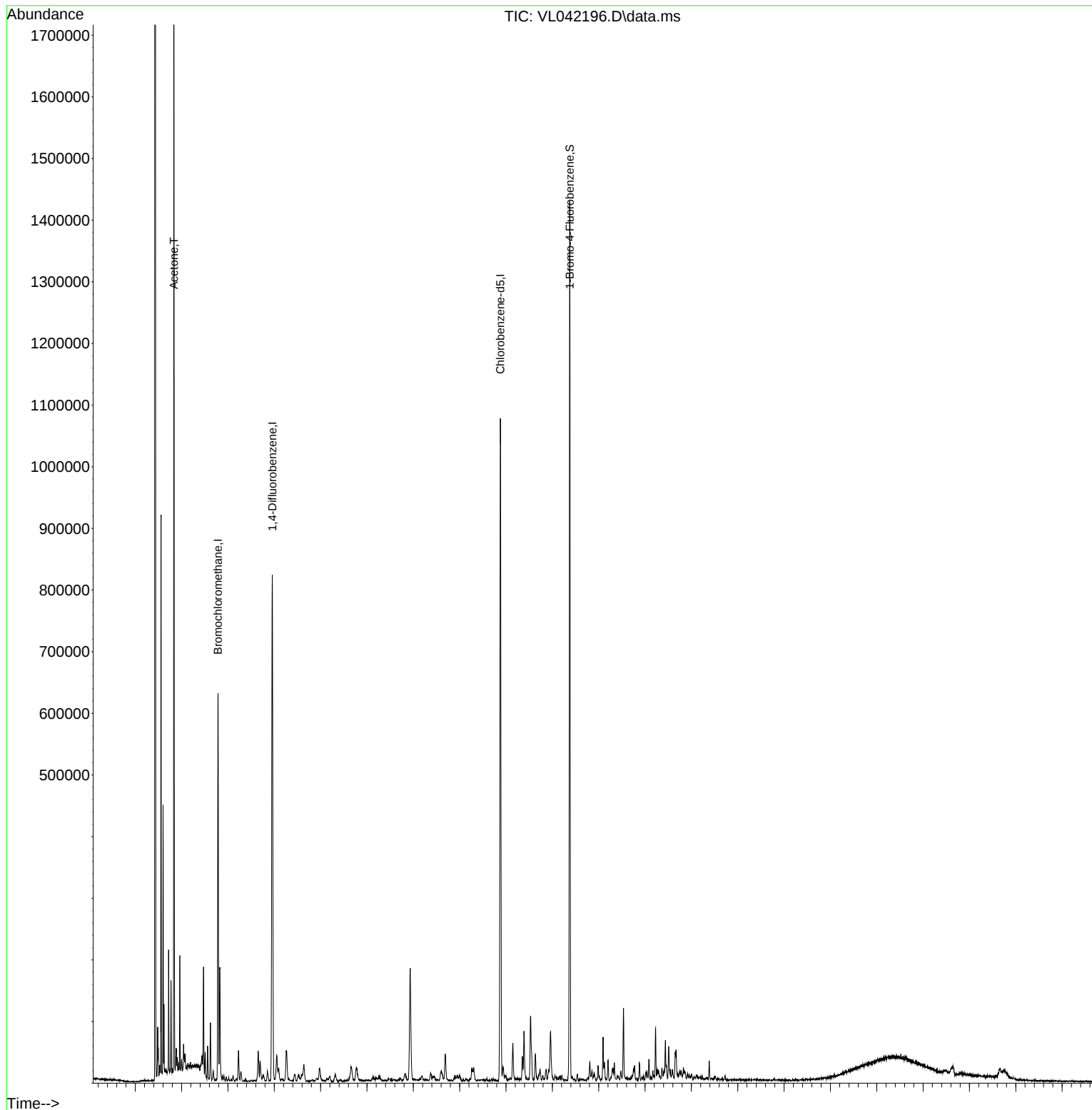
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042196.D
Acq On : 28 Mar 2025 00:44
Operator : SY/MD
Sample : Q1669-01DUP
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

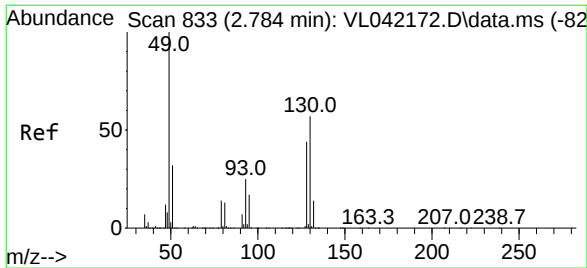
Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP

Quant Time: Mar 28 02:20:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Manual Integrations
APPROVED

Reviewed By : Semsettin Yesilyurt 03/31/2025
Supervised By : Mahesh Dadoda 04/03/2025





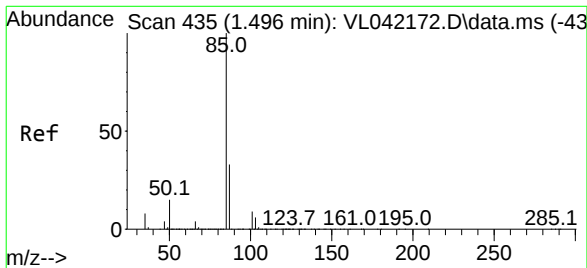
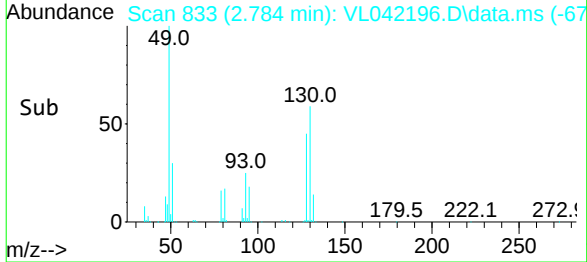
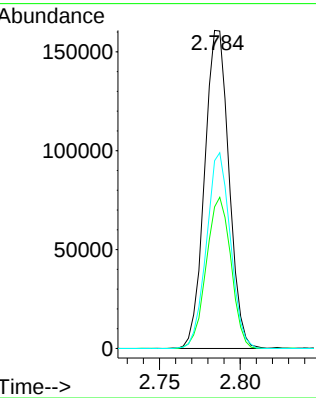
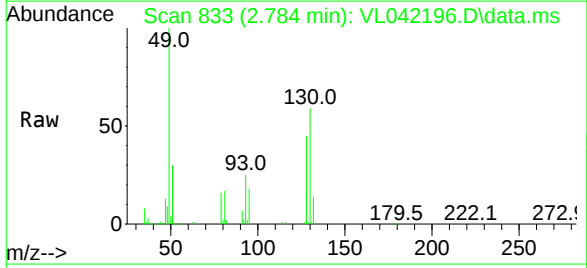
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 833
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP

Tgt Ion: 49 Resp: 169076
Ion Ratio Lower Upper
49 100
128 48.0 22.9 68.5
130 60.4 28.8 86.4

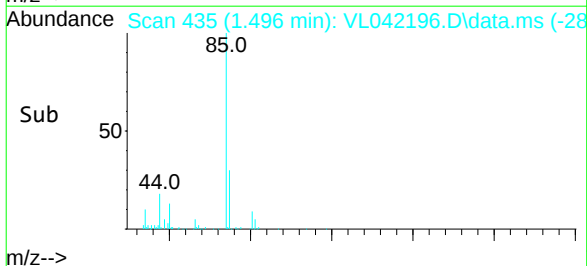
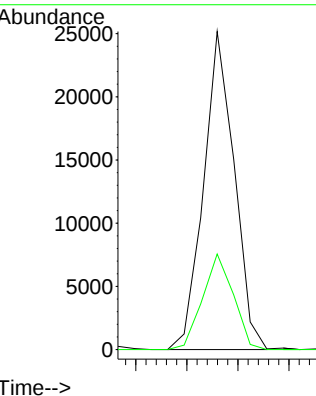
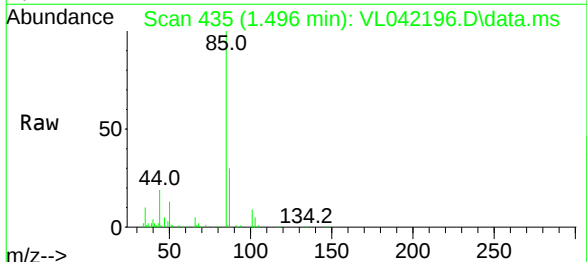
Manual Integrations
APPROVED

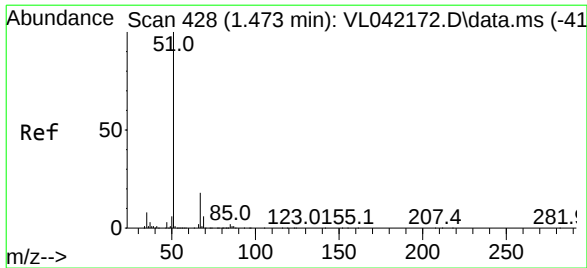
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025



#2
Dichlorodifluoromethane
Concen: 0.421 ppbv
RT: 1.496 min Scan# 435
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Tgt Ion: 85 Resp: 10520
Ion Ratio Lower Upper
85 100
87 30.1 26.1 39.1





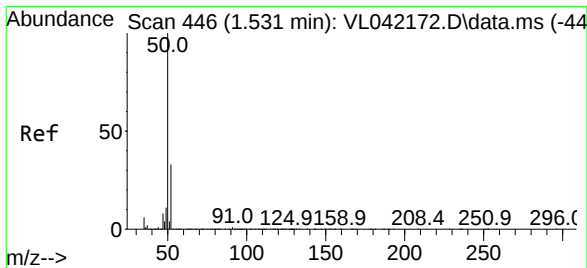
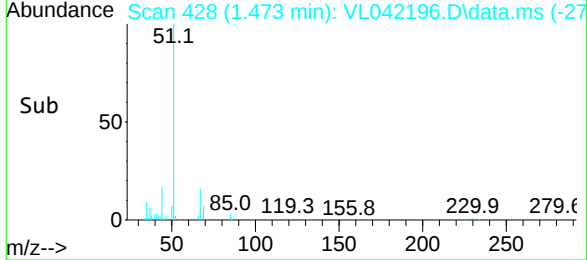
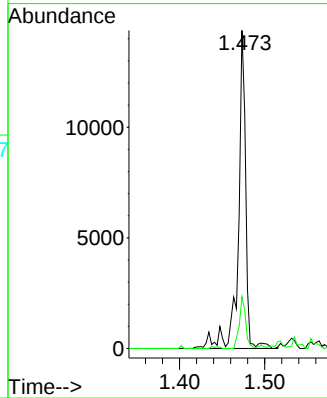
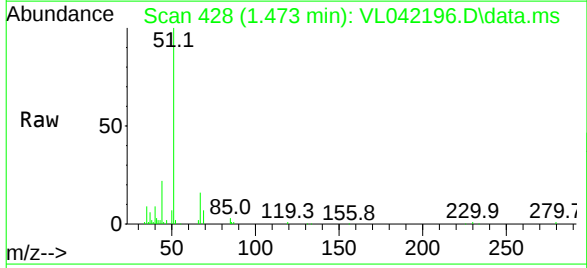
#3
Chlorodifluoromethane
Concen: 0.338 ppbv
RT: 1.473 min Scan# 428
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP

Tgt Ion: 51 Resp: 8616
Ion Ratio Lower Upper
51 100
67 15.8 15.0 22.6

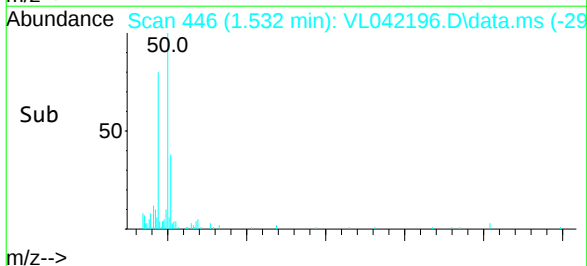
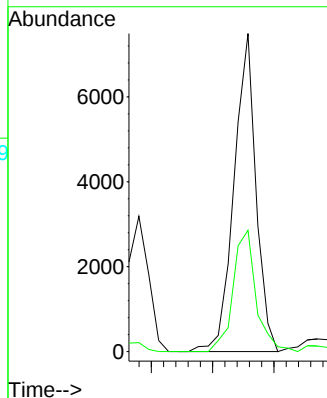
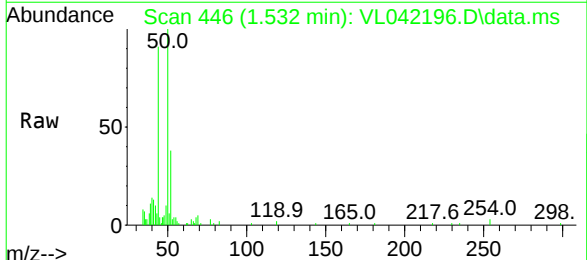
Manual Integrations
APPROVED

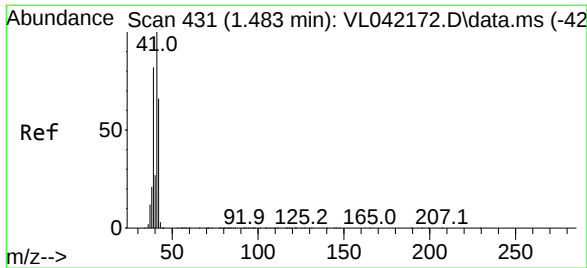
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025



#4
Chloromethane
Concen: 0.366 ppbv
RT: 1.532 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

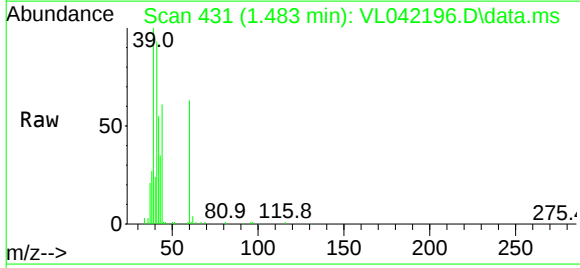
Tgt Ion: 50 Resp: 3735
Ion Ratio Lower Upper
50 100
52 38.1 26.1 39.1





#9
 Propene
 Concen: 0.854 ppbv
 RT: 1.483 min Scan# 431
 Delta R.T. 0.000 min
 Lab File: VL042196.D
 Acq: 28 Mar 2025 00:44

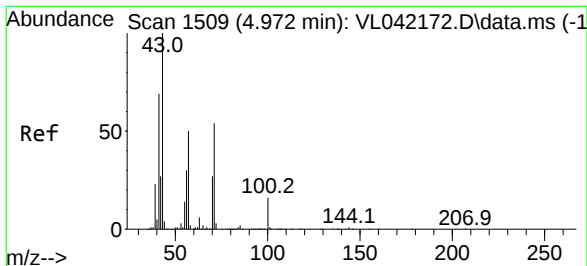
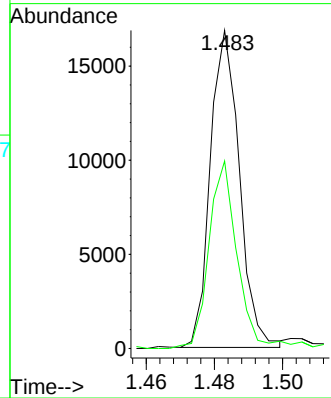
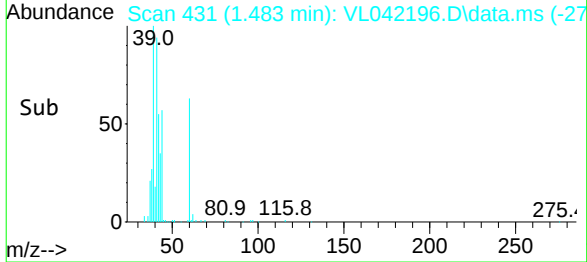
Instrument :
 MSVOA_L
 ClientSampleId :
 IA-B9-3-3262025DUP



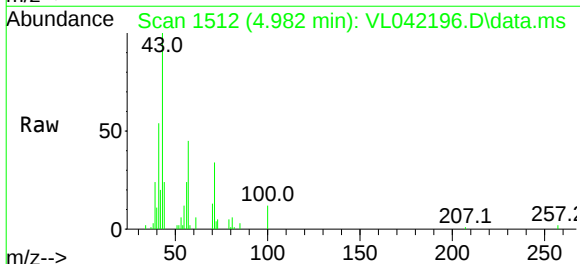
Tgt Ion: 41 Resp: 9977
 Ion Ratio Lower Upper
 41 100
 42 59.7 55.4 83.2

Manual Integrations
 APPROVED

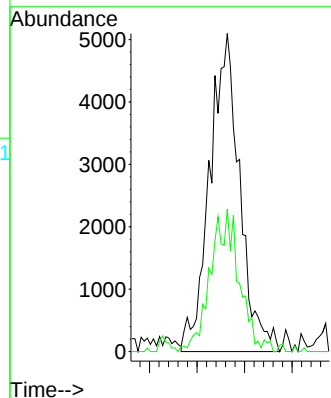
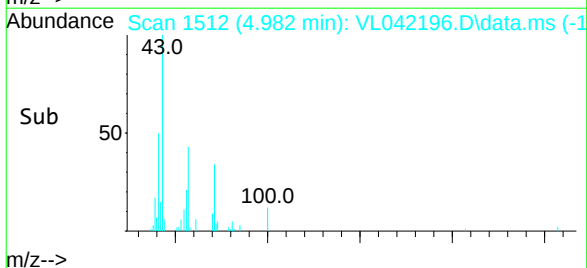
Reviewed By :Semsettin Yesilyurt 03/31/2025
 Supervised By :Mahesh Dadoda 04/03/2025

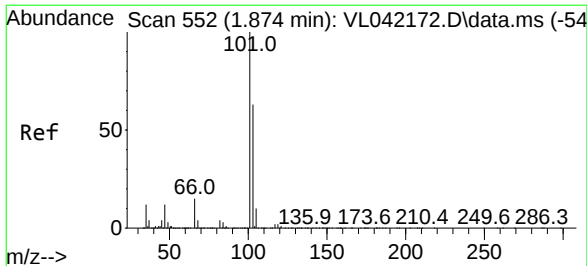


#10
 Heptane
 Concen: 0.360 ppbv m
 RT: 4.982 min Scan# 1512
 Delta R.T. 0.010 min
 Lab File: VL042196.D
 Acq: 28 Mar 2025 00:44



Tgt Ion: 43 Resp: 11183
 Ion Ratio Lower Upper
 43 100
 57 0.0 39.4 59.2#





#11

Trichlorofluoromethane

Concen: 0.221 ppbv

RT: 1.875 min Scan# 552

Delta R.T. 0.000 min

Lab File: VL042196.D

Acq: 28 Mar 2025 00:44

Instrument :

MSVOA_L

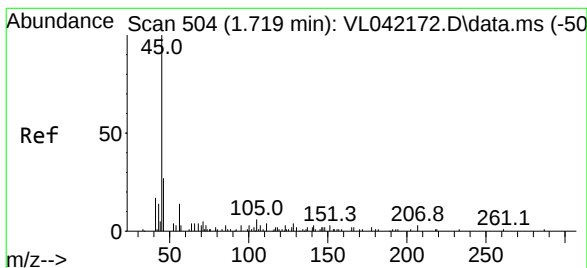
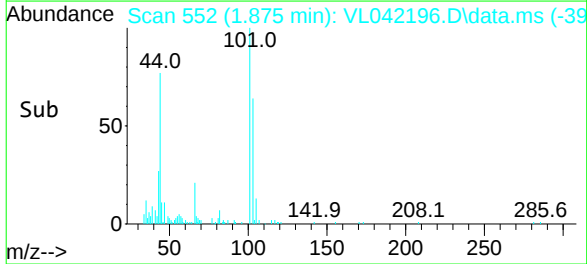
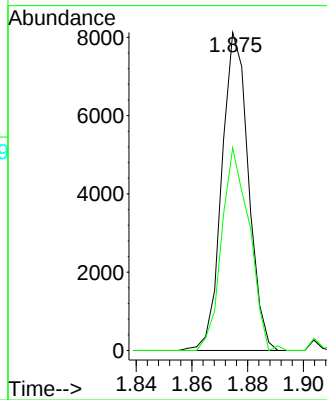
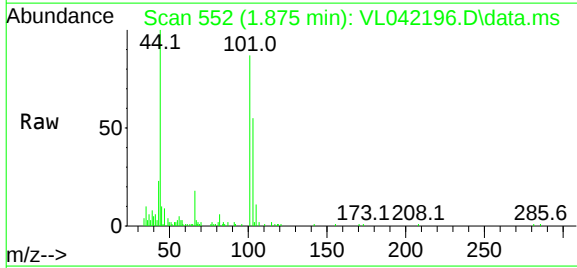
ClientSampleId :

IA-B9-3-3262025DUP

Tgt Ion: 101 Resp: 5375
 Ion Ratio Lower Upper
 101 100
 103 63.7 50.2 75.2

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
 Supervised By :Mahesh Dadoda 04/03/2025



#13

Ethanol

Concen: 58.343 ppbv

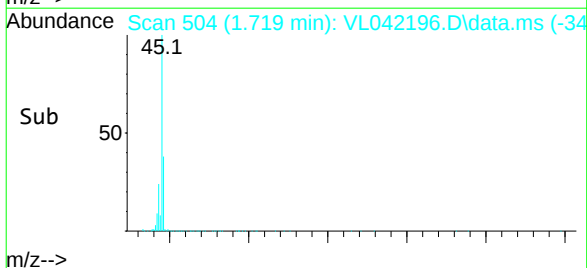
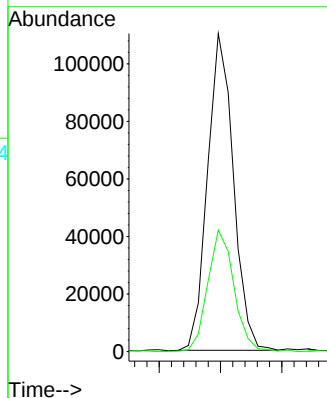
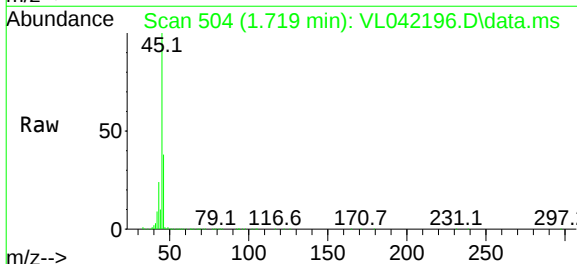
RT: 1.719 min Scan# 504

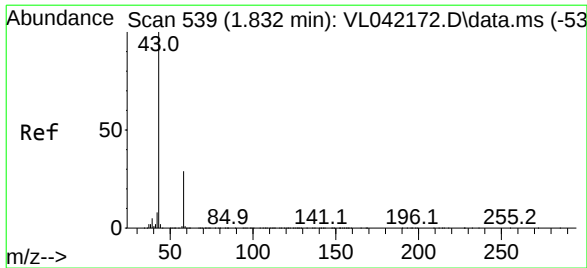
Delta R.T. 0.000 min

Lab File: VL042196.D

Acq: 28 Mar 2025 00:44

Tgt Ion: 45 Resp: 64469
 Ion Ratio Lower Upper
 45 100
 46 40.2 20.2 80.8





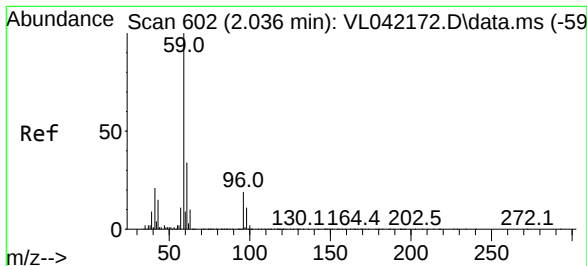
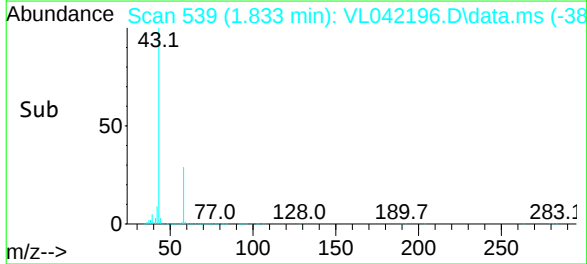
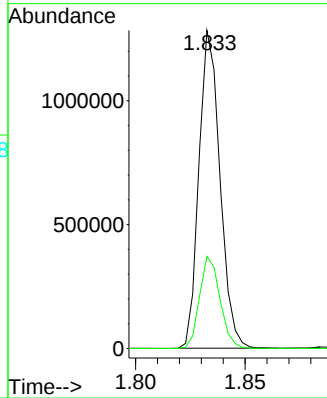
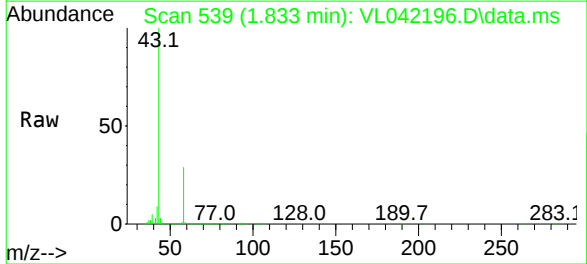
#15
Acetone
Concen: 36.240 ppbv
RT: 1.833 min Scan# 539
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Instrument : MSVOA_L
ClientSampleId : IA-B9-3-3262025DUP

Tgt Ion: 43 Resp: 856935
Ion Ratio Lower Upper
43 100
58 28.2 23.2 34.8

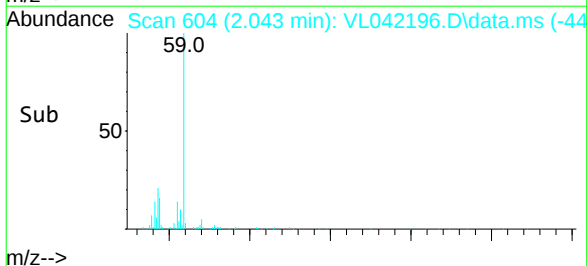
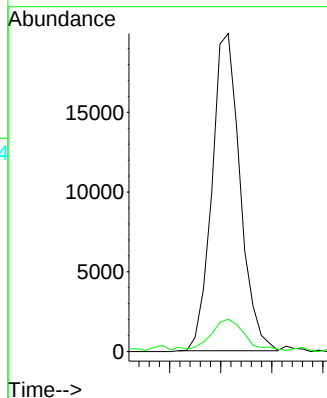
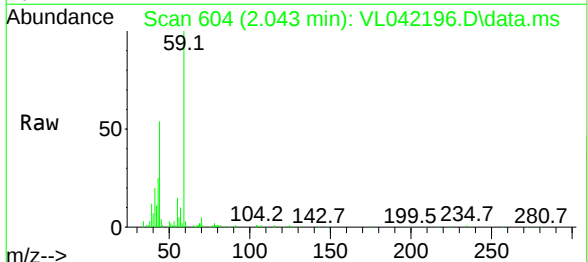
Manual Integrations
APPROVED

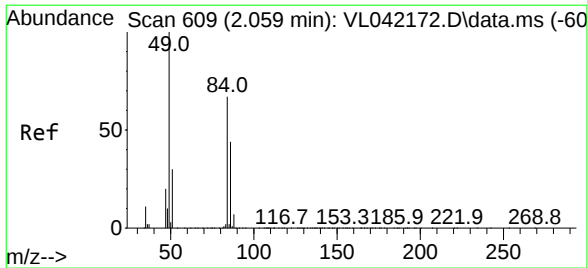
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025



#17
tert-Butyl alcohol
Concen: 0.517 ppbv
RT: 2.043 min Scan# 604
Delta R.T. 0.007 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

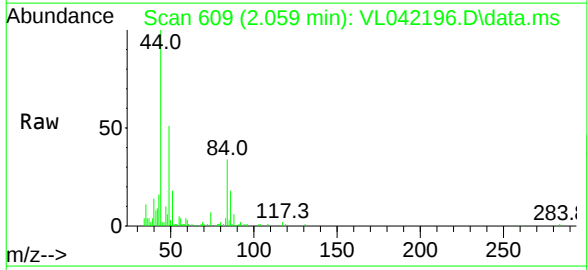
Tgt Ion: 59 Resp: 15220
Ion Ratio Lower Upper
59 100
57 14.7 8.9 13.3#





#20
Methylene Chloride
Concen: 0.356 ppbv
RT: 2.059 min Scan# 609
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

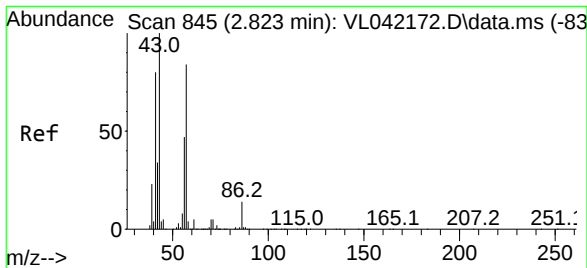
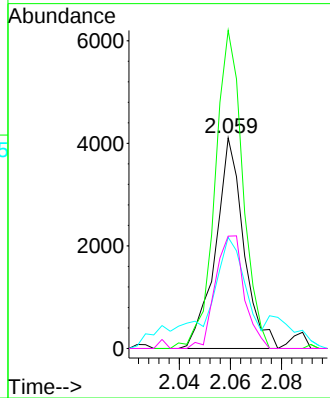
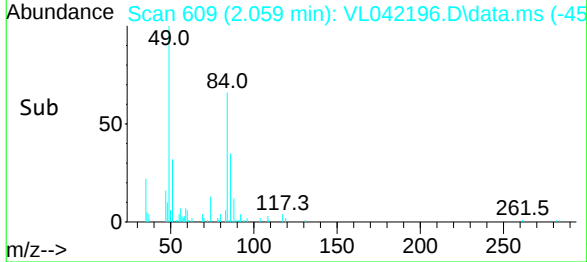
Instrument : MSVOA_L
ClientSampleId : IA-B9-3-3262025DUP



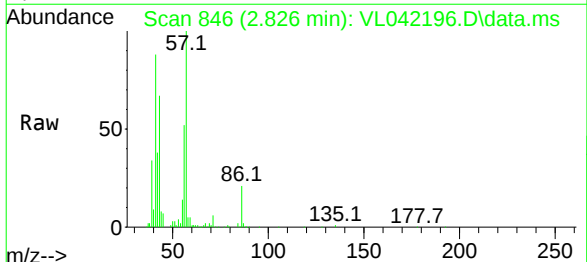
Tgt Ion	Ratio	Lower	Upper
84	100		
49	151.0	120.2	180.4
51	39.1	37.4	56.0
86	53.3	52.4	78.6

Manual Integrations
APPROVED

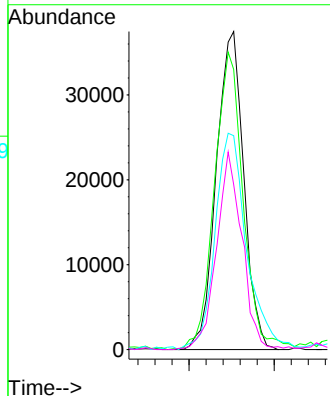
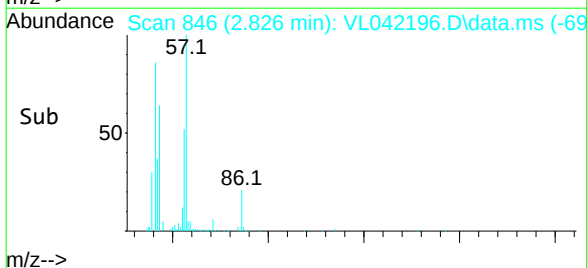
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

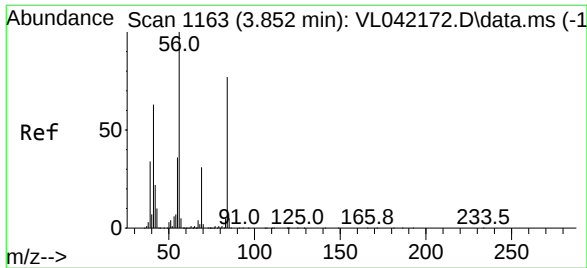


#26
Hexane
Concen: 1.768 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.003 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44



Tgt Ion	Ratio	Lower	Upper
57	100		
41	99.1	76.6	114.8
43	78.9	207.8	311.8#
56	57.9	43.6	65.4





#30

Cyclohexane

Concen: 0.179 ppbv m

RT: 3.852 min Scan# 11

Delta R.T. 0.000 min

Lab File: VL042196.D

Acq: 28 Mar 2025 00:44

Instrument :

MSVOA_L

ClientSampleId :

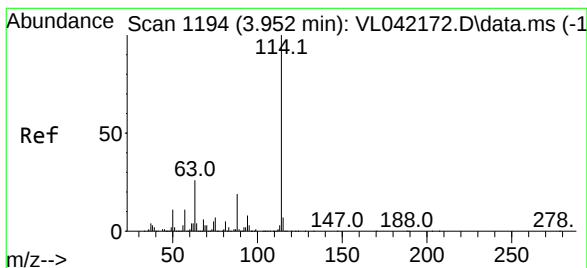
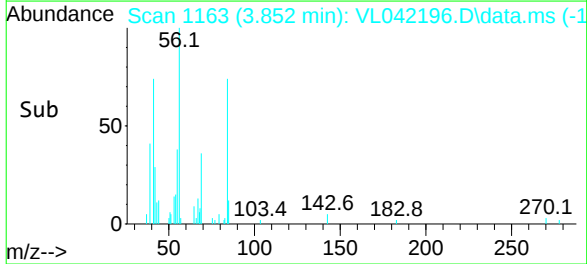
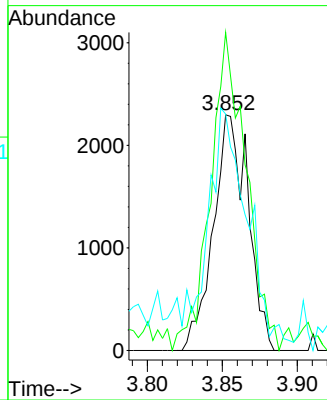
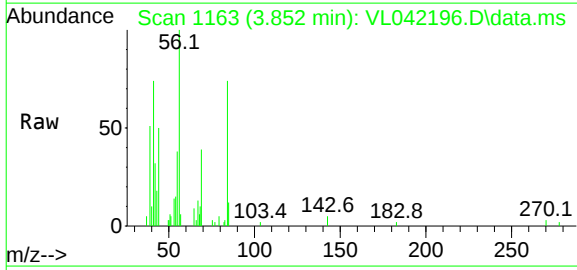
IA-B9-3-3262025DUP

Tgt	Ion:	84	Resp:	3688
Ion	Ratio	Lower	Upper	
84	100			
56	141.8	102.8	154.2	
41	140.3	66.5	99.7#	

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

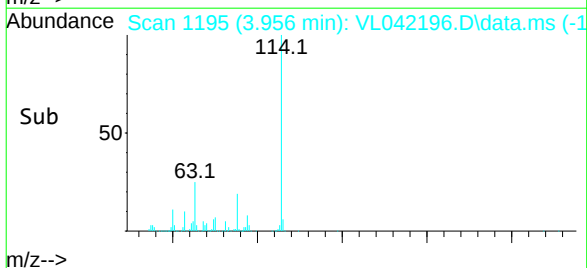
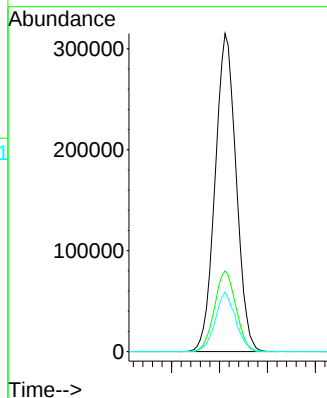
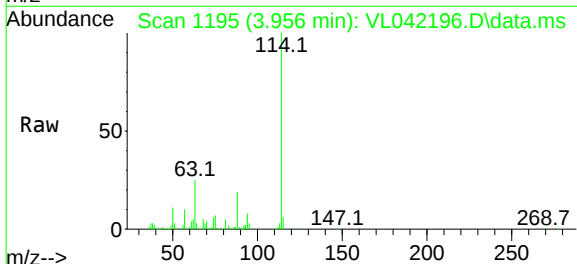
RT: 3.956 min Scan# 1195

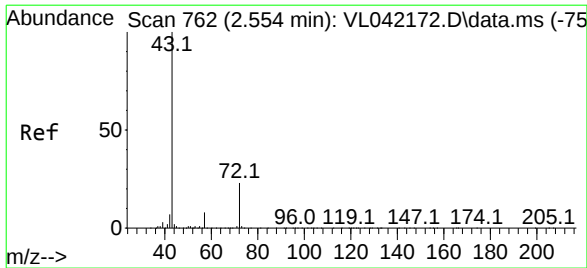
Delta R.T. 0.003 min

Lab File: VL042196.D

Acq: 28 Mar 2025 00:44

Tgt	Ion:	114	Resp:	480272
Ion	Ratio	Lower	Upper	
114	100			
63	25.9	20.7	31.1	
88	18.0	15.0	22.4	





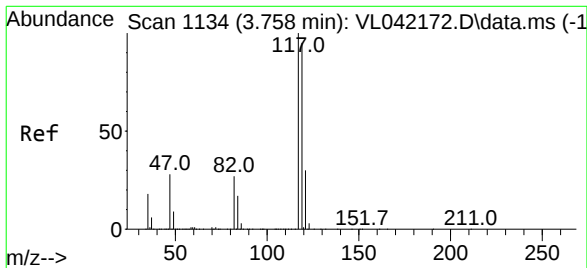
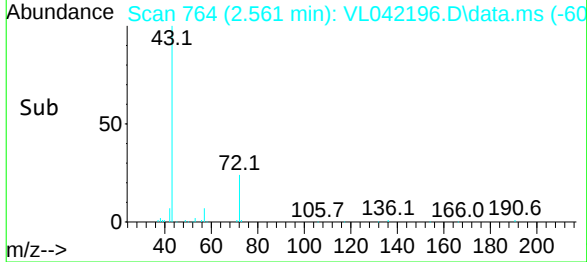
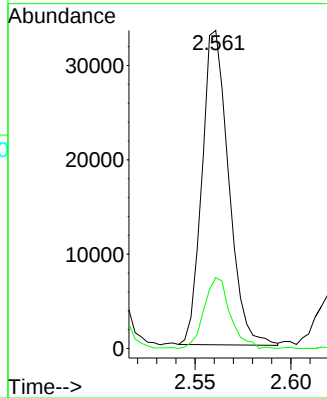
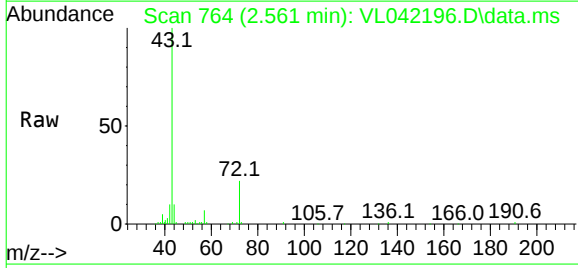
#34
2-Butanone
Concen: 0.925 ppbv
RT: 2.561 min Scan# 762
Delta R.T. 0.007 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP

Tgt Ion: 43 Resp: 32222
Ion Ratio Lower Upper
43 100
72 22.4 18.2 27.2

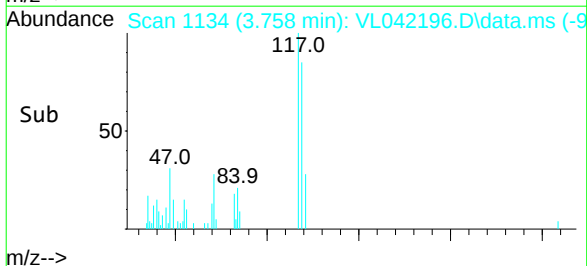
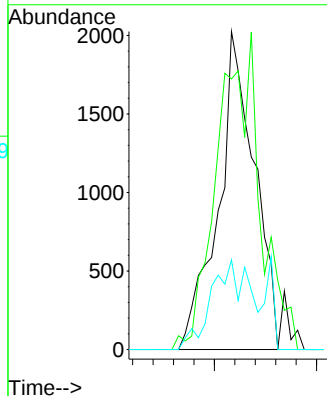
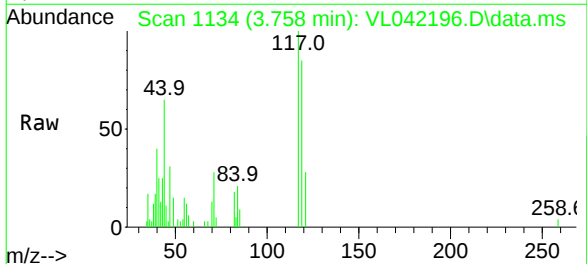
Manual Integrations
APPROVED

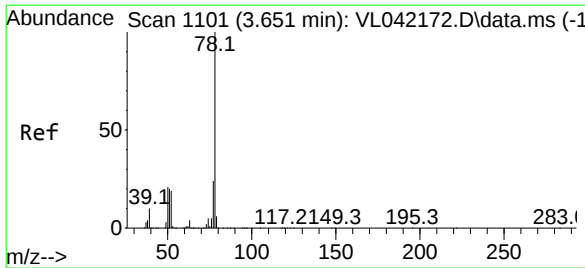
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025



#35
Carbon Tetrachloride
Concen: 0.066 ppbv
RT: 3.758 min Scan# 1134
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

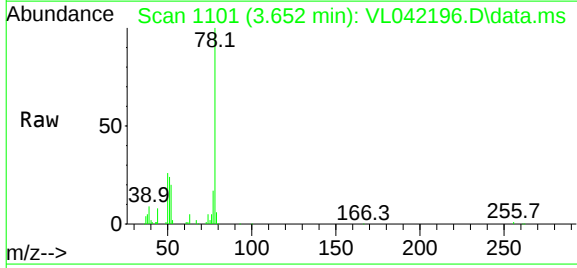
Tgt Ion:117 Resp: 2485
Ion Ratio Lower Upper
117 100
119 80.7 76.2 114.2
121 28.2 24.2 36.4





#36
Benzene
Concen: 0.622 ppbv
RT: 3.652 min Scan# 1101
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

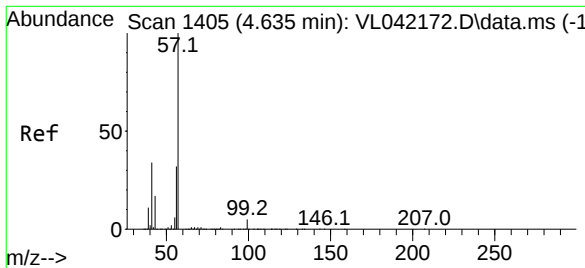
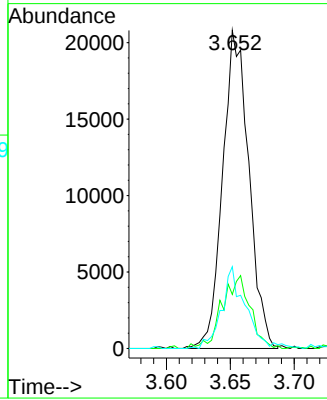
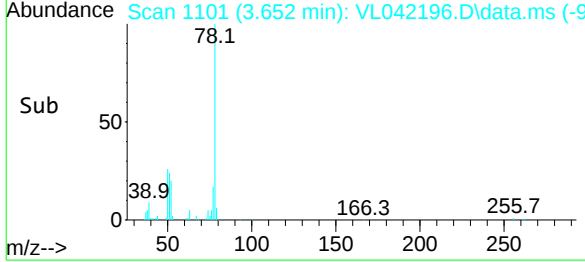
Instrument : MSVOA_L
ClientSampleId : IA-B9-3-3262025DUP



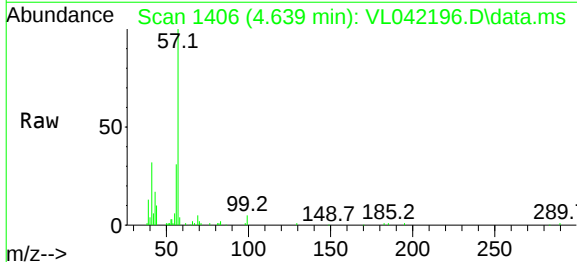
Tgt Ion: 78 Resp: 29626
Ion Ratio Lower Upper
78 100
77 17.0 19.1 28.7#
50 25.7 16.6 24.8#

Manual Integrations
APPROVED

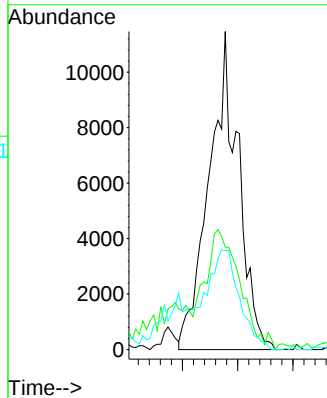
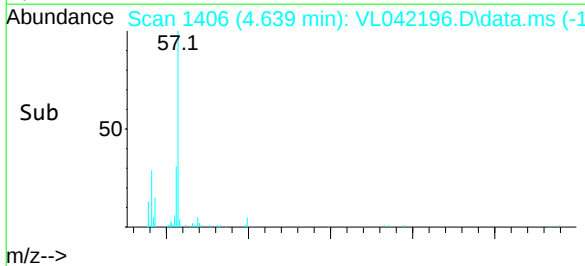
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

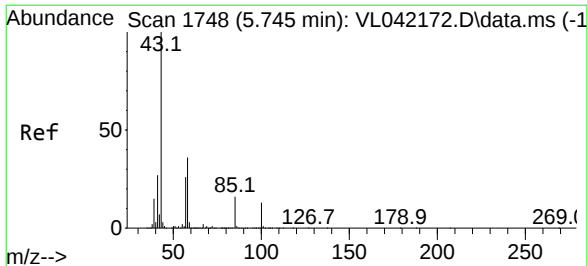


#44
2,2,4-Trimethylpentane
Concen: 0.262 ppbv m
RT: 4.639 min Scan# 1406
Delta R.T. 0.003 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44



Tgt Ion: 57 Resp: 21092
Ion Ratio Lower Upper
57 100
41 0.0 26.8 40.2#
56 0.0 25.6 38.4#





#50

4-Methyl-2-Pentanone

Concen: 0.351 ppbv m

RT: 5.772 min Scan# 1748

Delta R.T. 0.026 min

Lab File: VL042196.D

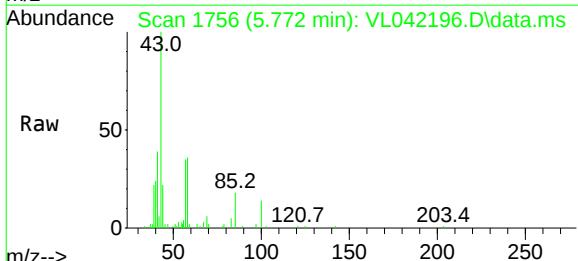
Acq: 28 Mar 2025 00:44

Instrument :

MSVOA_L

ClientSampleId :

IA-B9-3-3262025DUP



Tgt Ion: 43 Resp: 19376

Ion Ratio Lower Upper

43 100

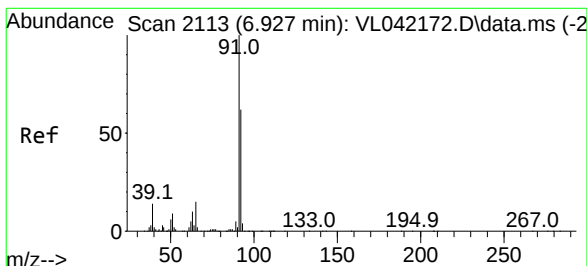
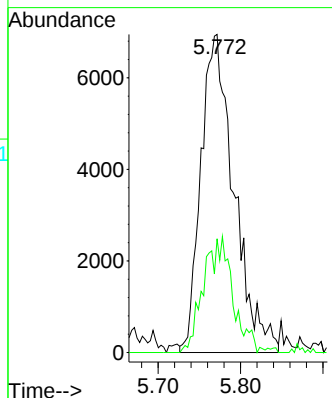
58 32.6 29.0 43.6

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025

Supervised By :Mahesh Dadoda 04/03/2025



#53

Toluene

Concen: 2.284 ppbv

RT: 6.933 min Scan# 2115

Delta R.T. 0.007 min

Lab File: VL042196.D

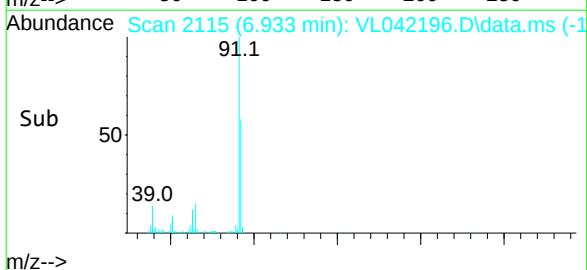
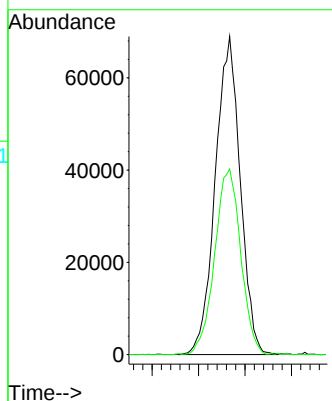
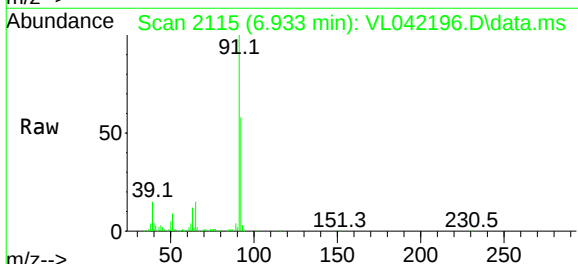
Acq: 28 Mar 2025 00:44

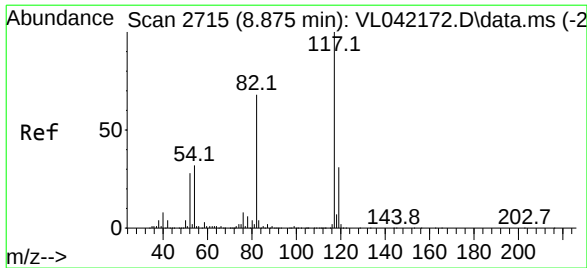
Tgt Ion: 91 Resp: 128886

Ion Ratio Lower Upper

91 100

92 61.0 48.4 72.6





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.879 min Scan# 2715

Delta R.T. 0.003 min

Lab File: VL042196.D

Acq: 28 Mar 2025 00:44

Instrument :

MSVOA_L

ClientSampleId :

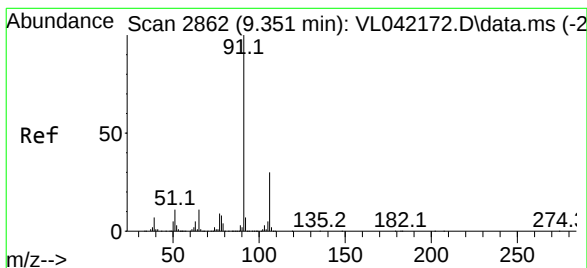
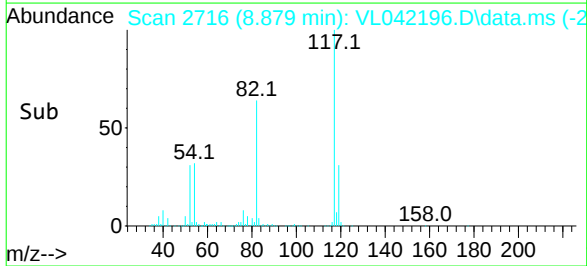
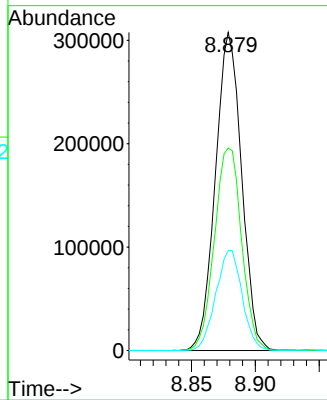
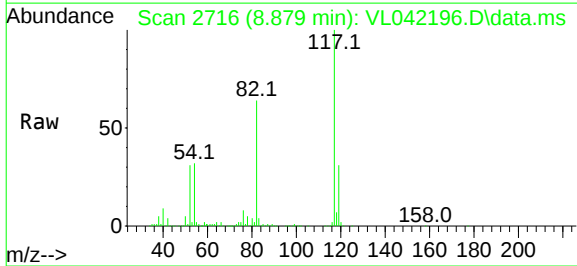
IA-B9-3-3262025DUP

Tgt Ion:	117	Resp:	439128
Ion	Ratio	Lower	Upper
117	100		
82	66.0	55.8	83.6
119	31.7	25.5	38.3

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025



#58

Ethyl Benzene

Concen: 0.279 ppbv

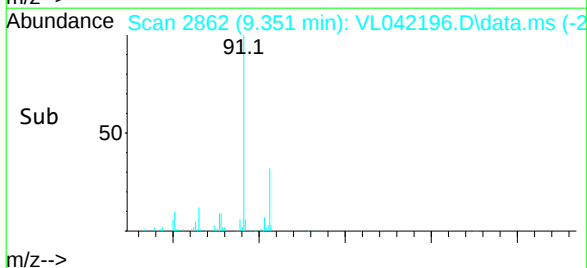
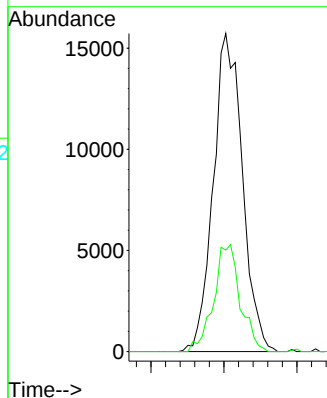
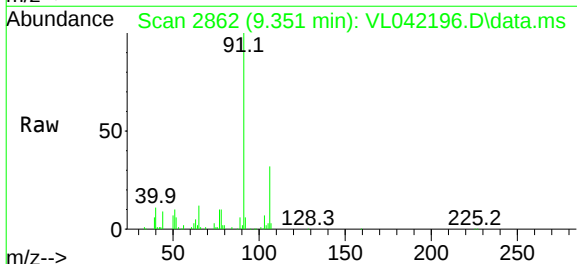
RT: 9.351 min Scan# 2862

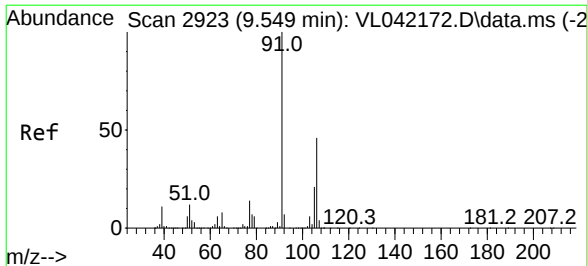
Delta R.T. 0.000 min

Lab File: VL042196.D

Acq: 28 Mar 2025 00:44

Tgt Ion:	91	Resp:	21749
Ion	Ratio	Lower	Upper
91	100		
106	31.9	24.2	36.2





#59

m/p-Xylene

Concen: 1.051 ppbv

RT: 9.526 min Scan# 29

Delta R.T. -0.022 min

Lab File: VL042196.D

Acq: 28 Mar 2025 00:44

Instrument :

MSVOA_L

ClientSampleId :

IA-B9-3-3262025DUP

Tgt Ion: 91 Resp: 65488

Ion Ratio Lower Upper

91 100

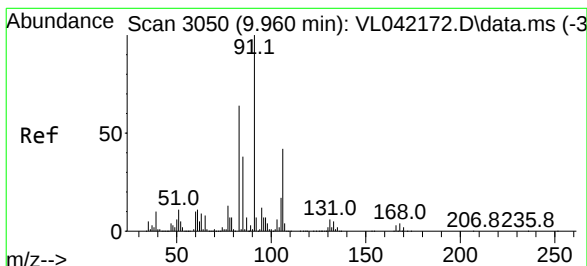
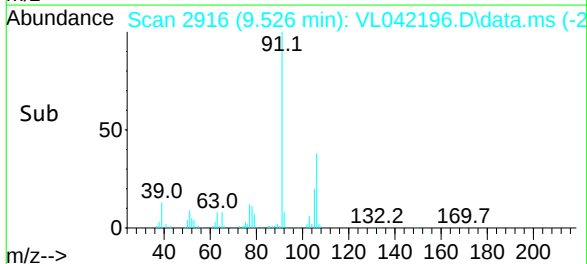
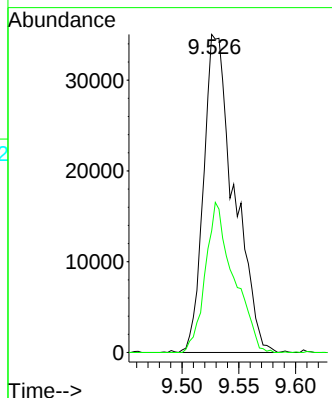
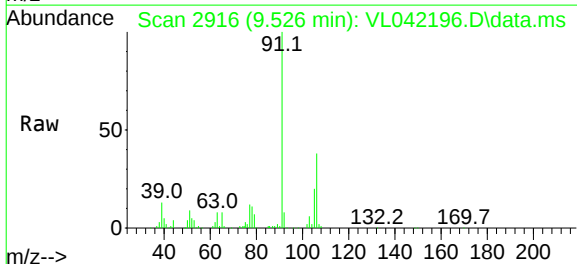
106 43.9 36.4 54.6

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025

Supervised By :Mahesh Dadoda 04/03/2025



#60

o-Xylene

Concen: 0.491 ppbv

RT: 9.963 min Scan# 3051

Delta R.T. 0.003 min

Lab File: VL042196.D

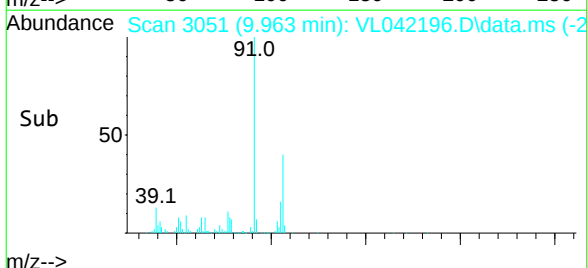
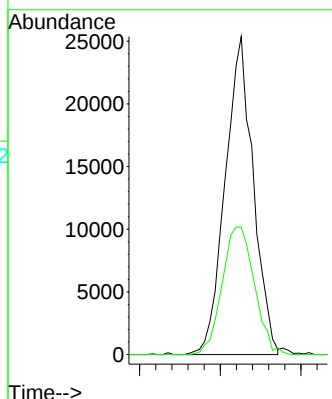
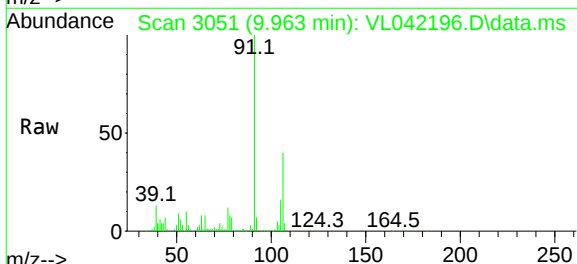
Acq: 28 Mar 2025 00:44

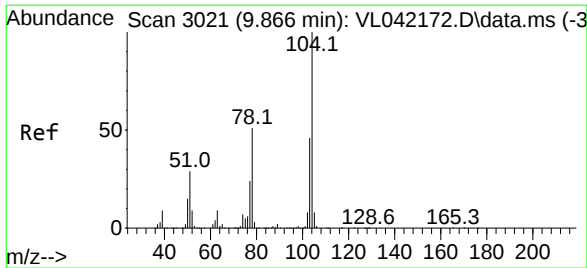
Tgt Ion: 91 Resp: 30665

Ion Ratio Lower Upper

91 100

106 46.1 20.8 62.5





#61

Styrene

Concen: 0.114 ppbv

RT: 9.866 min Scan# 3021

Delta R.T. 0.000 min

Lab File: VL042196.D

Acq: 28 Mar 2025 00:44

Instrument :

MSVOA_L

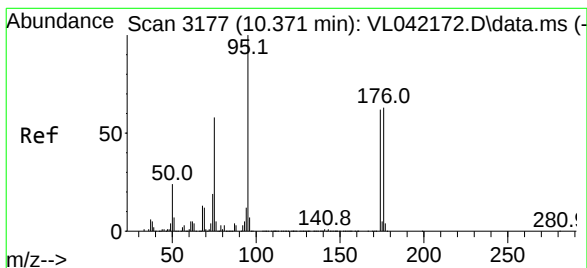
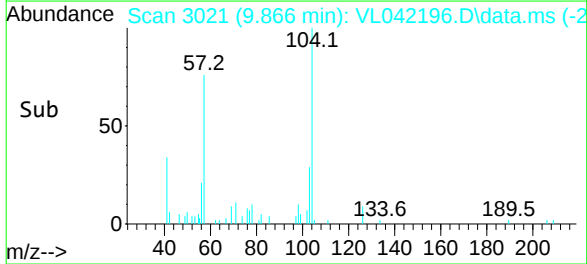
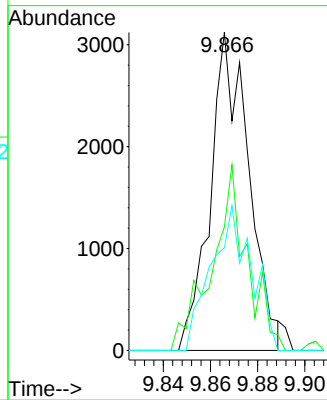
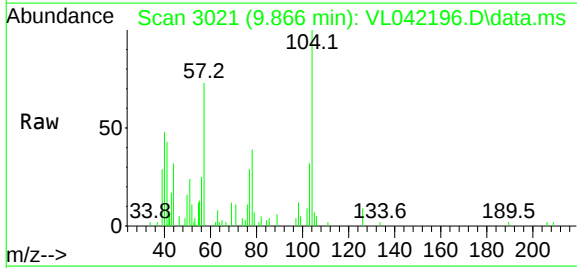
ClientSampleId :

IA-B9-3-3262025DUP

Tgt Ion:	104	Resp:	3531
Ion Ratio	Lower	Upper	
104	100		
78	54.4	41.8	62.6
103	47.9	37.0	55.4

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025



#68

1-Bromo-4-Fluorobenzene

Concen: 10.105 ppbv

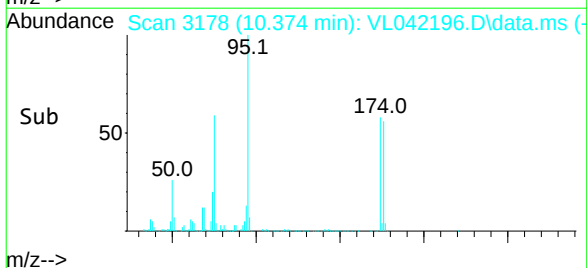
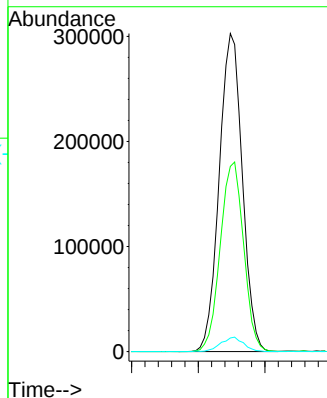
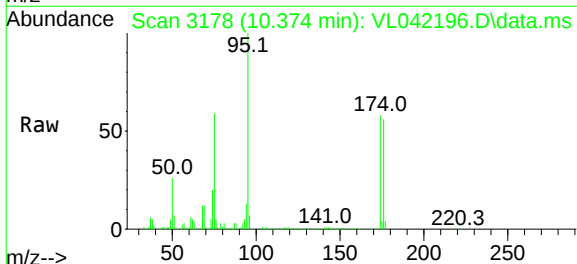
RT: 10.374 min Scan# 3178

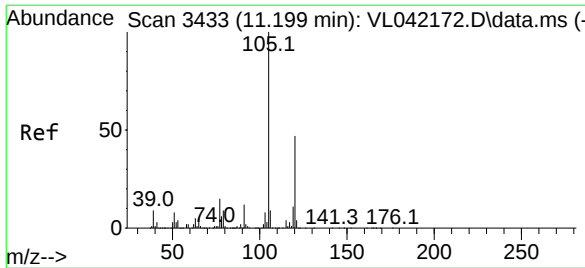
Delta R.T. 0.003 min

Lab File: VL042196.D

Acq: 28 Mar 2025 00:44

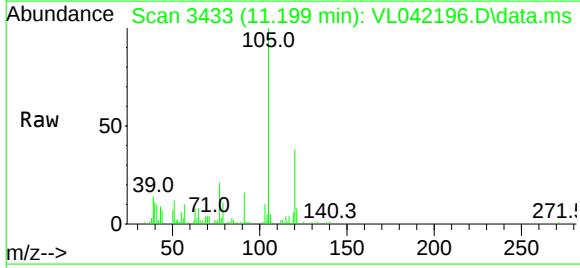
Tgt Ion:	95	Resp:	364412
Ion Ratio	Lower	Upper	
95	100		
174	60.3	50.6	76.0
175	4.5	3.8	5.6





#73
1,3,5-Trimethylbenzene
Concen: 0.156 ppbv
RT: 11.199 min Scan# 3433
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44

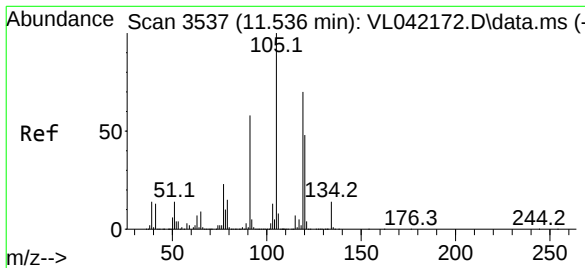
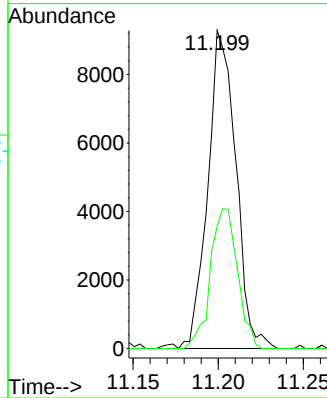
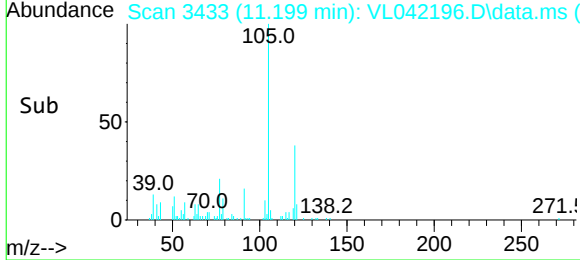
Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025DUP



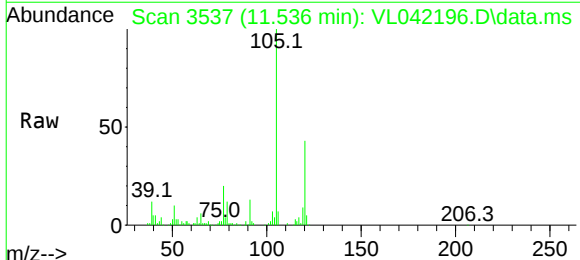
Tgt Ion:105 Resp: 10625
Ion Ratio Lower Upper
105 100
120 38.3 37.4 56.0

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025



#74
1,2,4-Trimethylbenzene
Concen: 0.487 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. 0.000 min
Lab File: VL042196.D
Acq: 28 Mar 2025 00:44



Tgt Ion:105 Resp: 38101
Ion Ratio Lower Upper
105 100
120 42.6 38.6 58.0
91 12.8 46.2 69.2#
77 19.7 18.6 27.8

