

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
 Data File : VL042185.D
 Acq On : 27 Mar 2025 18:22
 Operator : SY/MD
 Sample : Q1669-01
 Misc : 400mL/MSVOA_L
 ALS Vial : 6 Sample Multiplier: 1

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

Manual Integrations
 APPROVED

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

Quant Time: Mar 28 02:14:56 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	2.791	49	182164	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.962	114	537249	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.885	117	488802	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	399253	9.946	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.500%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	10784	0.401	ppbv	94
3) Chlorodifluoromethane	1.476	51	7336m	0.267	ppbv	
4) Chloromethane	1.532	50	4102	0.373	ppbv	97
9) Propene	1.483	41	9886	0.785	ppbv	90
10) Heptane	4.982	43	12733m	0.380	ppbv	
11) Trichlorofluoromethane	1.881	101	5615	0.215	ppbv	98
13) Ethanol	1.722	45	66284	55.675	ppbv	87
15) Acetone	1.836	43	884107	34.703	ppbv	98
17) tert-Butyl alcohol	2.043	59	15704	0.495	ppbv #	88
20) Methylene Chloride	2.062	84	3433	0.362	ppbv #	83
26) Hexane	2.829	57	49383	1.934	ppbv #	35
30) Cyclohexane	3.855	84	4259m	0.192	ppbv	
34) 2-Butanone	2.561	43	35584	0.913	ppbv	98
35) Carbon Tetrachloride	3.765	117	2627	0.063	ppbv	91
36) Benzene	3.661	78	34017	0.639	ppbv #	92
44) 2,2,4-Trimethylpentane	4.648	57	23919m	0.266	ppbv	
50) 4-Methyl-2-Pentanone	5.781	43	22175m	0.359	ppbv	
53) Toluene	6.937	91	146384	2.319	ppbv	99
58) Ethyl Benzene	9.358	91	27191	0.313	ppbv	95
59) m/p-Xylene	9.533	91	73715m	1.063	ppbv	
60) o-Xylene	9.966	91	35115	0.505	ppbv	99
61) Styrene	9.872	104	4273	0.124	ppbv	91
64) n-propylbenzene	10.992	120	2677	0.100	ppbv	96
74) 1,2,4-Trimethylbenzene	11.539	105	44446	0.510	ppbv #	64

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

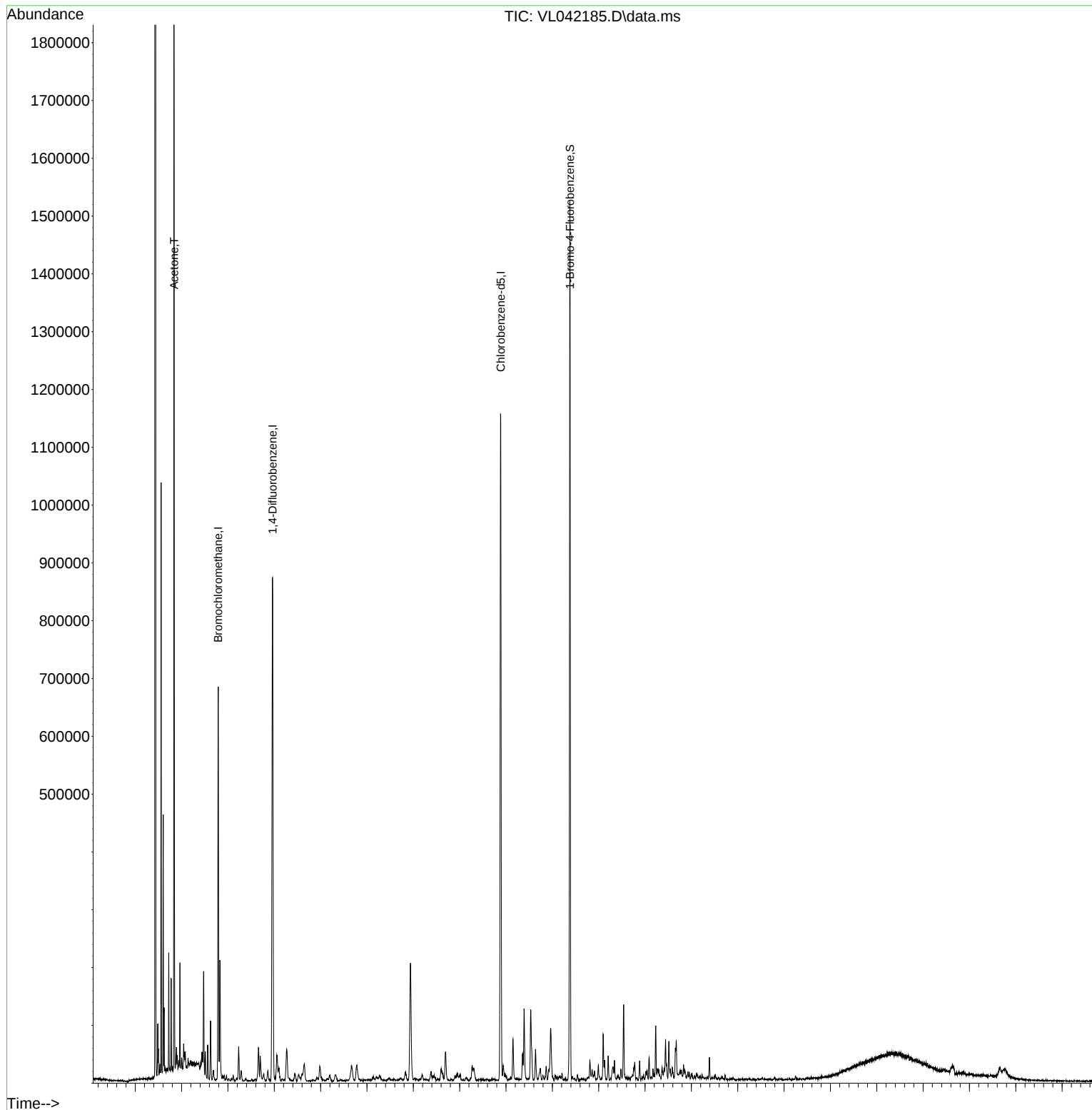
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042185.D
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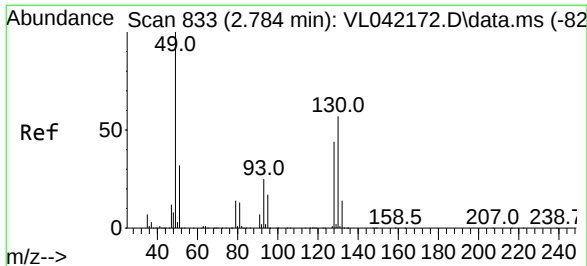
Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025

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Supervised By :Mahesh Dadoda 04/03/2025

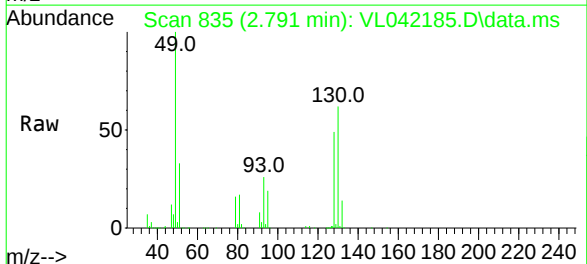
Quant Time: Mar 28 02:14:56 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration





#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.791 min Scan# 833
Delta R.T. 0.007 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

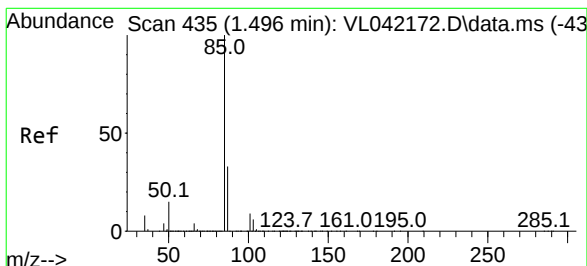
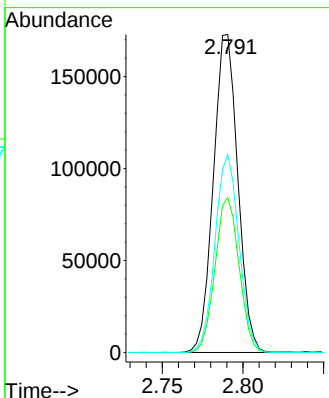
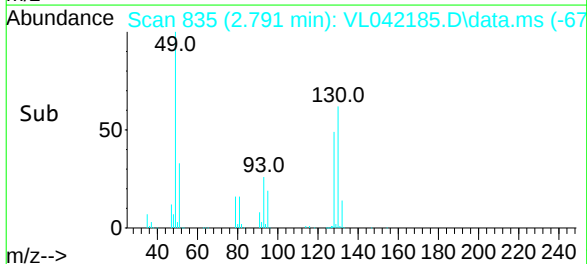
Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025



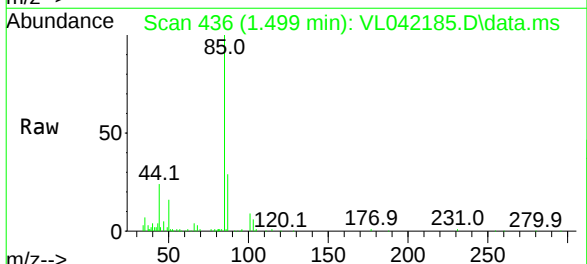
Tgt Ion: 49 Resp: 182164
Ion Ratio Lower Upper
49 100
128 47.9 22.9 68.5
130 61.0 28.8 86.4

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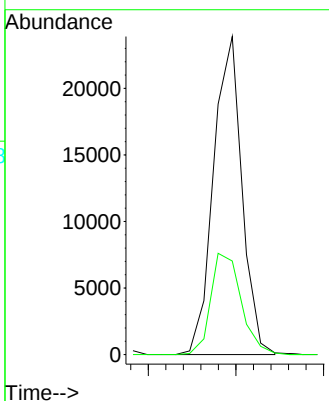
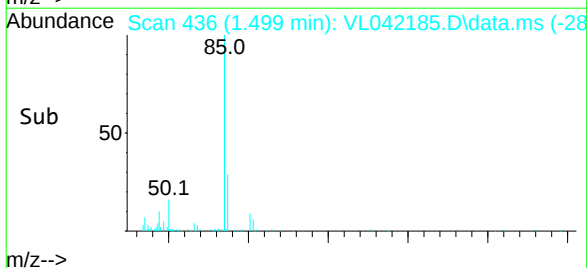
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

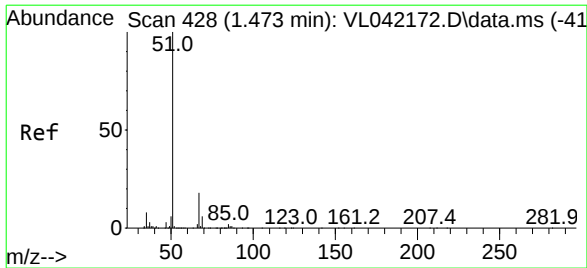


#2
Dichlorodifluoromethane
Concen: 0.401 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22



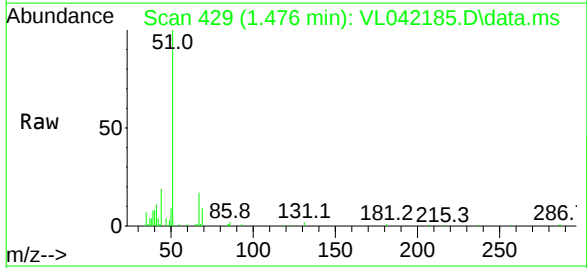
Tgt Ion: 85 Resp: 10784
Ion Ratio Lower Upper
85 100
87 29.4 26.1 39.1





#3
Chlorodifluoromethane
Concen: 0.267 ppbv m
RT: 1.476 min Scan# 428
Delta R.T. 0.003 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

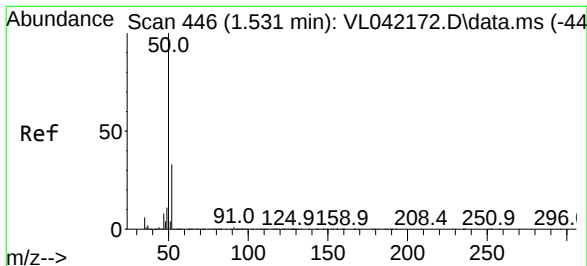
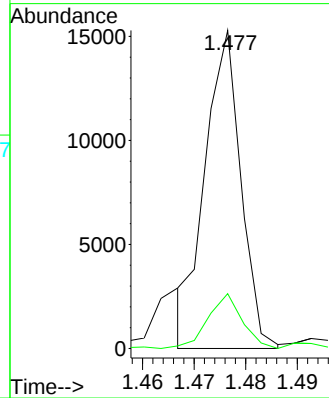
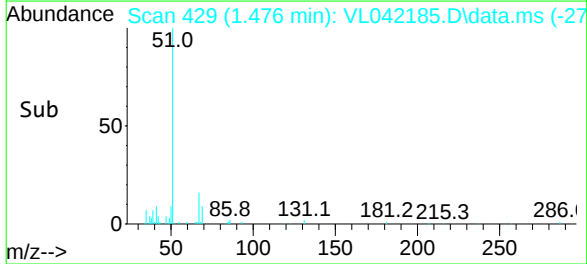
Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3262025



Tgt Ion: 51 Resp: 7336
Ion Ratio Lower Upper
51 100
67 18.9 15.0 22.6

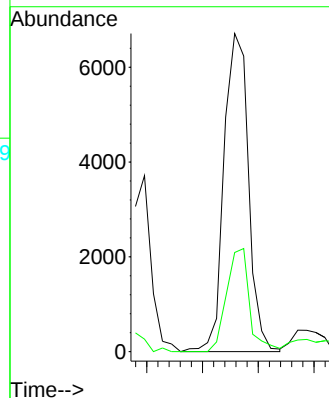
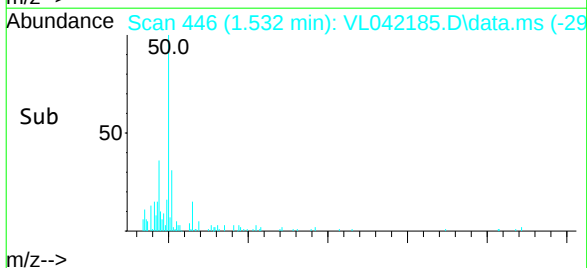
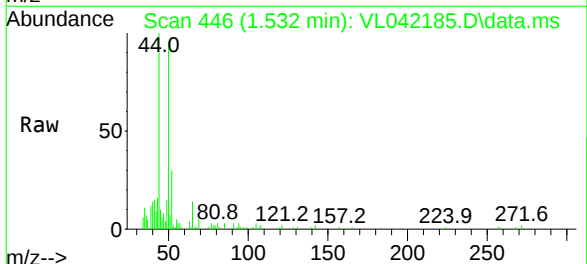
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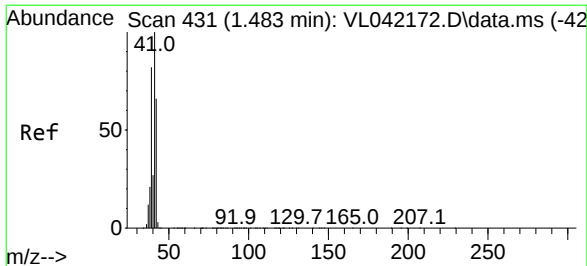
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025



#4
Chloromethane
Concen: 0.373 ppbv
RT: 1.532 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 50 Resp: 4102
Ion Ratio Lower Upper
50 100
52 31.2 26.1 39.1





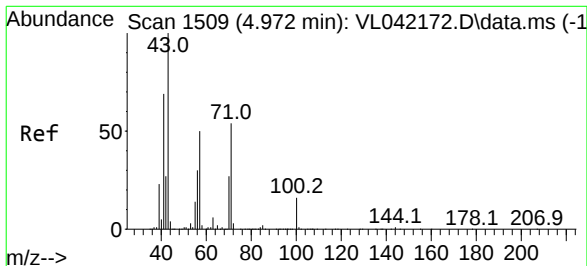
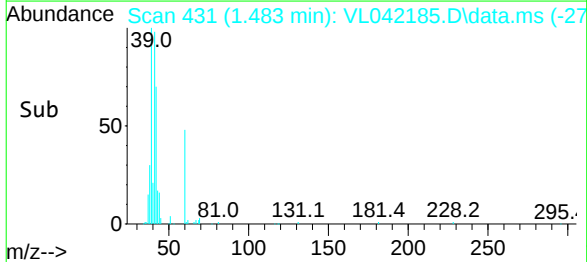
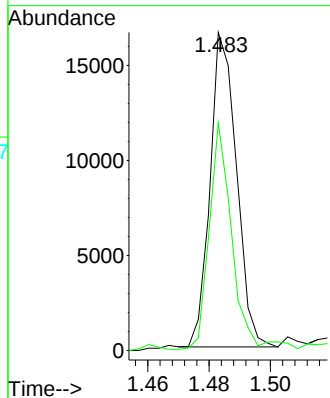
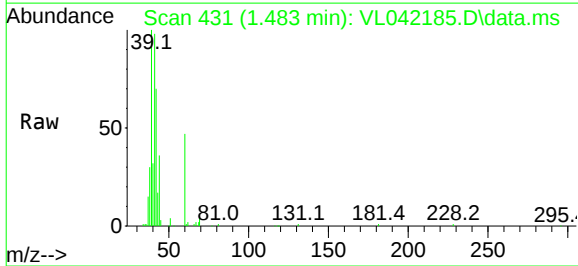
#9
 Propene
 Concen: 0.785 ppbv
 RT: 1.483 min Scan# 431
 Delta R.T. 0.000 min
 Lab File: VL042185.D
 Acq: 27 Mar 2025 18:22

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

Tgt Ion: 41 Resp: 9886
 Ion Ratio Lower Upper
 41 100
 42 61.2 55.4 83.2

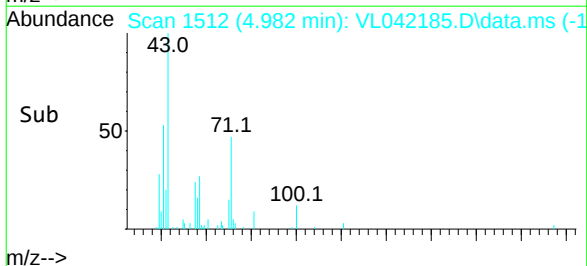
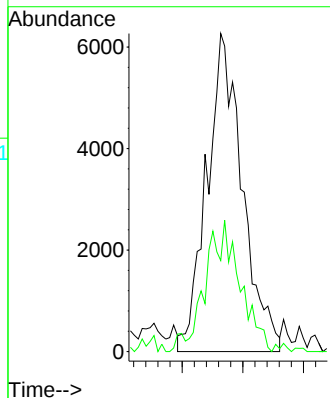
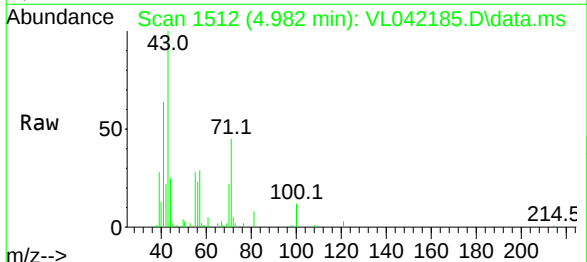
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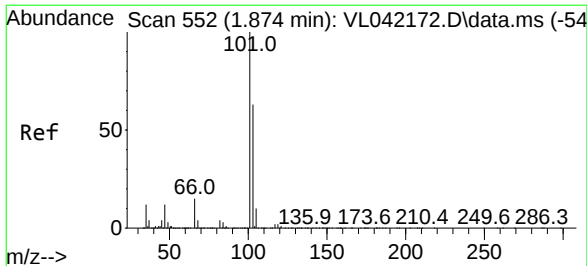
Reviewed By :Semsettin Yesilyurt 03/31/2025
 Supervised By :Mahesh Dadoda 04/03/2025



#10
 Heptane
 Concen: 0.380 ppbv m
 RT: 4.982 min Scan# 1512
 Delta R.T. 0.010 min
 Lab File: VL042185.D
 Acq: 27 Mar 2025 18:22

Tgt Ion: 43 Resp: 12733
 Ion Ratio Lower Upper
 43 100
 57 42.8 39.4 59.2





#11

Trichlorofluoromethane

Concen: 0.215 ppbv

RT: 1.881 min Scan# 552

Delta R.T. 0.007 min

Lab File: VL042185.D

Acq: 27 Mar 2025 18:22

Instrument :

MSVOA_L

ClientSampleId :

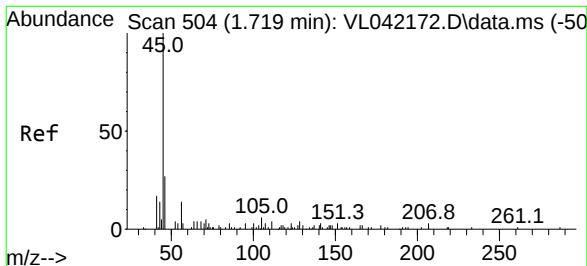
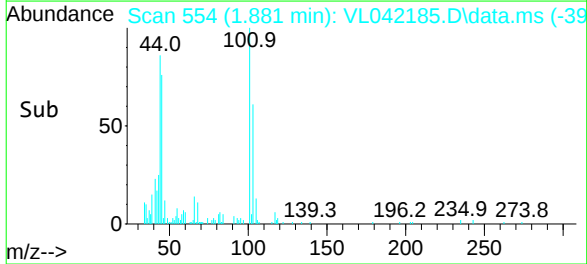
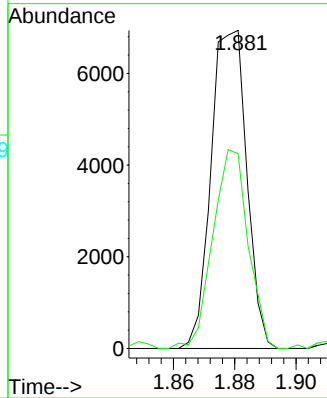
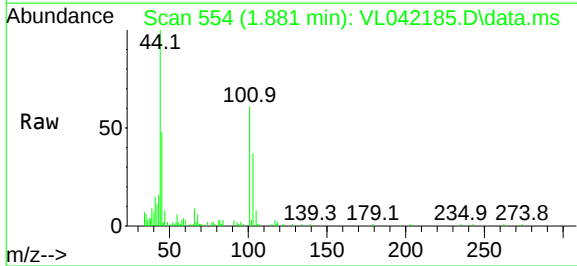
IA-B9-3-3262025

Tgt Ion:	101	Resp:	5615
Ion Ratio	Lower	Upper	
101	100		
103	61.3	50.2	75.2

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#13

Ethanol

Concen: 55.675 ppbv

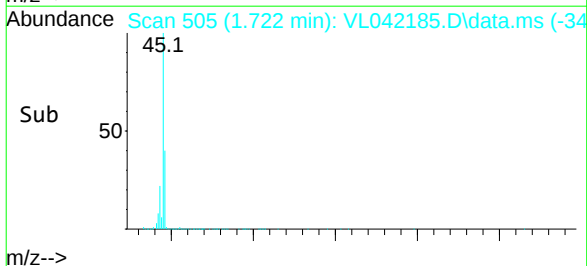
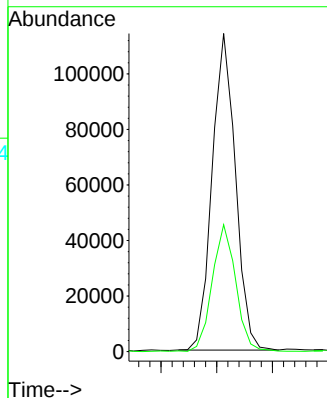
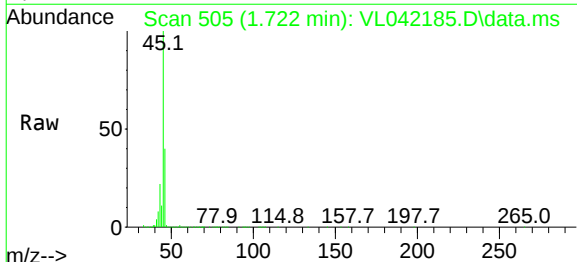
RT: 1.722 min Scan# 505

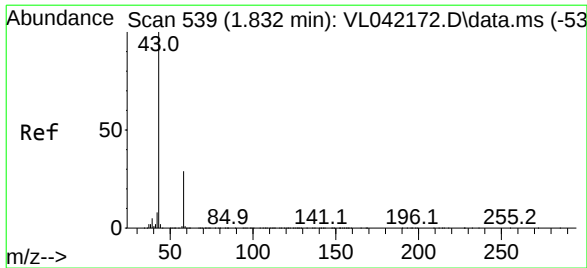
Delta R.T. 0.003 min

Lab File: VL042185.D

Acq: 27 Mar 2025 18:22

Tgt Ion:	45	Resp:	66284
Ion Ratio	Lower	Upper	
45	100		
46	41.8	20.2	80.8





#15

Acetone

Concen: 34.703 ppbv

RT: 1.836 min Scan# 54

Delta R.T. 0.003 min

Lab File: VL042185.D

Acq: 27 Mar 2025 18:22

Instrument :

MSVOA_L

ClientSampleId :

IA-B9-3-3262025

Tgt Ion: 43 Resp: 884107

Ion Ratio Lower Upper

43 100

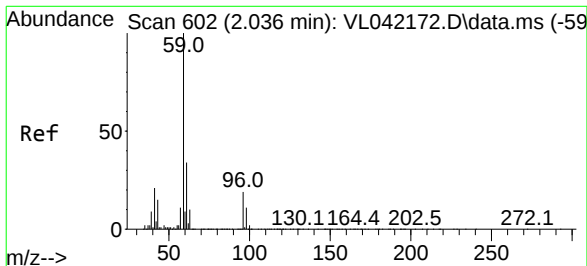
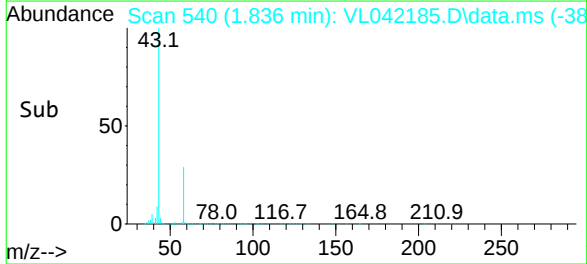
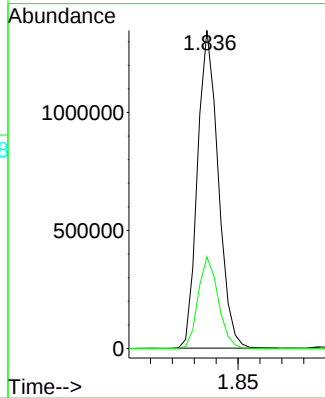
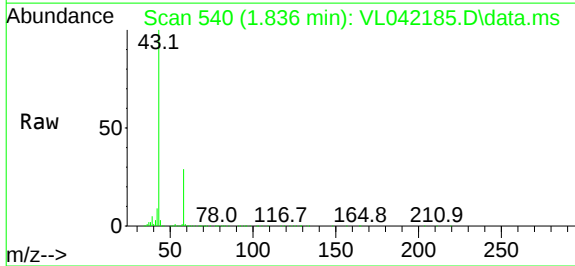
58 28.0 23.2 34.8

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025

Supervised By :Mahesh Dadoda 04/03/2025



#17

tert-Butyl alcohol

Concen: 0.495 ppbv

RT: 2.043 min Scan# 604

Delta R.T. 0.007 min

Lab File: VL042185.D

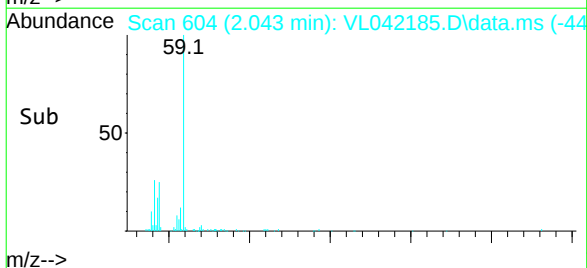
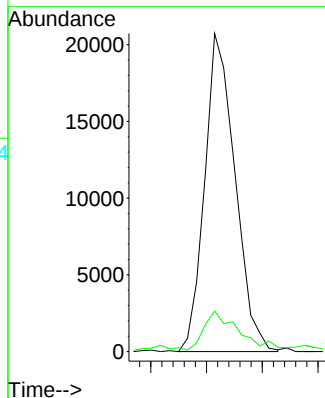
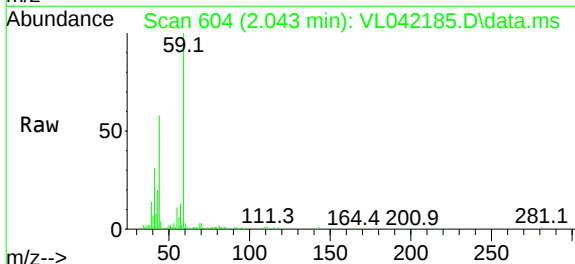
Acq: 27 Mar 2025 18:22

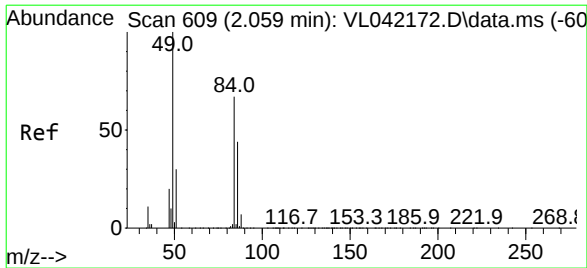
Tgt Ion: 59 Resp: 15704

Ion Ratio Lower Upper

59 100

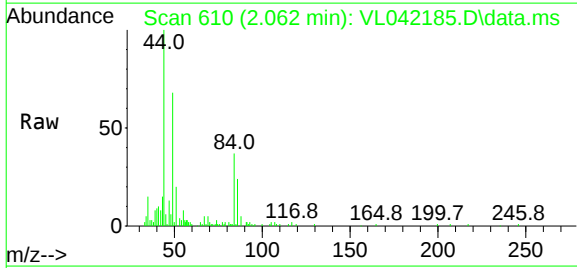
57 15.8 8.9 13.3#





#20
Methylene Chloride
Concen: 0.362 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.003 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

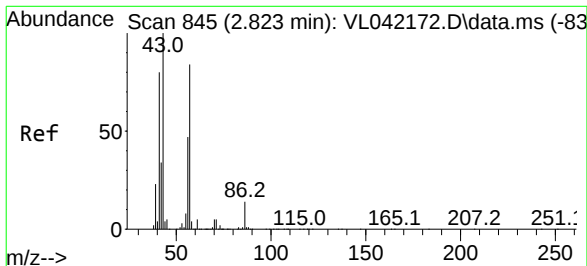
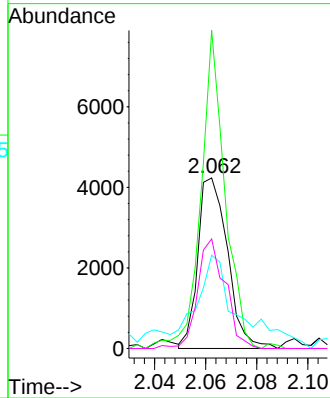
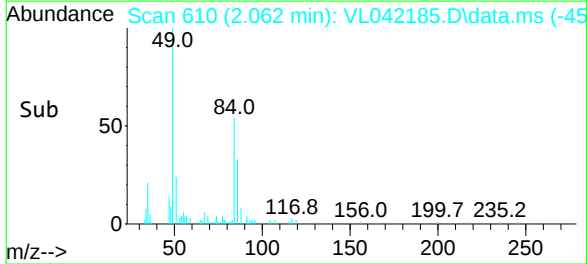
Instrument : MSVOA_L
ClientSampleId : IA-B9-3-3262025



Tgt Ion	Ratio	Lower	Upper
84	100		
49	184.6	120.2	180.4
51	43.8	37.4	56.0
86	64.2	52.4	78.6

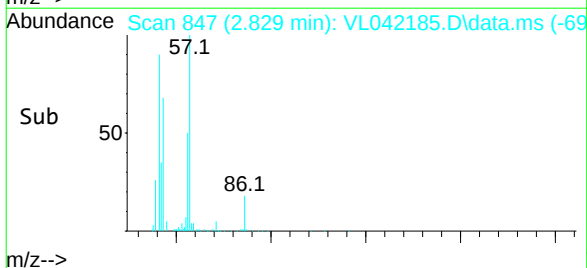
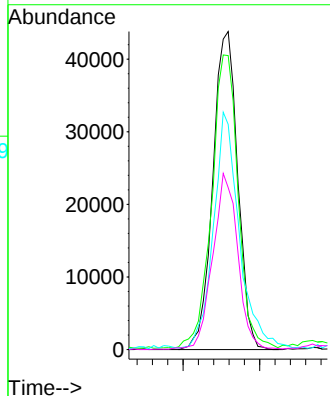
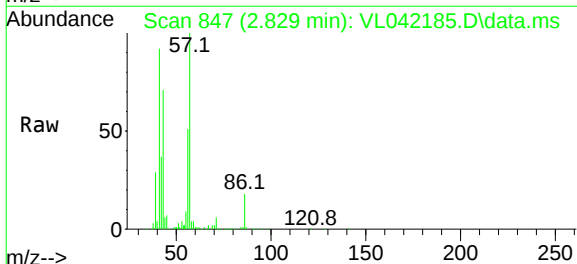
Manual Integrations
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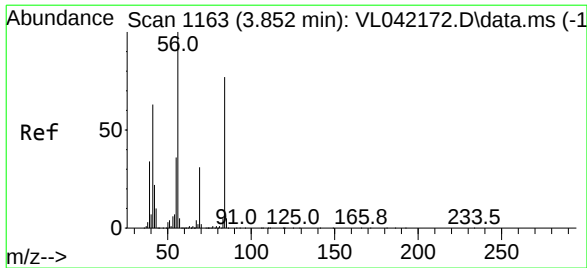
Reviewed By : Semsettin Yesilyurt 03/31/2025
Supervised By : Mahesh Dadoda 04/03/2025



#26
Hexane
Concen: 1.934 ppbv
RT: 2.829 min Scan# 847
Delta R.T. 0.007 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

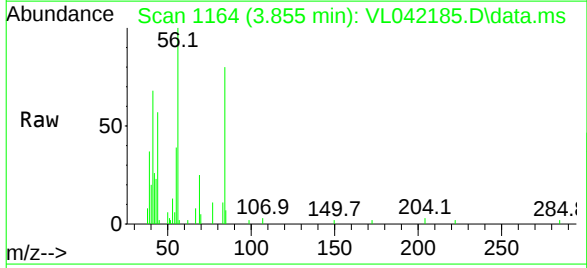
Tgt Ion	Ratio	Lower	Upper
57	100		
41	97.4	76.6	114.8
43	78.3	207.8	311.8
56	55.8	43.6	65.4





#30
Cyclohexane
Concen: 0.192 ppbv m
RT: 3.855 min Scan# 1163
Delta R.T. 0.003 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

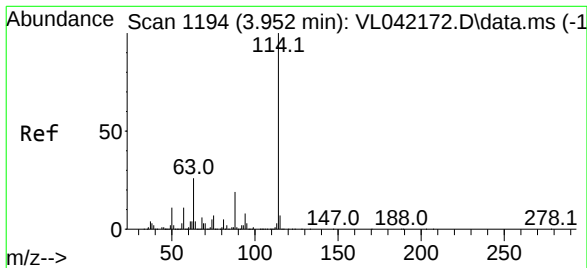
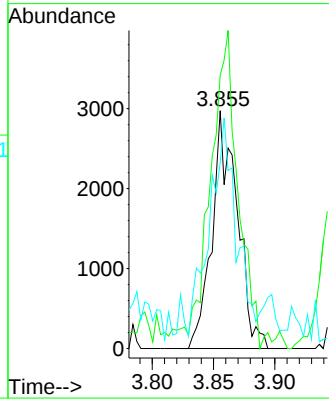
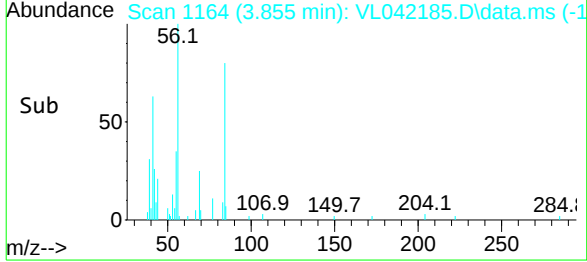
Instrument : MSVOA_L
ClientSampleId : IA-B9-3-3262025



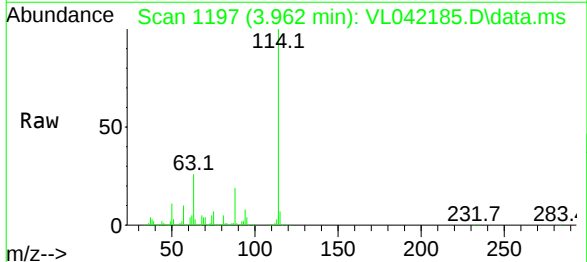
Tgt Ion: 84 Resp: 4259
Ion Ratio Lower Upper
84 100
56 154.4 102.8 154.2#
41 0.0 66.5 99.7#

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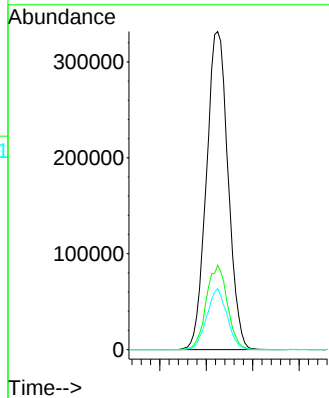
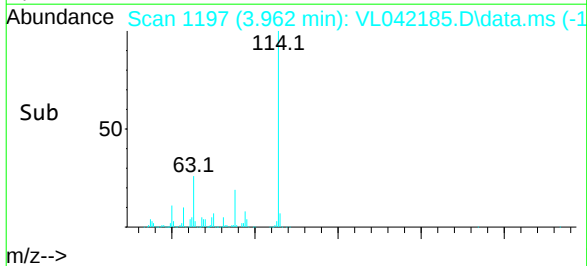
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

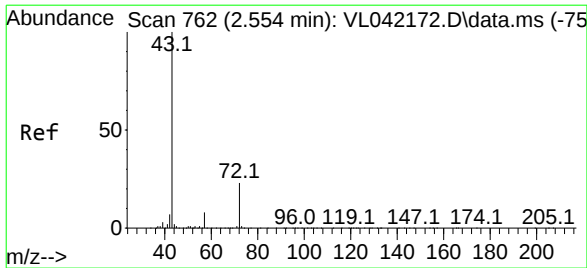


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.962 min Scan# 1197
Delta R.T. 0.010 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22



Tgt Ion:114 Resp: 537249
Ion Ratio Lower Upper
114 100
63 25.8 20.7 31.1
88 17.9 15.0 22.4





#34

2-Butanone

Concen: 0.913 ppbv

RT: 2.561 min Scan# 76

Delta R.T. 0.007 min

Lab File: VL042185.D

Acq: 27 Mar 2025 18:22

Instrument :

MSVOA_L

ClientSampleId :

IA-B9-3-3262025

Tgt Ion: 43 Resp: 35584

Ion Ratio Lower Upper

43 100

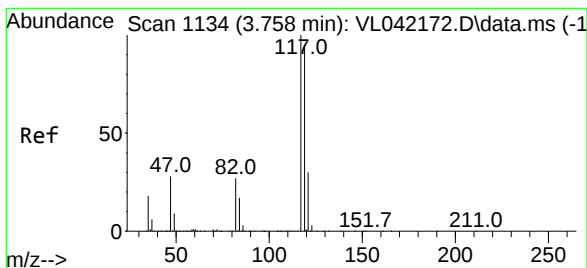
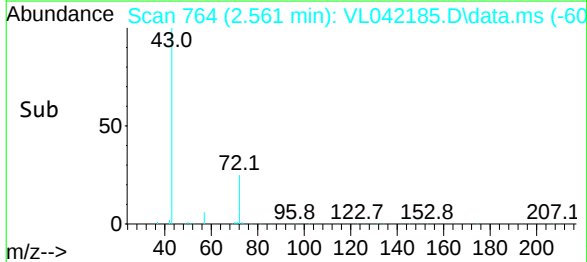
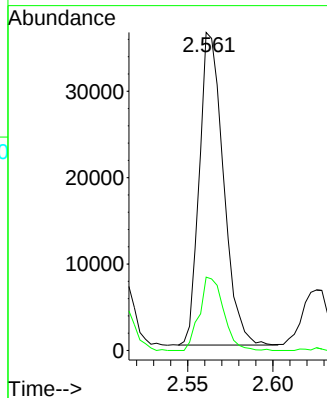
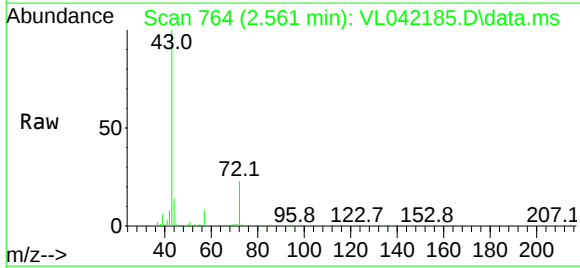
72 23.5 18.2 27.2

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 03/31/2025

Supervised By :Mahesh Dadoda 04/03/2025



#35

Carbon Tetrachloride

Concen: 0.063 ppbv

RT: 3.765 min Scan# 1136

Delta R.T. 0.007 min

Lab File: VL042185.D

Acq: 27 Mar 2025 18:22

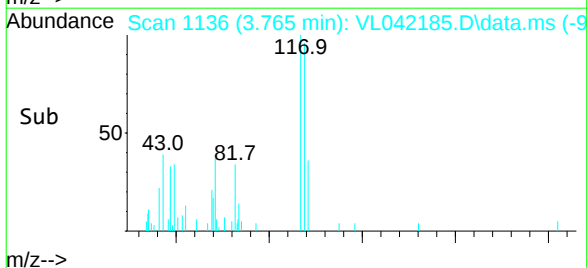
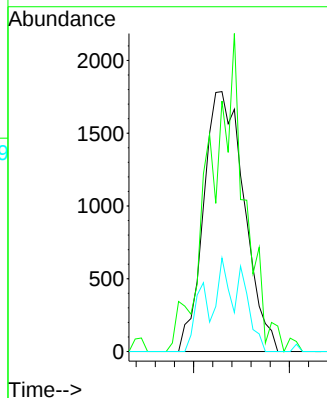
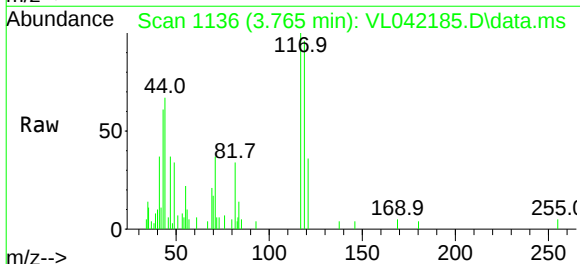
Tgt Ion:117 Resp: 2627

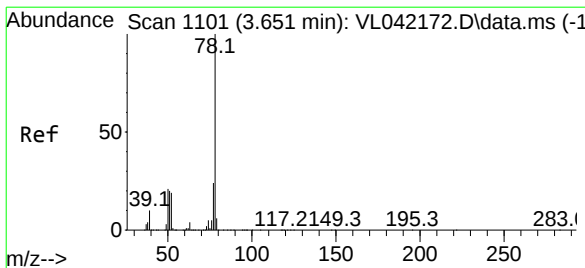
Ion Ratio Lower Upper

117 100

119 86.6 76.2 114.2

121 35.9 24.2 36.4





#36

Benzene

Concen: 0.639 ppbv

RT: 3.661 min Scan# 1101

Delta R.T. 0.010 min

Lab File: VL042185.D

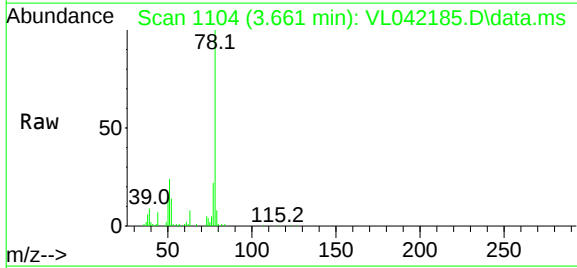
Acq: 27 Mar 2025 18:22

Instrument :

MSVOA_L

ClientSampleId :

IA-B9-3-3262025

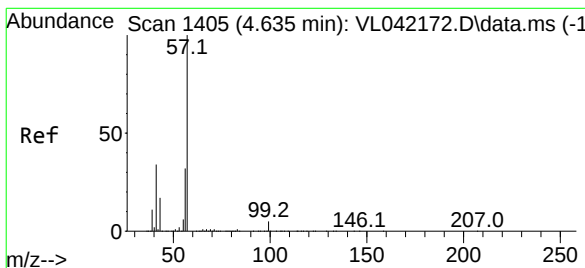
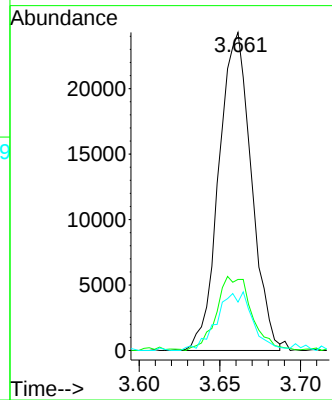
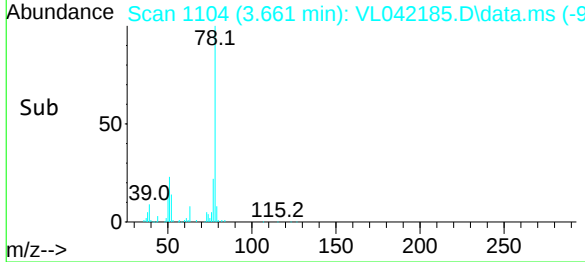


Tgt Ion:	78	Resp:	34017
Ion	Ratio	Lower	Upper
78	100		
77	22.0	19.1	28.7
50	14.3	16.6	24.8

Manual Integrations

APPROVED

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



#44

2,2,4-Trimethylpentane

Concen: 0.266 ppbv m

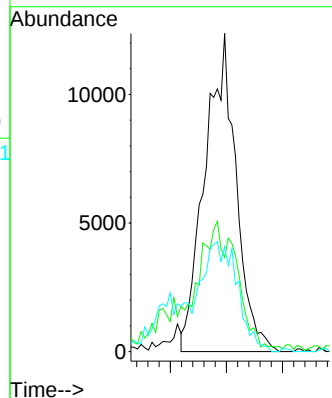
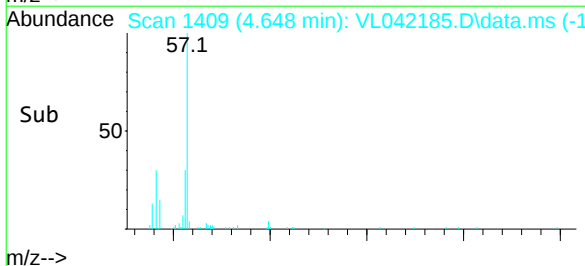
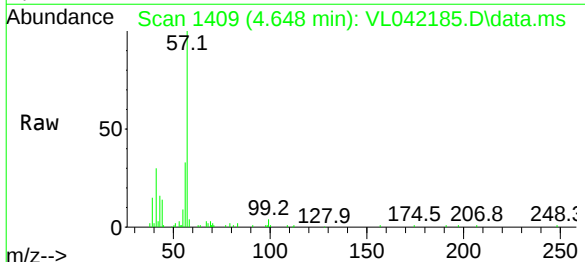
RT: 4.648 min Scan# 1409

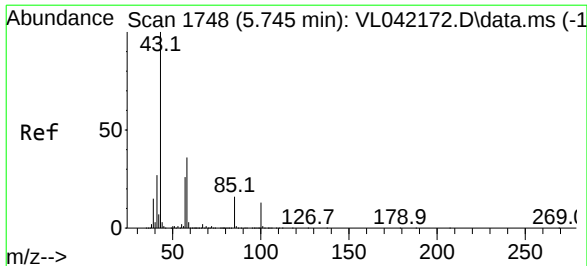
Delta R.T. 0.013 min

Lab File: VL042185.D

Acq: 27 Mar 2025 18:22

Tgt Ion:	57	Resp:	23919
Ion	Ratio	Lower	Upper
57	100		
41	62.1	26.8	40.2
56	58.0	25.6	38.4





#50

4-Methyl-2-Pentanone

Concen: 0.359 ppbv m

RT: 5.781 min Scan# 1748

Delta R.T. 0.036 min

Lab File: VL042185.D

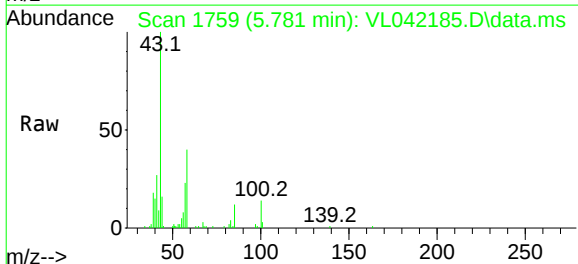
Acq: 27 Mar 2025 18:22

Instrument :

MSVOA_L

ClientSampleId :

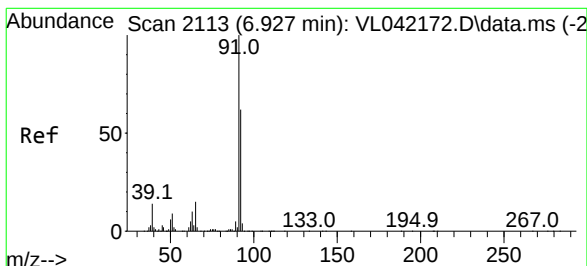
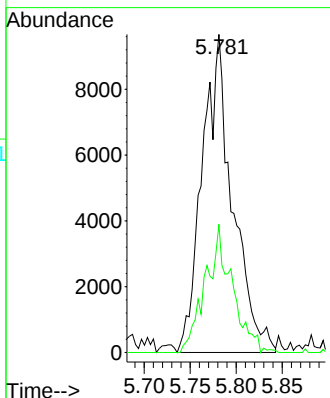
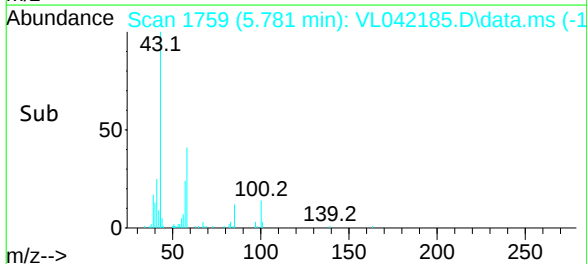
IA-B9-3-3262025



Tgt Ion: 43 Resp: 22175
 Ion Ratio Lower Upper
 43 100
 58 0.0 29.0 43.6

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



#53

Toluene

Concen: 2.319 ppbv

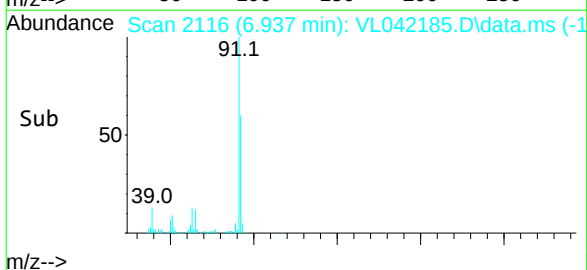
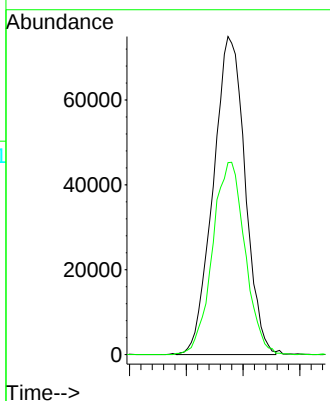
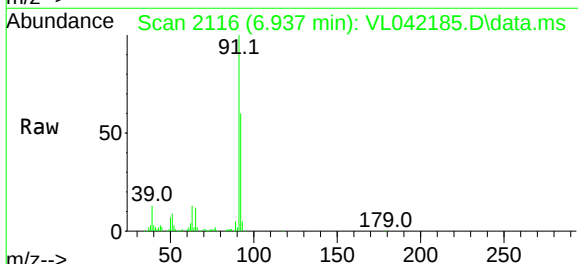
RT: 6.937 min Scan# 2116

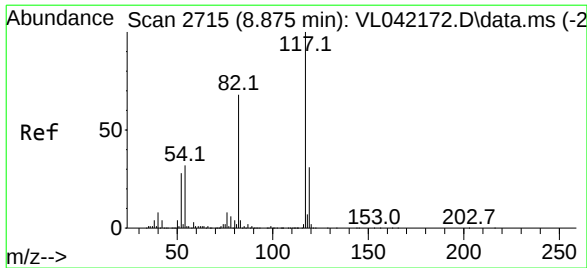
Delta R.T. 0.010 min

Lab File: VL042185.D

Acq: 27 Mar 2025 18:22

Tgt Ion: 91 Resp: 146384
 Ion Ratio Lower Upper
 91 100
 92 61.6 48.4 72.6





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.885 min Scan# 2715

Delta R.T. 0.010 min

Lab File: VL042185.D

Acq: 27 Mar 2025 18:22

Instrument :

MSVOA_L

ClientSampleId :

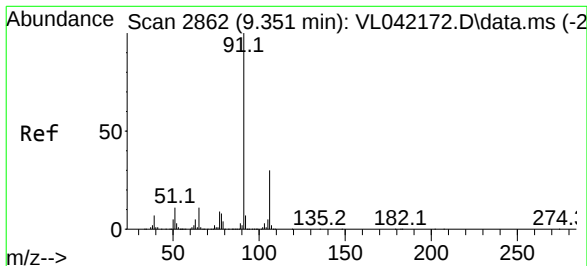
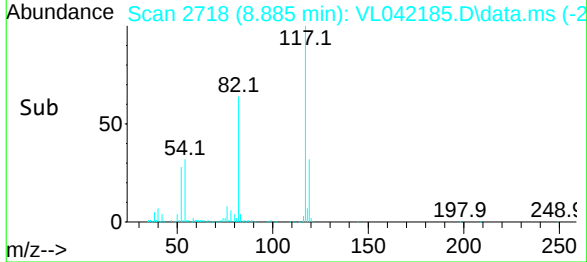
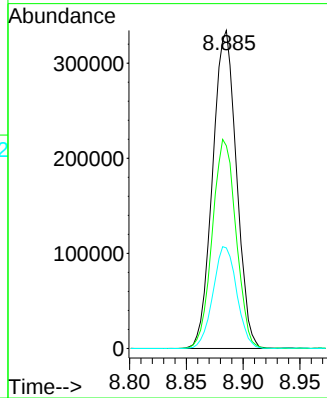
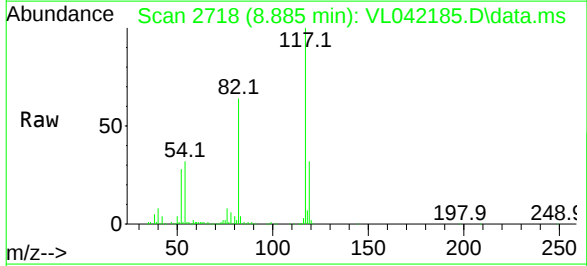
IA-B9-3-3262025

Tgt Ion:	117	Resp:	488802
Ion	Ratio	Lower	Upper
117	100		
82	65.5	55.8	83.6
119	32.1	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: 0.313 ppbv

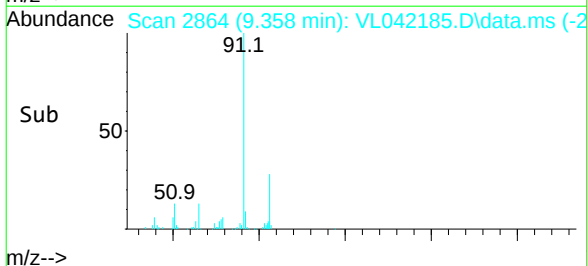
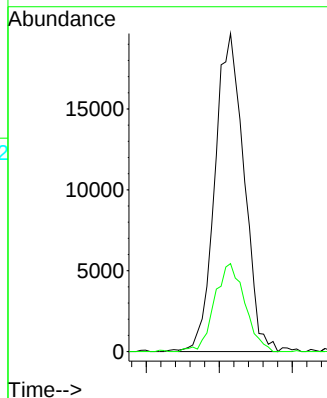
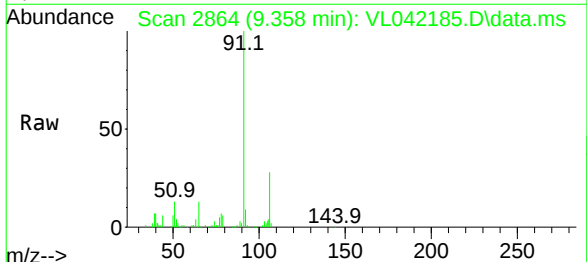
RT: 9.358 min Scan# 2864

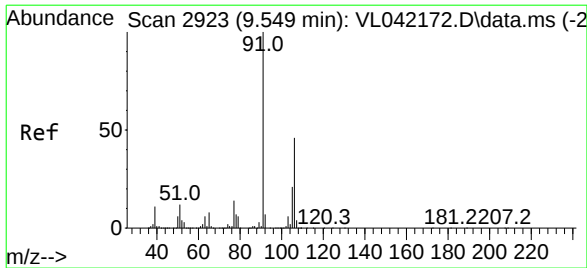
Delta R.T. 0.007 min

Lab File: VL042185.D

Acq: 27 Mar 2025 18:22

Tgt Ion:	91	Resp:	27191
Ion	Ratio	Lower	Upper
91	100		
106	27.7	24.2	36.2





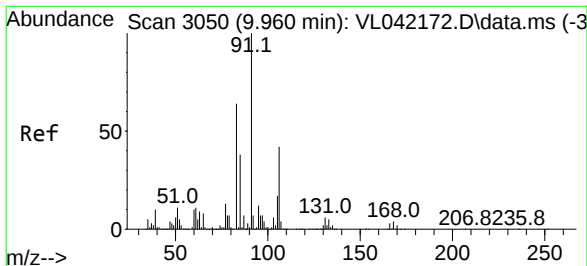
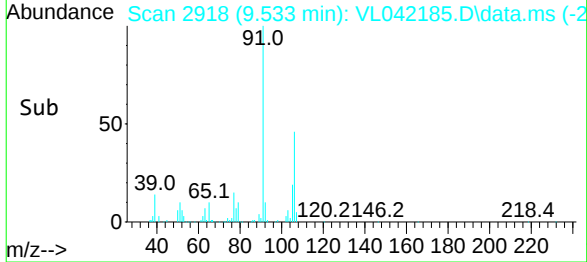
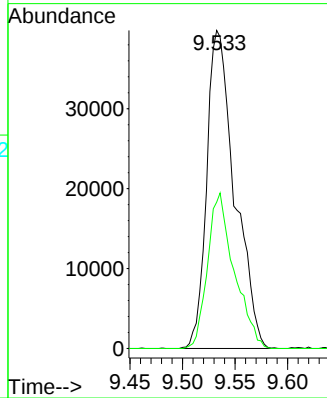
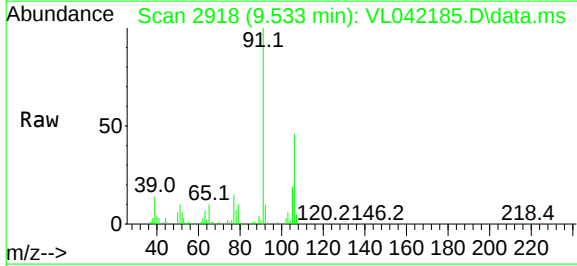
#59
m/p-Xylene
Concen: 1.063 ppbv m
RT: 9.533 min Scan# 2918
Delta R.T. -0.016 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

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

Tgt Ion: 91 Resp: 73715
Ion Ratio Lower Upper
91 100
106 46.5 36.4 54.6

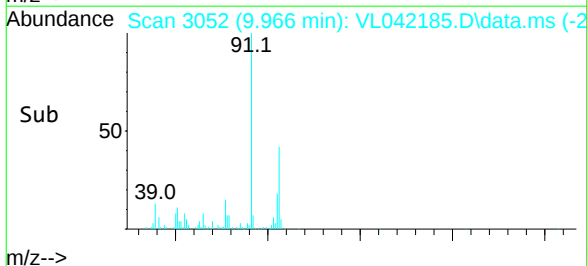
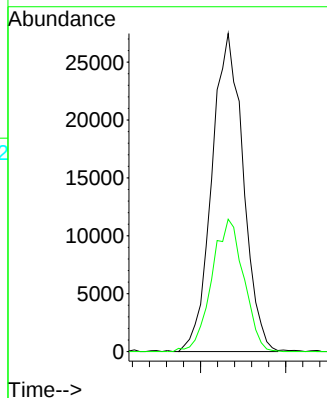
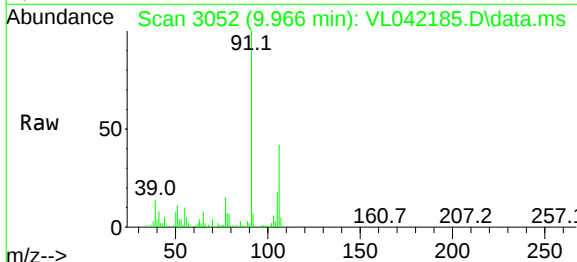
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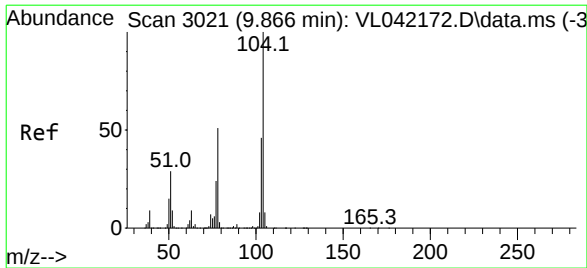
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025



#60
o-Xylene
Concen: 0.505 ppbv
RT: 9.966 min Scan# 3052
Delta R.T. 0.007 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion: 91 Resp: 35115
Ion Ratio Lower Upper
91 100
106 42.3 20.8 62.5





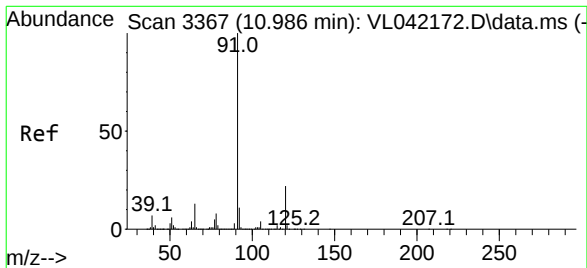
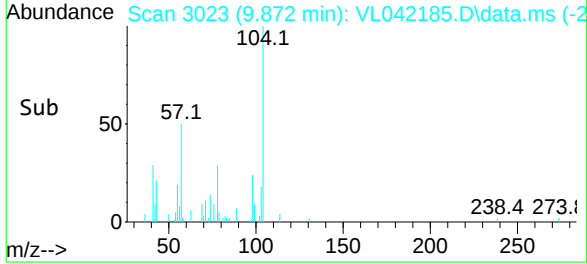
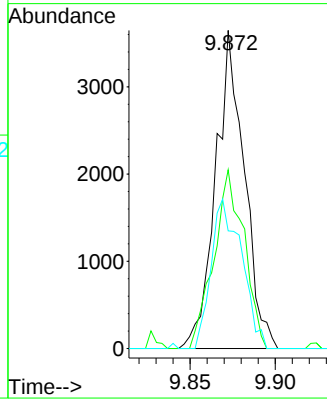
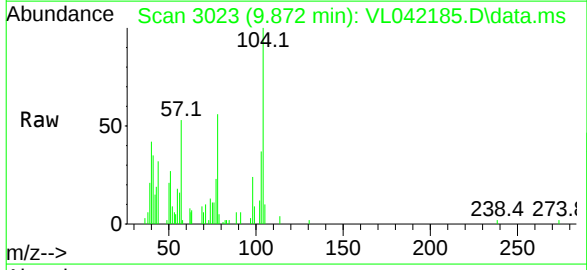
#61
Styrene
Concen: 0.124 ppbv
RT: 9.872 min Scan# 3021
Delta R.T. 0.007 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

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

Tgt Ion:104 Resp: 4273
Ion Ratio Lower Upper
104 100
78 60.5 41.8 62.6
103 49.9 37.0 55.4

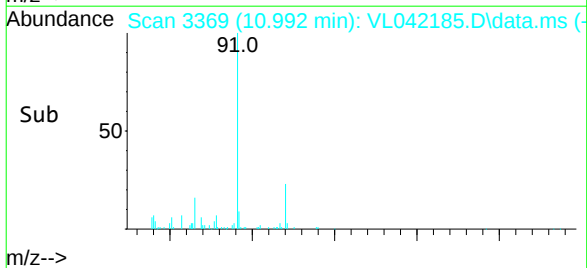
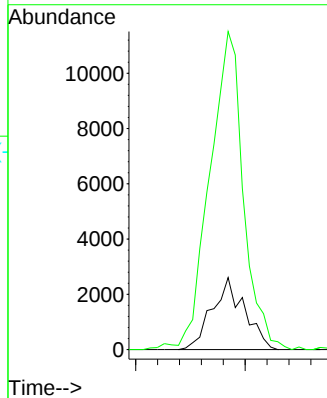
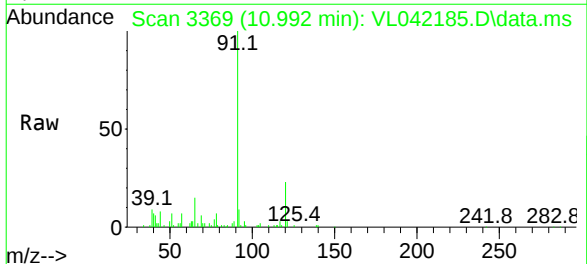
Manual Integrations
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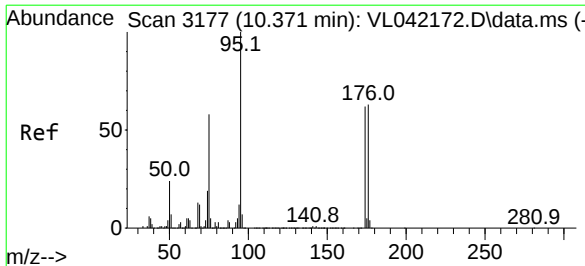
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025



#64
n-propylbenzene
Concen: 0.100 ppbv
RT: 10.992 min Scan# 3369
Delta R.T. 0.007 min
Lab File: VL042185.D
Acq: 27 Mar 2025 18:22

Tgt Ion:120 Resp: 2677
Ion Ratio Lower Upper
120 100
91 461.2 376.9 565.3





#68

1-Bromo-4-Fluorobenzene

Concen: 9.946 ppbv

RT: 10.377 min Scan# 3177

Delta R.T. 0.007 min

Lab File: VL042185.D

Acq: 27 Mar 2025 18:22

Instrument :

MSVOA_L

ClientSampleId :

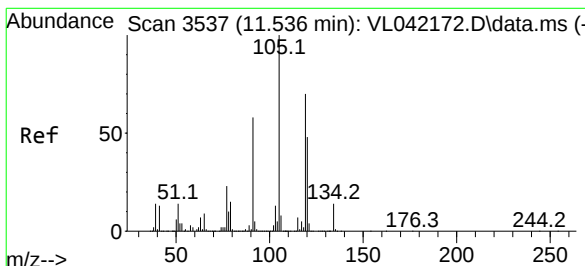
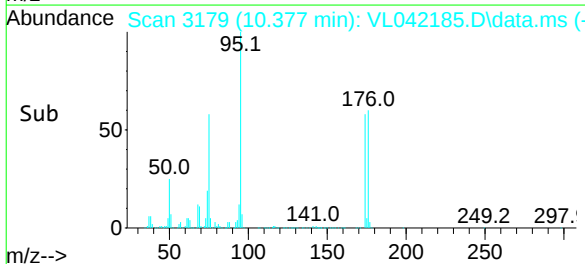
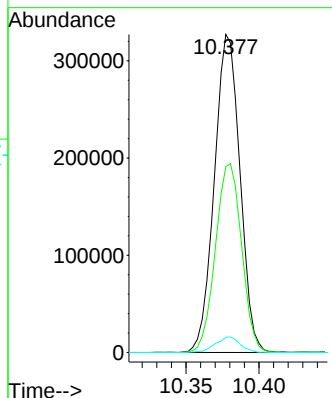
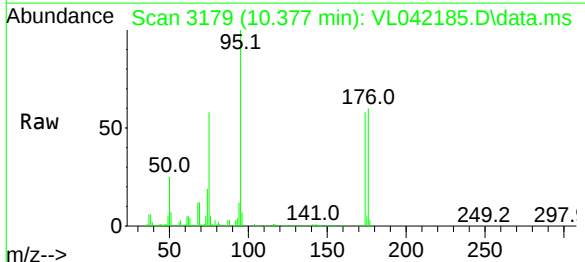
IA-B9-3-3262025

Tgt Ion:	95	Resp:	399253
Ion	Ratio	Lower	Upper
95	100		
174	60.5	50.6	76.0
175	4.8	3.8	5.6

Manual Integrations

APPROVED

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



#74

1,2,4-Trimethylbenzene

Concen: 0.510 ppbv

RT: 11.539 min Scan# 3538

Delta R.T. 0.003 min

Lab File: VL042185.D

Acq: 27 Mar 2025 18:22

Tgt Ion:	105	Resp:	44446
Ion	Ratio	Lower	Upper
105	100		
120	38.5	38.6	58.0#
91	11.8	46.2	69.2#
77	14.5	18.6	27.8#

