

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
 Data File : VL042197.D
 Acq On : 28 Mar 2025 01:20
 Operator : SY/MD
 Sample : Q1669-05
 Misc : 400mL/MSVOA_L
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SSSG-B16-3-3262025

Manual Integrations
 APPROVED

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

Quant Time: Mar 28 23:03:06 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		2.790	49	172645	10.000	ppbv	0.00
33) 1,4-Difluorobenzene		3.965	114	493948	10.000	ppbv	0.01
55) Chlorobenzene-d5		8.885	117	445312	10.000	ppbv	0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene		10.380	95	368899	10.088	ppbv	0.00
Spiked Amount		10.000	Range	65 - 135	Recovery	= 100.900%	
Target Compounds							Qvalue
2) Dichlorodifluoromethane		1.499	85	10972	0.430	ppbv	92
3) Chlorodifluoromethane		1.476	51	7213m	0.277	ppbv	
4) Chloromethane		1.531	50	3716	0.357	ppbv	99
9) Propene		1.486	41	7546m	0.632	ppbv	
10) Heptane		4.985	43	12702	0.400	ppbv	91
11) Trichlorofluoromethane		1.881	101	5673	0.229	ppbv	99
13) Ethanol		1.722	45	56814	50.352	ppbv	81
15) Acetone		1.842	43	149738m	6.202	ppbv	
20) Methylene Chloride		2.065	84	6666	0.741	ppbv	95
26) Hexane		2.829	57	45421	1.876	ppbv #	34
29) Chloroform		2.852	83	21281	0.601	ppbv	99
30) Cyclohexane		3.858	84	8428m	0.401	ppbv	
34) 2-Butanone		2.564	43	104671	2.922	ppbv	96
35) Carbon Tetrachloride		3.761	117	2542m	0.066	ppbv	
36) Benzene		3.658	78	26954	0.550	ppbv	97
41) Tetrahydrofuran		3.065	42	8525m	0.413	ppbv	
44) 2,2,4-Trimethylpentane		4.648	57	32093	0.388	ppbv #	76
52) Tetrachloroethene		8.225	164	690m	0.036	ppbv	
53) Toluene		6.940	91	124001	2.136	ppbv	98
58) Ethyl Benzene		9.361	91	20976	0.265	ppbv	95
59) m/p-Xylene		9.532	91	64820	1.026	ppbv	99
60) o-Xylene		9.969	91	22977	0.363	ppbv	94
61) Styrene		9.875	104	11230	0.359	ppbv	96
74) 1,2,4-Trimethylbenzene		11.539	105	20838	0.263	ppbv #	72

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

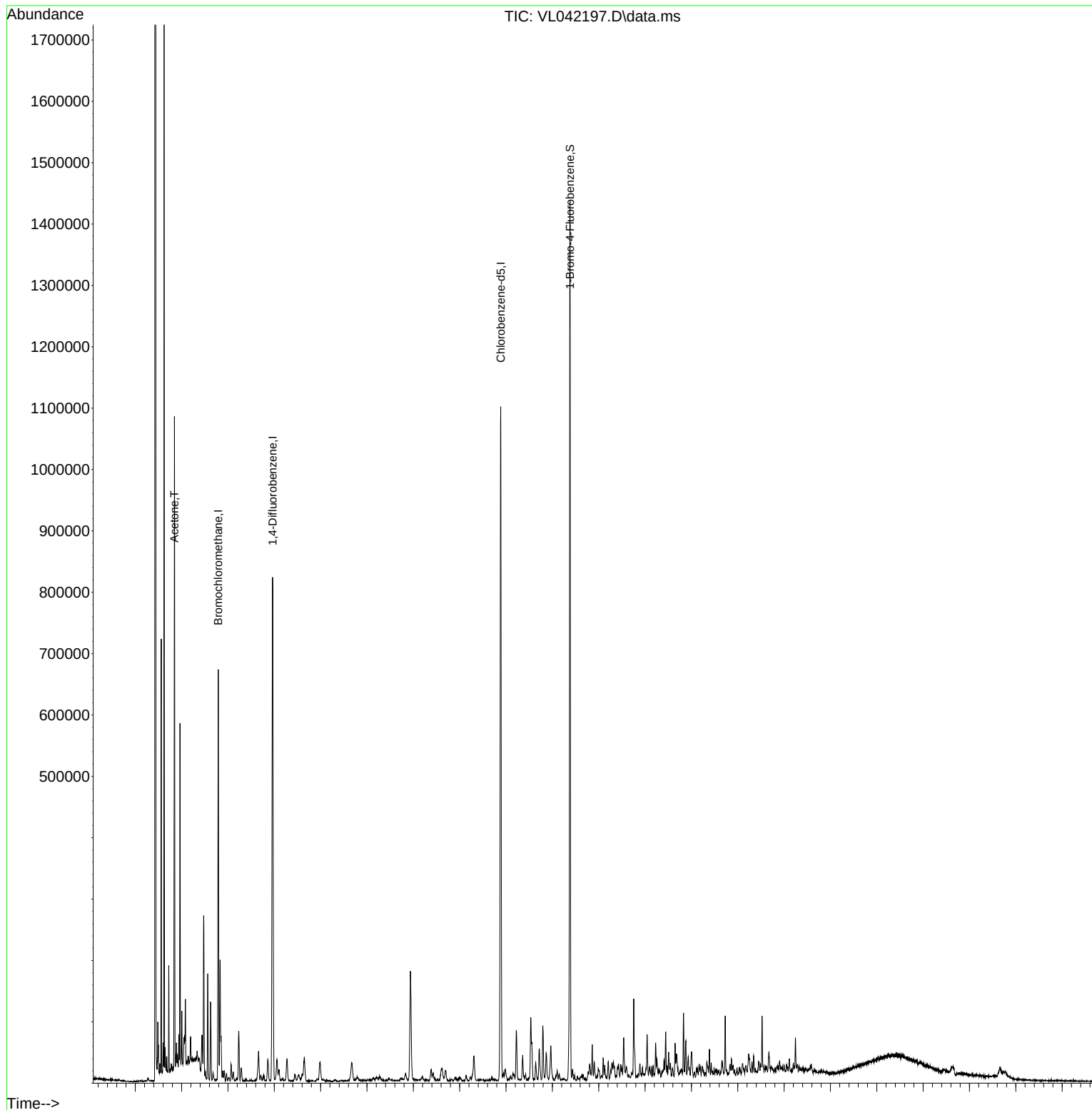
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042197.D
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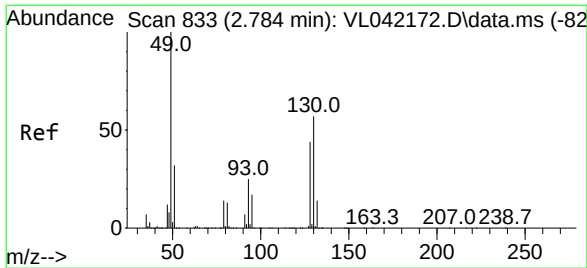
Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

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Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug
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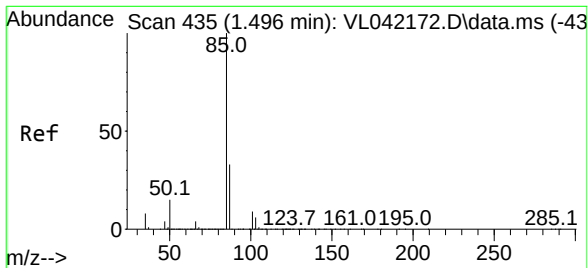
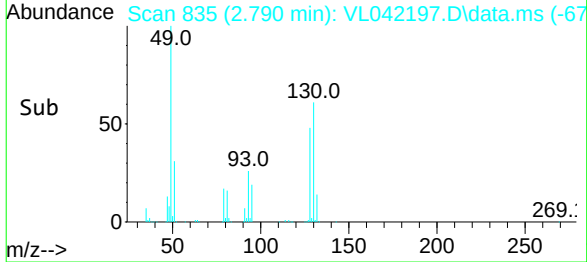
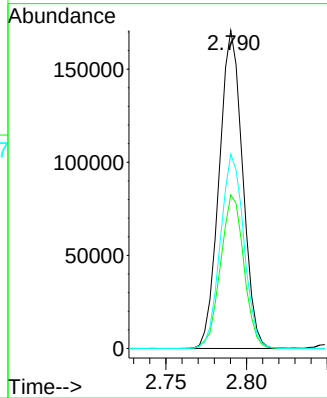
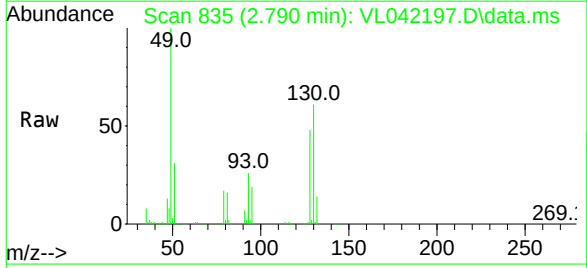
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.790 min Scan# 833
Delta R.T. 0.006 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Tgt Ion: 49 Resp: 172645
Ion Ratio Lower Upper
49 100
128 48.0 22.9 68.5
130 61.2 28.8 86.4

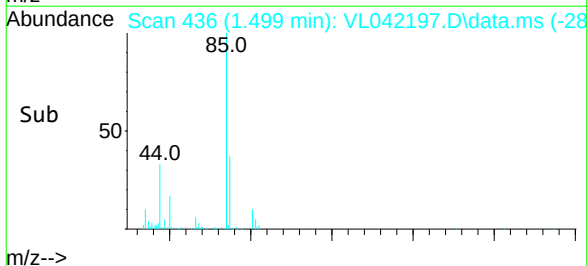
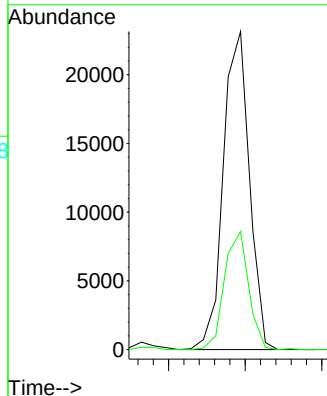
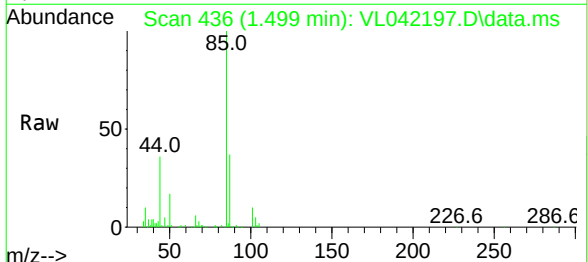
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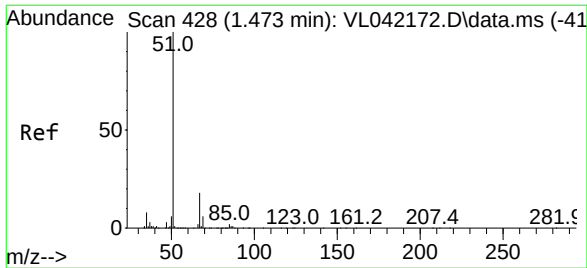
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025



#2
Dichlorodifluoromethane
Concen: 0.430 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

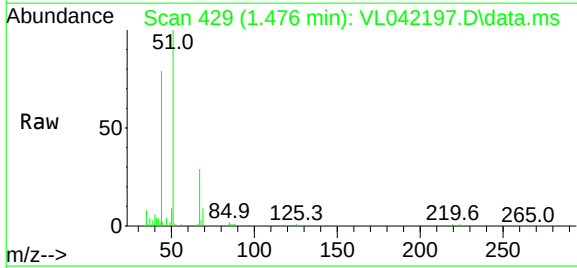
Tgt Ion: 85 Resp: 10972
Ion Ratio Lower Upper
85 100
87 37.1 26.1 39.1





#3
Chlorodifluoromethane
Concen: 0.277 ppbv m
RT: 1.476 min Scan# 428
Delta R.T. 0.003 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

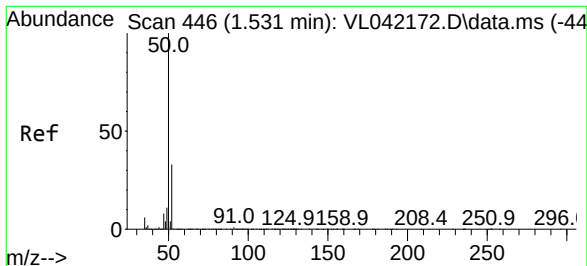
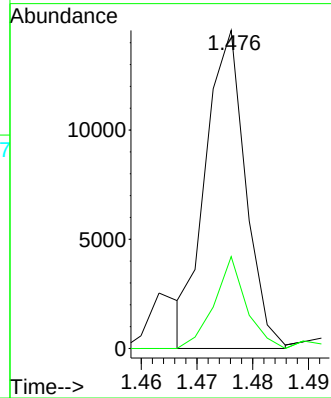
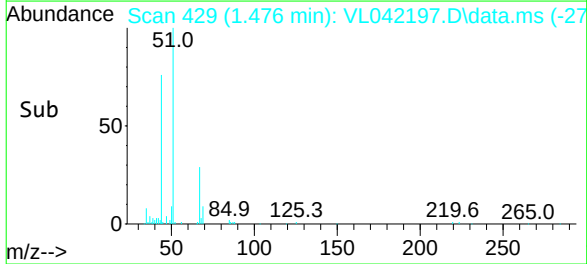
Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025



Tgt Ion: 51 Resp: 7213
Ion Ratio Lower Upper
51 100
67 28.1 15.0 22.6#

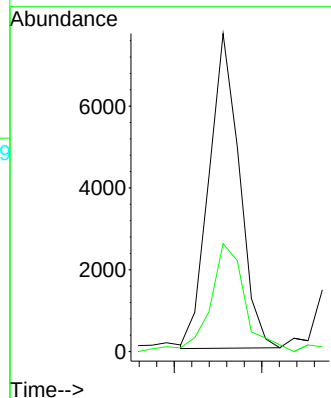
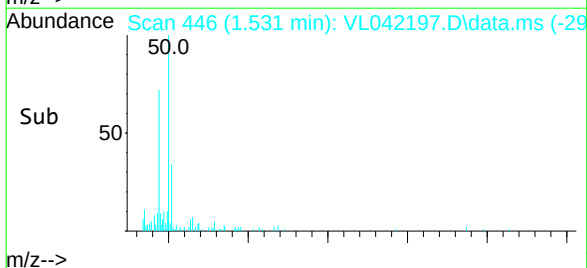
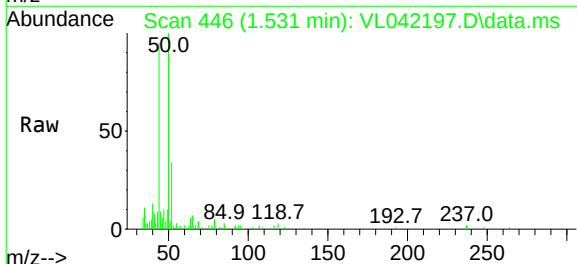
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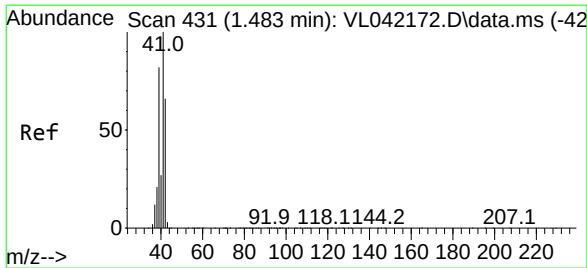
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025



#4
Chloromethane
Concen: 0.357 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

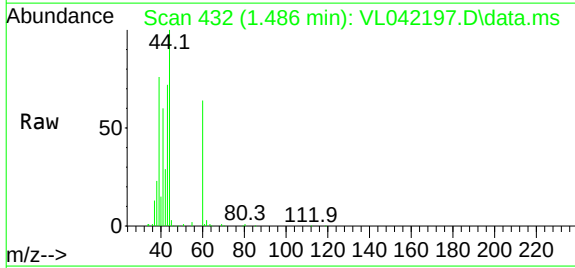
Tgt Ion: 50 Resp: 3716
Ion Ratio Lower Upper
50 100
52 33.2 26.1 39.1





#9
Propene
Concen: 0.632 ppbv m
RT: 1.486 min Scan# 431
Delta R.T. 0.003 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

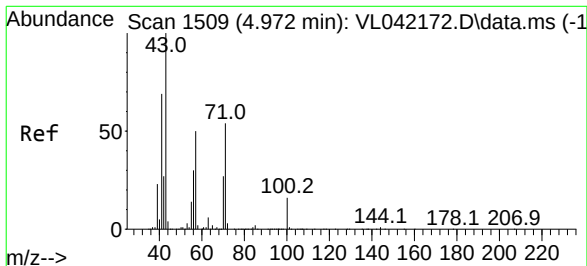
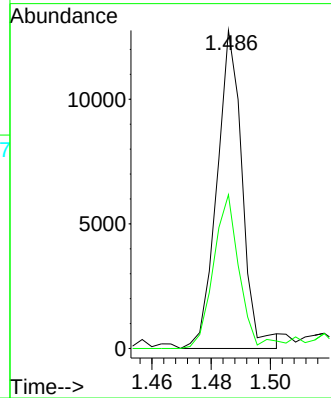
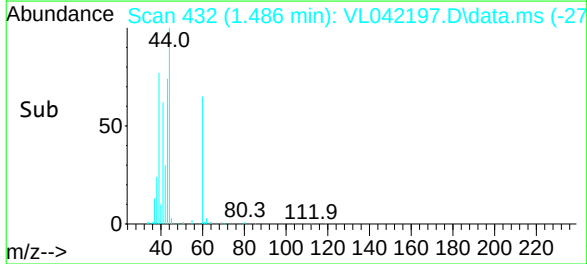
Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025



Tgt Ion: 41 Resp: 7546
Ion Ratio Lower Upper
41 100
42 665.9 55.4 83.2#

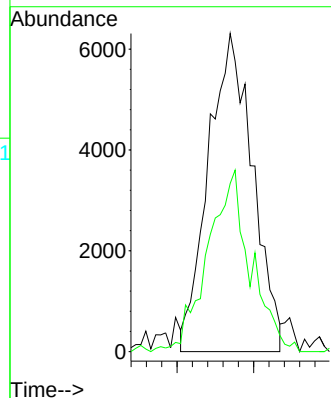
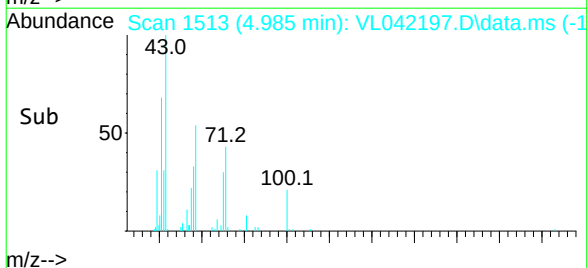
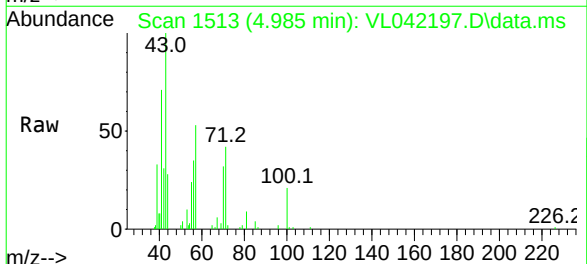
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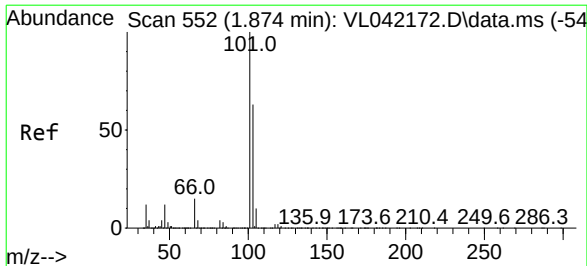
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025



#10
Heptane
Concen: 0.400 ppbv
RT: 4.985 min Scan# 1513
Delta R.T. 0.013 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 43 Resp: 12702
Ion Ratio Lower Upper
43 100
57 55.1 39.4 59.2





#11

Trichlorofluoromethane

Concen: 0.229 ppbv

RT: 1.881 min Scan# 55

Delta R.T. 0.006 min

Lab File: VL042197.D

Acq: 28 Mar 2025 01:20

Instrument :

MSVOA_L

ClientSampleId :

SSSG-B16-3-3262025

Tgt Ion:101 Resp: 5673

Ion Ratio Lower Upper

101 100

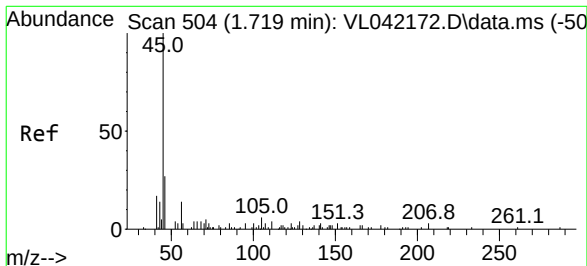
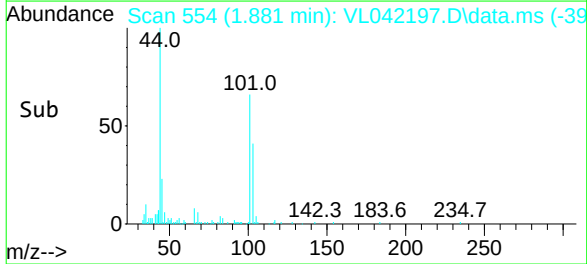
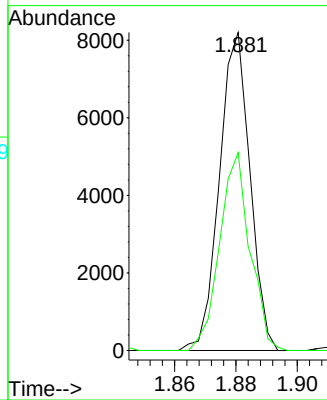
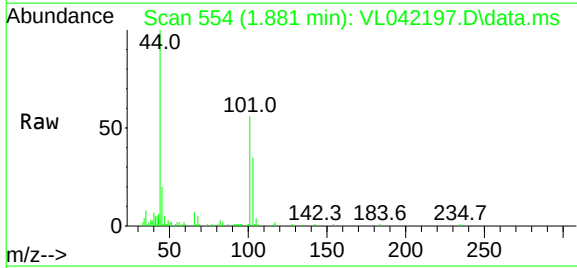
103 62.2 50.2 75.2

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 03/31/2025

Supervised By :Mahesh Dadoda 04/03/2025



#13

Ethanol

Concen: 50.352 ppbv

RT: 1.722 min Scan# 505

Delta R.T. 0.003 min

Lab File: VL042197.D

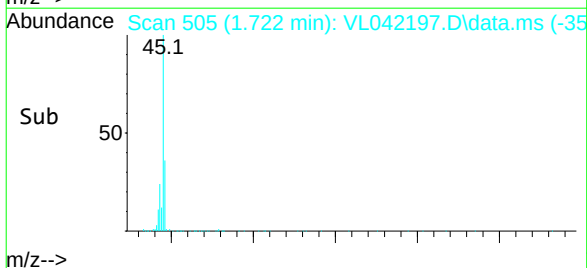
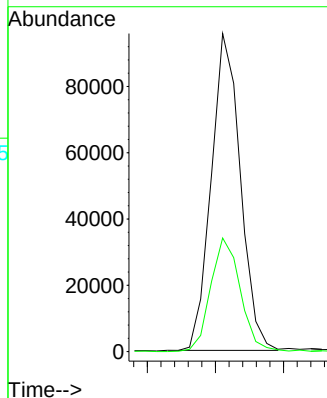
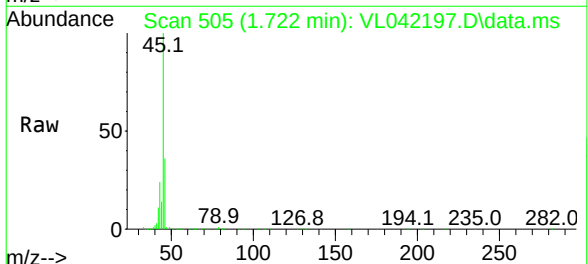
Acq: 28 Mar 2025 01:20

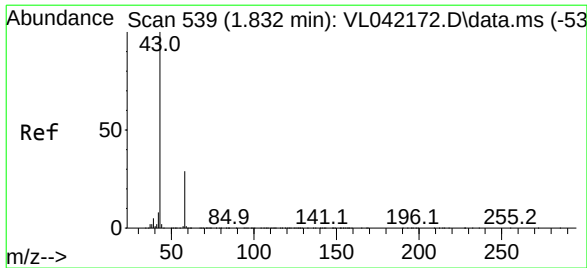
Tgt Ion: 45 Resp: 56814

Ion Ratio Lower Upper

45 100

46 37.5 20.2 80.8





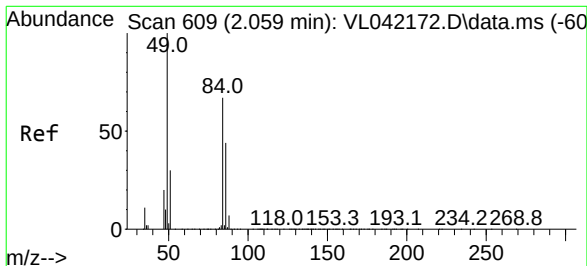
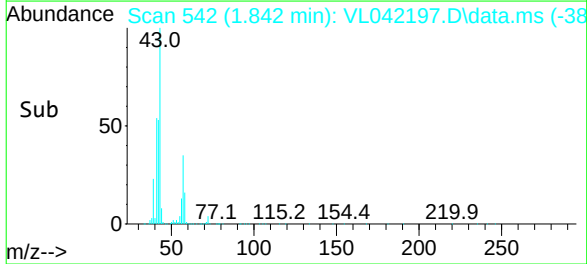
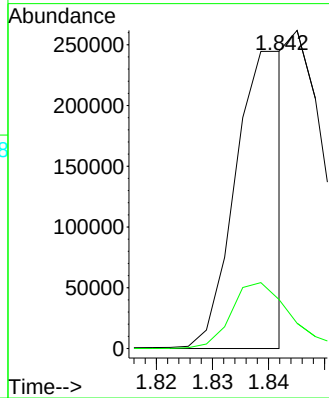
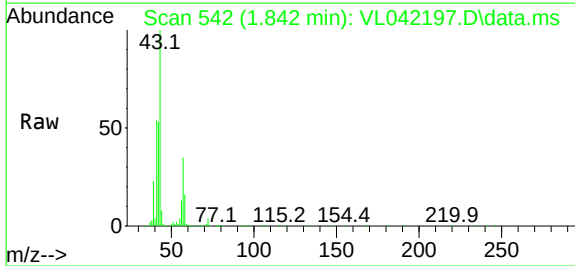
#15
Acetone
Concen: 6.202 ppbv m
RT: 1.842 min Scan# 54
Delta R.T. 0.010 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025

Tgt Ion: 43 Resp: 149738
Ion Ratio Lower Upper
43 100
58 26.9 23.2 34.8

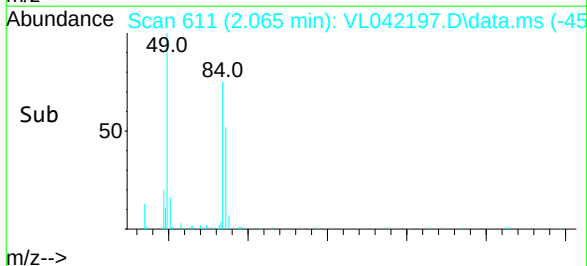
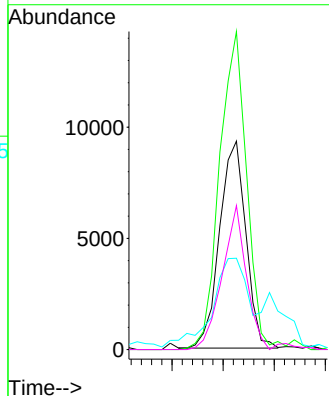
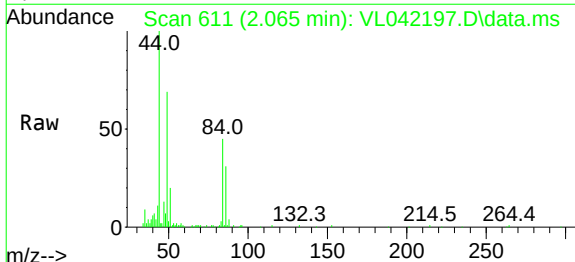
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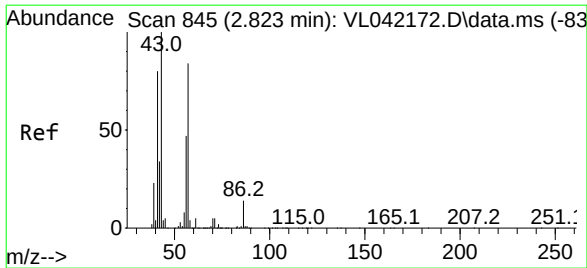
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025



#20
Methylene Chloride
Concen: 0.741 ppbv
RT: 2.065 min Scan# 611
Delta R.T. 0.006 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion: 84 Resp: 6666
Ion Ratio Lower Upper
84 100
49 153.7 120.2 180.4
51 37.5 37.4 56.0
86 69.6 52.4 78.6





#26

Hexane

Concen: 1.876 ppbv

RT: 2.829 min Scan# 84

Delta R.T. 0.006 min

Lab File: VL042197.D

Acq: 28 Mar 2025 01:20

Instrument :

MSVOA_L

ClientSampleId :

SSSG-B16-3-3262025

Tgt Ion: 57 Resp: 45421

Ion Ratio Lower Upper

57 100

41 102.0 76.6 114.8

43 79.1 207.8 311.8#

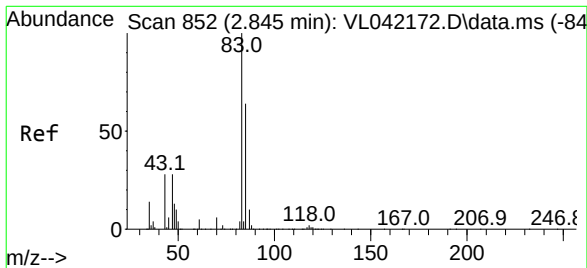
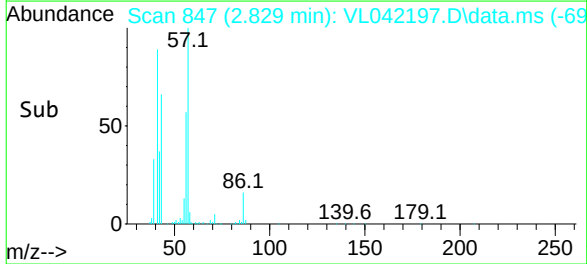
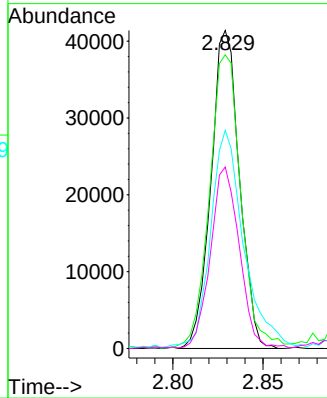
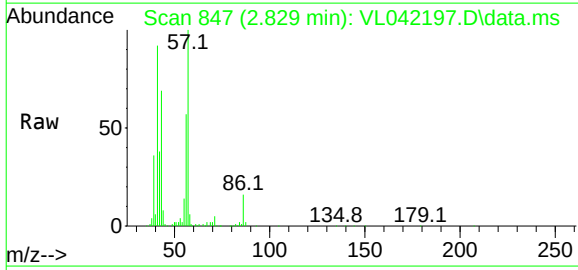
56 58.3 43.6 65.4

Manual Integrations

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Supervised By :Mahesh Dadoda 04/03/2025



#29

Chloroform

Concen: 0.601 ppbv

RT: 2.852 min Scan# 854

Delta R.T. 0.006 min

Lab File: VL042197.D

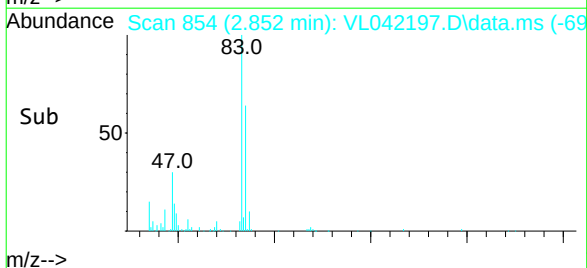
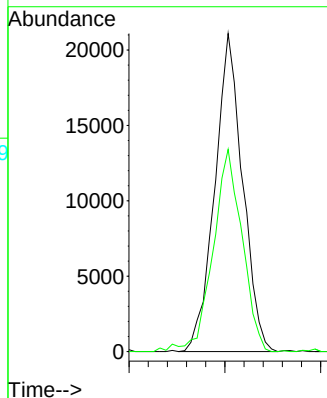
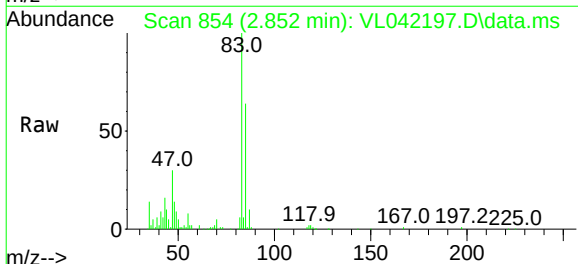
Acq: 28 Mar 2025 01:20

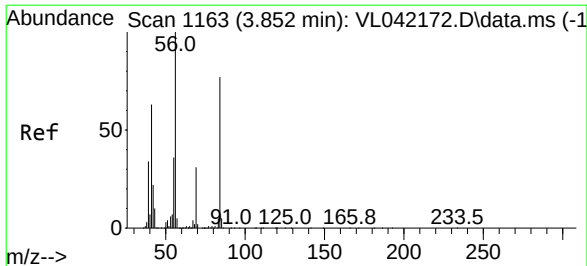
Tgt Ion: 83 Resp: 21281

Ion Ratio Lower Upper

83 100

85 63.6 51.4 77.2





#30

Cyclohexane

Concen: 0.401 ppbv m

RT: 3.858 min Scan# 11

Delta R.T. 0.006 min

Lab File: VL042197.D

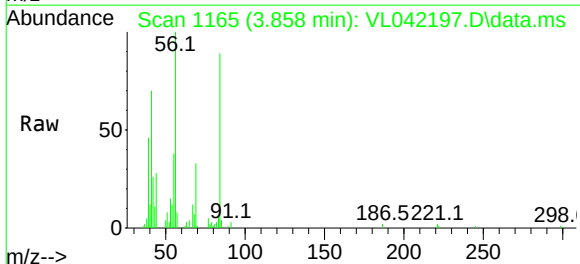
Acq: 28 Mar 2025 01:20

Instrument :

MSVOA_L

ClientSampleId :

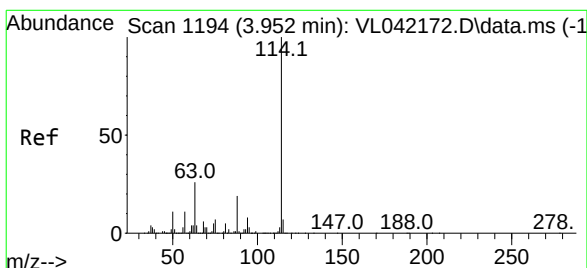
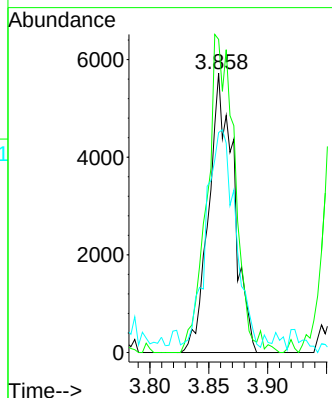
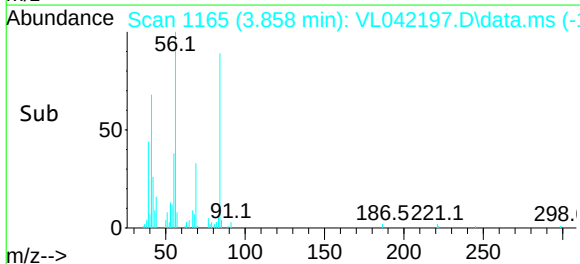
SSSG-B16-3-3262025



Tgt Ion:	84	Resp:	8428
Ion	Ratio	Lower	Upper
84	100		
56	126.8	102.8	154.2
41	92.0	66.5	99.7

Manual Integrations
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Supervised By :Mahesh Dadoda 04/03/2025



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

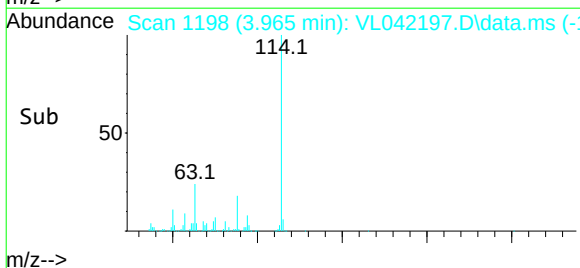
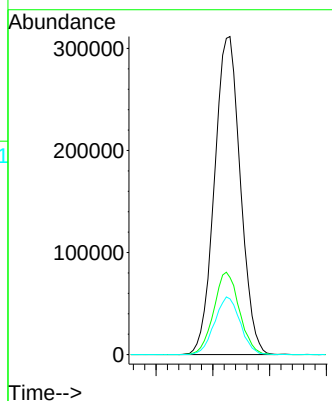
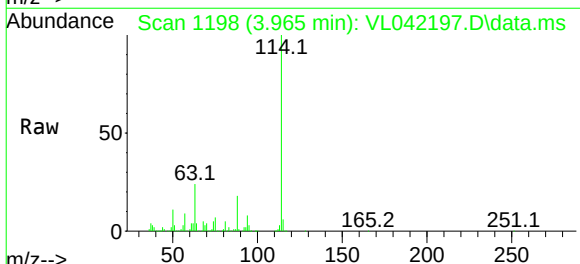
RT: 3.965 min Scan# 1198

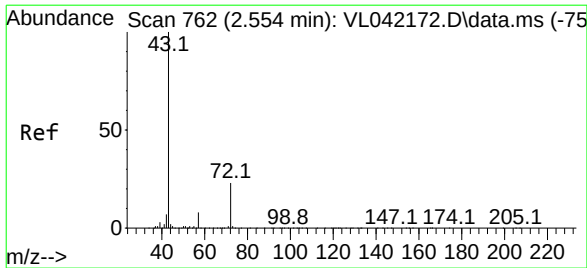
Delta R.T. 0.013 min

Lab File: VL042197.D

Acq: 28 Mar 2025 01:20

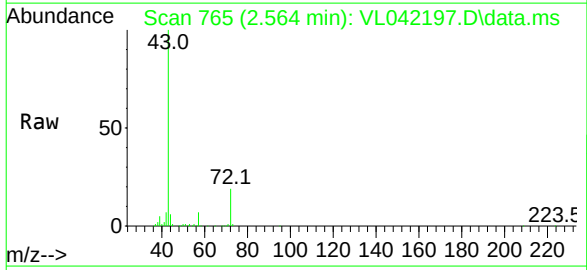
Tgt Ion:	114	Resp:	493948
Ion	Ratio	Lower	Upper
114	100		
63	25.6	20.7	31.1
88	17.9	15.0	22.4





#34
2-Butanone
Concen: 2.922 ppbv
RT: 2.564 min Scan# 76
Delta R.T. 0.009 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

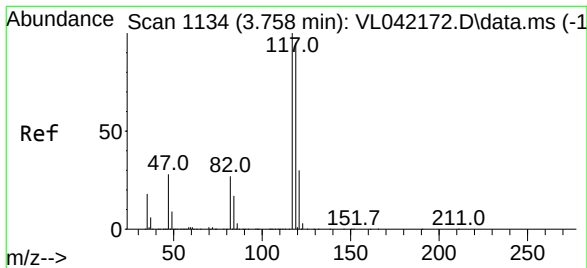
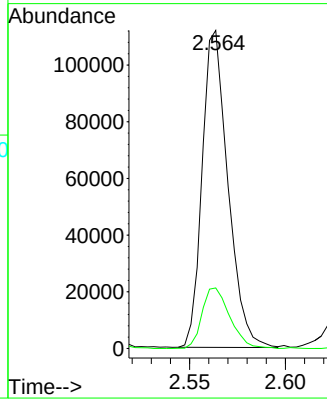
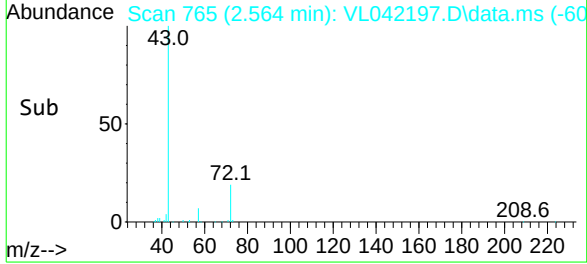
Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025



Tgt Ion: 43 Resp: 104671
Ion Ratio Lower Upper
43 100
72 20.7 18.2 27.2

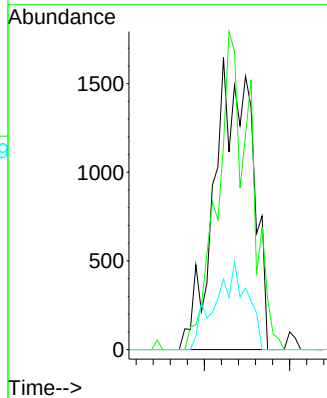
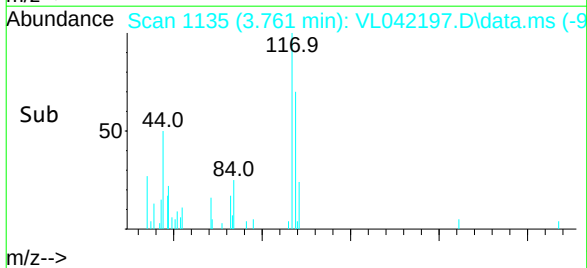
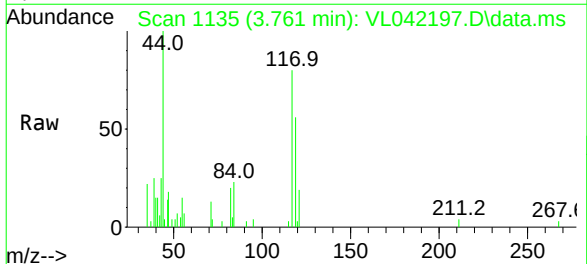
Manual Integrations
APPROVED

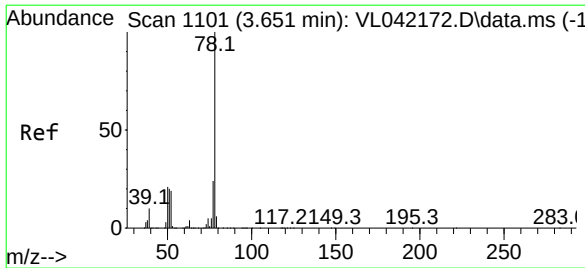
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025



#35
Carbon Tetrachloride
Concen: 0.066 ppbv m
RT: 3.761 min Scan# 1135
Delta R.T. 0.003 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

Tgt Ion:117 Resp: 2542
Ion Ratio Lower Upper
117 100
119 69.8 76.2 114.2#
121 24.2 24.2 36.4#





#36

Benzene

Concen: 0.550 ppbv

RT: 3.658 min Scan# 11

Delta R.T. 0.006 min

Lab File: VL042197.D

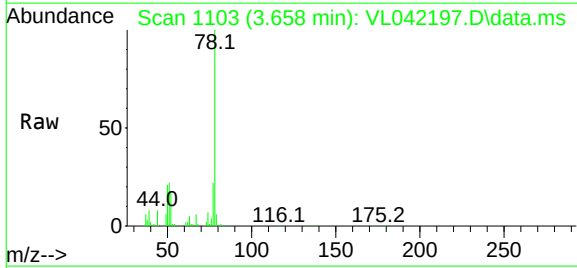
Acq: 28 Mar 2025 01:20

Instrument :

MSVOA_L

ClientSampleId :

SSSG-B16-3-3262025

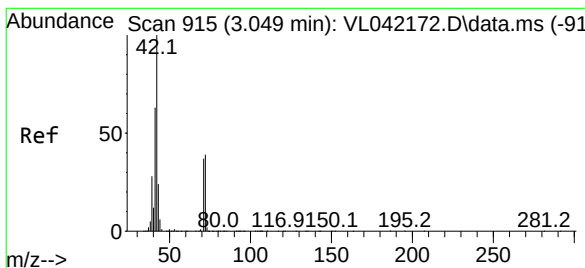
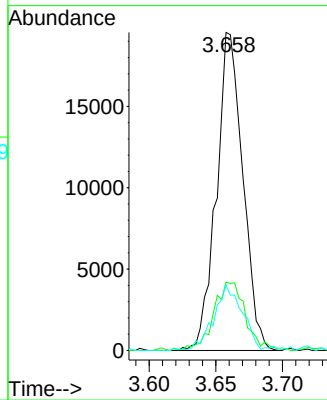
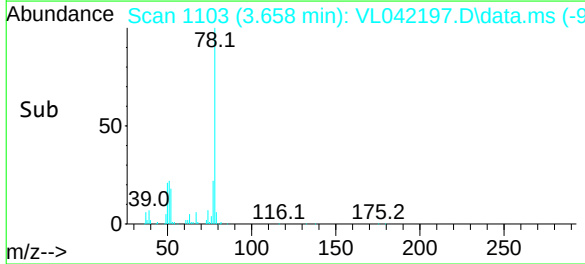


Tgt Ion	Ratio	Lower	Upper
78	100		
77	21.2	19.1	28.7
50	20.3	16.6	24.8

Manual Integrations

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



#41

Tetrahydrofuran

Concen: 0.413 ppbv m

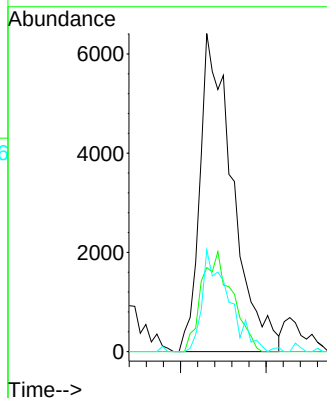
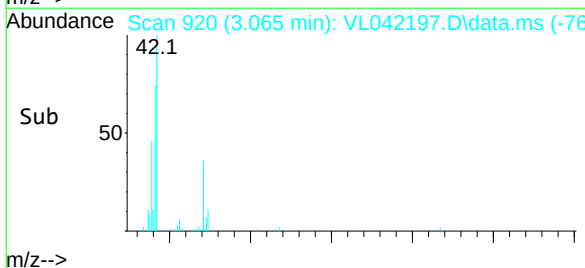
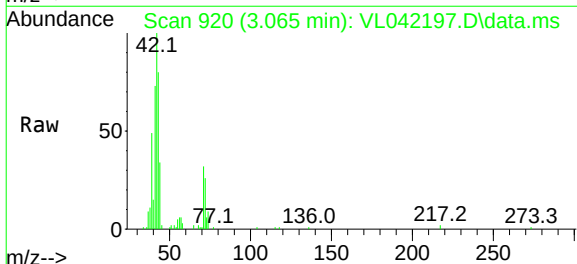
RT: 3.065 min Scan# 920

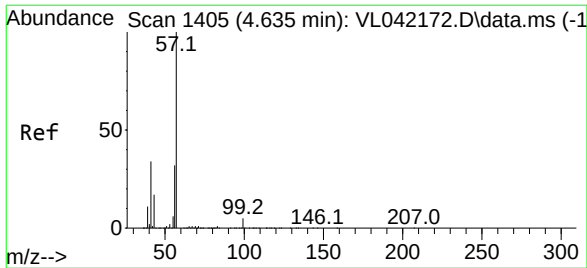
Delta R.T. 0.016 min

Lab File: VL042197.D

Acq: 28 Mar 2025 01:20

Tgt Ion	Ratio	Lower	Upper
42	100		
72	0.0	31.4	47.0#
71	26.0	30.2	45.4#





#44

2,2,4-Trimethylpentane

Concen: 0.388 ppbv

RT: 4.648 min Scan# 1409

Delta R.T. 0.013 min

Lab File: VL042197.D

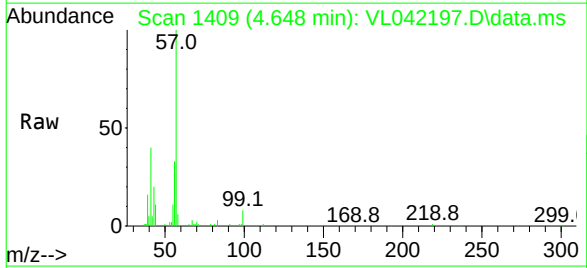
Acq: 28 Mar 2025 01:20

Instrument :

MSVOA_L

ClientSampleId :

SSSG-B16-3-3262025

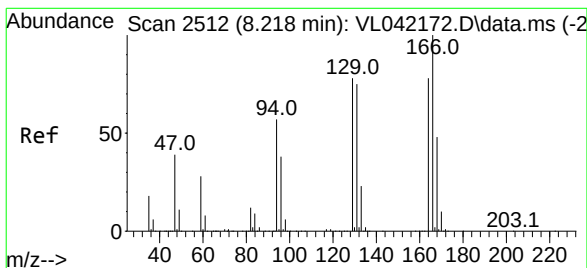
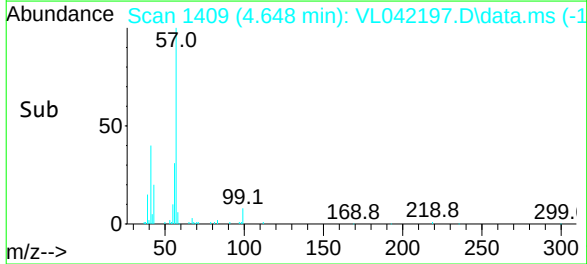
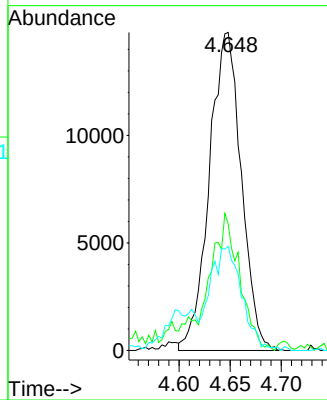


Tgt Ion:	57	Ratio	100	Lower	Upper
57	100				
41	47.6		26.8	40.2	
56	44.7		25.6	38.4	

Manual Integrations

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



#52

Tetrachloroethene

Concen: 0.036 ppbv m

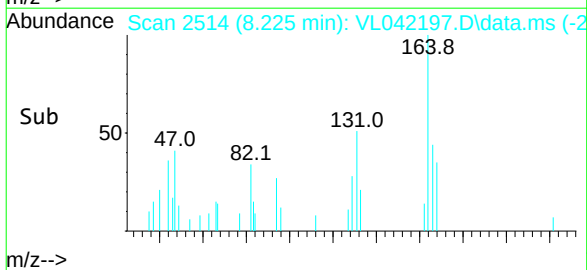
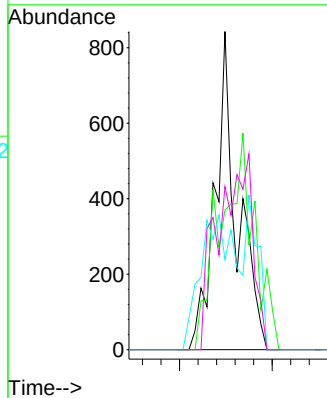
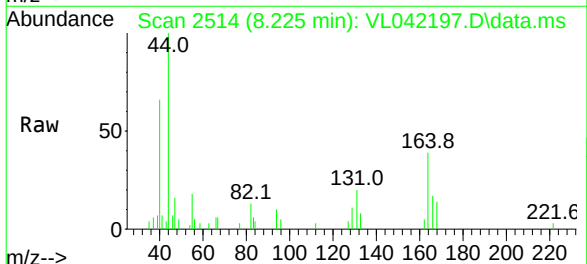
RT: 8.225 min Scan# 2514

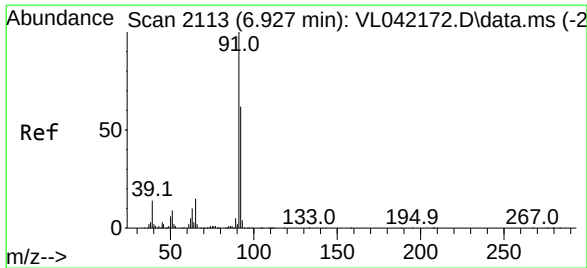
Delta R.T. 0.006 min

Lab File: VL042197.D

Acq: 28 Mar 2025 01:20

Tgt Ion:	164	Ratio	100	Lower	Upper
164	100				
166	43.9		102.5	153.7	
129	28.4		79.8	119.8	
131	51.2		76.6	114.8	





#53

Toluene

Concen: 2.136 ppbv

RT: 6.940 min Scan# 2113

Delta R.T. 0.013 min

Lab File: VL042197.D

Acq: 28 Mar 2025 01:20

Instrument :

MSVOA_L

ClientSampleId :

SSSG-B16-3-3262025

Tgt Ion: 91 Resp: 124001

Ion Ratio Lower Upper

91 100

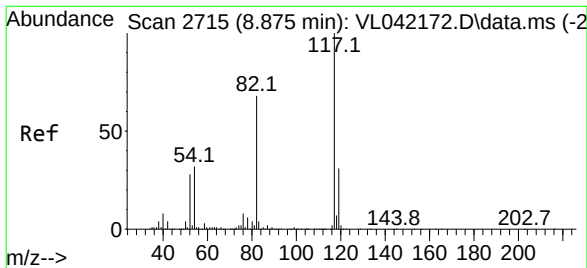
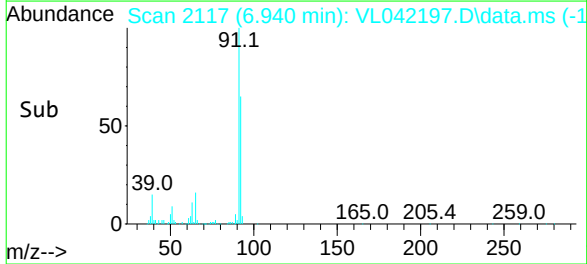
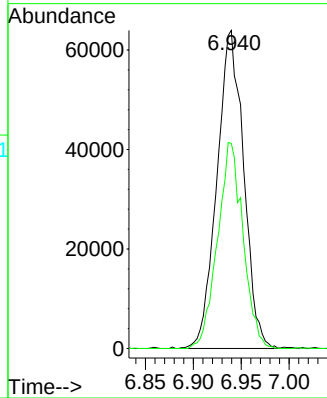
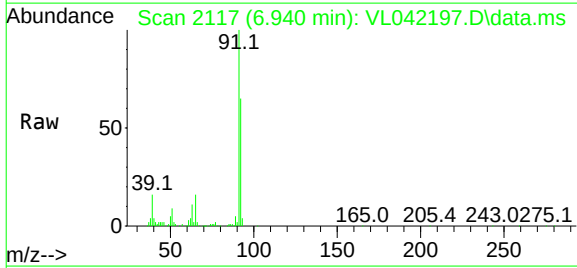
92 61.8 48.4 72.6

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 03/31/2025

Supervised By :Mahesh Dadoda 04/03/2025



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.885 min Scan# 2718

Delta R.T. 0.010 min

Lab File: VL042197.D

Acq: 28 Mar 2025 01:20

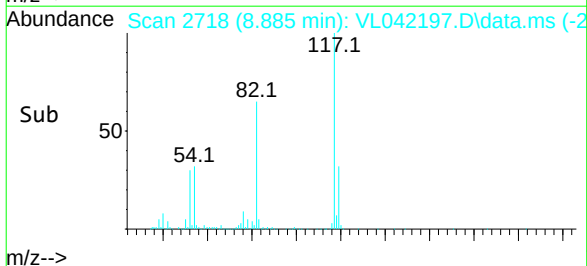
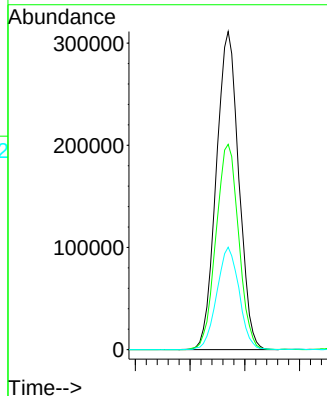
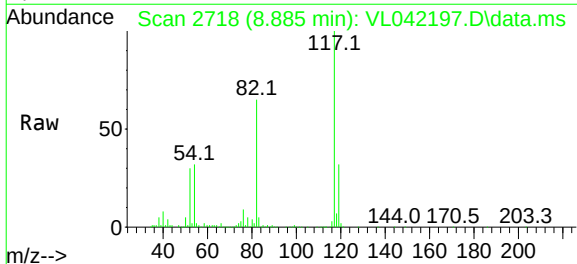
Tgt Ion:117 Resp: 445312

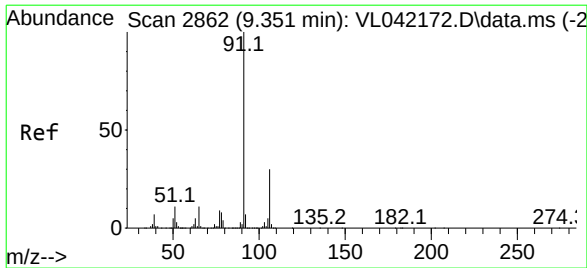
Ion Ratio Lower Upper

117 100

82 65.1 55.8 83.6

119 32.0 25.5 38.3





#58

Ethyl Benzene

Concen: 0.265 ppbv

RT: 9.361 min Scan# 2865

Delta R.T. 0.009 min

Lab File: VL042197.D

Acq: 28 Mar 2025 01:20

Instrument :

MSVOA_L

ClientSampleId :

SSSG-B16-3-3262025

Tgt Ion: 91 Resp: 20976

Ion Ratio Lower Upper

91 100

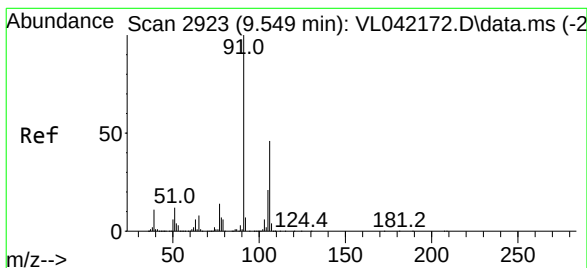
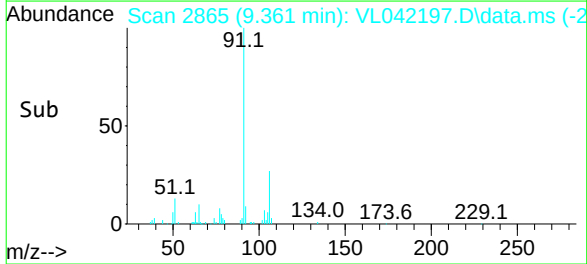
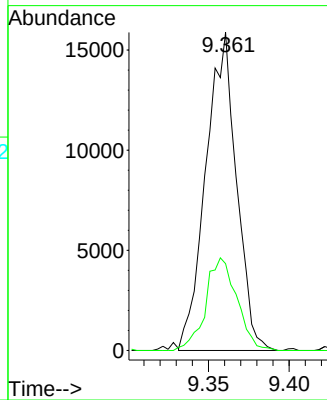
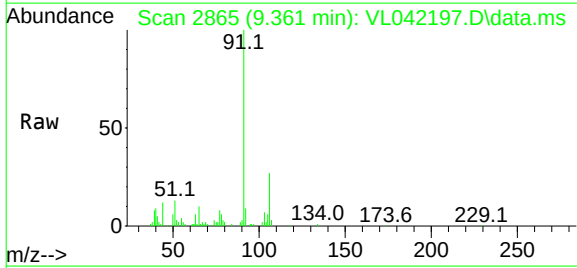
106 27.3 24.2 36.2

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 03/31/2025

Supervised By :Mahesh Dadoda 04/03/2025



#59

m/p-Xylene

Concen: 1.026 ppbv

RT: 9.532 min Scan# 2918

Delta R.T. -0.016 min

Lab File: VL042197.D

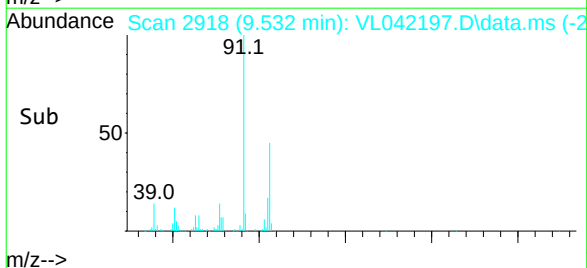
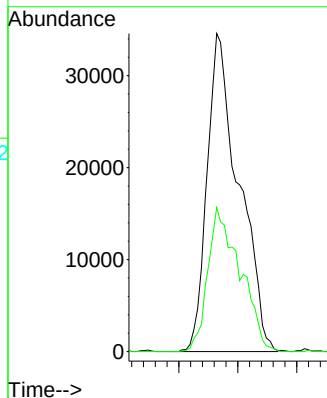
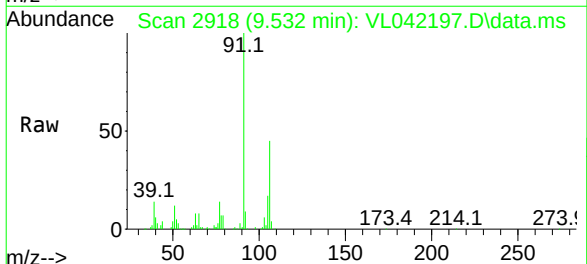
Acq: 28 Mar 2025 01:20

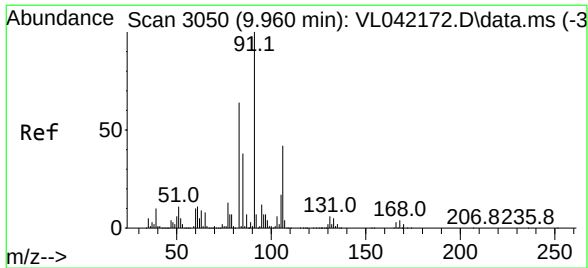
Tgt Ion: 91 Resp: 64820

Ion Ratio Lower Upper

91 100

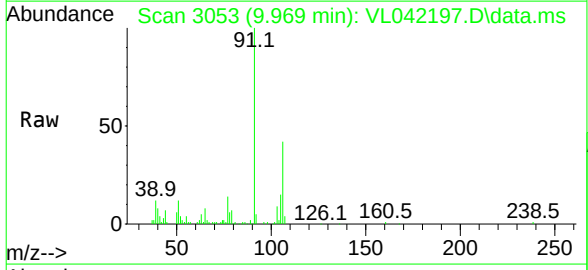
106 46.1 36.4 54.6





#60
o-Xylene
Concen: 0.363 ppbv
RT: 9.969 min Scan# 3053
Delta R.T. 0.009 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20

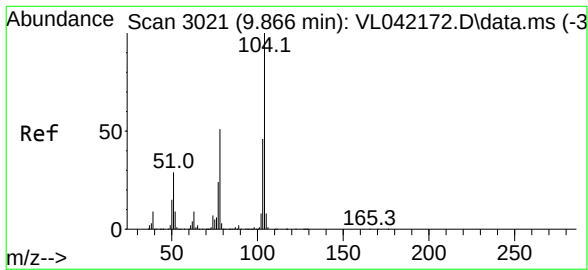
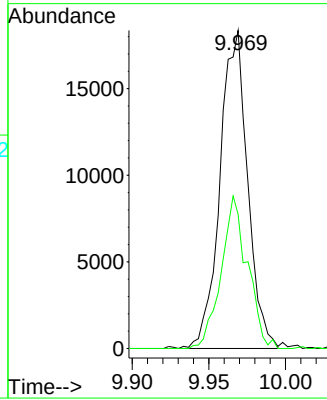
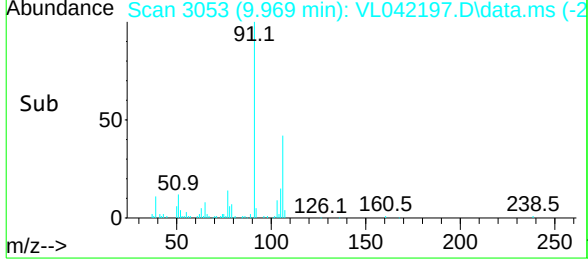
Instrument :
MSVOA_L
ClientSampleId :
SSSG-B16-3-3262025



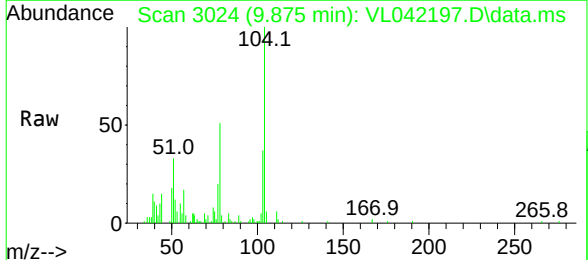
Tgt Ion: 91 Resp: 22977
Ion Ratio Lower Upper
91 100
106 45.7 20.8 62.5

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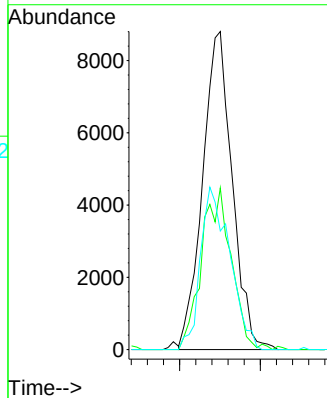
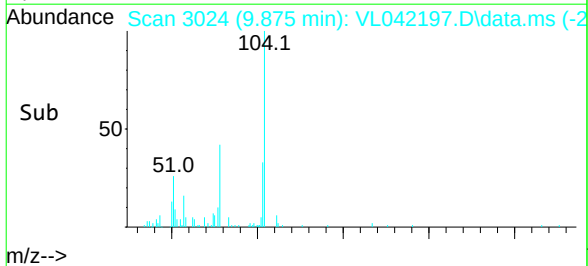
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

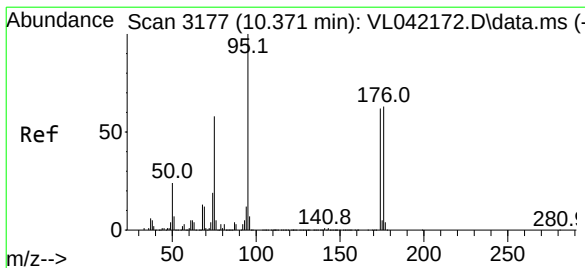


#61
Styrene
Concen: 0.359 ppbv
RT: 9.875 min Scan# 3024
Delta R.T. 0.009 min
Lab File: VL042197.D
Acq: 28 Mar 2025 01:20



Tgt Ion:104 Resp: 11230
Ion Ratio Lower Upper
104 100
78 51.4 41.8 62.6
103 50.7 37.0 55.4





#68

1-Bromo-4-Fluorobenzene

Concen: 10.088 ppbv

RT: 10.380 min Scan# 3177

Delta R.T. 0.009 min

Lab File: VL042197.D

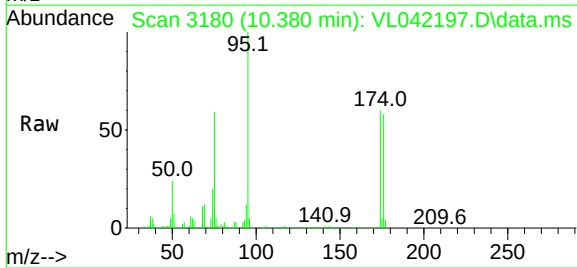
Acq: 28 Mar 2025 01:20

Instrument :

MSVOA_L

ClientSampleId :

SSSG-B16-3-3262025



Tgt Ion: 95 Resp: 368899

Ion Ratio Lower Upper

95 100

174 60.5 50.6 76.0

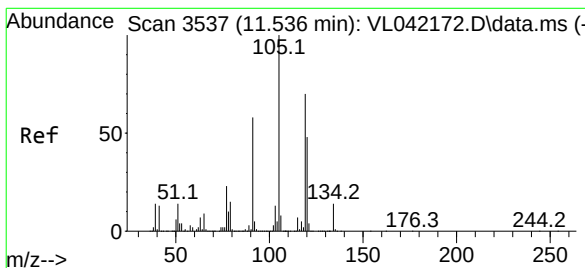
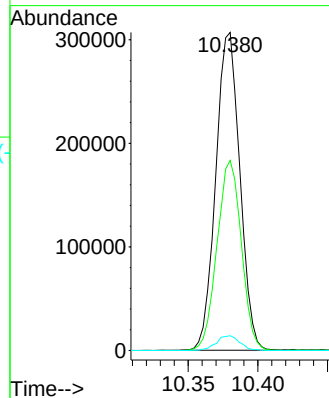
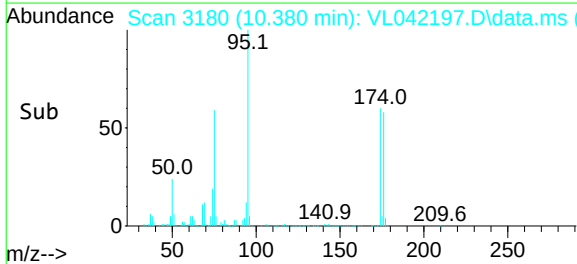
175 4.5 3.8 5.6

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025

Supervised By :Mahesh Dadoda 04/03/2025



#74

1,2,4-Trimethylbenzene

Concen: 0.263 ppbv

RT: 11.539 min Scan# 3538

Delta R.T. 0.003 min

Lab File: VL042197.D

Acq: 28 Mar 2025 01:20

Tgt Ion:105 Resp: 20838

Ion Ratio Lower Upper

105 100

120 45.6 38.6 58.0

91 19.0 46.2 69.2#

77 14.0 18.6 27.8#

