

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111825\
 Data File : VL043217.D
 Acq On : 18 Nov 2025 17:40
 Operator : SY/MD
 Sample : Q3651-06
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA3

Manual Integrations
 APPROVED

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

Quant Time: Nov 19 01:37:42 2025

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

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

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

Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.790	49	99721	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	263141	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.878	117	208459	10.000	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene 10.374 95 152659 9.991 ppbv 0.00
 Spiked Amount 10.000 Range 65 - 135 Recovery = 99.900%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	1.499	85	5540	0.394	ppbv	99
3) Chlorodifluoromethane	1.476	51	11837m	0.856	ppbv	
4) Chloromethane	1.534	50	27687	5.265	ppbv #	87
9) Propene	1.489	41	5701	0.971	ppbv #	1
10) Heptane	4.981	43	24657m	1.410	ppbv	
11) Trichlorofluoromethane	1.881	101	2691	0.197	ppbv	89
13) Ethanol	1.722	45	202331	97.961	ppbv	99
15) Acetone	1.835	43	83575	6.032	ppbv	98
17) tert-Butyl alcohol	2.042	59	11636	0.640	ppbv #	84
19) Isopropyl Alcohol	1.887	45	9694	1.238	ppbv #	1
20) Methylene Chloride	2.065	84	23751	5.462	ppbv	97
26) Hexane	2.826	57	18114	1.383	ppbv #	53
27) Carbon Disulfide	2.153	76	6178	0.462	ppbv #	59
29) Chloroform	2.848	83	4559	0.245	ppbv #	81
30) Cyclohexane	3.858	84	1847m	0.168	ppbv	
34) 2-Butanone	2.554	43	521507	28.076	ppbv	99
35) Carbon Tetrachloride	3.768	117	1829m	0.092	ppbv	
36) Benzene	3.661	78	3353	0.133	ppbv #	90
50) 4-Methyl-2-Pentanone	5.768	43	4914m	0.188	ppbv	
53) Toluene	6.936	91	1607514	53.871	ppbv	98
58) Ethyl Benzene	9.354	91	14355	0.358	ppbv	99
59) m/p-Xylene	9.529	91	46716m	1.452	ppbv	
60) o-Xylene	9.963	91	22645	0.705	ppbv	92
61) Styrene	9.872	104	2129	0.151	ppbv	90
74) 1,2,4-Trimethylbenzene	11.536	105	13137	0.367	ppbv #	55
79) Naphthalene	13.516	128	5717	0.180	ppbv #	89

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

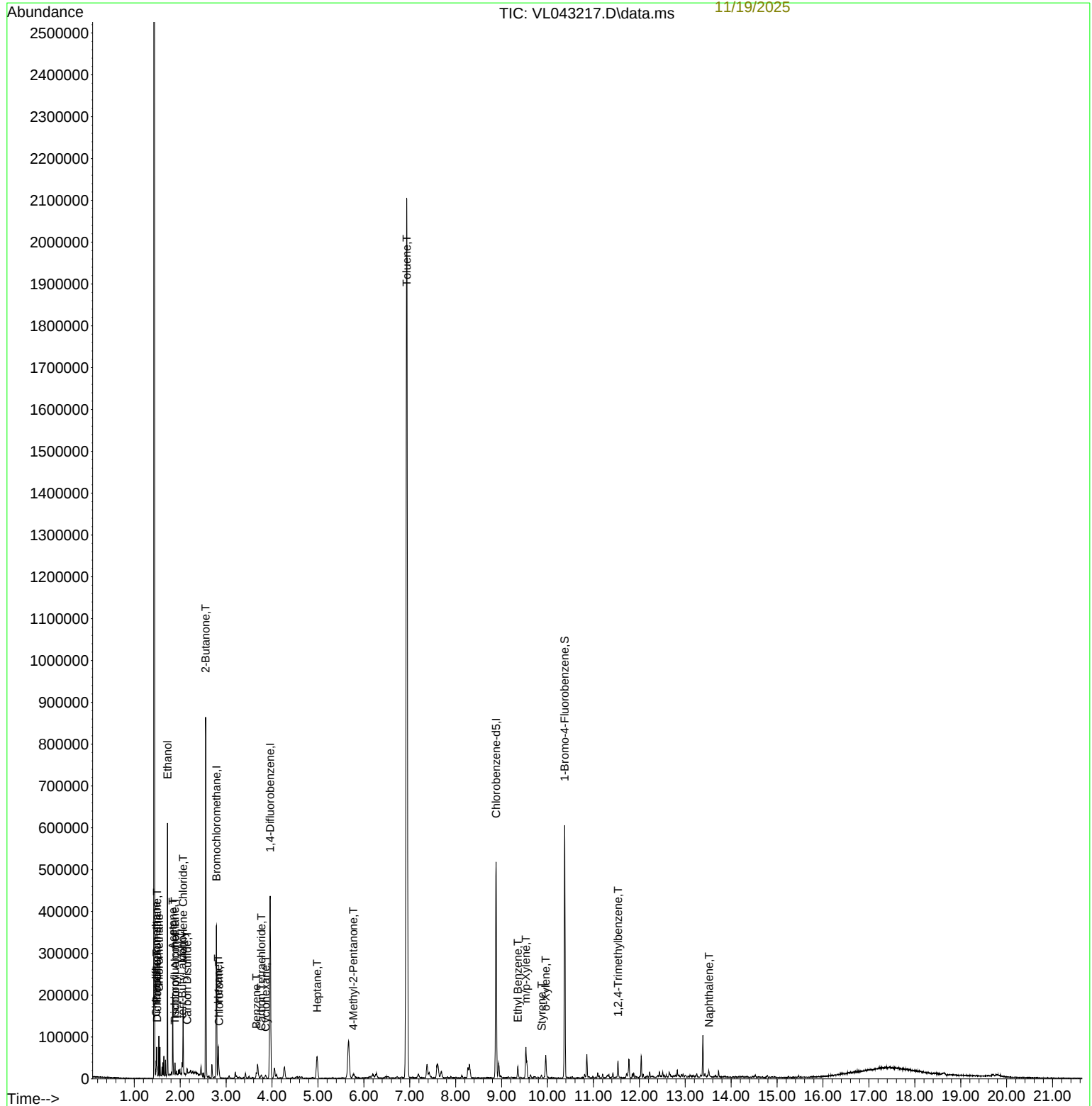
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Data File : VL043217.D
Acq On : 18 Nov 2025 17:40
Operator : SY/MD
Sample : Q3651-06
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

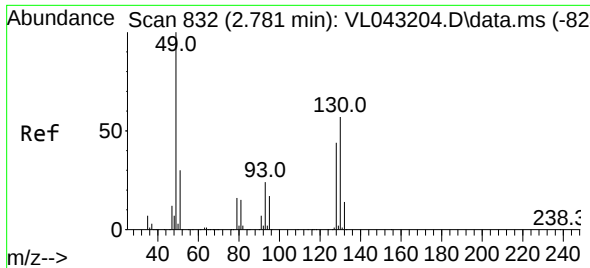
Instrument :
MSVOA_L
ClientSampleId :
IA3

Quant Time: Nov 19 01:37:42 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug
QLast Update : Wed Nov 19 01:11:25 2025
Response via : Initial Calibration

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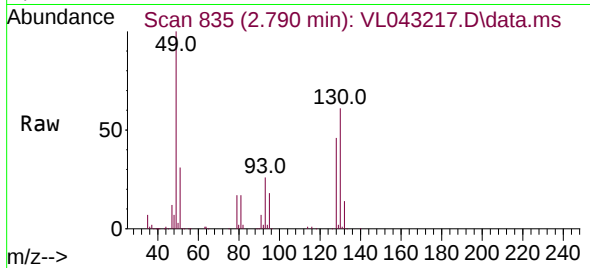
Reviewed By :Semsettin
Yesilyurt
11/19/2025
Supervised By :Mahesh
Dadoda
11/19/2025





#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.790 min Scan# 832
Delta R.T. 0.009 min
Lab File: VL043217.D
Acq: 18 Nov 2025 17:40

Instrument :
MSVOA_L
ClientSampleId :
IA3

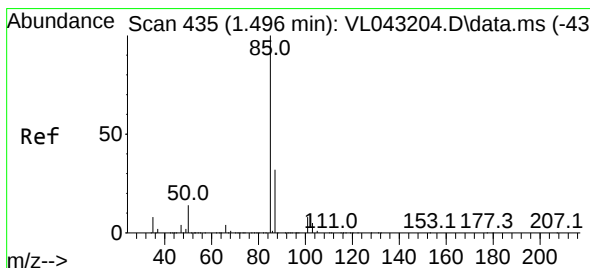
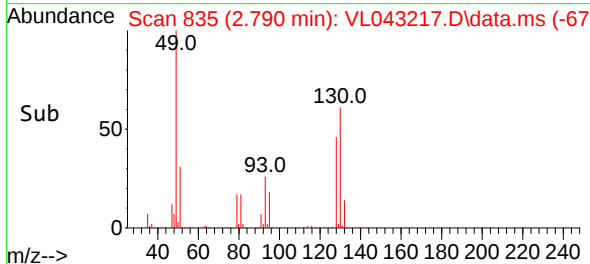
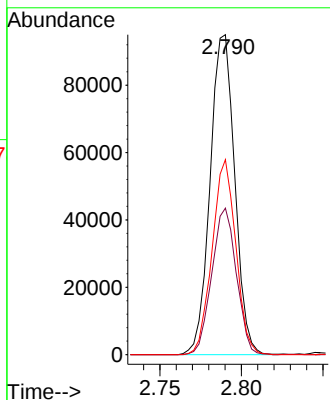


Tgt Ion: 49 Resp: 9972
Ion Ratio Lower Upper
49 100
128 45.6 23.0 69.0
130 58.5 29.9 89.7

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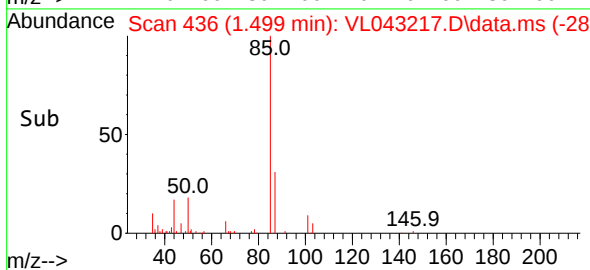
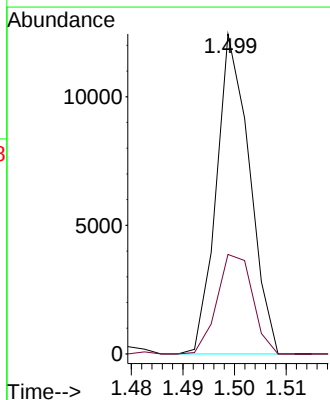
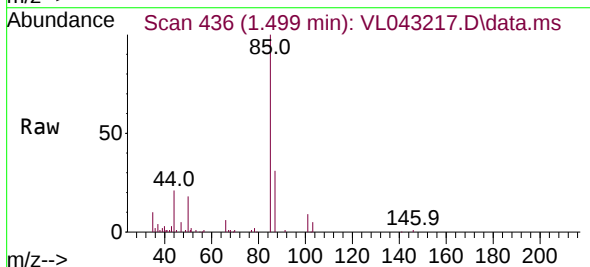
Reviewed By :Semsettin
Yesilyurt
11/19/2025

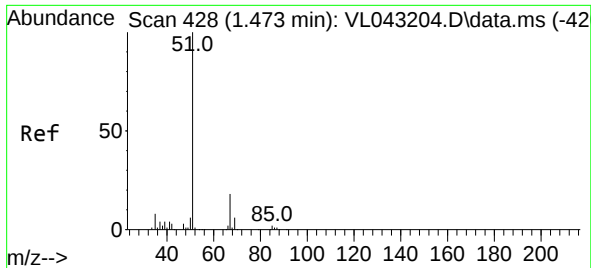
Supervised By :Mahesh
Dadoda
11/19/2025



#2
Dichlorodifluoromethane
Concen: 0.394 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL043217.D
Acq: 18 Nov 2025 17:40

Tgt Ion: 85 Resp: 5540
Ion Ratio Lower Upper
85 100
87 31.1 25.4 38.2





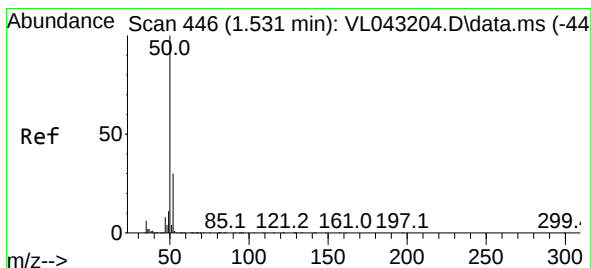
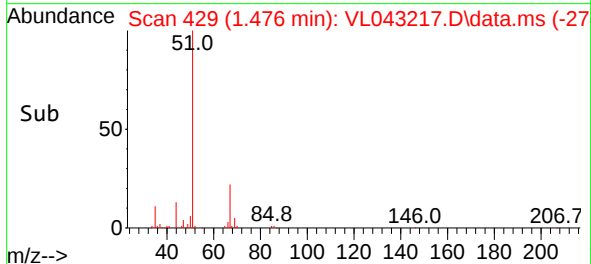
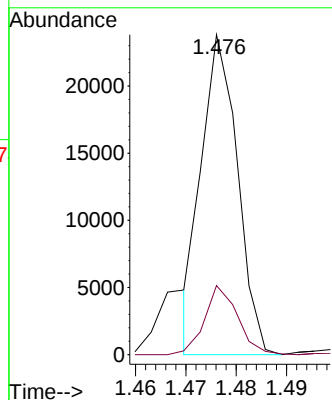
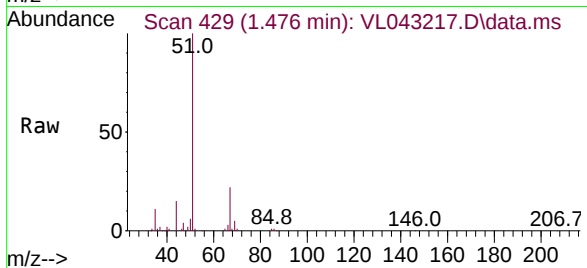
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Chlorodifluoromethane
Concen: 0.856 ppbv m
RT: 1.476 min Scan# 41
Delta R.T. 0.003 min
Lab File: VL043217.D
Acq: 18 Nov 2025 17:40

Instrument :
MSVOA_L
ClientSampleId :
IA3

Tgt Ion: 51 Resp: 1183
Ion Ratio Lower Upper
51 100
67 20.4 14.9 22.3

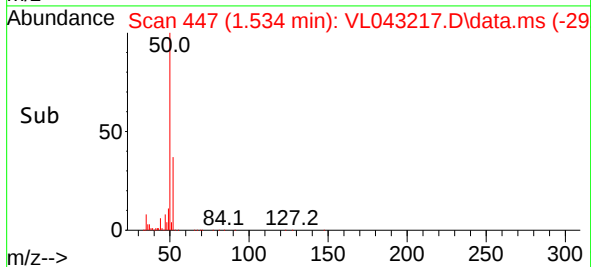
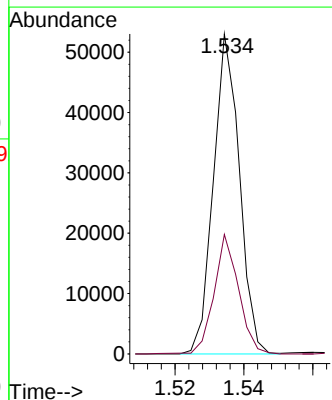
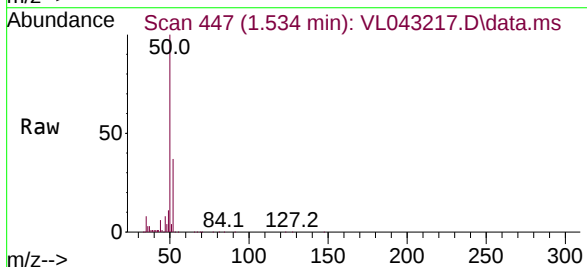
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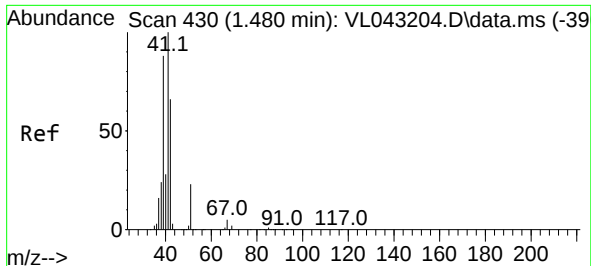
Reviewed By :Semsettin
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Supervised By :Mahesh
Dadoda
11/19/2025



#4
Chloromethane
Concen: 5.265 ppbv
RT: 1.534 min Scan# 447
Delta R.T. 0.003 min
Lab File: VL043217.D
Acq: 18 Nov 2025 17:40

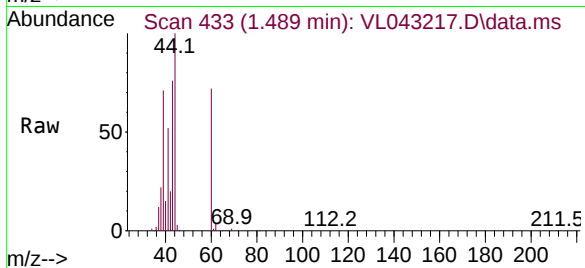
Tgt Ion: 50 Resp: 27687
Ion Ratio Lower Upper
50 100
52 37.3 24.1 36.1#





#9
 Propene
 Concen: 0.971 ppbv
 RT: 1.489 min Scan# 430
 Delta R.T. 0.009 min
 Lab File: VL043217.D
 Acq: 18 Nov 2025 17:40

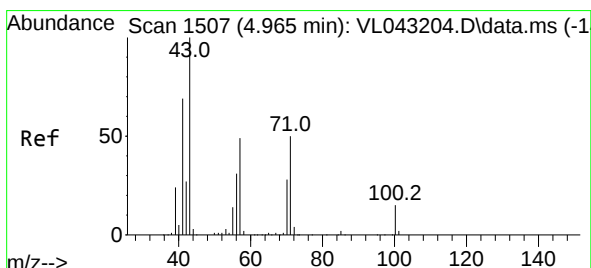
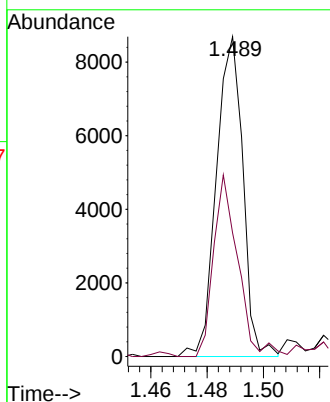
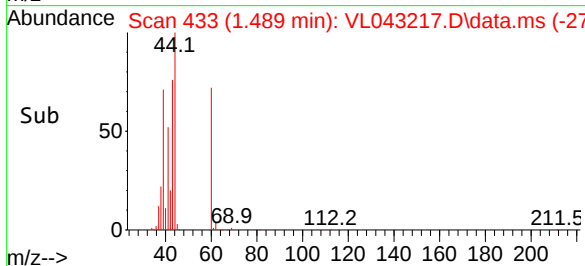
Instrument :
 MSVOA_L
 ClientSampleId :
 IA3



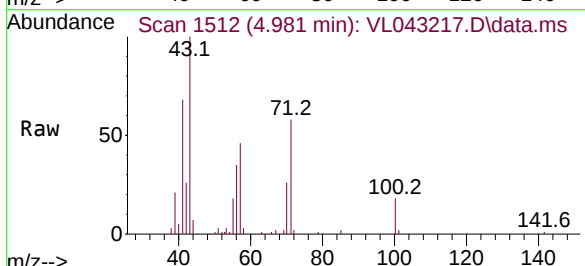
Tgt Ion: 41 Resp: 5701
 Ion Ratio Lower Upper
 41 100
 42 53.6 3.7 5.5

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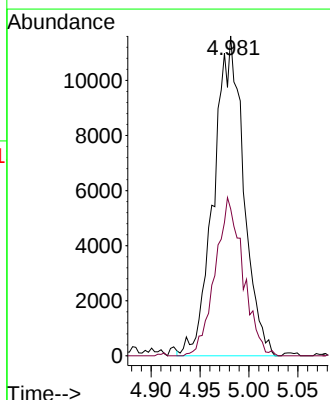
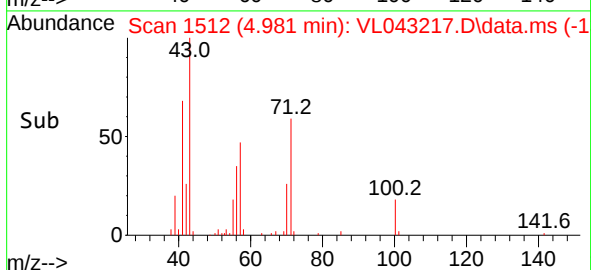
Reviewed By :Semsettin
 Yesilyurt
 11/19/2025
 Supervised By :Mahesh
 Dadoda
 11/19/2025

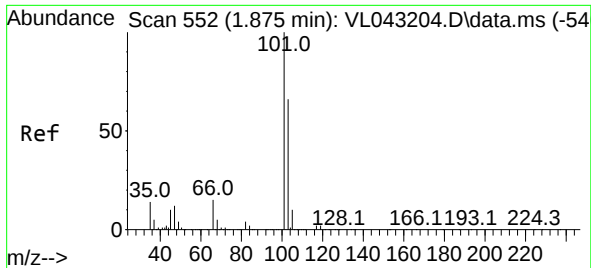


#10
 Heptane
 Concen: 1.410 ppbv m
 RT: 4.981 min Scan# 1512
 Delta R.T. 0.016 min
 Lab File: VL043217.D
 Acq: 18 Nov 2025 17:40



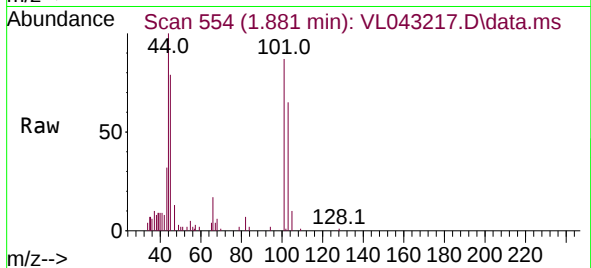
Tgt Ion: 43 Resp: 24657
 Ion Ratio Lower Upper
 43 100
 57 0.0 39.7 59.5





#11
Trichlorofluoromethane
Concen: 0.197 ppbv
RT: 1.881 min Scan# 505
Delta R.T. 0.006 min
Lab File: VL043217.D
Acq: 18 Nov 2025 17:40

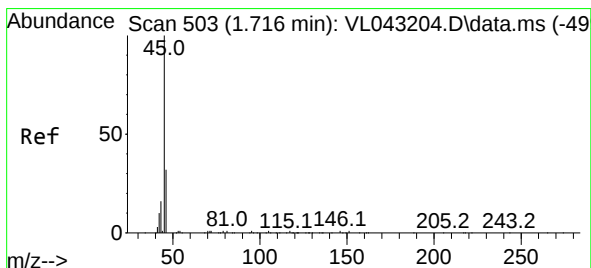
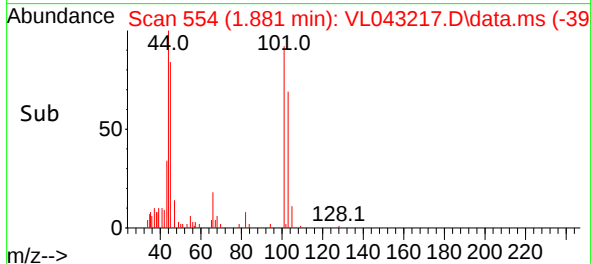
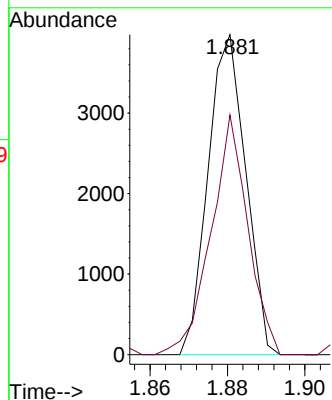
Instrument :
MSVOA_L
ClientSampleId :
IA3



Tgt Ion:101 Resp: 2691
Ion Ratio Lower Upper
101 100
103 74.9 52.6 79.0

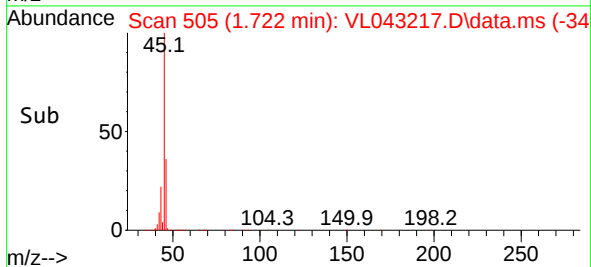
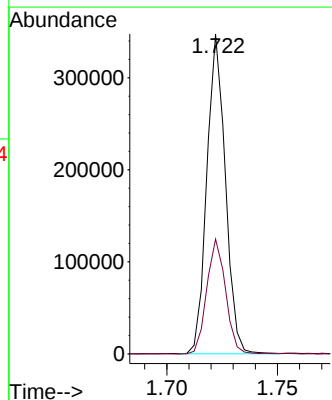
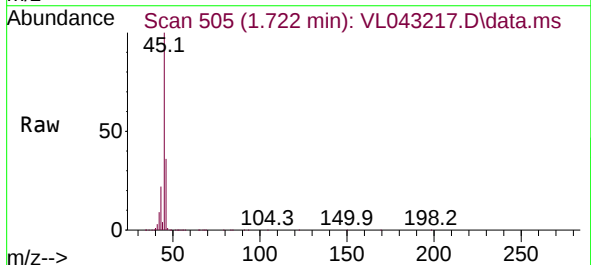
Manual Integrations
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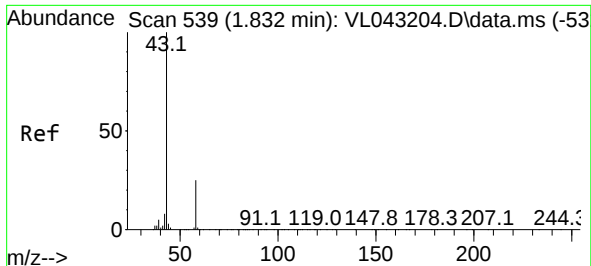
Reviewed By :Semsettin
Yesilyurt
11/19/2025
Supervised By :Mahesh
Dadoda
11/19/2025



#13
Ethanol
Concen: 97.961 ppbv
RT: 1.722 min Scan# 505
Delta R.T. 0.006 min
Lab File: VL043217.D
Acq: 18 Nov 2025 17:40

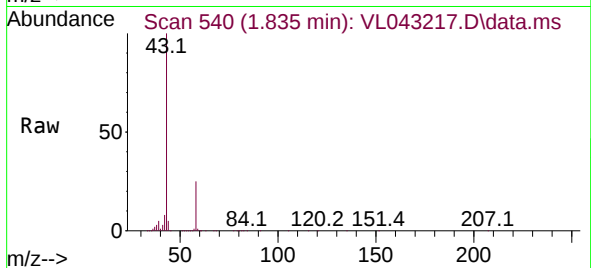
Tgt Ion: 45 Resp: 202331
Ion Ratio Lower Upper
45 100
46 36.6 15.0 59.8





#15
Acetone
Concen: 6.032 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL043217.D
Acq: 18 Nov 2025 17:40

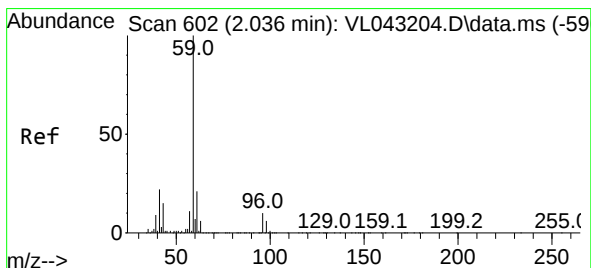
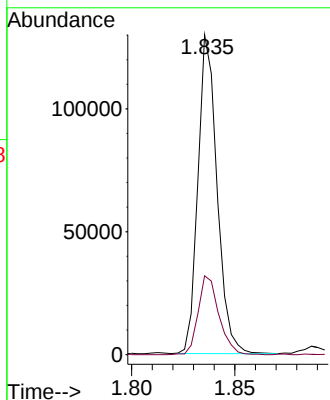
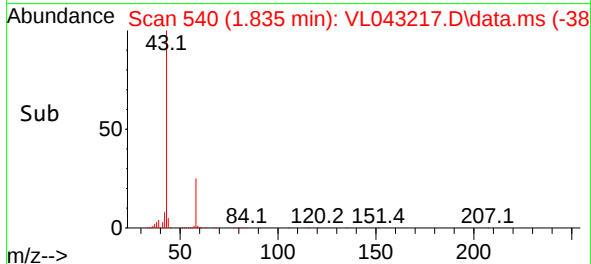
Instrument :
MSVOA_L
ClientSampleId :
IA3



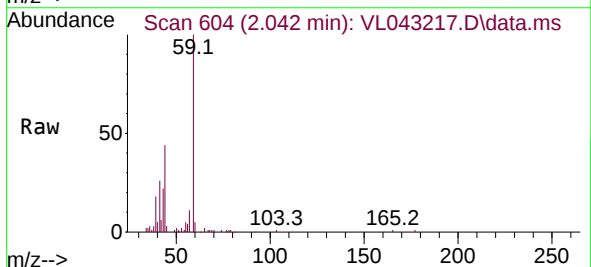
Tgt Ion: 43 Resp: 83575
Ion Ratio Lower Upper
43 100
58 26.9 20.7 31.1

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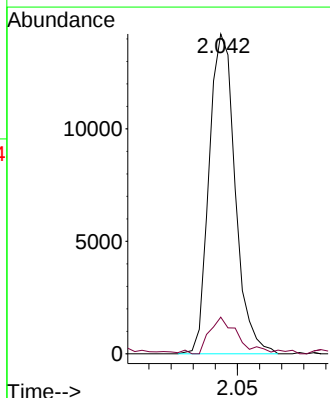
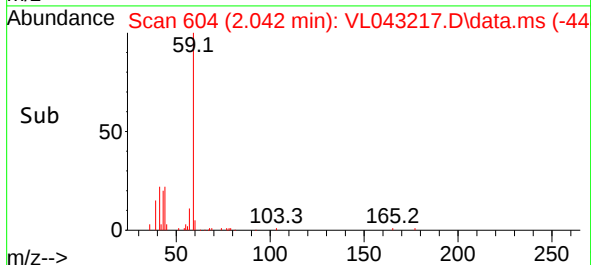
Reviewed By :Semsettin
Yesilyurt
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Supervised By :Mahesh
Dadoda
11/19/2025

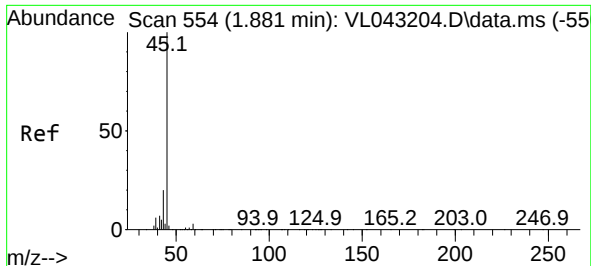


#17
tert-Butyl alcohol
Concen: 0.640 ppbv
RT: 2.042 min Scan# 604
Delta R.T. 0.006 min
Lab File: VL043217.D
Acq: 18 Nov 2025 17:40



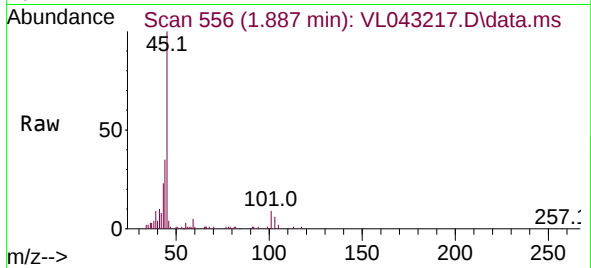
Tgt Ion: 59 Resp: 11636
Ion Ratio Lower Upper
59 100
57 17.3 9.0 13.4#





#19
Isopropyl Alcohol
Concen: 1.238 ppbv
RT: 1.887 min Scan# 511
Delta R.T. 0.006 min
Lab File: VL043217.D
Acq: 18 Nov 2025 17:40

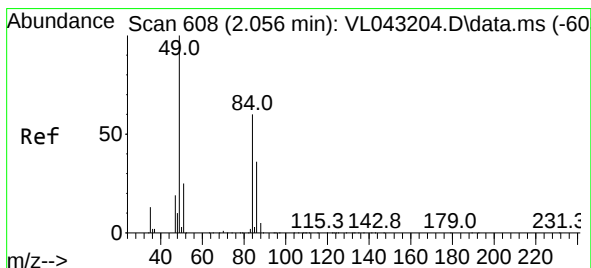
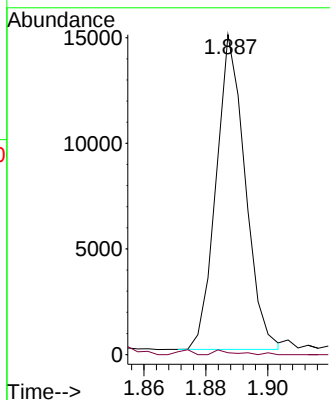
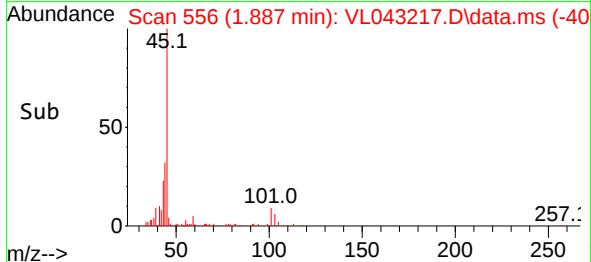
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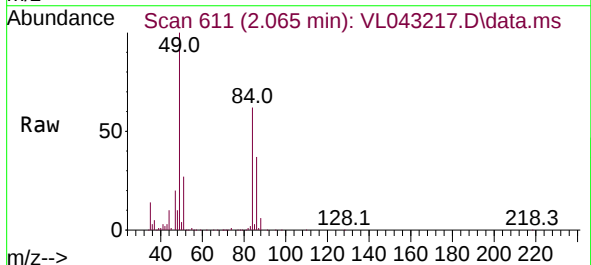
Tgt Ion: 45 Resp: 9694
Ion Ratio Lower Upper
45 100
58 231.6 31.3 46.9

Manual Integrations
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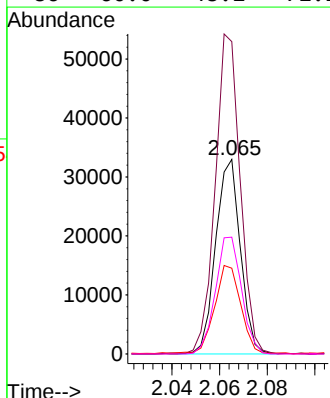
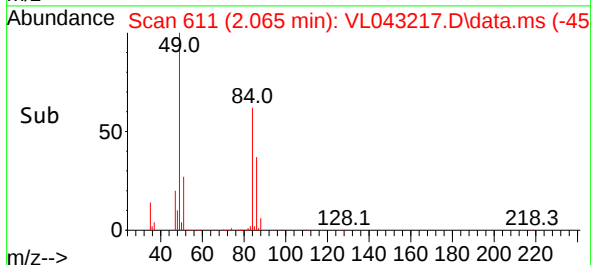
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Supervised By :Mahesh
Dadoda
11/19/2025

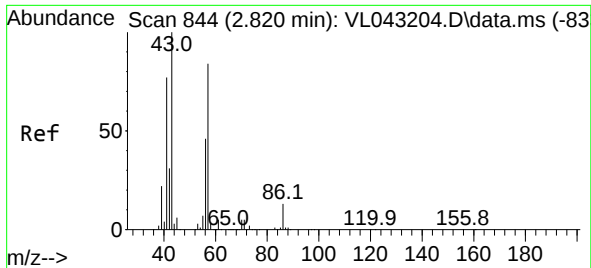


#20
Methylene Chloride
Concen: 5.462 ppbv
RT: 2.065 min Scan# 611
Delta R.T. 0.009 min
Lab File: VL043217.D
Acq: 18 Nov 2025 17:40



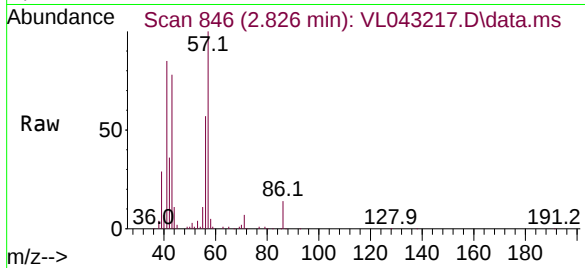
Tgt Ion: 84 Resp: 23751
Ion Ratio Lower Upper
84 100
49 160.5 132.9 199.3
51 43.5 34.8 52.2
86 60.0 48.2 72.2





#26
Hexane
Concen: 1.383 ppbv
RT: 2.826 min Scan# 844
Delta R.T. 0.006 min
Lab File: VL043217.D
Acq: 18 Nov 2025 17:40

Instrument :
MSVOA_L
ClientSampleId :
IA3

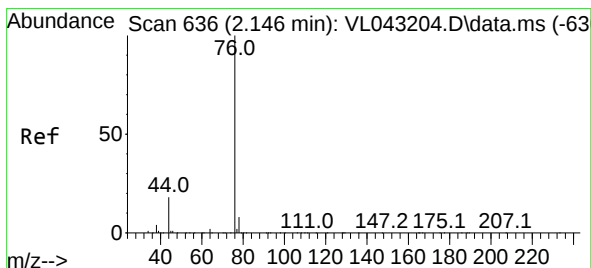
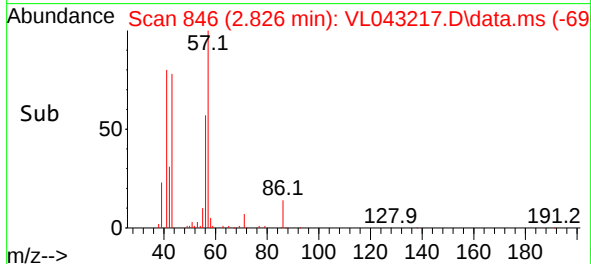
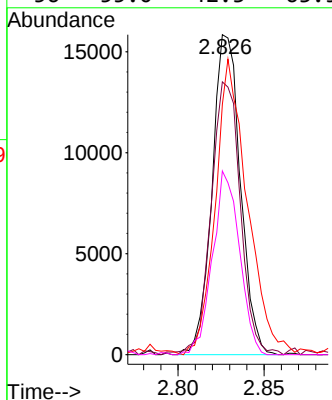


Tgt Ion: 57 Resp: 18114
Ion Ratio Lower Upper
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56 55.0 42.3 63.5

Manual Integrations
APPROVED

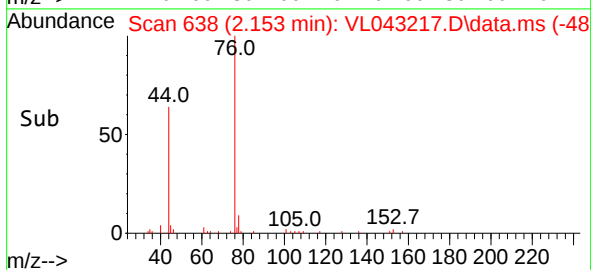
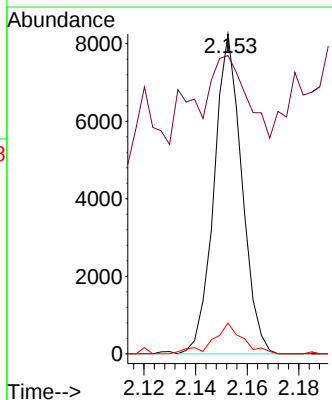
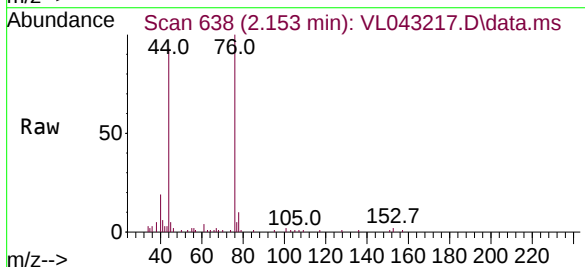
Reviewed By :Semsettin
Yesilyurt
11/19/2025

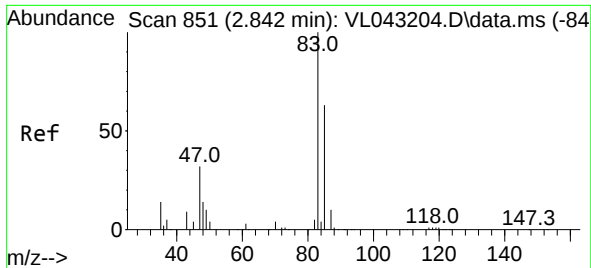
Supervised By :Mahesh
Dadoda
11/19/2025



#27
Carbon Disulfide
Concen: 0.462 ppbv
RT: 2.153 min Scan# 638
Delta R.T. 0.006 min
Lab File: VL043217.D
Acq: 18 Nov 2025 17:40

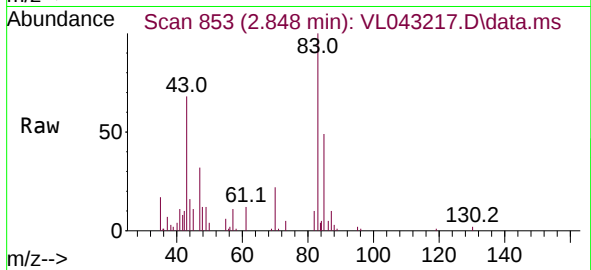
Tgt Ion: 76 Resp: 6178
Ion Ratio Lower Upper
76 100
44 49.4 16.1 24.1#
78 10.4 9.6 14.4





#29
Chloroform
Concen: 0.245 ppbv
RT: 2.848 min Scan# 851
Delta R.T. 0.006 min
Lab File: VL043217.D
Acq: 18 Nov 2025 17:40

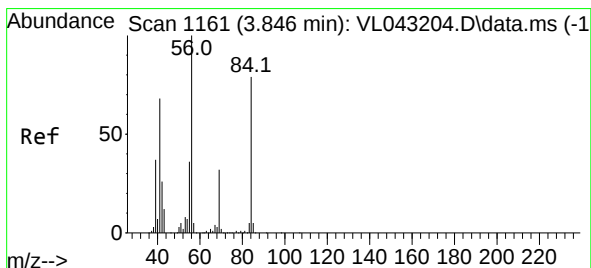
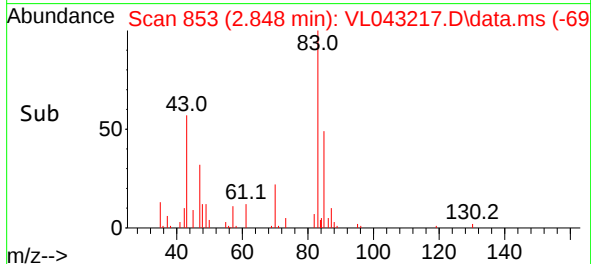
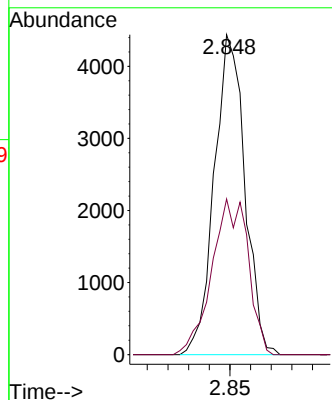
Instrument :
MSVOA_L
ClientSampleId :
IA3



Tgt Ion: 83 Resp: 4559
Ion Ratio Lower Upper
83 100
85 48.6 50.5 75.7

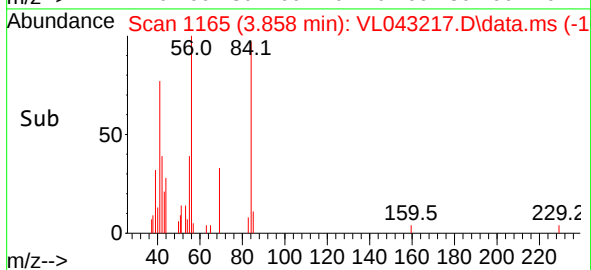
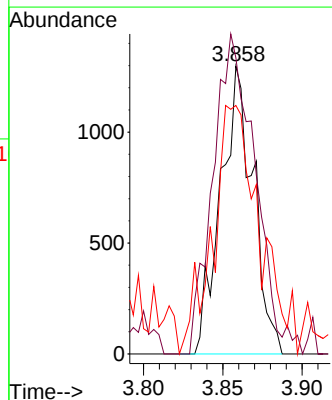
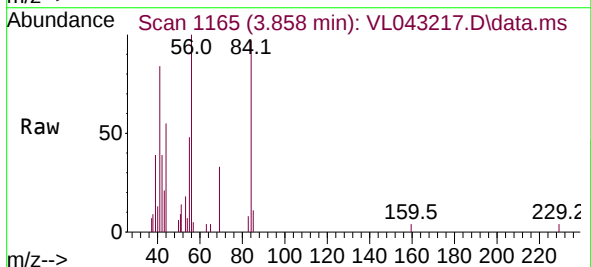
Manual Integrations
APPROVED

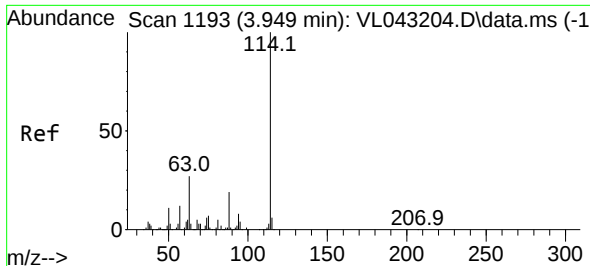
Reviewed By :Semsettin
Yesilyurt
11/19/2025
Supervised By :Mahesh
Dadoda
11/19/2025



#30
Cyclohexane
Concen: 0.168 ppbv m
RT: 3.858 min Scan# 1165
Delta R.T. 0.013 min
Lab File: VL043217.D
Acq: 18 Nov 2025 17:40

Tgt Ion: 84 Resp: 1847
Ion Ratio Lower Upper
84 100
56 144.5 104.7 157.1
41 141.1 69.0 103.6





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.959 min Scan# 1196

Delta R.T. 0.009 min

Lab File: VL043217.D

Acq: 18 Nov 2025 17:40

Instrument :

MSVOA_L

ClientSampleId :

IA3

Tgt Ion:114 Resp: 26314

Ion Ratio Lower Upper

114 100

63 25.9 21.0 31.6

88 18.4 14.9 22.3

Manual Integrations

APPROVED

Reviewed By :Semsettin

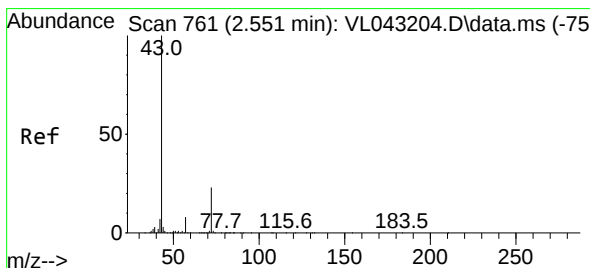
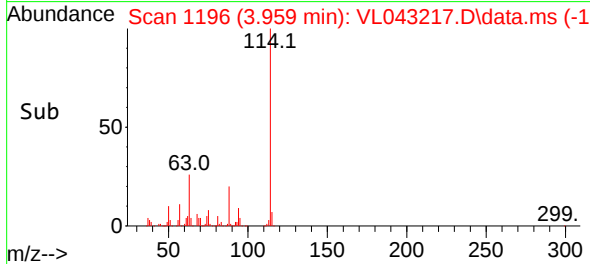
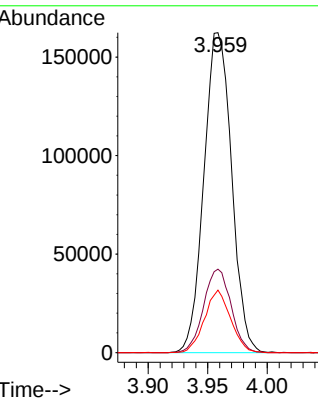
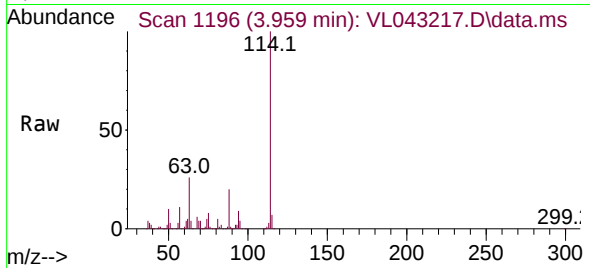
Yesilyurt

11/19/2025

Supervised By :Mahesh

Dadoda

11/19/2025



#34

2-Butanone

Concen: 28.076 ppbv

RT: 2.554 min Scan# 762

Delta R.T. 0.003 min

Lab File: VL043217.D

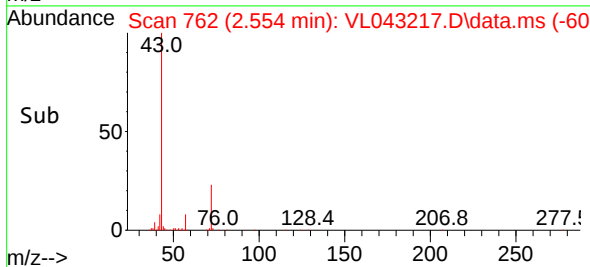
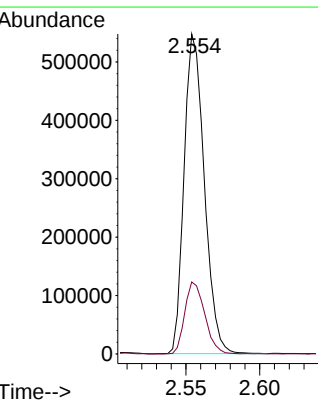
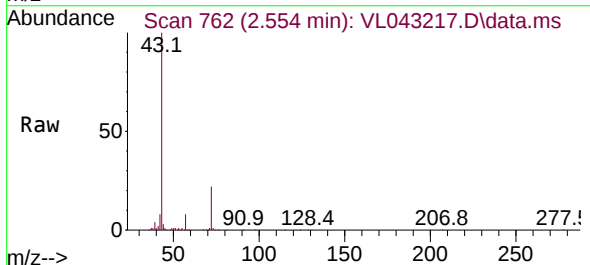
Acq: 18 Nov 2025 17:40

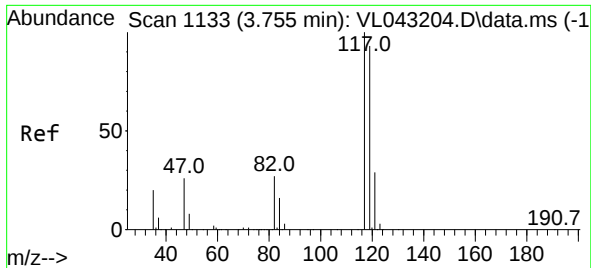
Tgt Ion: 43 Resp: 521507

Ion Ratio Lower Upper

43 100

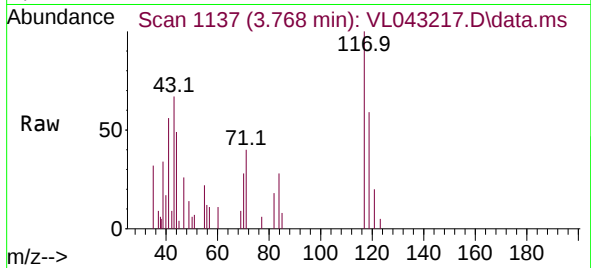
72 22.3 18.1 27.1





#35
Carbon Tetrachloride
Concen: 0.092 ppbv m
RT: 3.768 min Scan# 1133
Delta R.T. 0.013 min
Lab File: VL043217.D
Acq: 18 Nov 2025 17:40

Instrument :
MSVOA_L
ClientSampleId :
IA3

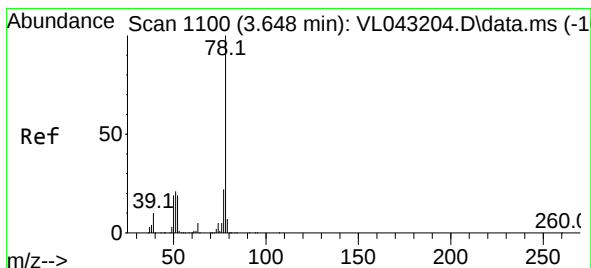
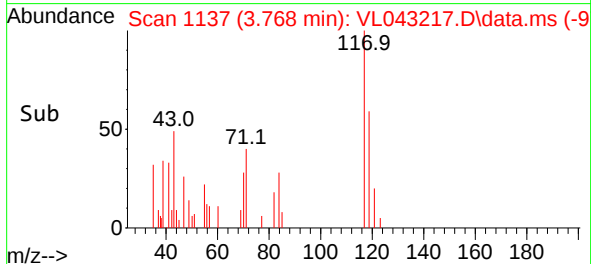
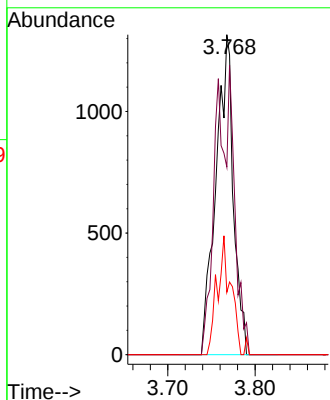


Tgt Ion: 117 Resp: 1829
Ion Ratio Lower Upper
117 100
119 58.7 74.6 112.0
121 19.5 23.2 34.8

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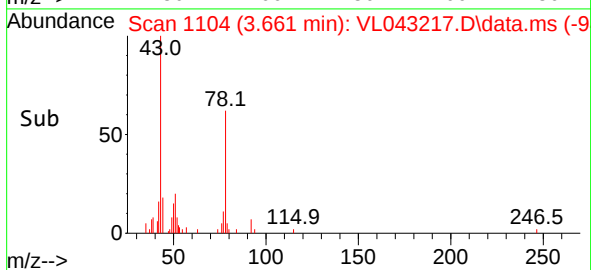
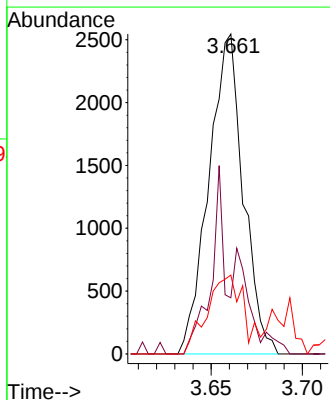
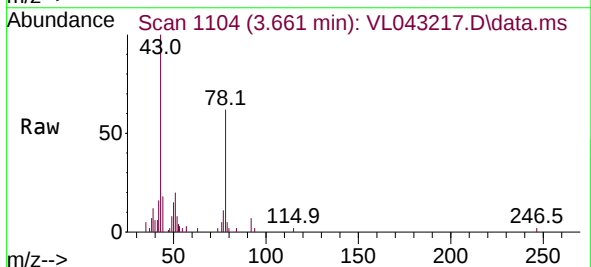
Reviewed By :Semsettin
Yesilyurt
11/19/2025

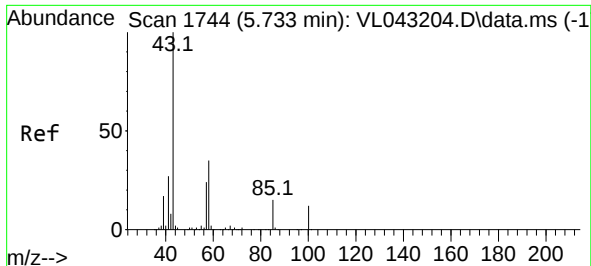
Supervised By :Mahesh
Dadoda
11/19/2025



#36
Benzene
Concen: 0.133 ppbv
RT: 3.661 min Scan# 1104
Delta R.T. 0.013 min
Lab File: VL043217.D
Acq: 18 Nov 2025 17:40

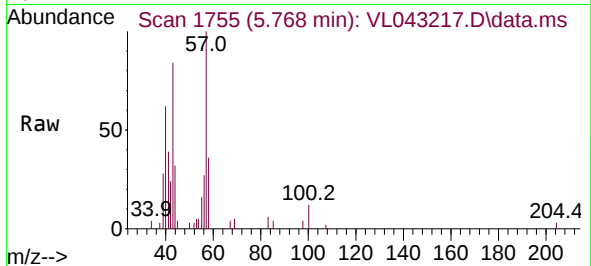
Tgt Ion: 78 Resp: 3353
Ion Ratio Lower Upper
78 100
77 17.6 17.5 26.3
50 24.7 15.5 23.3





#50
4-Methyl-2-Pentanone
Concen: 0.188 ppbv m
RT: 5.768 min Scan# 1744
Delta R.T. 0.035 min
Lab File: VL043217.D
Acq: 18 Nov 2025 17:40

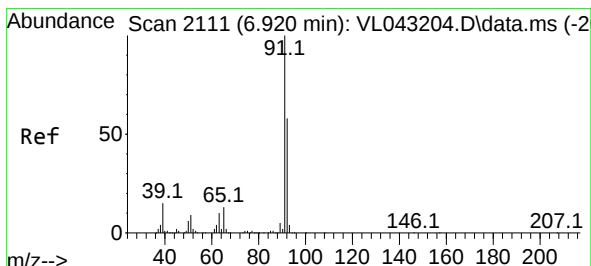
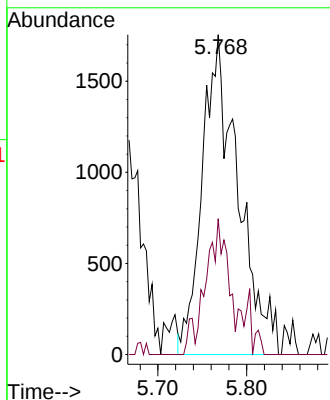
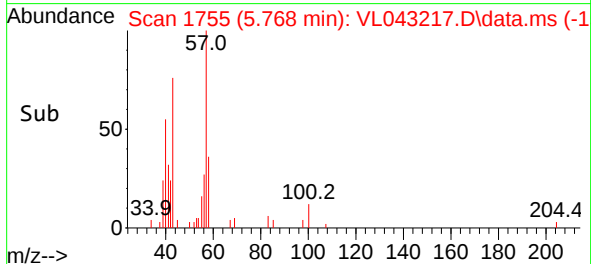
Instrument :
MSVOA_L
ClientSampleId :
IA3



Tgt Ion: 43 Resp: 4914
Ion Ratio Lower Upper
43 100
58 32.8 28.4 42.6

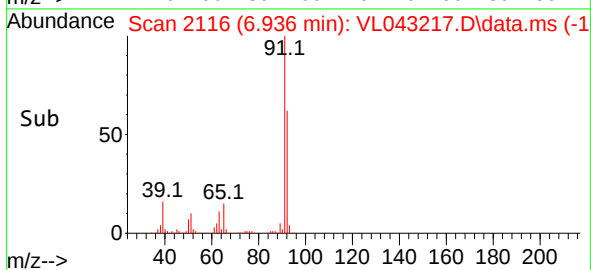
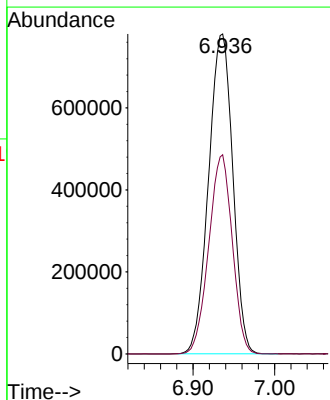
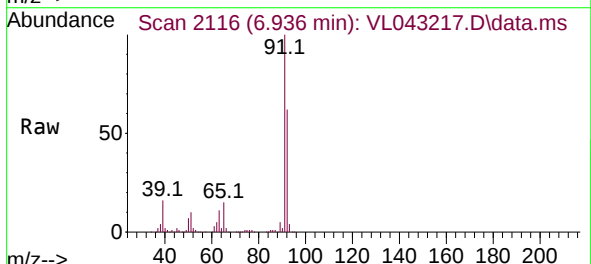
Manual Integrations
APPROVED

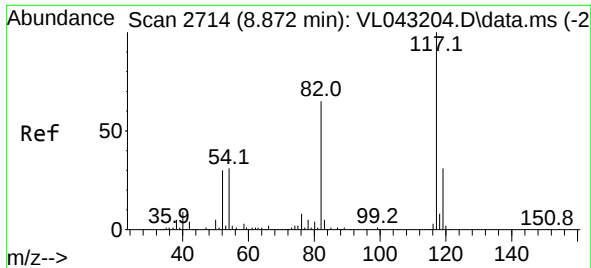
Reviewed By :Semsettin
Yesilyurt
11/19/2025
Supervised By :Mahesh
Dadoda
11/19/2025



#53
Toluene
Concen: 53.871 ppbv
RT: 6.936 min Scan# 2116
Delta R.T. 0.016 min
Lab File: VL043217.D
Acq: 18 Nov 2025 17:40

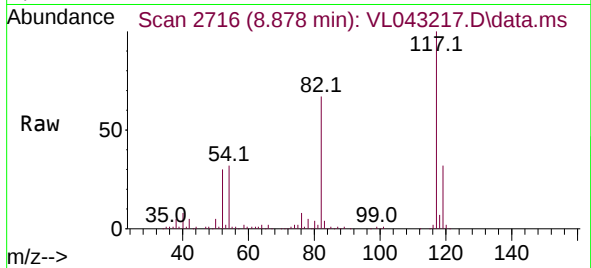
Tgt Ion: 91 Resp: 1607514
Ion Ratio Lower Upper
91 100
92 60.6 47.4 71.0





#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 21
Delta R.T. 0.006 min
Lab File: VL043217.D
Acq: 18 Nov 2025 17:40

Instrument :
MSVOA_L
ClientSampleId :
IA3

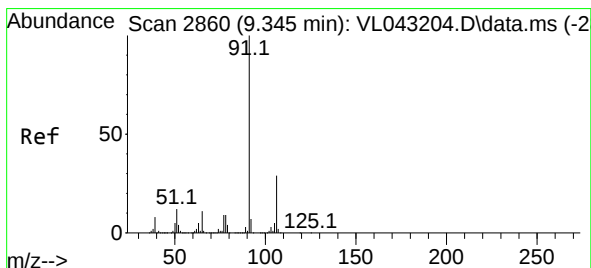
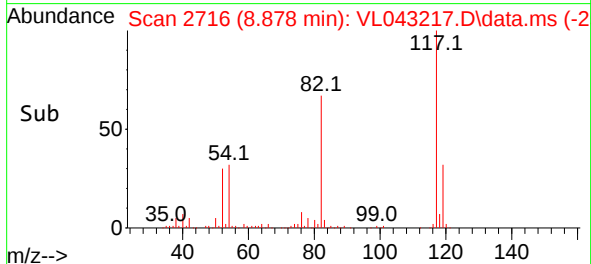
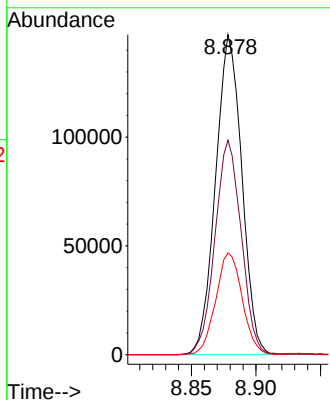


Tgt Ion:117 Resp: 208455
Ion Ratio Lower Upper
117 100
82 67.1 56.1 84.1
119 32.1 25.0 37.6

Manual Integrations
APPROVED

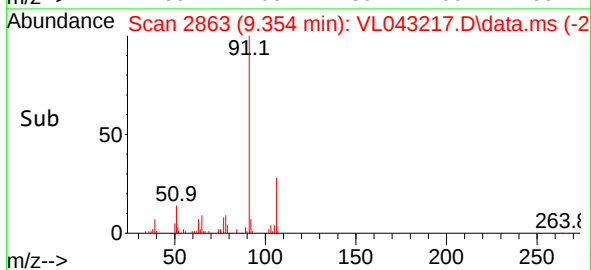
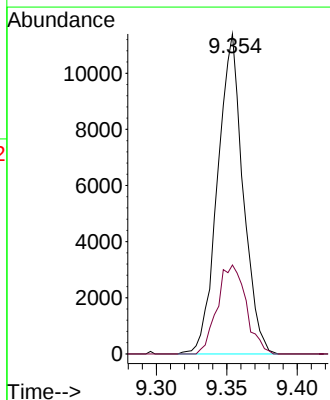
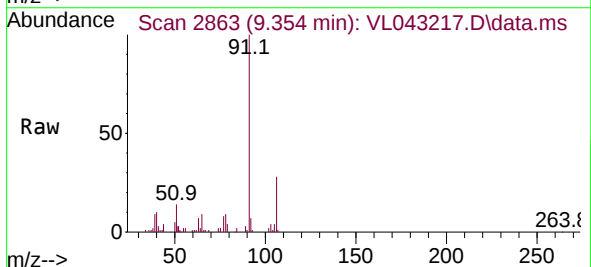
Reviewed By :Semsettin
Yesilyurt
11/19/2025

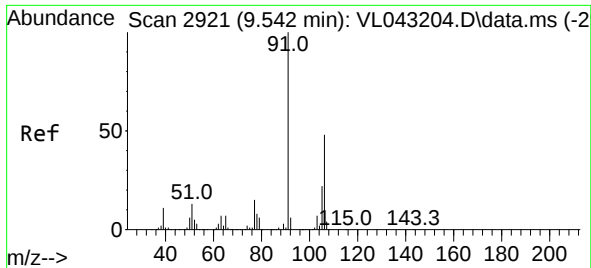
Supervised By :Mahesh
Dadoda
11/19/2025



#58
Ethyl Benzene
Concen: 0.358 ppbv
RT: 9.354 min Scan# 2863
Delta R.T. 0.009 min
Lab File: VL043217.D
Acq: 18 Nov 2025 17:40

Tgt Ion: 91 Resp: 14355
Ion Ratio Lower Upper
91 100
106 27.8 22.8 34.2





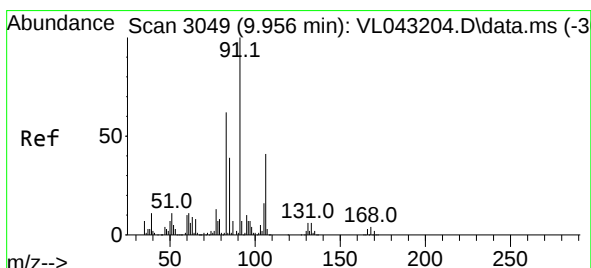
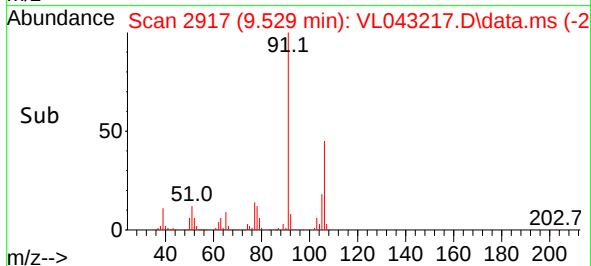
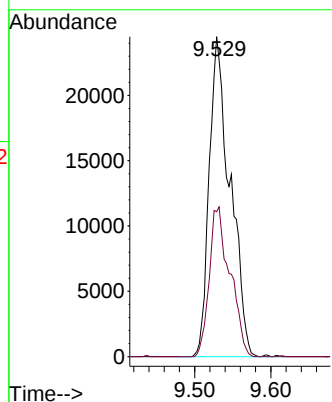
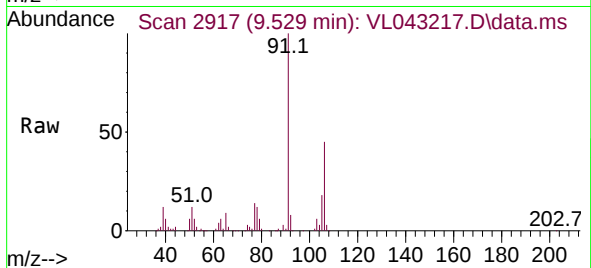
#59
m/p-Xylene
Concen: 1.452 ppbv m
RT: 9.529 min Scan# 2917
Delta R.T. -0.013 min
Lab File: VL043217.D
Acq: 18 Nov 2025 17:40

Instrument :
MSVOA_L
ClientSampleId :
IA3

Tgt Ion: 91 Resp: 46716
Ion Ratio Lower Upper
91 100
106 0.0 36.1 54.1

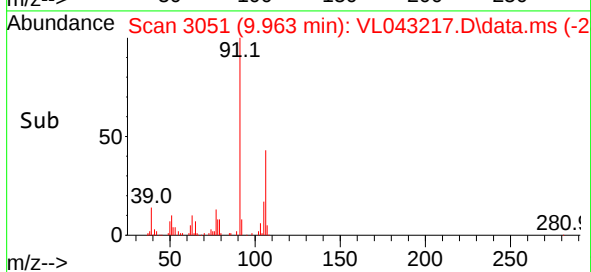
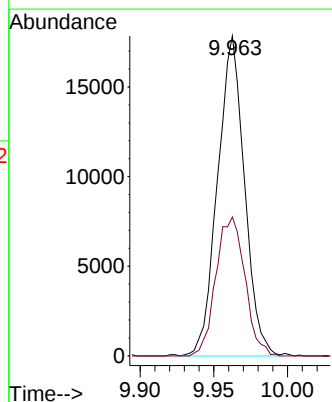
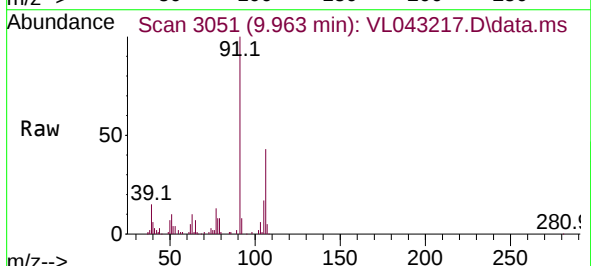
Manual Integrations
APPROVED

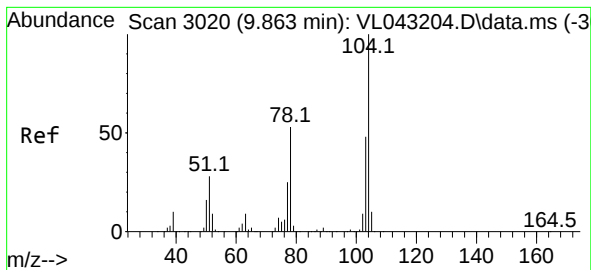
Reviewed By :Semsettin
Yesilyurt
11/19/2025
Supervised By :Mahesh
Dadoda
11/19/2025



#60
o-Xylene
Concen: 0.705 ppbv
RT: 9.963 min Scan# 3051
Delta R.T. 0.006 min
Lab File: VL043217.D
Acq: 18 Nov 2025 17:40

Tgt Ion: 91 Resp: 22645
Ion Ratio Lower Upper
91 100
106 46.8 20.9 62.8





#61

Styrene

Concen: 0.151 ppbv

RT: 9.872 min Scan# 3020

Delta R.T. 0.009 min

Lab File: VL043217.D

Acq: 18 Nov 2025 17:40

Instrument :

MSVOA_L

ClientSampleId :

IA3

Tgt Ion:	104	Resp:	2129
Ion Ratio	Lower	Upper	
104	100		
78	60.4	42.1	63.1
103	51.7	37.2	55.8

Manual Integrations
APPROVED

Reviewed By :Semsettin

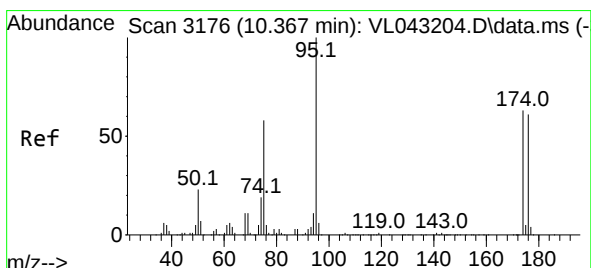
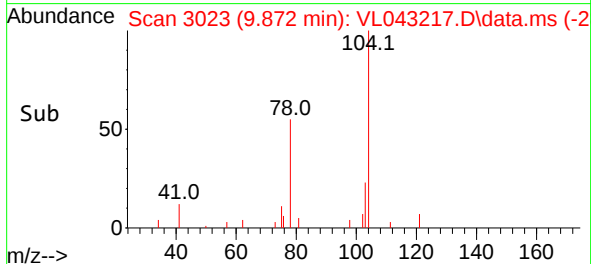
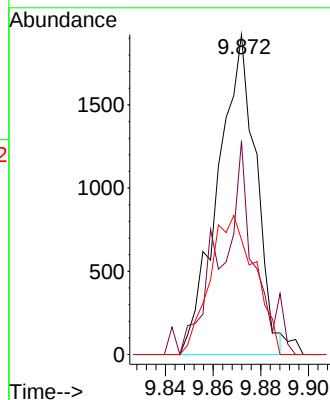
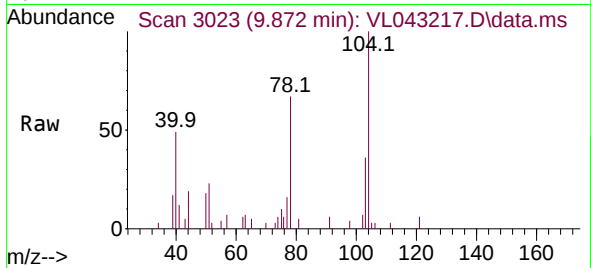
Yesilyurt

11/19/2025

Supervised By :Mahesh

Dadoda

11/19/2025



#68

1-Bromo-4-Fluorobenzene

Concen: 9.991 ppbv

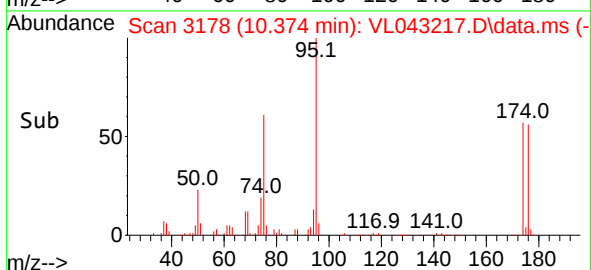
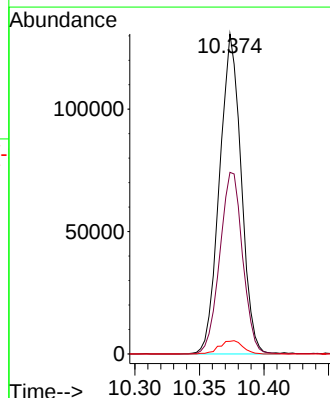
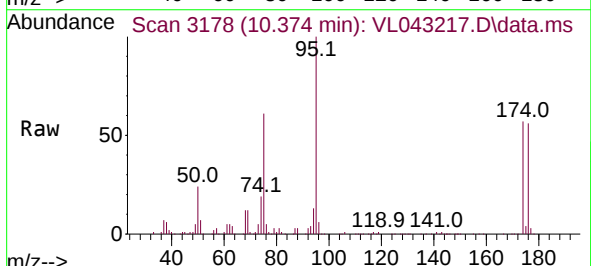
RT: 10.374 min Scan# 3178

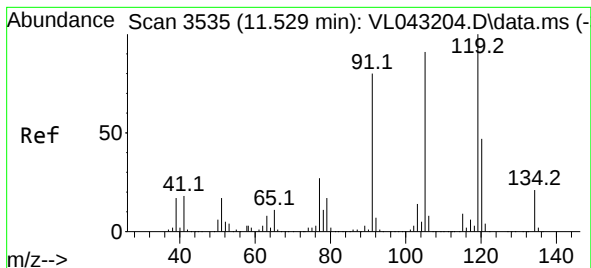
Delta R.T. 0.006 min

Lab File: VL043217.D

Acq: 18 Nov 2025 17:40

Tgt Ion:	95	Resp:	152659
Ion Ratio	Lower	Upper	
95	100		
174	59.9	50.2	75.2
175	4.4	4.1	6.1





#74

1,2,4-Trimethylbenzene

Concen: 0.367 ppbv

RT: 11.536 min Scan# 3537

Delta R.T. 0.006 min

Lab File: VL043217.D

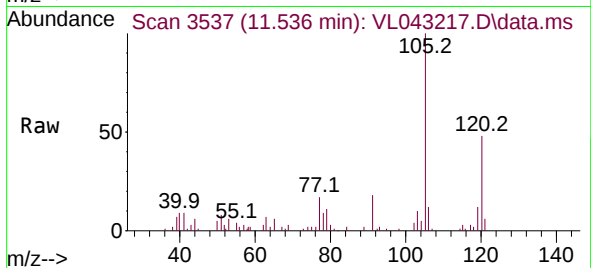
Acq: 18 Nov 2025 17:40

Instrument :

MSVOA_L

ClientSampleId :

IA3



Tgt Ion:105 Resp: 1313

Ion Ratio Lower Upper

105 100

120 47.7 41.7 62.5

91 18.0 70.0 105.0

77 17.3 23.8 35.8

Manual Integrations

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Reviewed By :Semsettin

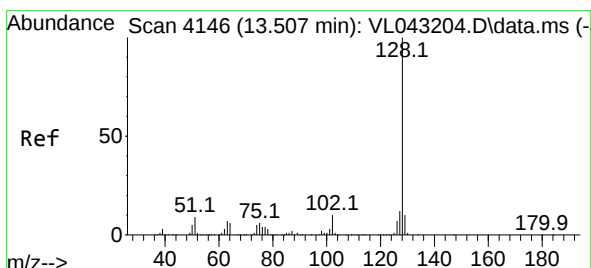
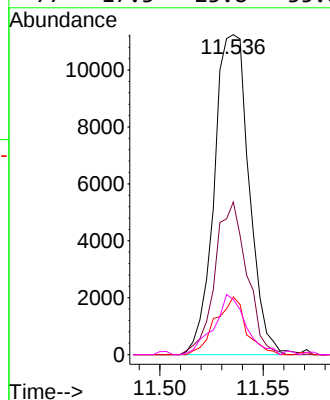
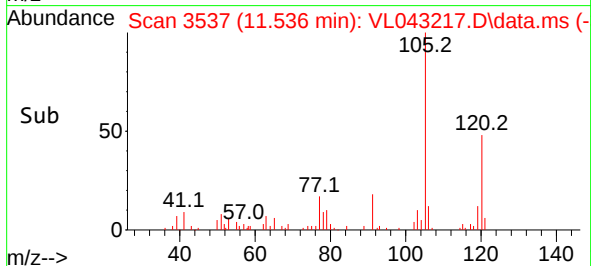
Yesilyurt

11/19/2025

Supervised By :Mahesh

Dadoda

11/19/2025



#79

Naphthalene

Concen: 0.180 ppbv

RT: 13.516 min Scan# 4149

Delta R.T. 0.009 min

Lab File: VL043217.D

Acq: 18 Nov 2025 17:40

Tgt Ion:128 Resp: 5717

Ion Ratio Lower Upper

128 100

127 19.2 9.9 14.9

129 11.7 8.4 12.6

