

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL061625\
 Data File : VL042629.D
 Acq On : 16 Jun 2025 15:12
 Operator : SY/MD
 Sample : Q2317-03
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 115-IA-2

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 06/20/2025
 Supervised By :Mahesh Dadoda 06/20/2025

Quant Time: Jun 17 14:19:02 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL052925AIR.M

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

QLast Update : Fri May 30 02:01:56 2025

Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.790	49	106087	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.962	114	286951	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.885	117	264656	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.380	95	201774	10.170	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.700%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.499	85	6451	0.495	ppbv	95
4) Chloromethane	1.531	50	3632	0.703	ppbv	94
9) Propene	1.486	41	3335m	0.461	ppbv	
10) Heptane	4.985	43	4351m	0.213	ppbv	
11) Trichlorofluoromethane	1.877	101	65222	5.376	ppbv	95
13) Ethanol	1.722	45	486754	564.798	ppbv	98
15) Acetone	1.835	43	410961	32.160	ppbv	99
17) tert-Butyl alcohol	2.043	59	4892m	0.367	ppbv	
19) Isopropyl Alcohol	1.887	45	78614	10.291	ppbv #	1
20) Methylene Chloride	2.062	84	2472	0.586	ppbv #	93
25) Ethyl Acetate	2.842	43	32533	0.930	ppbv #	91
26) Hexane	2.829	57	15180	0.955	ppbv	95
29) Chloroform	2.852	83	6100	0.295	ppbv	100
34) 2-Butanone	2.564	43	46400	2.267	ppbv	98
35) Carbon Tetrachloride	3.768	117	1577m	0.083	ppbv	
36) Benzene	3.661	78	9624	0.341	ppbv #	91
41) Tetrahydrofuran	3.065	42	18450	1.540	ppbv	93
52) Tetrachloroethene	8.225	164	390m	0.037	ppbv	
53) Toluene	6.936	91	19503	0.597	ppbv	100
58) Ethyl Benzene	9.361	91	4016	0.089	ppbv #	85
59) m/p-Xylene	9.539	91	10049m	0.284	ppbv	
60) o-Xylene	9.969	91	3689	0.105	ppbv	99
69) p-Isopropyltoluene	11.930	119	30528	0.549	ppbv	93
74) 1,2,4-Trimethylbenzene	11.539	105	5204	0.129	ppbv #	67
76) 1,4-Dichlorobenzene	11.675	146	559989	22.160	ppbv	99

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

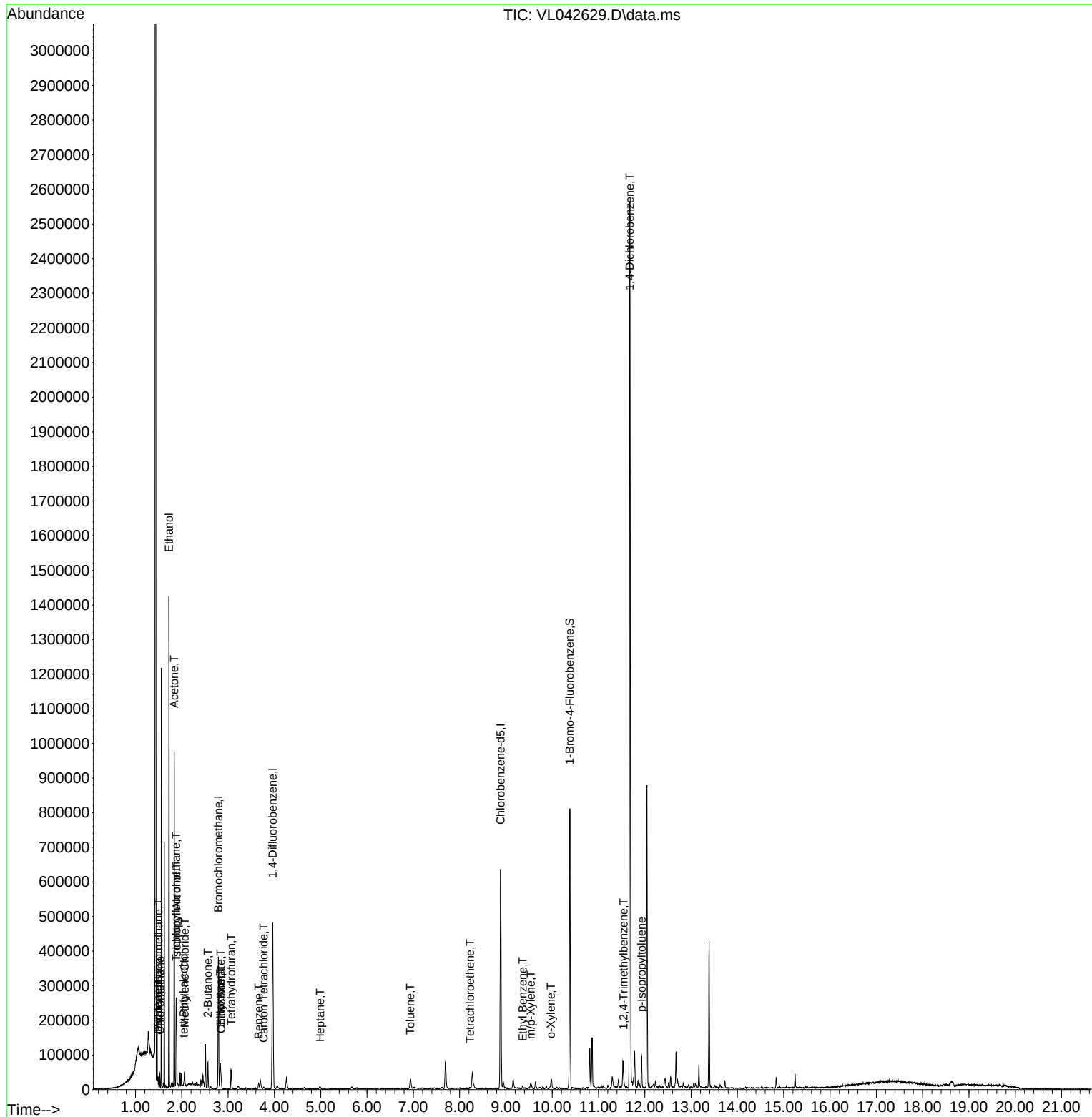
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL061625\
Data File : VL042629.D
Acq On : 16 Jun 2025 15:12
Operator : SY/MD
Sample : Q2317-03
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

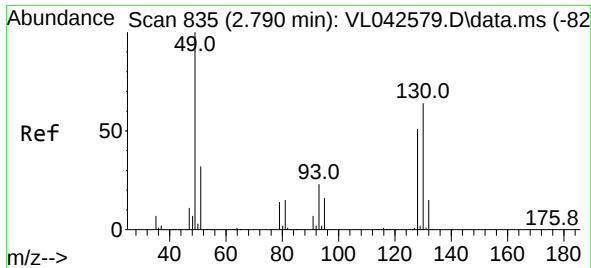
Instrument :
MSVOA_L
ClientSampleId :
115-IA-2

Quant Time: Jun 17 14:19:02 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL052925AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug
QLast Update : Fri May 30 02:01:56 2025
Response via : Initial Calibration

Manual Integrations
APPROVED

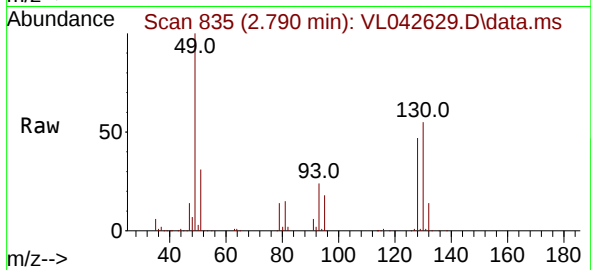
Reviewed By : Semsettin Yesilyurt 06/20/2025
Supervised By : Mahesh Dadoda 06/20/2025





#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.790 min Scan# 835
Delta R.T. 0.000 min
Lab File: VL042629.D
Acq: 16 Jun 2025 15:12

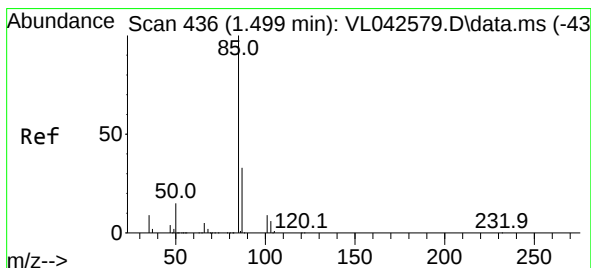
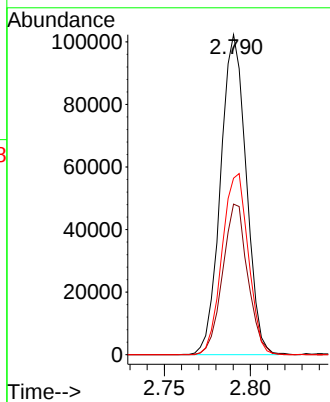
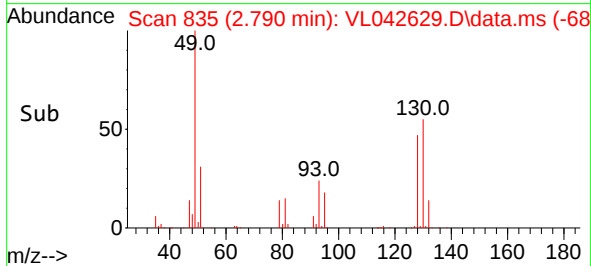
Instrument :
MSVOA_L
ClientSampleId :
115-IA-2



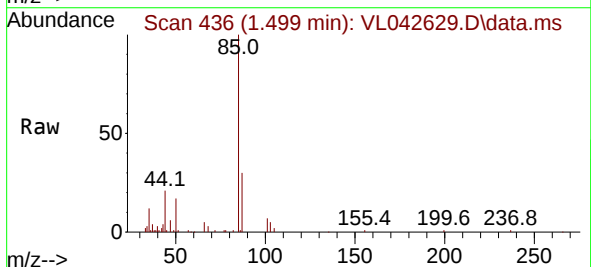
Tgt Ion: 49 Resp: 10608
Ion Ratio Lower Upper
49 100
128 46.2 24.2 72.6
130 57.9 30.4 91.2

Manual Integrations
APPROVED

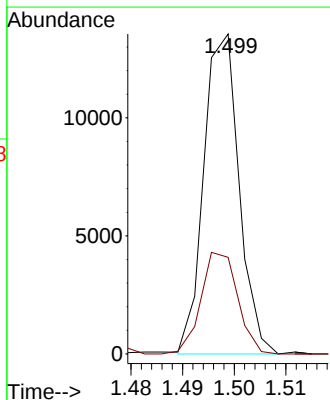
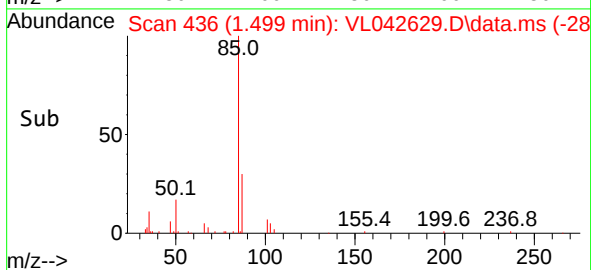
Reviewed By :Semsettin Yesilyurt 06/20/2025
Supervised By :Mahesh Dadoda 06/20/2025

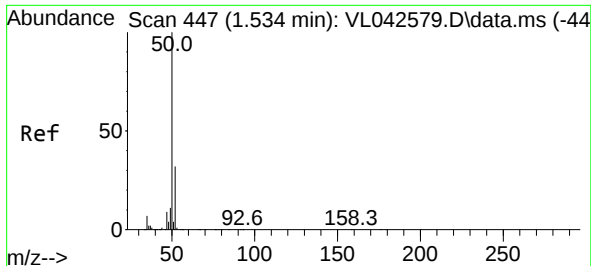


#2
Dichlorodifluoromethane
Concen: 0.495 ppbv
RT: 1.499 min Scan# 436
Delta R.T. -0.000 min
Lab File: VL042629.D
Acq: 16 Jun 2025 15:12



Tgt Ion: 85 Resp: 6451
Ion Ratio Lower Upper
85 100
87 30.2 26.6 39.8





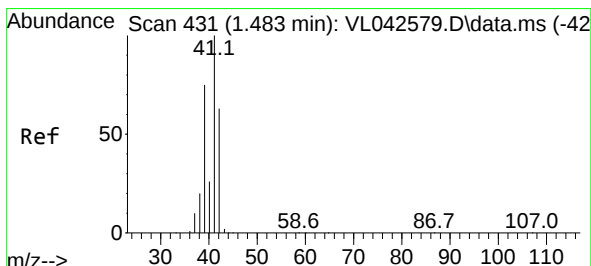
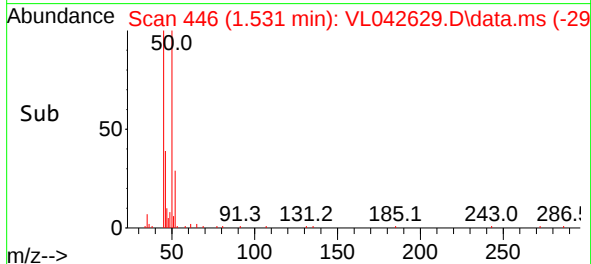
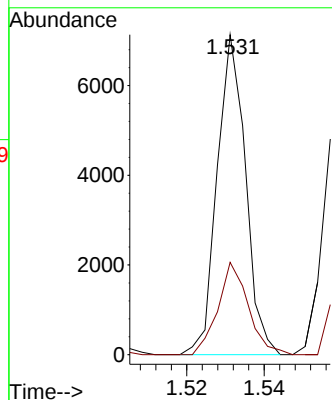
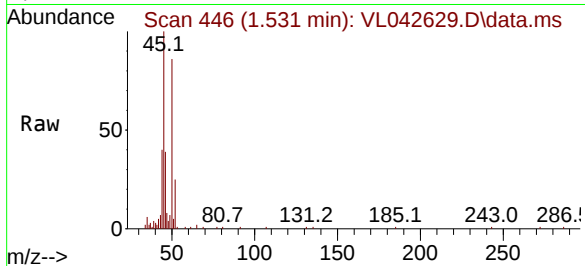
#4
Chloromethane
Concen: 0.703 ppbv
RT: 1.531 min Scan# 447
Delta R.T. -0.003 min
Lab File: VL042629.D
Acq: 16 Jun 2025 15:12

Instrument :
MSVOA_L
ClientSampleId :
115-IA-2

Tgt Ion: 50 Resp: 363
Ion Ratio Lower Upper
50 100
52 28.8 25.8 38.6

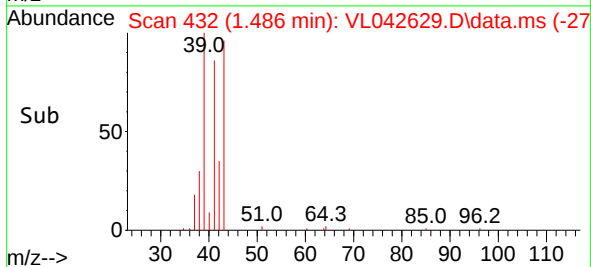
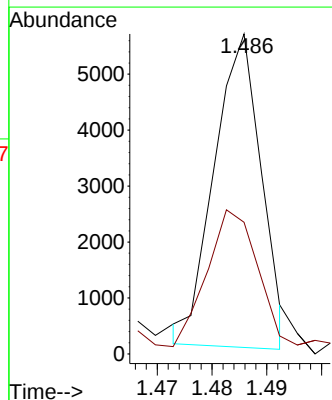
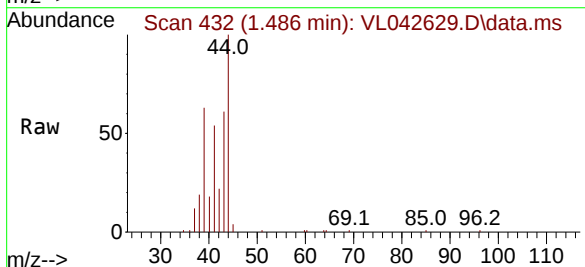
Manual Integrations
APPROVED

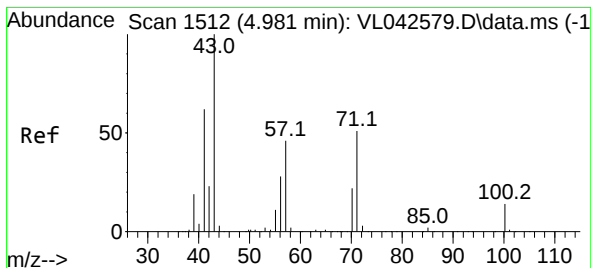
Reviewed By :Semsettin Yesilyurt 06/20/2025
Supervised By :Mahesh Dadoda 06/20/2025



#9
Propene
Concen: 0.461 ppbv m
RT: 1.486 min Scan# 432
Delta R.T. 0.003 min
Lab File: VL042629.D
Acq: 16 Jun 2025 15:12

Tgt Ion: 41 Resp: 3335
Ion Ratio Lower Upper
41 100
42 2569.7 53.3 79.9#





#10

Heptane

Concen: 0.213 ppbv m

RT: 4.985 min Scan# 1513

Delta R.T. 0.003 min

Lab File: VL042629.D

Acq: 16 Jun 2025 15:12

Instrument :

MSVOA_1

ClientSampleId :

115-IA-2

Tgt Ion: 43 Resp: 435

Ion Ratio Lower Upper

43 100

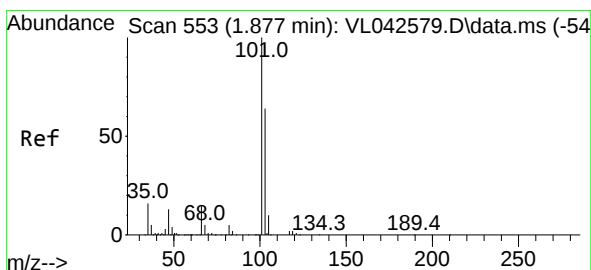
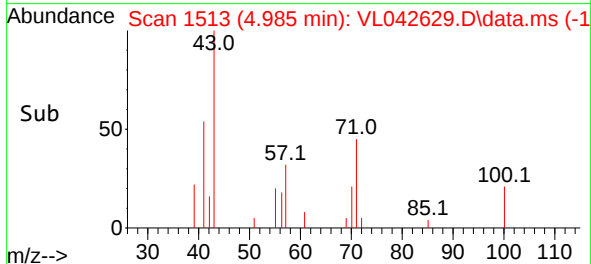
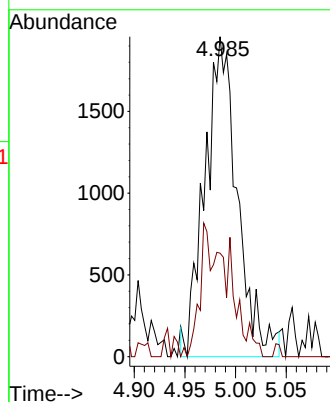
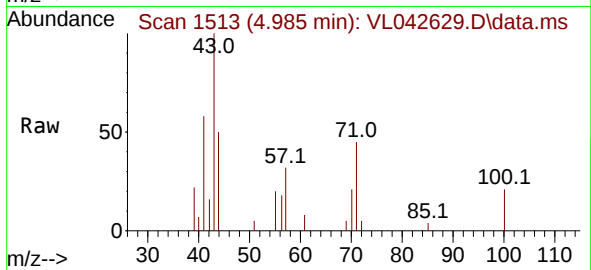
57 0.0 38.9 58.3

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 06/20/2025

Supervised By :Mahesh Dadoda 06/20/2025



#11

Trichlorofluoromethane

Concen: 5.376 ppbv

RT: 1.877 min Scan# 553

Delta R.T. -0.000 min

Lab File: VL042629.D

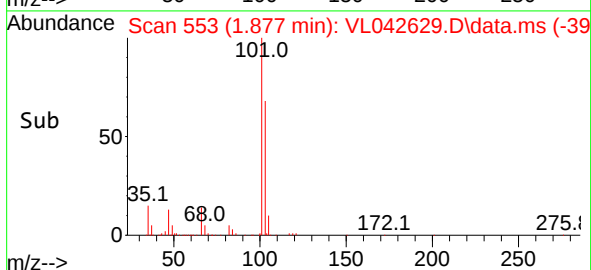
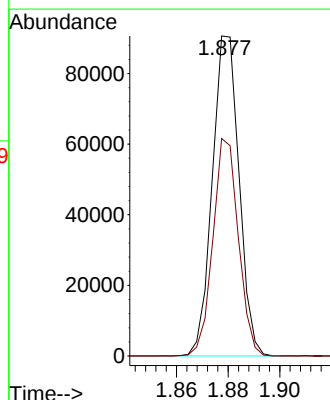
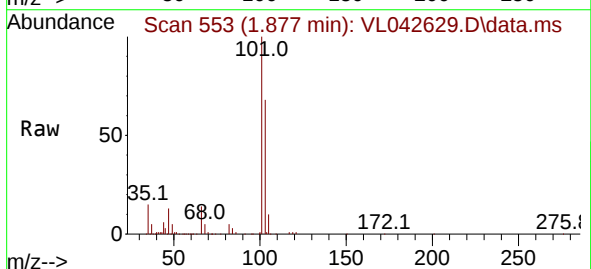
Acq: 16 Jun 2025 15:12

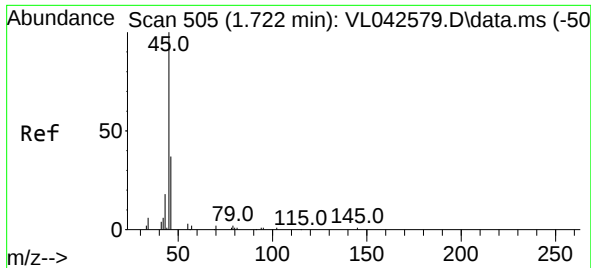
Tgt Ion:101 Resp: 65222

Ion Ratio Lower Upper

101 100

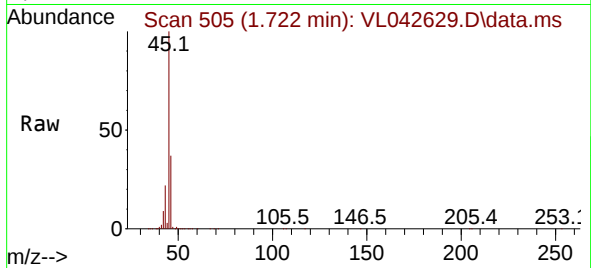
103 67.9 51.5 77.3





#13
Ethanol
Concen: 564.798 ppbv
RT: 1.722 min Scan# 505
Delta R.T. 0.000 min
Lab File: VL042629.D
Acq: 16 Jun 2025 15:12

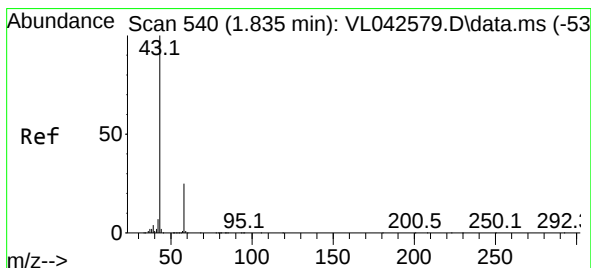
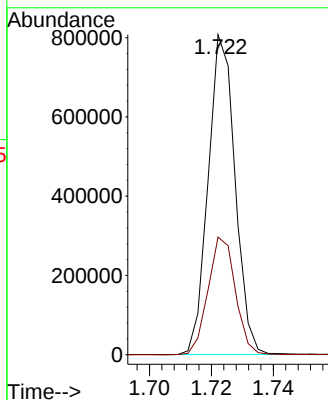
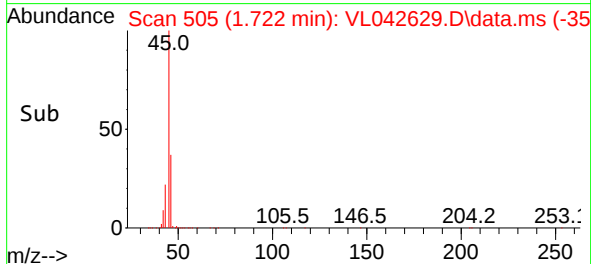
Instrument :
MSVOA_L
ClientSampleId :
115-IA-2



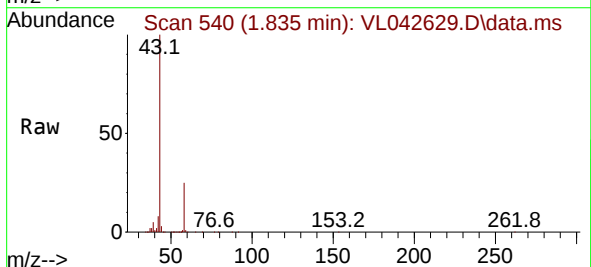
Tgt Ion: 45 Resp: 486754
Ion Ratio Lower Upper
45 100
46 37.6 14.5 58.1

Manual Integrations
APPROVED

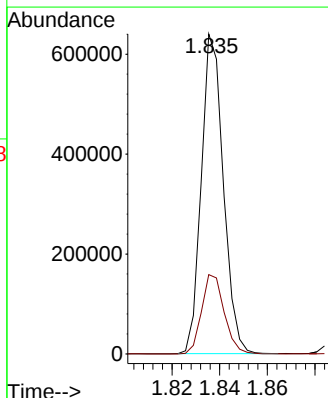
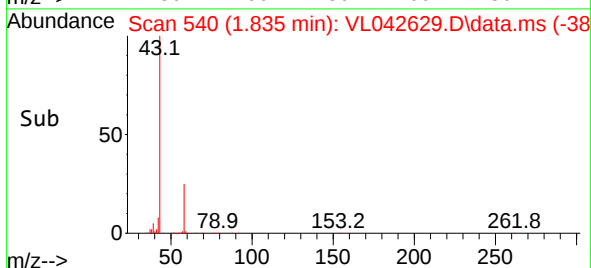
Reviewed By :Semsettin Yesilyurt 06/20/2025
Supervised By :Mahesh Dadoda 06/20/2025

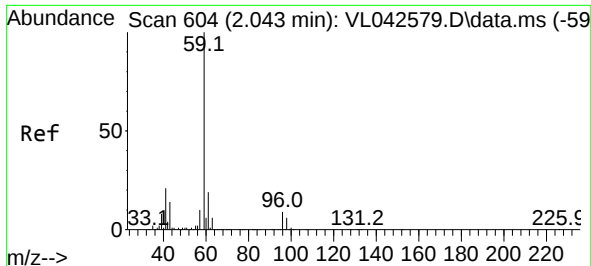


#15
Acetone
Concen: 32.160 ppbv
RT: 1.835 min Scan# 540
Delta R.T. 0.000 min
Lab File: VL042629.D
Acq: 16 Jun 2025 15:12



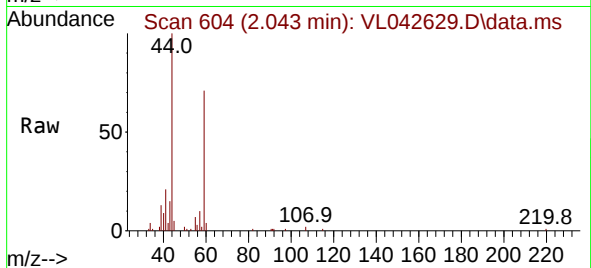
Tgt Ion: 43 Resp: 410961
Ion Ratio Lower Upper
43 100
58 25.6 21.0 31.4





#17
tert-Butyl alcohol
Concen: 0.367 ppbv m
RT: 2.043 min Scan# 604
Delta R.T. -0.000 min
Lab File: VL042629.D
Acq: 16 Jun 2025 15:12

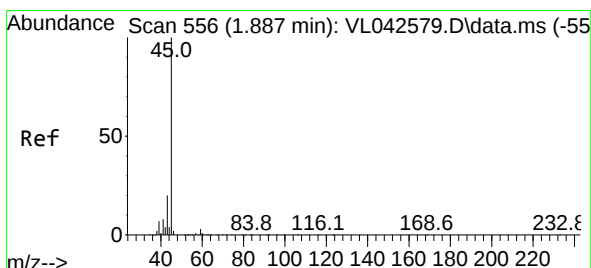
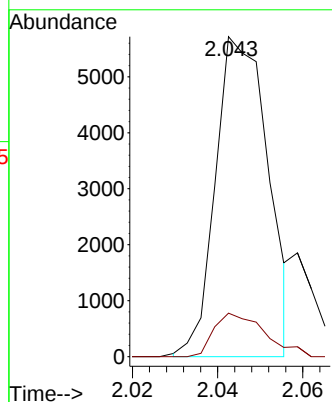
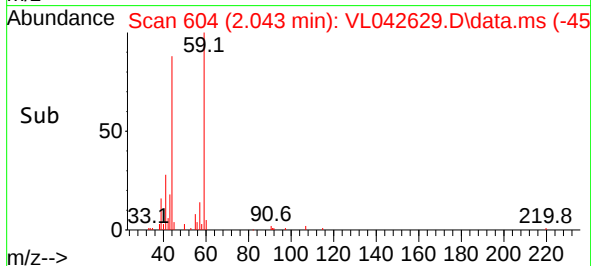
Instrument :
MSVOA_1
ClientSampleId :
115-IA-2



Tgt Ion: 59 Resp: 4892
Ion Ratio Lower Upper
59 100
57 13.2 8.6 12.8

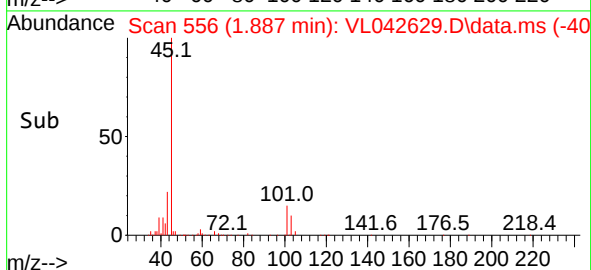
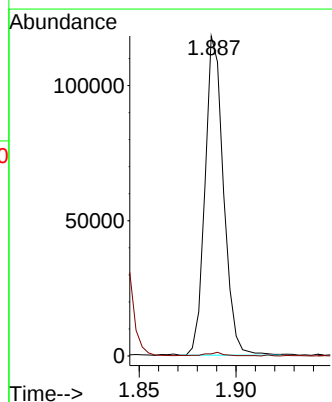
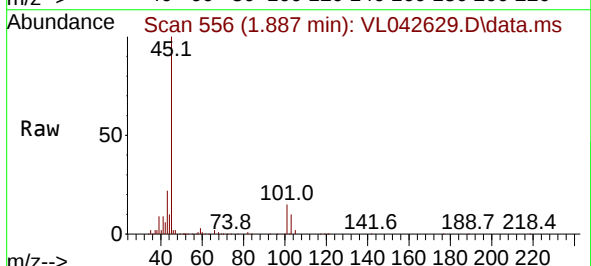
Manual Integrations
APPROVED

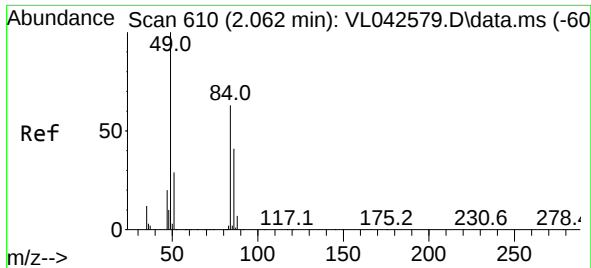
Reviewed By :Semsettin Yesilyurt 06/20/2025
Supervised By :Mahesh Dadoda 06/20/2025



#19
Isopropyl Alcohol
Concen: 10.291 ppbv
RT: 1.887 min Scan# 556
Delta R.T. 0.000 min
Lab File: VL042629.D
Acq: 16 Jun 2025 15:12

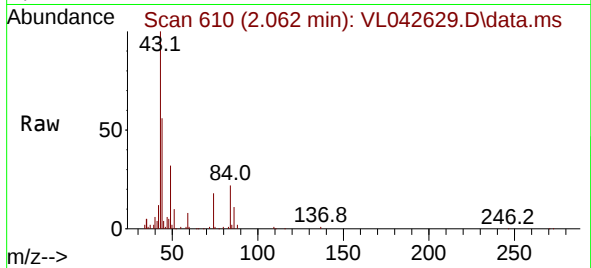
Tgt Ion: 45 Resp: 78614
Ion Ratio Lower Upper
45 100
58 133.9 29.4 44.2





#20
Methylene Chloride
Concen: 0.586 ppbv
RT: 2.062 min Scan# 610
Delta R.T. -0.000 min
Lab File: VL042629.D
Acq: 16 Jun 2025 15:12

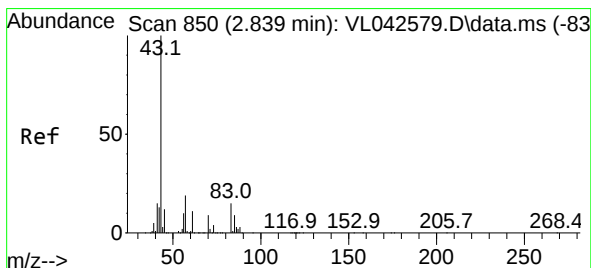
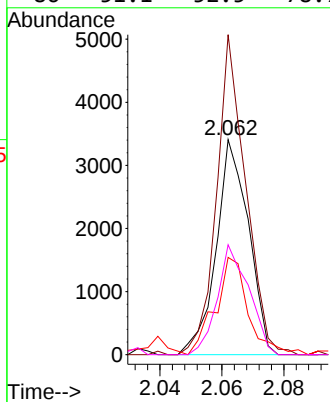
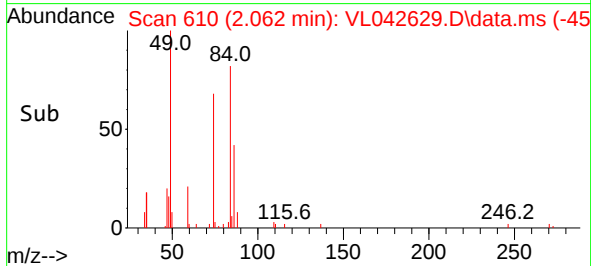
Instrument :
MSVOA_L
ClientSampleId :
115-IA-2



Tgt Ion: 84 Resp: 2472
Ion Ratio Lower Upper
84 100
49 158.4 128.8 193.2
51 43.6 38.6 57.8
86 51.1 52.5 78.7#

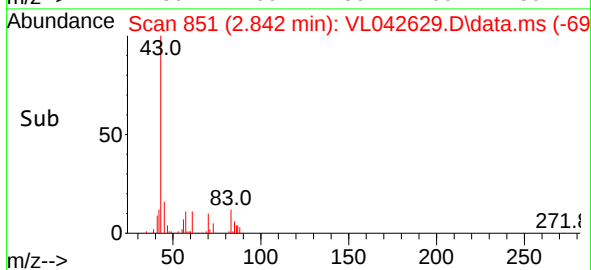
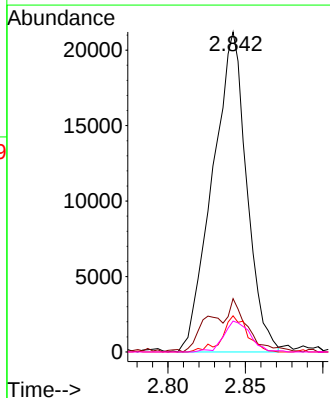
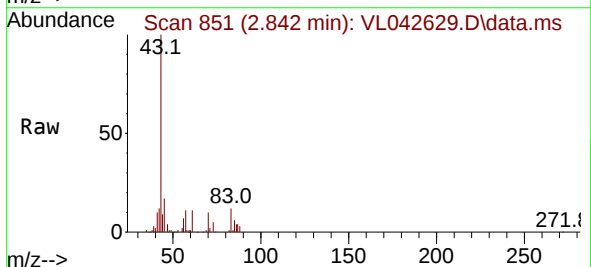
Manual Integrations
APPROVED

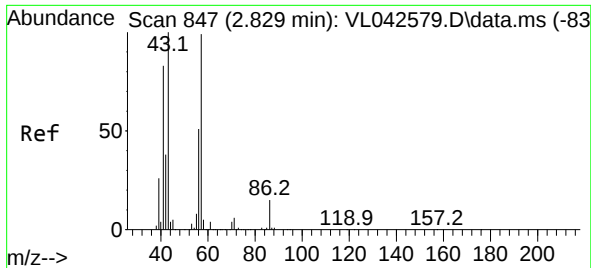
Reviewed By :Semsettin Yesilyurt 06/20/2025
Supervised By :Mahesh Dadoda 06/20/2025



#25
Ethyl Acetate
Concen: 0.930 ppbv
RT: 2.842 min Scan# 851
Delta R.T. 0.003 min
Lab File: VL042629.D
Acq: 16 Jun 2025 15:12

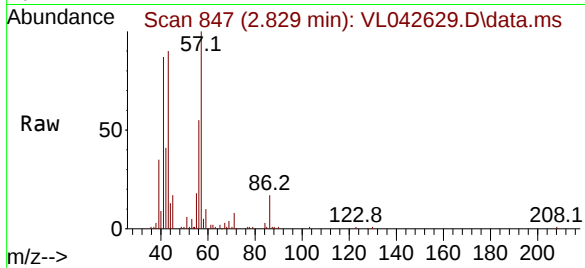
Tgt Ion: 43 Resp: 32533
Ion Ratio Lower Upper
43 100
45 18.4 8.2 12.2#
61 8.4 7.1 10.7
70 7.5 6.4 9.6





#26
Hexane
Concen: 0.955 ppbv
RT: 2.829 min Scan# 847
Delta R.T. -0.000 min
Lab File: VL042629.D
Acq: 16 Jun 2025 15:12

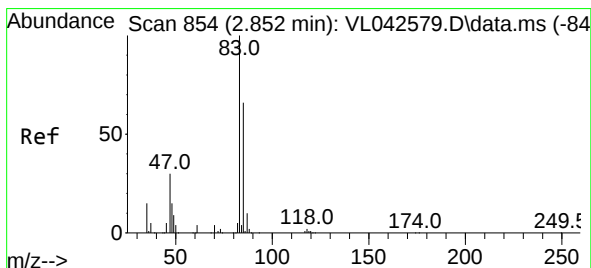
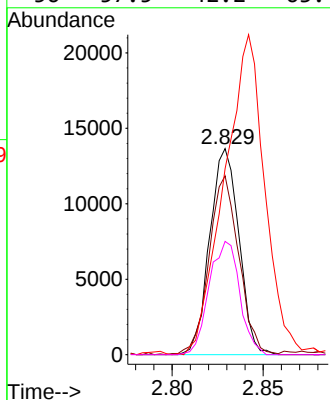
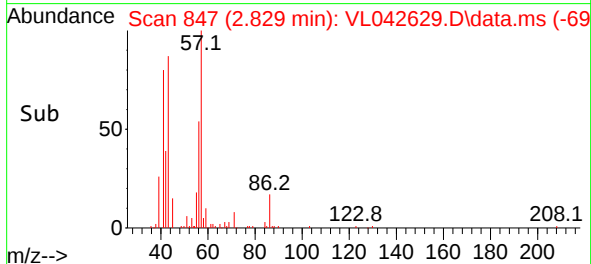
Instrument :
MSVOA_L
ClientSampleId :
115-IA-2



Tgt Ion: 57 Resp: 15180
Ion Ratio Lower Upper
57 100
41 90.9 70.6 106.0
43 218.4 181.1 271.7
56 57.5 42.2 63.4

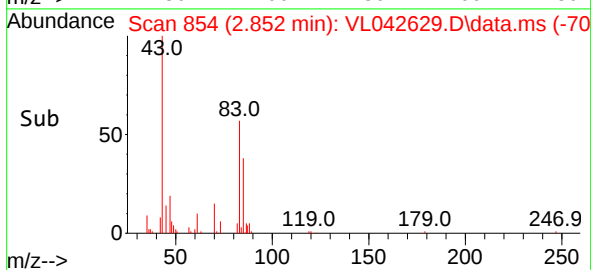
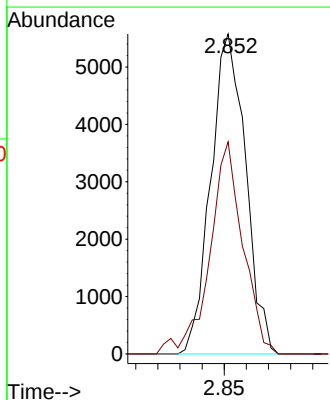
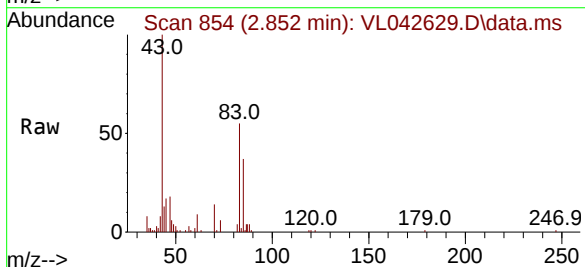
Manual Integrations
APPROVED

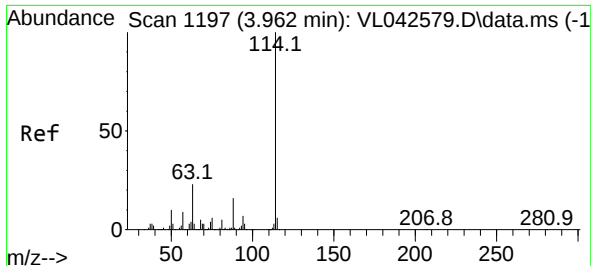
Reviewed By :Semsettin Yesilyurt 06/20/2025
Supervised By :Mahesh Dadoda 06/20/2025



#29
Chloroform
Concen: 0.295 ppbv
RT: 2.852 min Scan# 854
Delta R.T. -0.000 min
Lab File: VL042629.D
Acq: 16 Jun 2025 15:12

Tgt Ion: 83 Resp: 6100
Ion Ratio Lower Upper
83 100
85 66.3 52.8 79.2





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.962 min Scan# 1197

Delta R.T. -0.000 min

Lab File: VL042629.D

Acq: 16 Jun 2025 15:12

Instrument :

MSVOA_L

ClientSampleId :

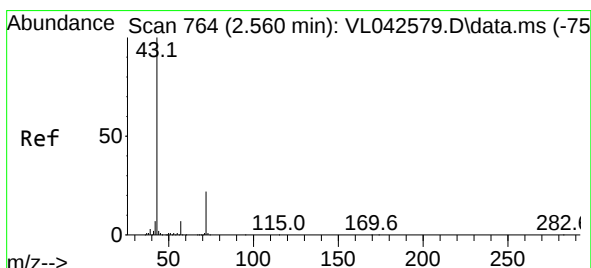
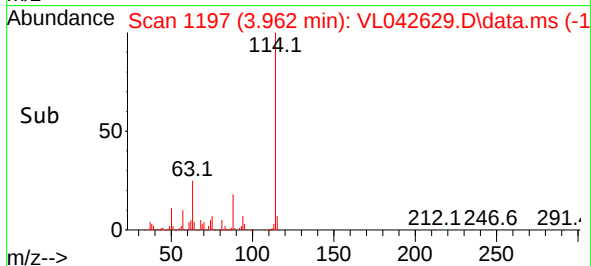
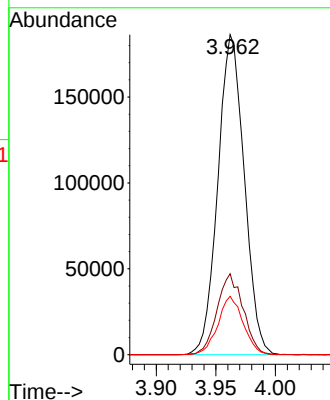
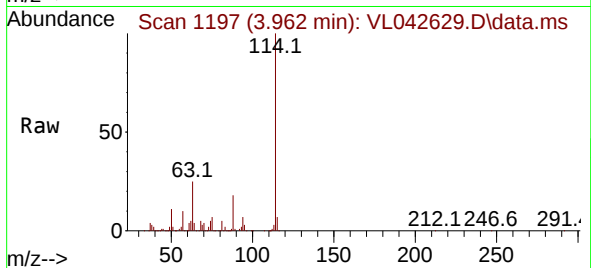
115-IA-2

Tgt Ion:114 Resp: 28695
 Ion Ratio Lower Upper
 114 100
 63 25.0 19.0 28.6
 88 17.4 13.6 20.4

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 06/20/2025
 Supervised By :Mahesh Dadoda 06/20/2025



#34

2-Butanone

Concen: 2.267 ppbv

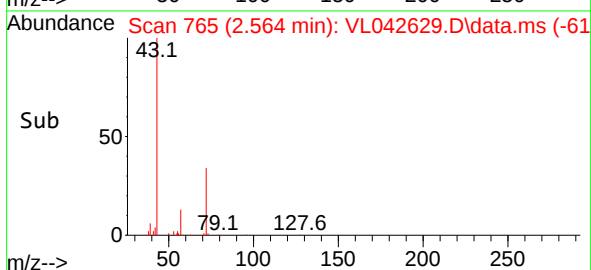
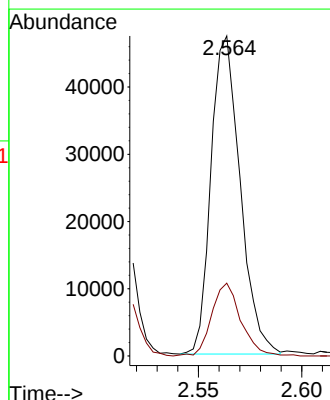
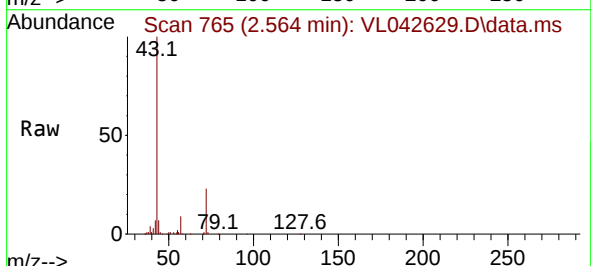
RT: 2.564 min Scan# 765

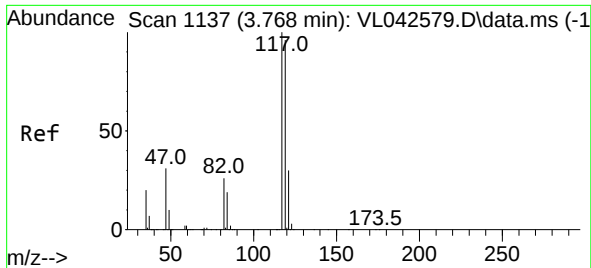
Delta R.T. 0.003 min

Lab File: VL042629.D

Acq: 16 Jun 2025 15:12

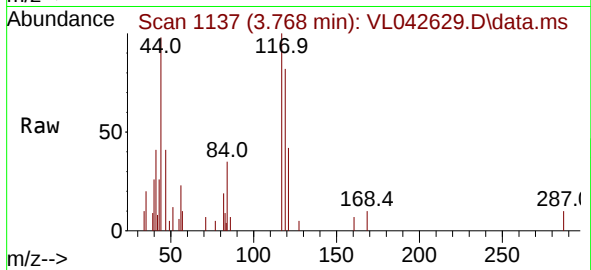
Tgt Ion: 43 Resp: 46400
 Ion Ratio Lower Upper
 43 100
 72 23.0 17.7 26.5





#35
Carbon Tetrachloride
Concen: 0.083 ppbv m
RT: 3.768 min Scan# 1137
Delta R.T. -0.000 min
Lab File: VL042629.D
Acq: 16 Jun 2025 15:12

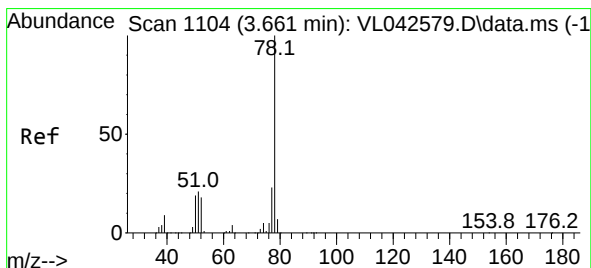
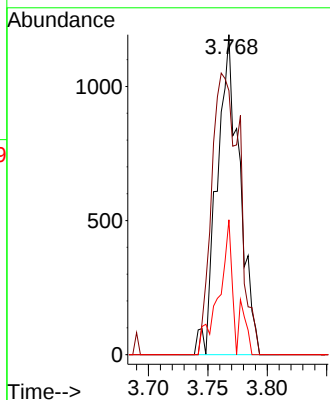
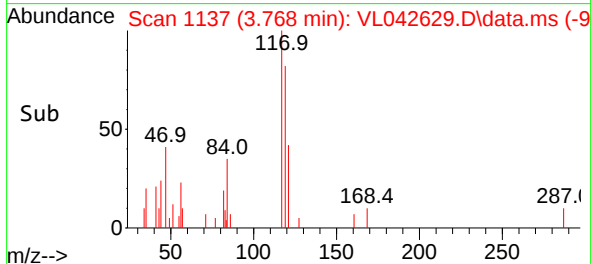
Instrument :
MSVOA_L
ClientSampleId :
115-IA-2



Tgt Ion: 117 Resp: 157
Ion Ratio Lower Upper
117 100
119 82.5 76.8 115.2
121 42.2 24.3 36.5

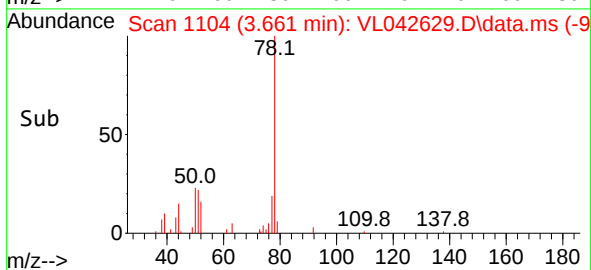
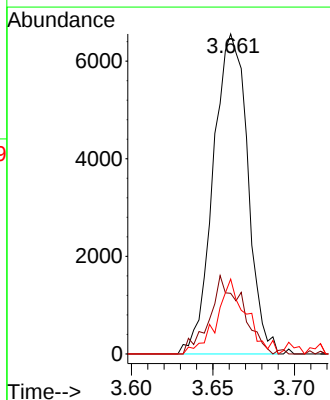
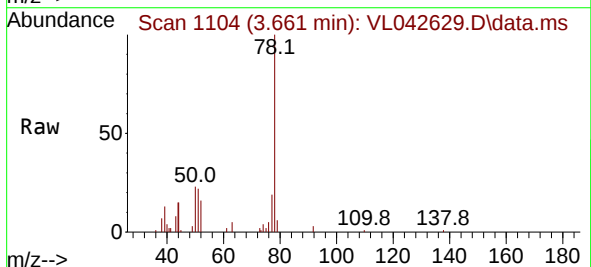
Manual Integrations
APPROVED

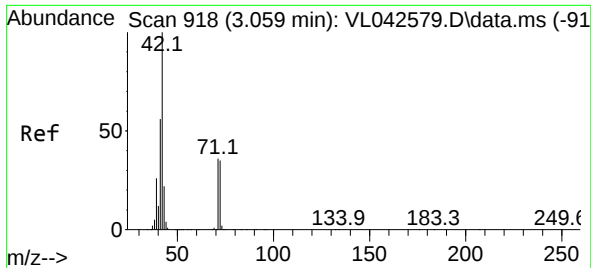
Reviewed By :Semsettin Yesilyurt 06/20/2025
Supervised By :Mahesh Dadoda 06/20/2025



#36
Benzene
Concen: 0.341 ppbv
RT: 3.661 min Scan# 1104
Delta R.T. -0.000 min
Lab File: VL042629.D
Acq: 16 Jun 2025 15:12

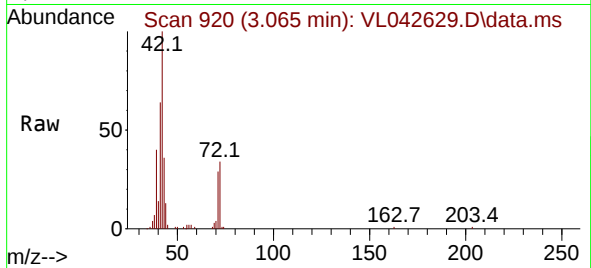
Tgt Ion: 78 Resp: 9624
Ion Ratio Lower Upper
78 100
77 19.0 18.2 27.2
50 23.4 15.2 22.8





#41
Tetrahydrofuran
Concen: 1.540 ppbv
RT: 3.065 min Scan# 918
Delta R.T. 0.006 min
Lab File: VL042629.D
Acq: 16 Jun 2025 15:12

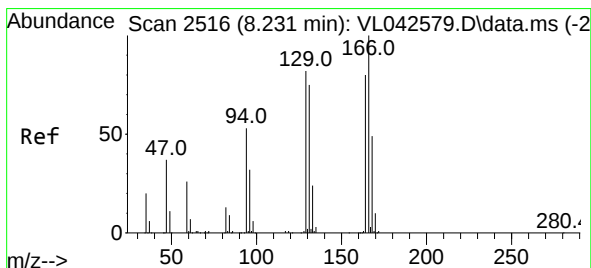
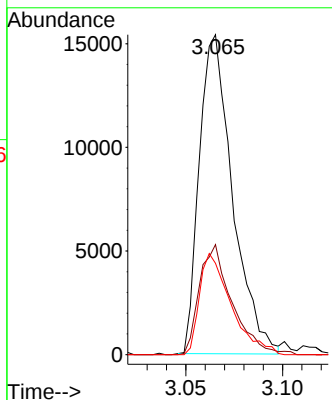
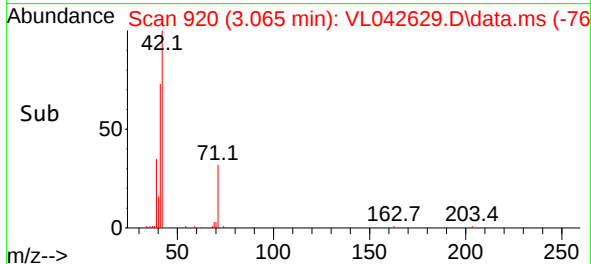
Instrument :
MSVOA_L
ClientSampleId :
115-IA-2



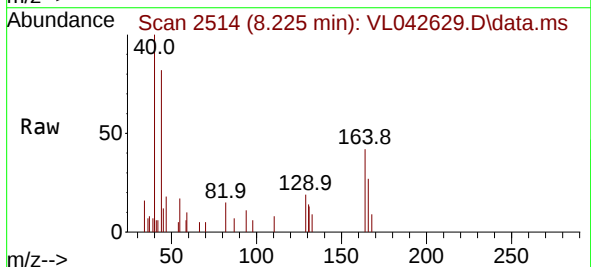
Tgt Ion: 42 Resp: 18450
Ion Ratio Lower Upper
42 100
72 33.8 28.9 43.3
71 30.2 28.5 42.7

Manual Integrations
APPROVED

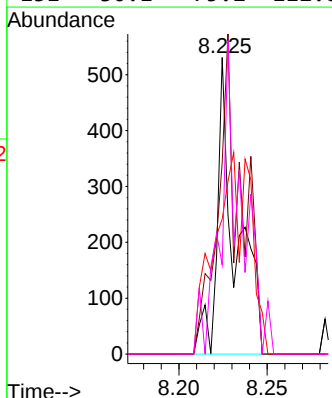
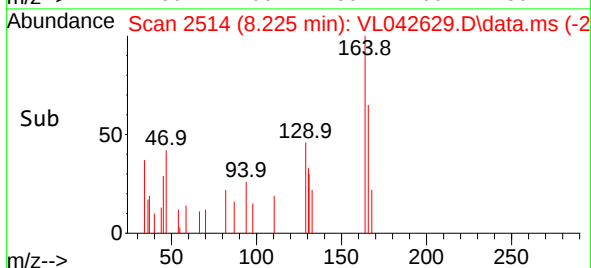
Reviewed By :Semsettin Yesilyurt 06/20/2025
Supervised By :Mahesh Dadoda 06/20/2025

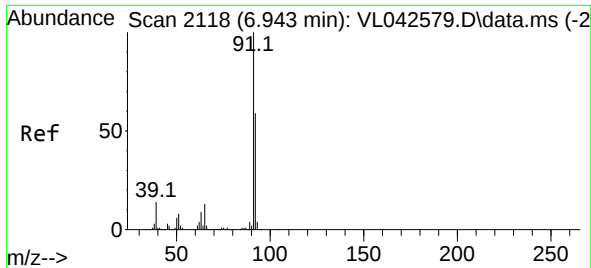


#52
Tetrachloroethene
Concen: 0.037 ppbv m
RT: 8.225 min Scan# 2514
Delta R.T. -0.006 min
Lab File: VL042629.D
Acq: 16 Jun 2025 15:12



Tgt Ion:164 Resp: 390
Ion Ratio Lower Upper
164 100
166 64.6 100.0 150.0#
129 45.6 82.2 123.4#
131 30.1 75.2 112.8#





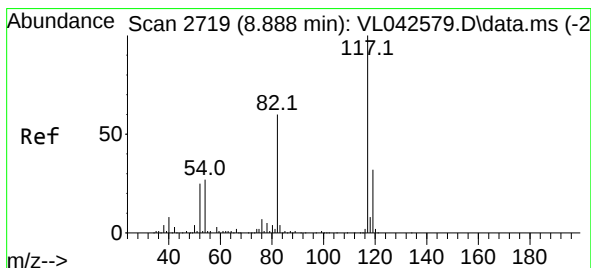
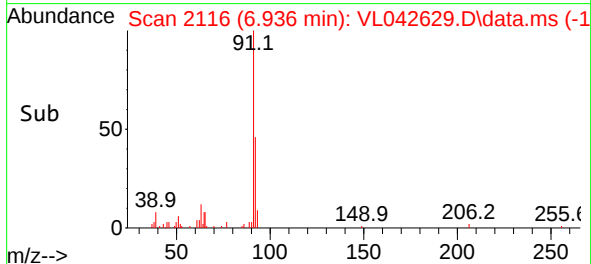
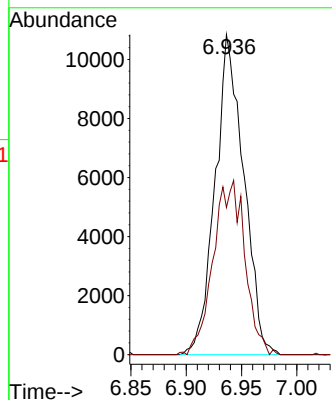
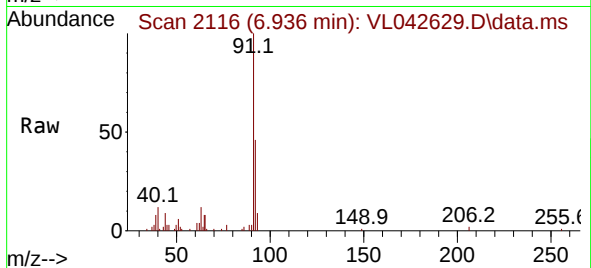
#53
Toluene
Concen: 0.597 ppbv
RT: 6.936 min Scan# 2116
Delta R.T. -0.006 min
Lab File: VL042629.D
Acq: 16 Jun 2025 15:12

Instrument :
MSVOA_L
ClientSampleId :
115-IA-2

Tgt Ion: 91 Resp: 1950
Ion Ratio Lower Upper
91 100
92 60.2 48.2 72.4

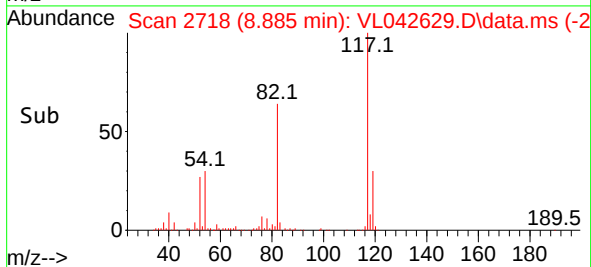
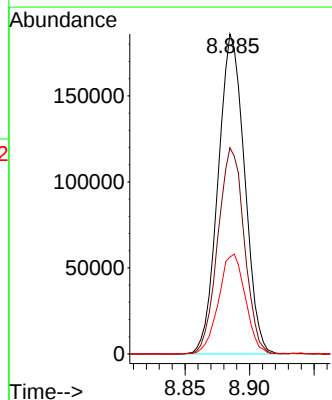
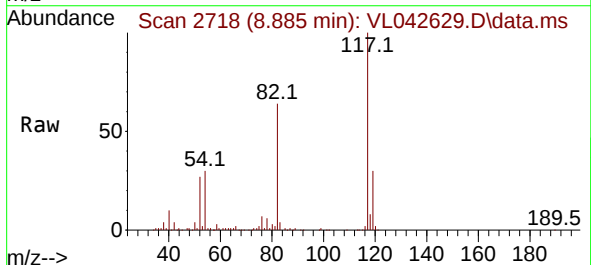
Manual Integrations
APPROVED

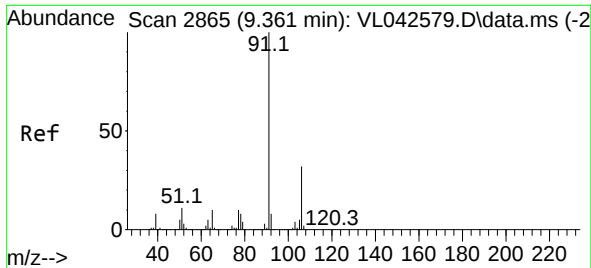
Reviewed By :Semsettin Yesilyurt 06/20/2025
Supervised By :Mahesh Dadoda 06/20/2025



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.885 min Scan# 2718
Delta R.T. -0.003 min
Lab File: VL042629.D
Acq: 16 Jun 2025 15:12

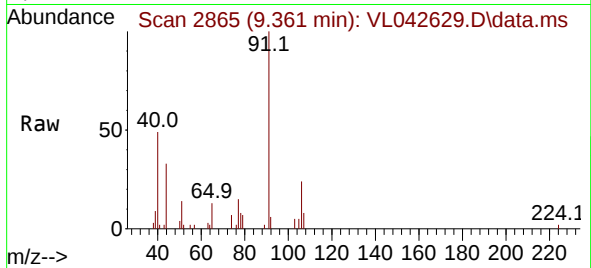
Tgt Ion:117 Resp: 264656
Ion Ratio Lower Upper
117 100
82 64.6 51.2 76.8
119 31.8 26.3 39.5





#58
Ethyl Benzene
Concen: 0.089 ppbv
RT: 9.361 min Scan# 2865
Delta R.T. 0.000 min
Lab File: VL042629.D
Acq: 16 Jun 2025 15:12

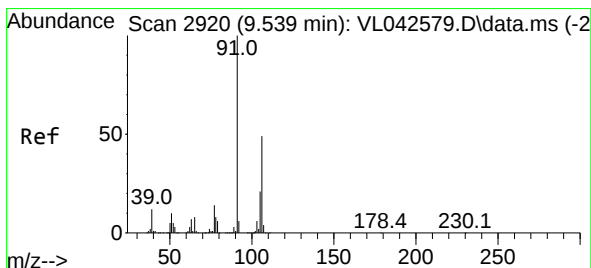
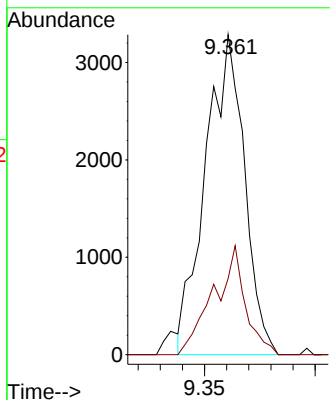
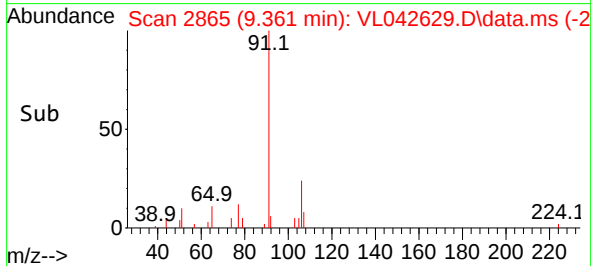
Instrument :
MSVOA_L
ClientSampleId :
115-IA-2



Tgt Ion: 91 Resp: 4010
Ion Ratio Lower Upper
91 100
106 23.8 25.9 38.9

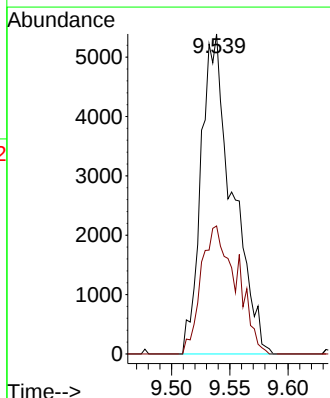
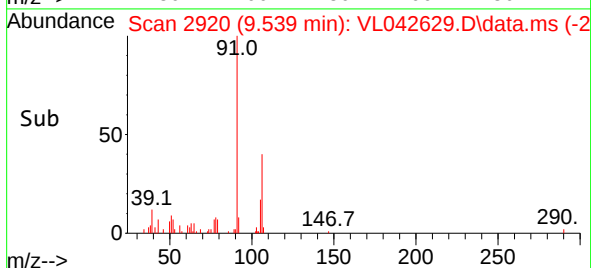
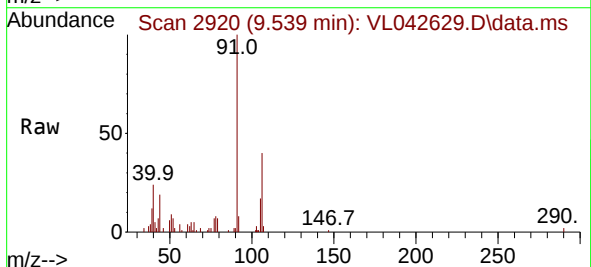
Manual Integrations
APPROVED

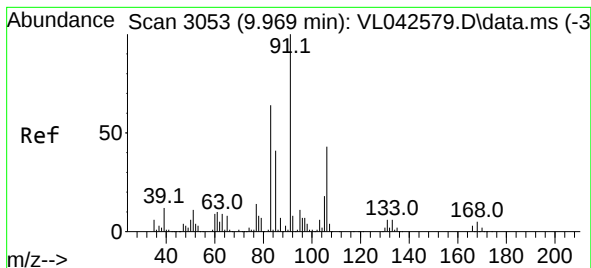
Reviewed By :Semsettin Yesilyurt 06/20/2025
Supervised By :Mahesh Dadoda 06/20/2025



#59
m/p-Xylene
Concen: 0.284 ppbv m
RT: 9.539 min Scan# 2920
Delta R.T. -0.000 min
Lab File: VL042629.D
Acq: 16 Jun 2025 15:12

Tgt Ion: 91 Resp: 10049
Ion Ratio Lower Upper
91 100
106 45.5 38.8 58.2





#60

o-Xylene

Concen: 0.105 ppbv

RT: 9.969 min Scan# 3053

Delta R.T. -0.000 min

Lab File: VL042629.D

Acq: 16 Jun 2025 15:12

Instrument :

MSVOA_1

ClientSampleId :

115-IA-2

Tgt Ion: 91 Resp: 3689

Ion Ratio Lower Upper

91 100

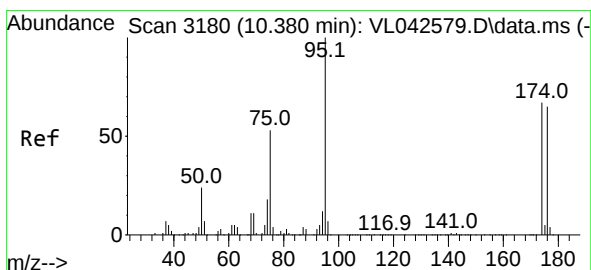
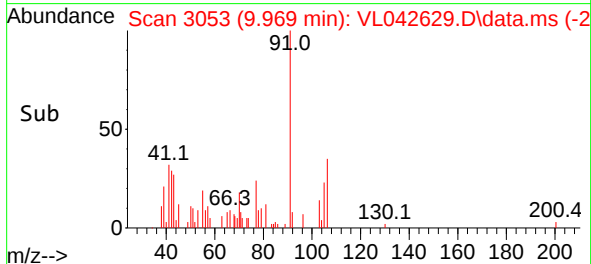
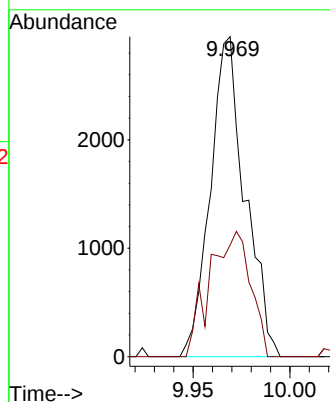
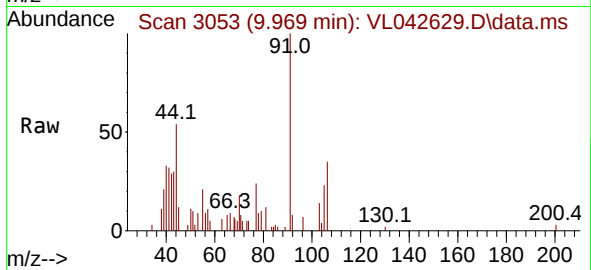
106 46.3 22.9 68.5

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 06/20/2025

Supervised By :Mahesh Dadoda 06/20/2025



#68

1-Bromo-4-Fluorobenzene

Concen: 10.170 ppbv

RT: 10.380 min Scan# 3180

Delta R.T. -0.000 min

Lab File: VL042629.D

Acq: 16 Jun 2025 15:12

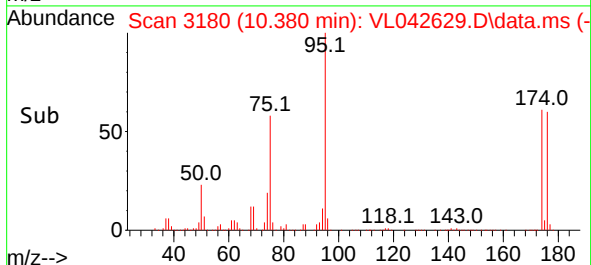
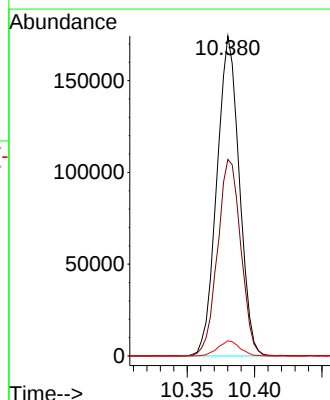
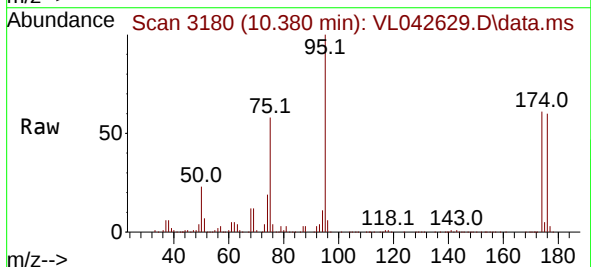
Tgt Ion: 95 Resp: 201774

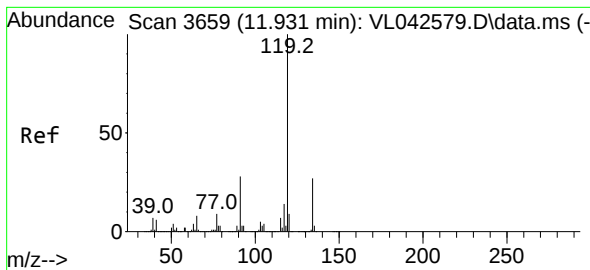
Ion Ratio Lower Upper

95 100

174 63.9 53.1 79.7

175 4.6 4.2 6.2





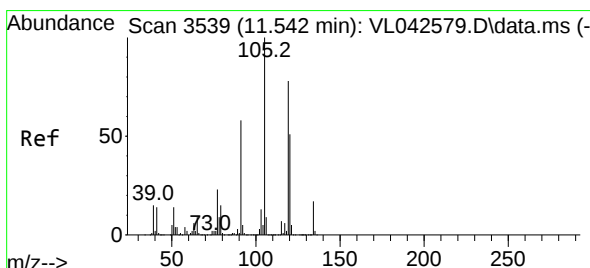
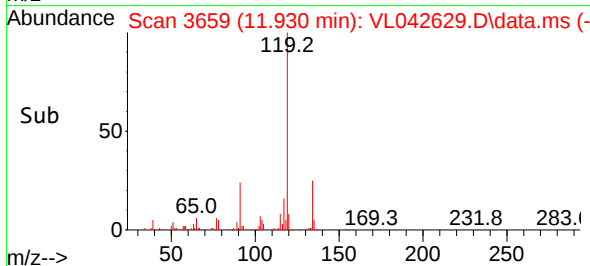
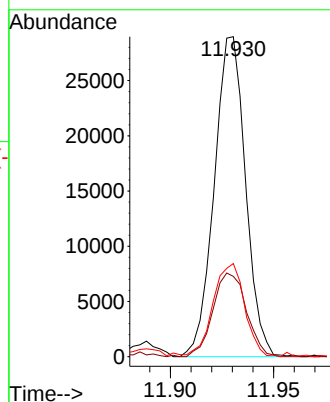
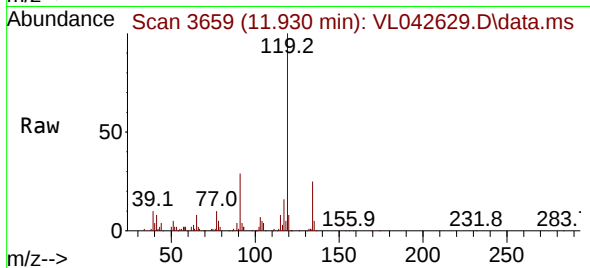
#69
p-Isopropyltoluene
Concen: 0.549 ppbv
RT: 11.930 min Scan# 30528
Delta R.T. -0.000 min
Lab File: VL042629.D
Acq: 16 Jun 2025 15:12

Instrument :
MSVOA_L
ClientSampleId :
115-IA-2

Tgt Ion:119 Resp: 30528
Ion Ratio Lower Upper
119 100
134 28.9 21.1 31.7
91 31.7 21.9 32.9

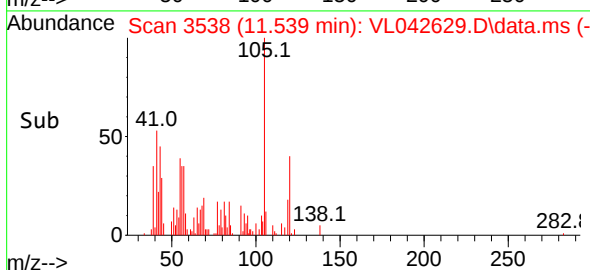
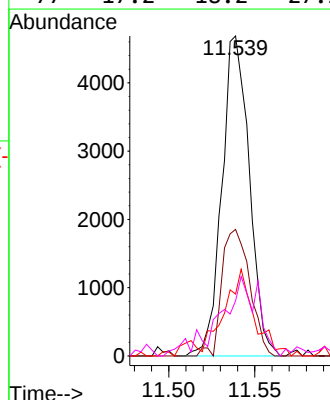
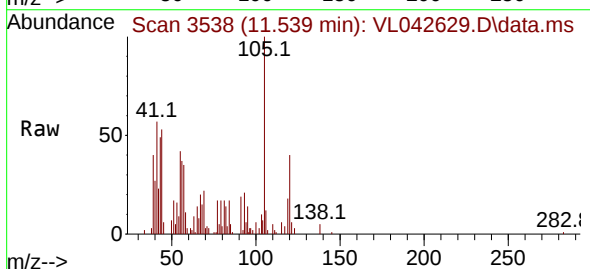
Manual Integrations
APPROVED

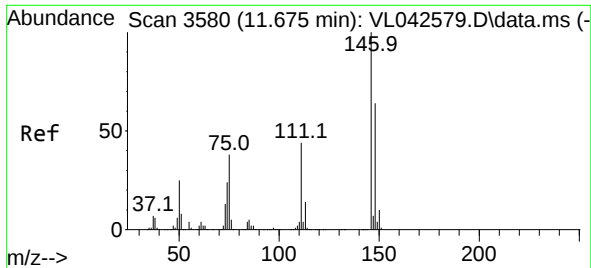
Reviewed By :Semsettin Yesilyurt 06/20/2025
Supervised By :Mahesh Dadoda 06/20/2025



#74
1,2,4-Trimethylbenzene
Concen: 0.129 ppbv
RT: 11.539 min Scan# 3538
Delta R.T. -0.003 min
Lab File: VL042629.D
Acq: 16 Jun 2025 15:12

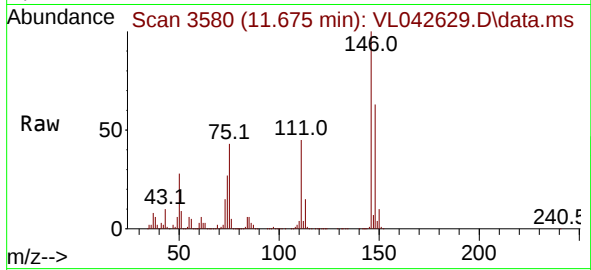
Tgt Ion:105 Resp: 5204
Ion Ratio Lower Upper
105 100
120 39.5 40.8 61.2#
91 17.1 46.8 70.2#
77 17.2 18.2 27.2#





#76
 1,4-Dichlorobenzene
 Concen: 22.160 ppbv
 RT: 11.675 min Scan# 31
 Delta R.T. -0.000 min
 Lab File: VL042629.D
 Acq: 16 Jun 2025 15:12

Instrument :
 MSVOA_L
 ClientSampleId :
 115-IA-2



Tgt Ion:146 Resp: 559989
 Ion Ratio Lower Upper
 146 100
 111 44.5 21.6 64.8
 148 64.0 32.1 96.5

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 06/20/2025
 Supervised By :Mahesh Dadoda 06/20/2025

