

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL061625\
 Data File : VL042628.D
 Acq On : 16 Jun 2025 14:35
 Operator : SY/MD
 Sample : Q2317-02
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 115-IA-1

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 06/17/2025
 Supervised By :Mahesh Dadoda 06/17/2025

Quant Time: Jun 17 03:05:45 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	2.787	49	106724	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	298270	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.882	117	259856	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	202110	10.376	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.800%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	6121	0.467	ppbv	92
4) Chloromethane	1.531	50	3698	0.712	ppbv	99
9) Propene	1.486	41	61584m	8.465	ppbv	
10) Heptane	4.981	43	4176m	0.204	ppbv	
11) Trichlorofluoromethane	1.878	101	98869	8.101	ppbv	99
13) Ethanol	1.722	45	773828	892.541	ppbv	96
15) Acetone	1.835	43	492820	38.336	ppbv	97
19) Isopropyl Alcohol	1.884	45	384826	50.075	ppbv	91
20) Methylene Chloride	2.062	84	5435	1.281	ppbv	97
26) Hexane	2.826	57	65240	4.081	ppbv	86
29) Chloroform	2.849	83	11988	0.577	ppbv	100
34) 2-Butanone	2.557	43	44583	2.096	ppbv	99
35) Carbon Tetrachloride	3.765	117	1770m	0.090	ppbv	
36) Benzene	3.654	78	9676	0.329	ppbv	98
37) 1,2-Dichloroethane	3.214	62	2513m	0.172	ppbv	
38) Trichloroethene	4.548	130	670m	0.054	ppbv	
41) Tetrahydrofuran	3.059	42	17246	1.385	ppbv	96
44) 2,2,4-Trimethylpentane	4.642	57	7963	0.158	ppbv #	64
50) 4-Methyl-2-Pentanone	5.768	43	7622m	0.258	ppbv	
52) Tetrachloroethene	8.225	164	799m	0.073	ppbv	
53) Toluene	6.930	91	25563	0.753	ppbv	100
58) Ethyl Benzene	9.354	91	5269m	0.120	ppbv	
59) m/p-Xylene	9.532	91	13470	0.388	ppbv	94
60) o-Xylene	9.966	91	5876m	0.170	ppbv	
61) Styrene	9.869	104	2313m	0.141	ppbv	
69) p-Isopropyltoluene	11.924	119	29010	0.531	ppbv	95
74) 1,2,4-Trimethylbenzene	11.532	105	11072	0.279	ppbv #	71
76) 1,4-Dichlorobenzene	11.672	146	430999	17.371	ppbv	99

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

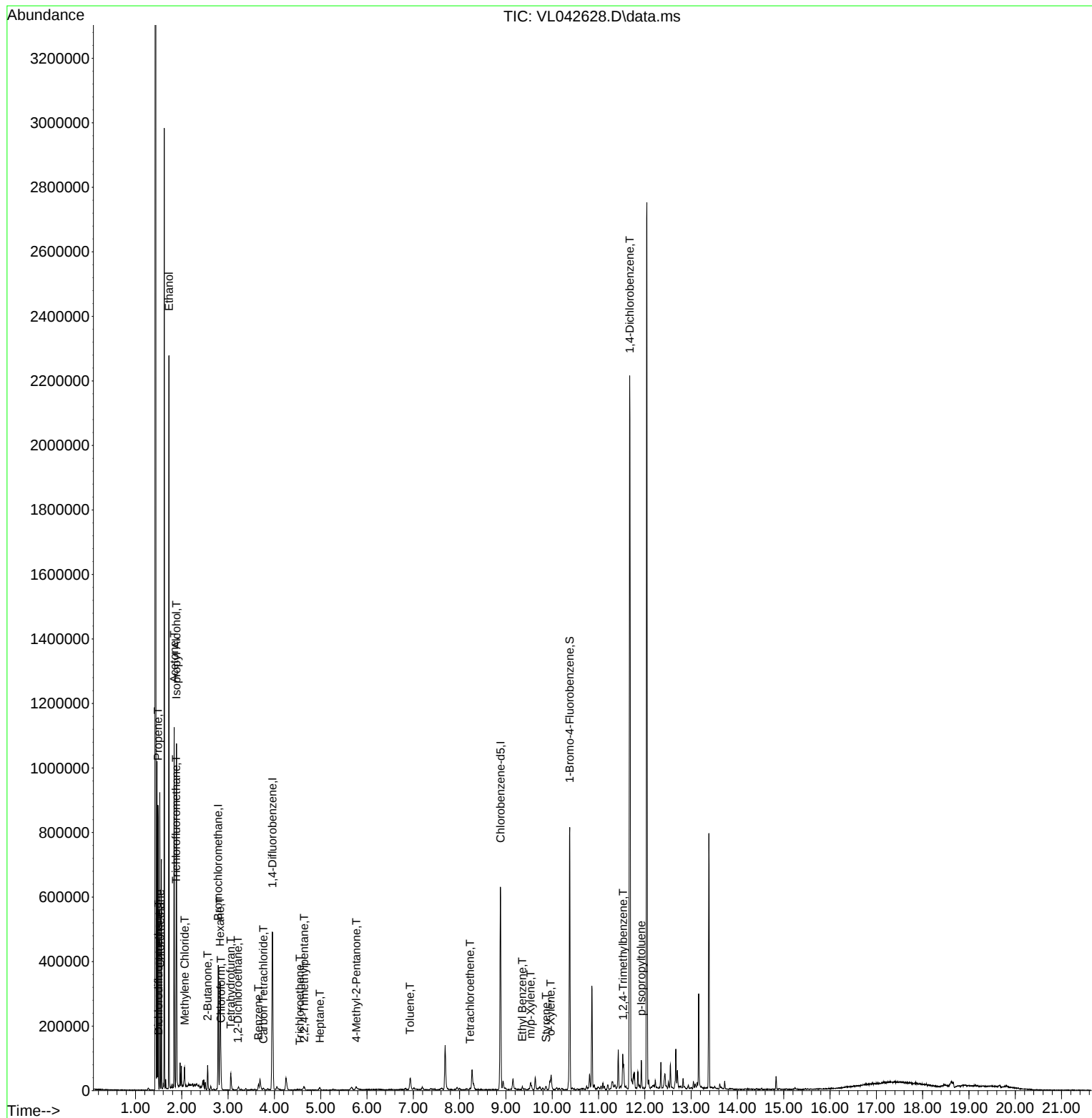
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL061625\
Data File : VL042628.D
Acq On : 16 Jun 2025 14:35
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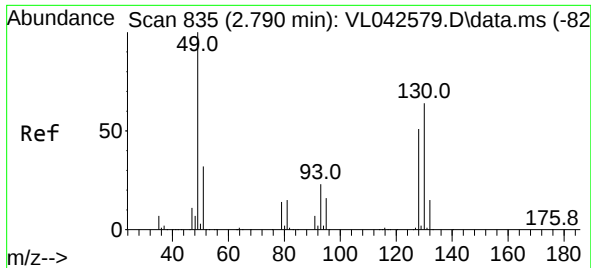
Instrument :
MSVOA_L
ClientSampleId :
115-IA-1

Manual Integrations
APPROVED

Reviewed By : Semsettin Yesilyurt 06/17/2025
Supervised By : Mahesh Dadoda 06/17/2025

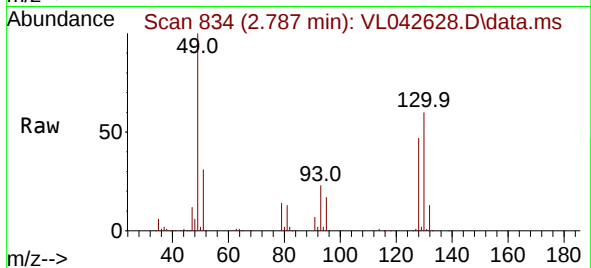
Quant Time: Jun 17 03:05:45 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL052925AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug
QLast Update : Fri May 30 02:01:56 2025
Response via : Initial Calibration





#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 835
Delta R.T. -0.003 min
Lab File: VL042628.D
Acq: 16 Jun 2025 14:35

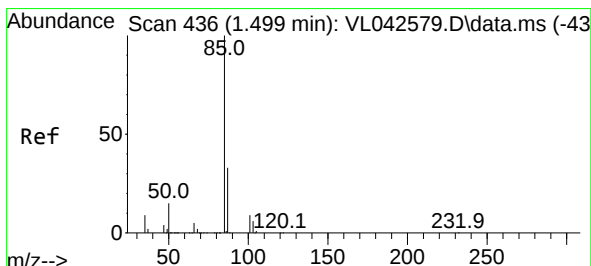
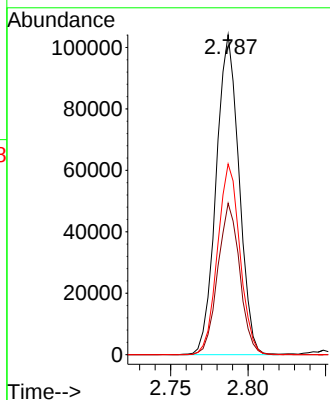
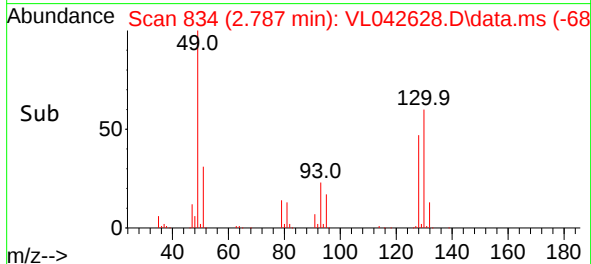
Instrument :
MSVOA_L
ClientSampleId :
115-IA-1



Tgt Ion: 49 Resp: 106724
Ion Ratio Lower Upper
49 100
128 45.4 24.2 72.6
130 58.3 30.4 91.2

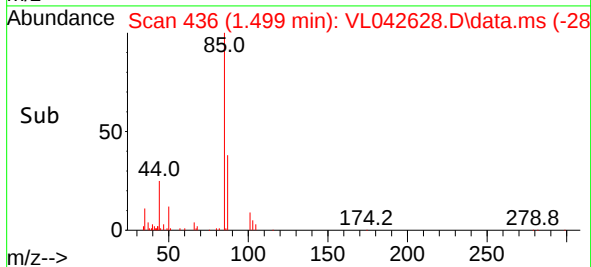
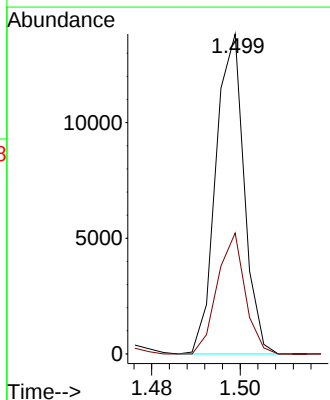
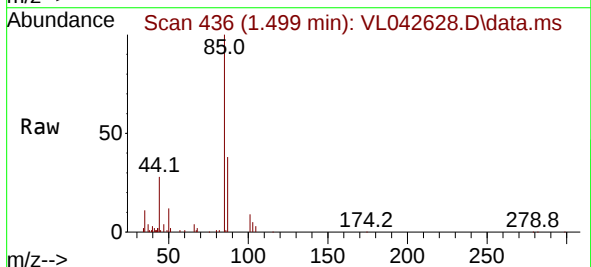
Manual Integrations
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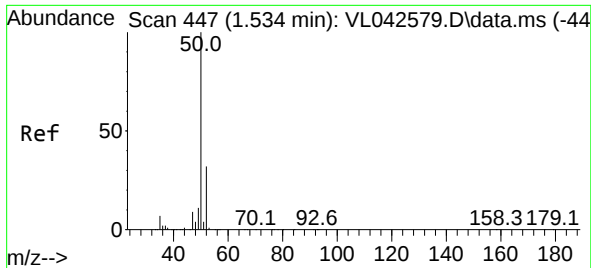
Reviewed By :Semsettin Yesilyurt 06/17/2025
Supervised By :Mahesh Dadoda 06/17/2025



#2
Dichlorodifluoromethane
Concen: 0.467 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.000 min
Lab File: VL042628.D
Acq: 16 Jun 2025 14:35

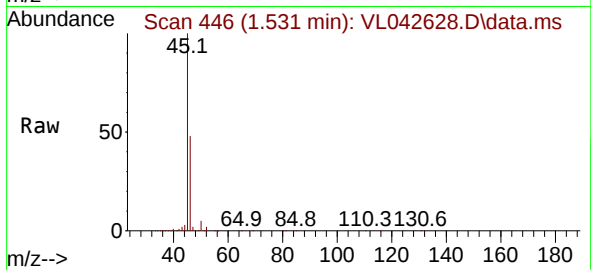
Tgt Ion: 85 Resp: 6121
Ion Ratio Lower Upper
85 100
87 37.8 26.6 39.8





#4
Chloromethane
Concen: 0.712 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.003 min
Lab File: VL042628.D
Acq: 16 Jun 2025 14:35

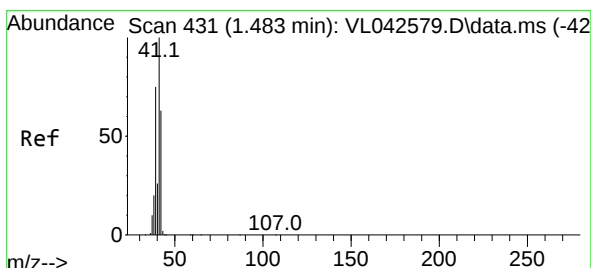
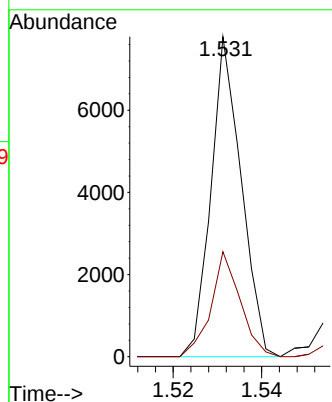
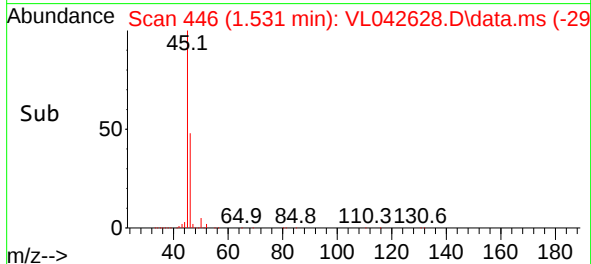
Instrument :
MSVOA_L
ClientSampleId :
115-IA-1



Tgt Ion: 50 Resp: 3698
Ion Ratio Lower Upper
50 100
52 32.8 25.8 38.6

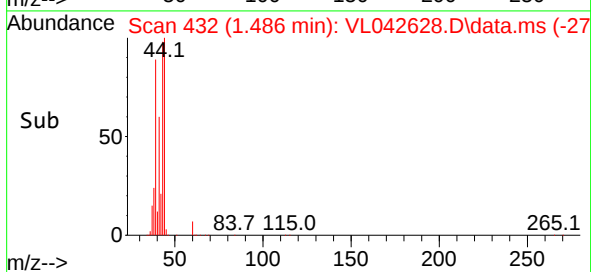
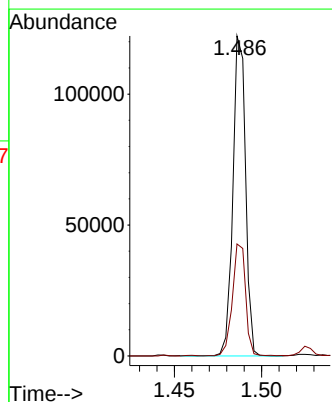
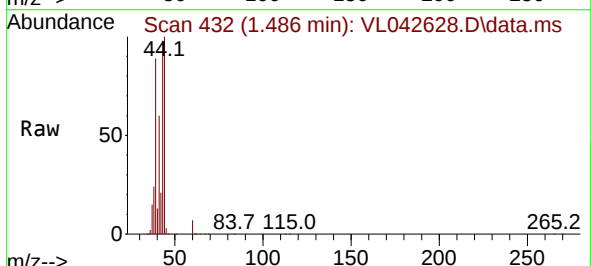
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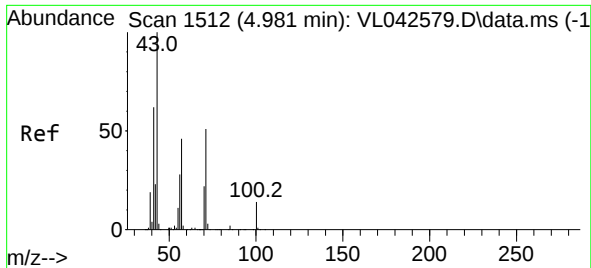
Reviewed By :Semsettin Yesilyurt 06/17/2025
Supervised By :Mahesh Dadoda 06/17/2025



#9
Propene
Concen: 8.465 ppbv m
RT: 1.486 min Scan# 432
Delta R.T. 0.003 min
Lab File: VL042628.D
Acq: 16 Jun 2025 14:35

Tgt Ion: 41 Resp: 61584
Ion Ratio Lower Upper
41 100
42 90.1 53.3 79.9#





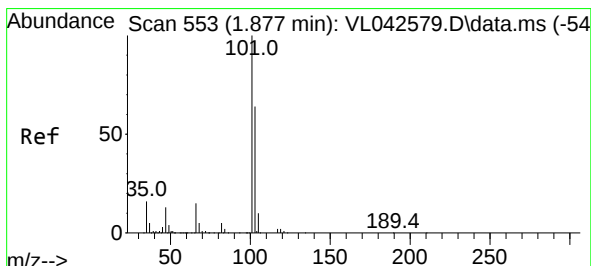
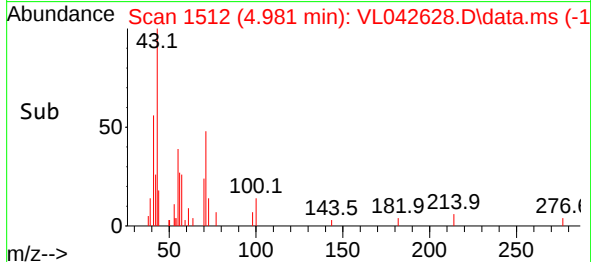
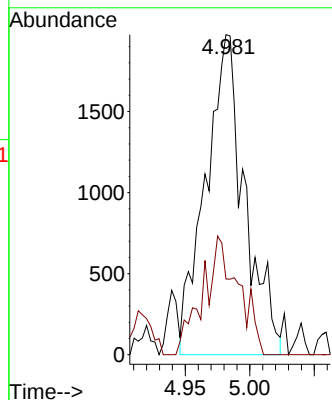
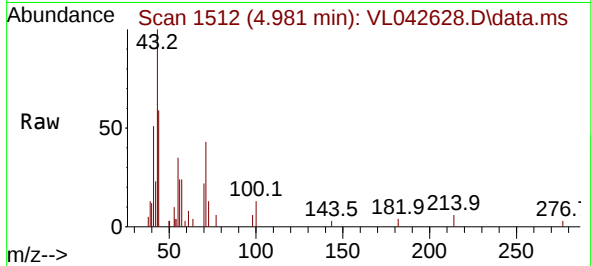
#10
Heptane
Concen: 0.204 ppbv m
RT: 4.981 min Scan# 11
Delta R.T. 0.000 min
Lab File: VL042628.D
Acq: 16 Jun 2025 14:35

Instrument :
MSVOA_L
ClientSampleId :
115-IA-1

Tgt Ion: 43 Resp: 4170
Ion Ratio Lower Upper
43 100
57 33.6 38.9 58.3

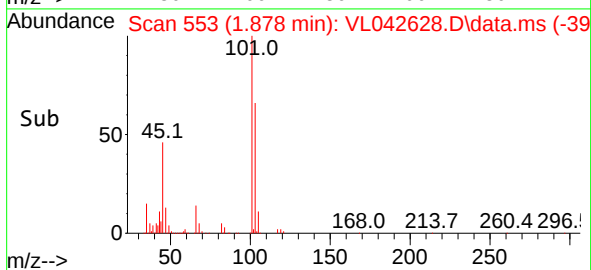
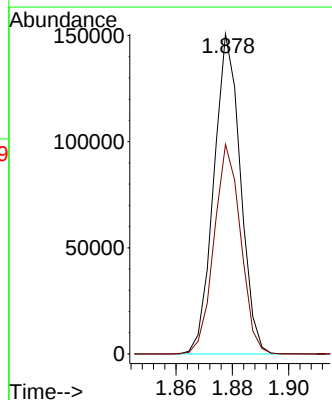
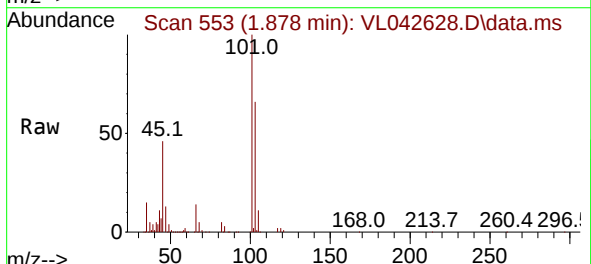
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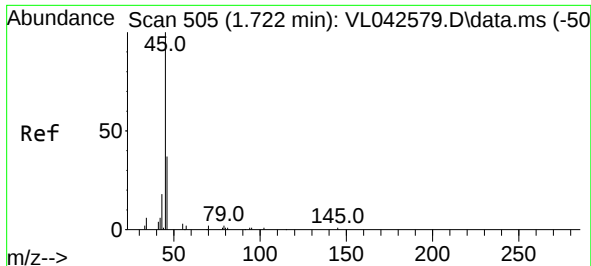
Reviewed By :Semsettin Yesilyurt 06/17/2025
Supervised By :Mahesh Dadoda 06/17/2025



#11
Trichlorofluoromethane
Concen: 8.101 ppbv
RT: 1.878 min Scan# 553
Delta R.T. 0.000 min
Lab File: VL042628.D
Acq: 16 Jun 2025 14:35

Tgt Ion:101 Resp: 98869
Ion Ratio Lower Upper
101 100
103 65.5 51.5 77.3





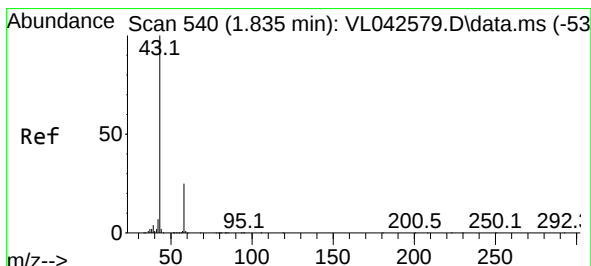
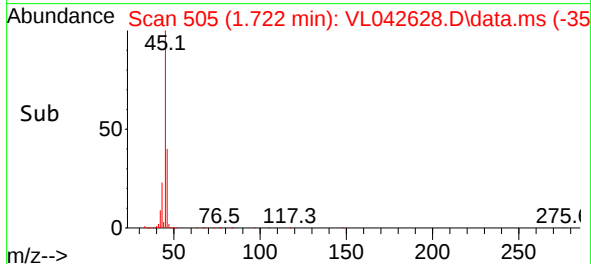
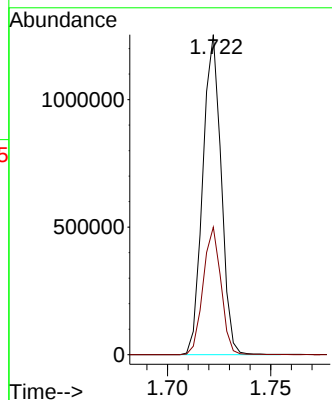
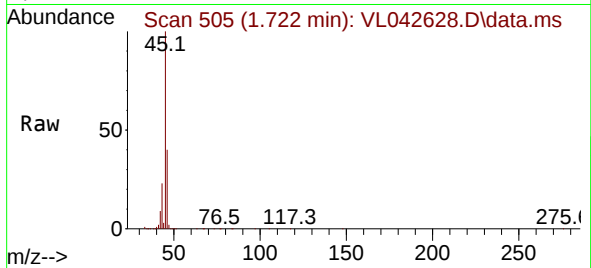
#13
Ethanol
Concen: 892.541 ppbv
RT: 1.722 min Scan# 505
Delta R.T. 0.000 min
Lab File: VL042628.D
Acq: 16 Jun 2025 14:35

Instrument :
MSVOA_L
ClientSampleId :
115-IA-1

Tgt Ion: 45 Resp: 773828
Ion Ratio Lower Upper
45 100
46 38.8 14.5 58.1

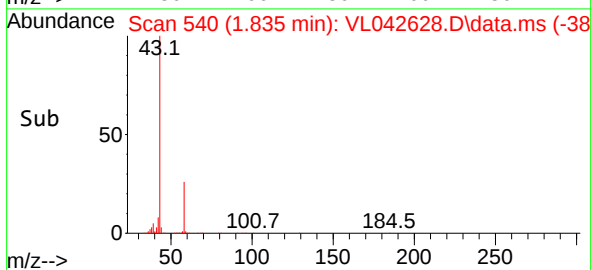
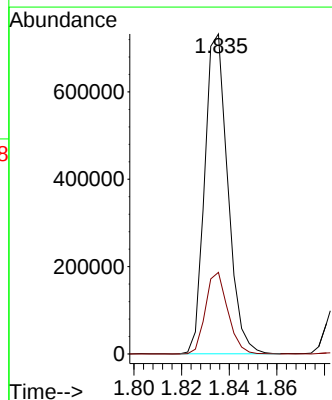
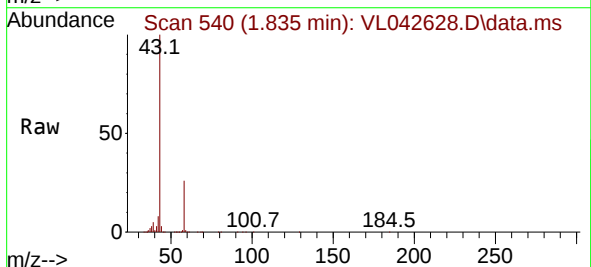
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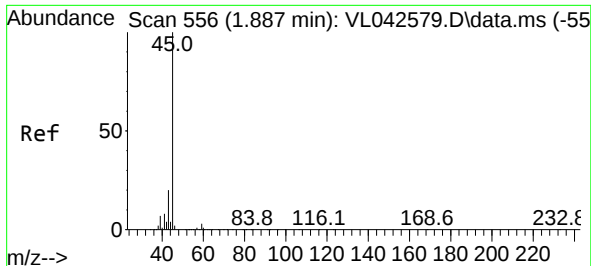
Reviewed By :Semsettin Yesilyurt 06/17/2025
Supervised By :Mahesh Dadoda 06/17/2025



#15
Acetone
Concen: 38.336 ppbv
RT: 1.835 min Scan# 540
Delta R.T. 0.000 min
Lab File: VL042628.D
Acq: 16 Jun 2025 14:35

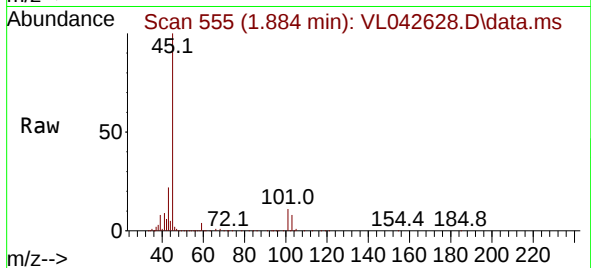
Tgt Ion: 43 Resp: 492820
Ion Ratio Lower Upper
43 100
58 24.7 21.0 31.4





#19
Isopropyl Alcohol
Concen: 50.075 ppbv
RT: 1.884 min Scan# 511
Delta R.T. -0.003 min
Lab File: VL042628.D
Acq: 16 Jun 2025 14:35

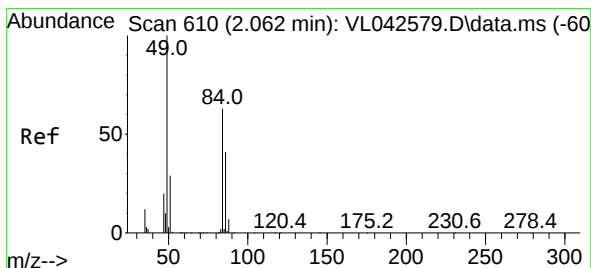
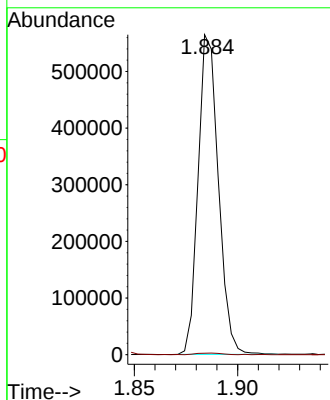
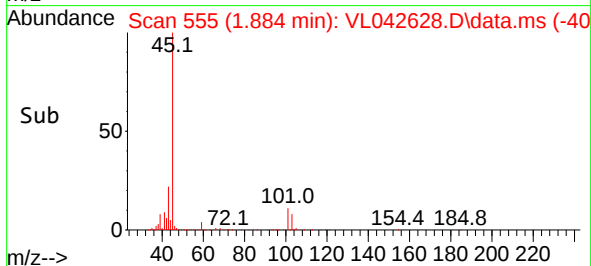
Instrument :
MSVOA_L
ClientSampleId :
115-IA-1



Tgt Ion: 45 Resp: 384820
Ion Ratio Lower Upper
45 100
58 31.6 29.4 44.2

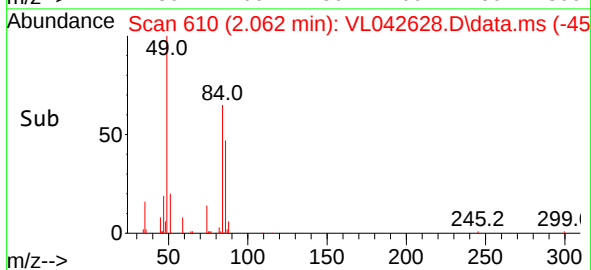
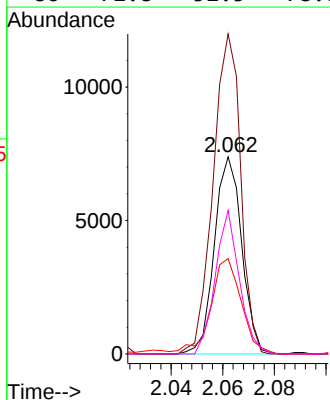
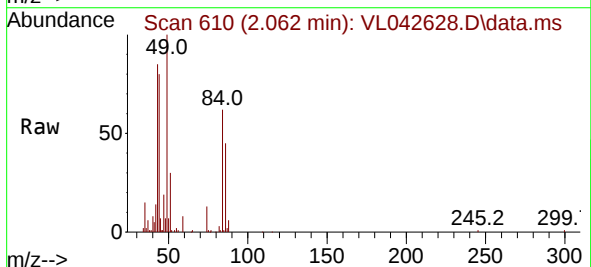
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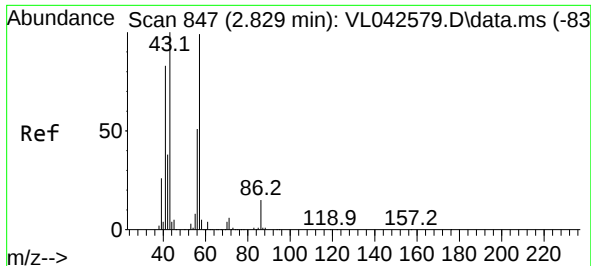
Reviewed By :Semsettin Yesilyurt 06/17/2025
Supervised By :Mahesh Dadoda 06/17/2025



#20
Methylene Chloride
Concen: 1.281 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.000 min
Lab File: VL042628.D
Acq: 16 Jun 2025 14:35

Tgt Ion: 84 Resp: 5435
Ion Ratio Lower Upper
84 100
49 162.3 128.8 193.2
51 48.3 38.6 57.8
86 72.8 52.5 78.7





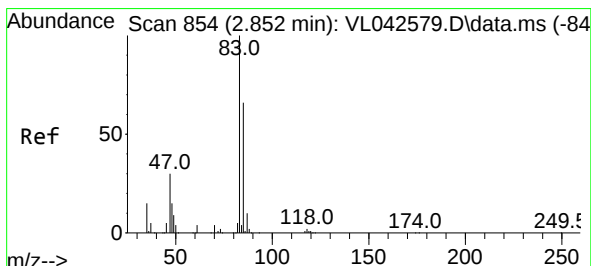
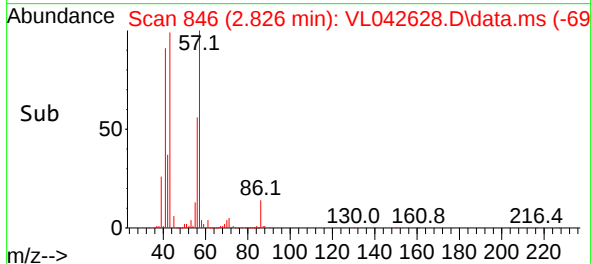
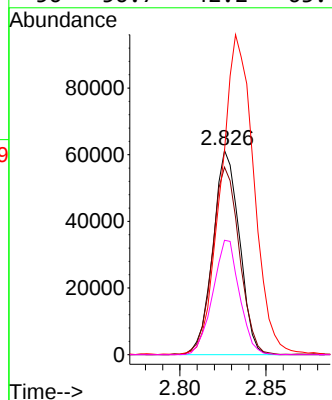
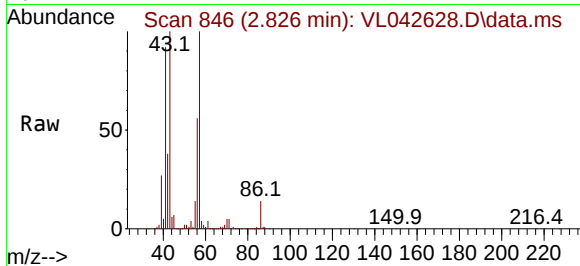
#26
Hexane
Concen: 4.081 ppbv
RT: 2.826 min Scan# 84
Delta R.T. -0.003 min
Lab File: VL042628.D
Acq: 16 Jun 2025 14:35

Instrument :
MSVOA_L
ClientSampleId :
115-IA-1

Tgt Ion: 57 Resp: 65240
Ion Ratio Lower Upper
57 100
41 94.9 70.6 106.0
43 195.4 181.1 271.7
56 56.7 42.2 63.4

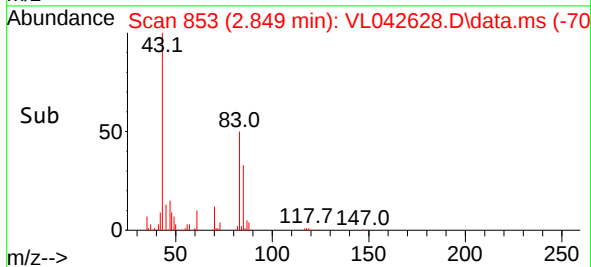
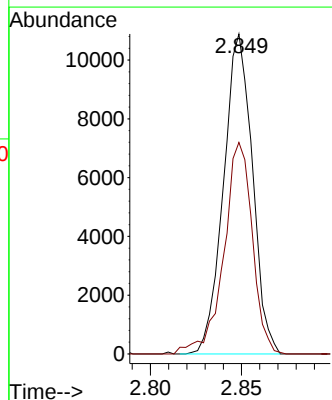
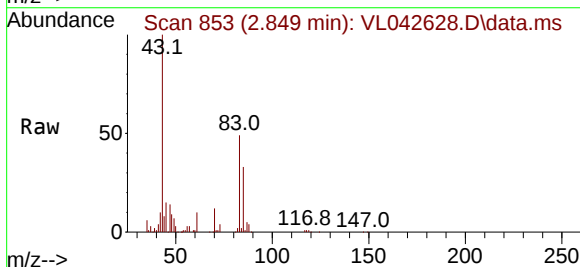
Manual Integrations
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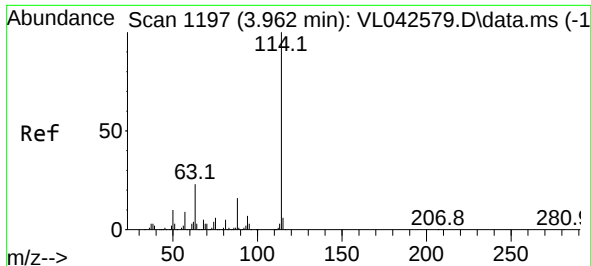
Reviewed By :Semsettin Yesilyurt 06/17/2025
Supervised By :Mahesh Dadoda 06/17/2025



#29
Chloroform
Concen: 0.577 ppbv
RT: 2.849 min Scan# 853
Delta R.T. -0.003 min
Lab File: VL042628.D
Acq: 16 Jun 2025 14:35

Tgt Ion: 83 Resp: 11988
Ion Ratio Lower Upper
83 100
85 65.6 52.8 79.2





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.959 min Scan# 1196

Delta R.T. -0.003 min

Lab File: VL042628.D

Acq: 16 Jun 2025 14:35

Instrument :

MSVOA_L

ClientSampleId :

115-IA-1

Tgt Ion:114 Resp: 298270

Ion Ratio Lower Upper

114 100

63 24.9 19.0 28.6

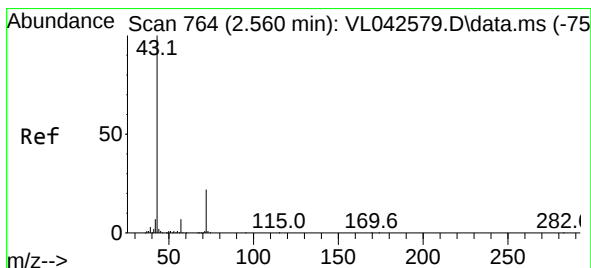
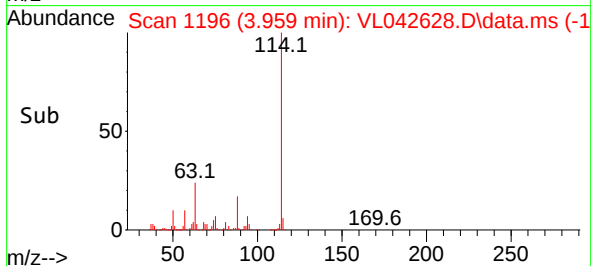
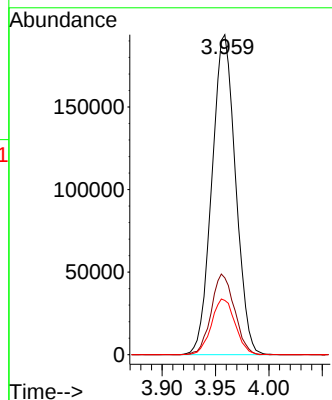
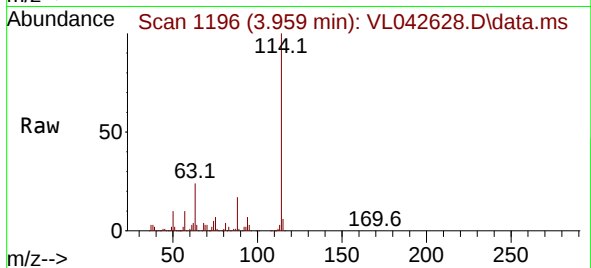
88 17.5 13.6 20.4

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 06/17/2025

Supervised By :Mahesh Dadoda 06/17/2025



#34

2-Butanone

Concen: 2.096 ppbv

RT: 2.557 min Scan# 763

Delta R.T. -0.003 min

Lab File: VL042628.D

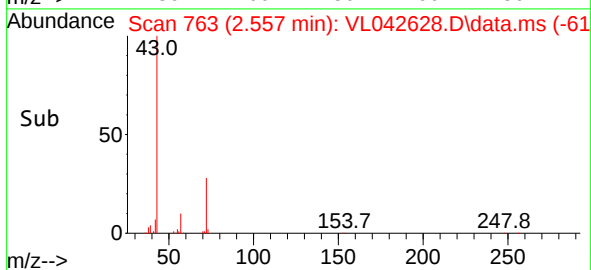
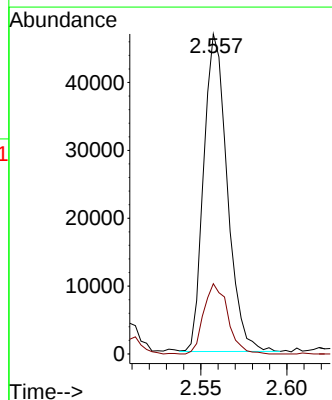
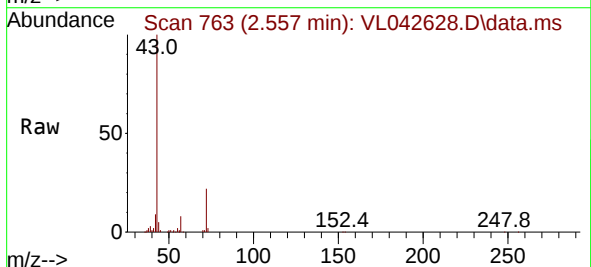
Acq: 16 Jun 2025 14:35

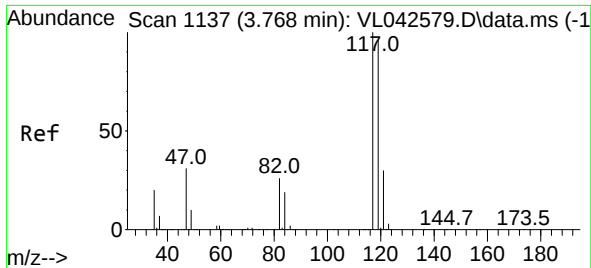
Tgt Ion: 43 Resp: 44583

Ion Ratio Lower Upper

43 100

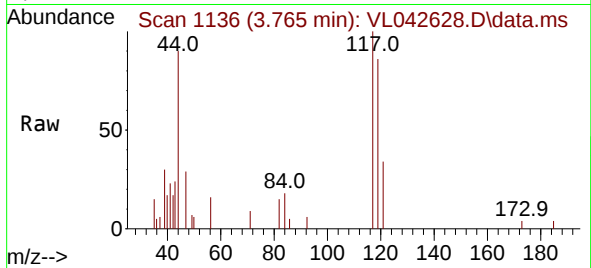
72 22.6 17.7 26.5





#35
Carbon Tetrachloride
Concen: 0.090 ppbv m
RT: 3.765 min Scan# 1136
Delta R.T. -0.003 min
Lab File: VL042628.D
Acq: 16 Jun 2025 14:35

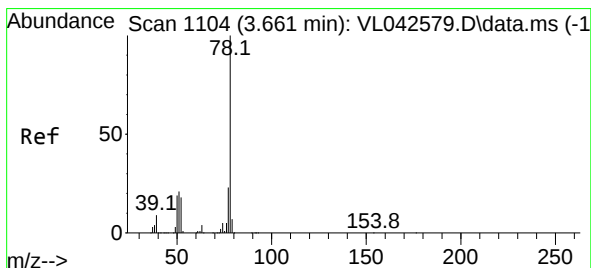
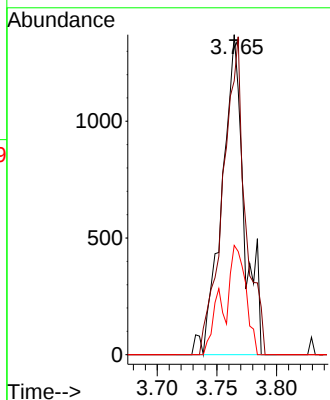
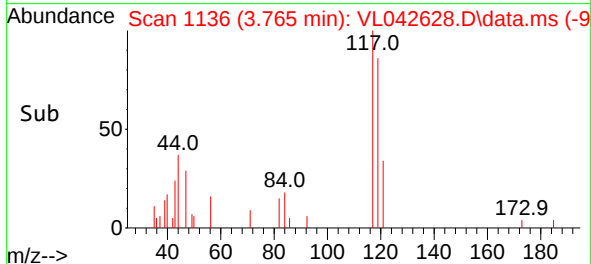
Instrument :
MSVOA_L
ClientSampleId :
115-IA-1



Tgt Ion:117 Resp: 1770
Ion Ratio Lower Upper
117 100
119 85.6 76.8 115.2
121 34.1 24.3 36.5

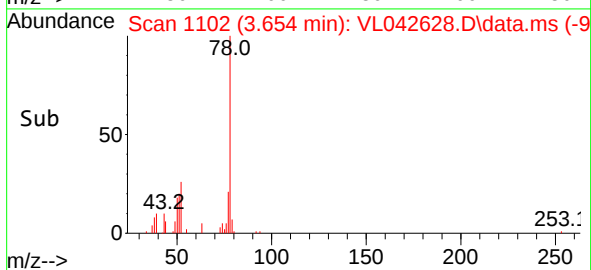
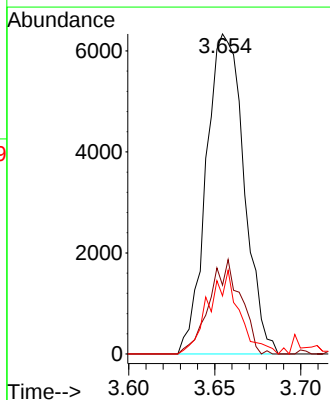
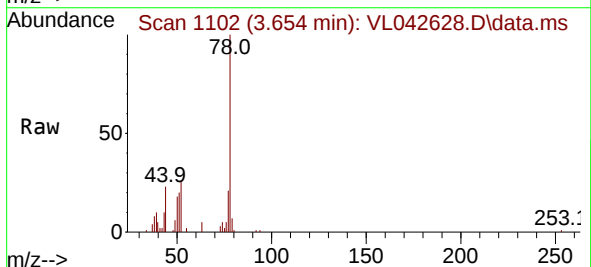
Manual Integrations
APPROVED

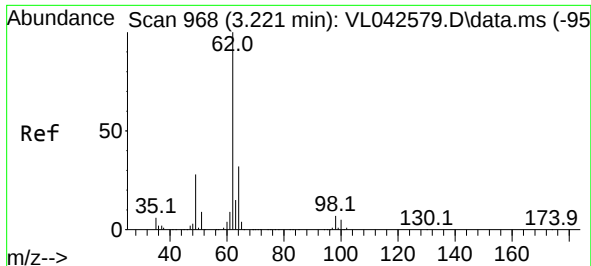
Reviewed By :Semsettin Yesilyurt 06/17/2025
Supervised By :Mahesh Dadoda 06/17/2025



#36
Benzene
Concen: 0.329 ppbv
RT: 3.654 min Scan# 1102
Delta R.T. -0.006 min
Lab File: VL042628.D
Acq: 16 Jun 2025 14:35

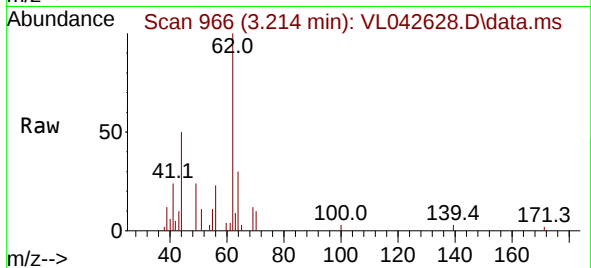
Tgt Ion: 78 Resp: 9676
Ion Ratio Lower Upper
78 100
77 21.5 18.2 27.2
50 18.1 15.2 22.8





#37
1,2-Dichloroethane
Concen: 0.172 ppbv m
RT: 3.214 min Scan# 966
Delta R.T. -0.006 min
Lab File: VL042628.D
Acq: 16 Jun 2025 14:35

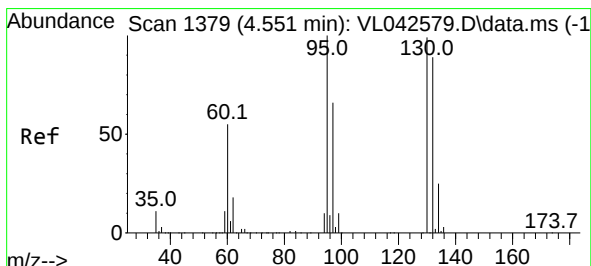
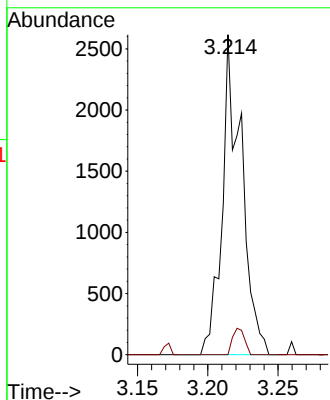
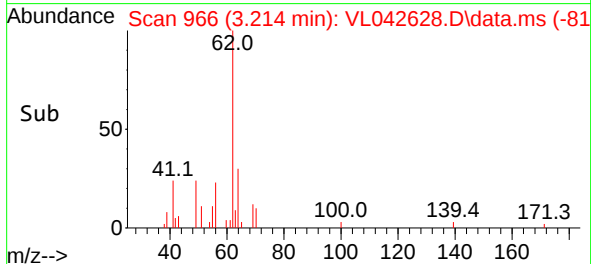
Instrument :
MSVOA_L
ClientSampleId :
115-IA-1



Tgt Ion: 62 Resp: 251
Ion Ratio Lower Upper
62 100
98 0.0 6.1 9.1

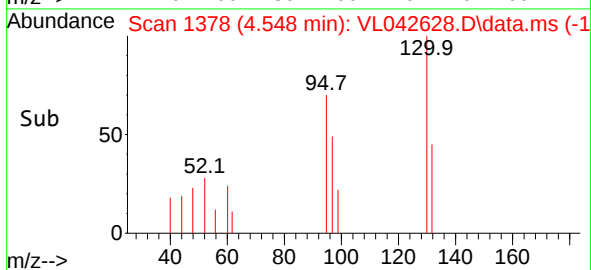
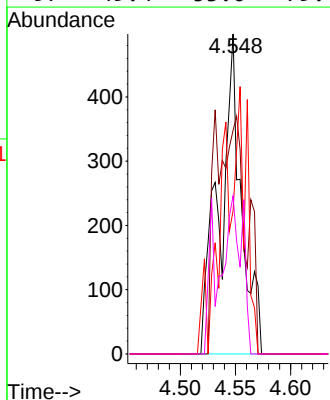
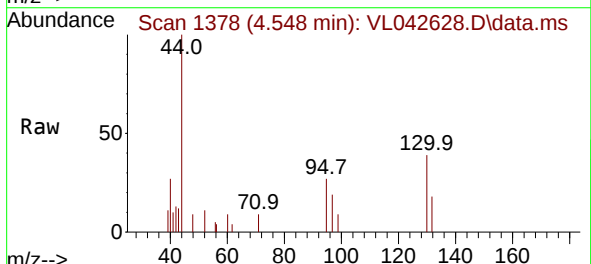
Manual Integrations
APPROVED

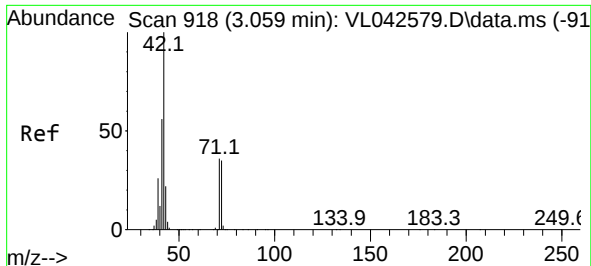
Reviewed By :Semsettin Yesilyurt 06/17/2025
Supervised By :Mahesh Dadoda 06/17/2025



#38
Trichloroethene
Concen: 0.054 ppbv m
RT: 4.548 min Scan# 1378
Delta R.T. -0.003 min
Lab File: VL042628.D
Acq: 16 Jun 2025 14:35

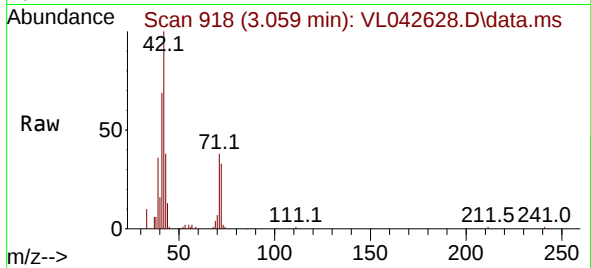
Tgt Ion:130 Resp: 670
Ion Ratio Lower Upper
130 100
95 69.9 80.6 121.0#
132 44.8 71.8 107.6#
97 49.4 53.0 79.4#





#41
Tetrahydrofuran
Concen: 1.385 ppbv
RT: 3.059 min Scan# 918
Delta R.T. 0.000 min
Lab File: VL042628.D
Acq: 16 Jun 2025 14:35

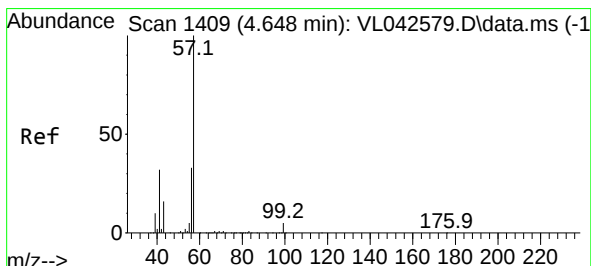
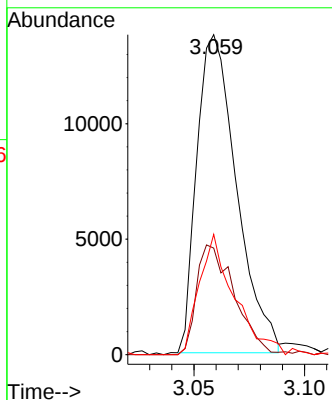
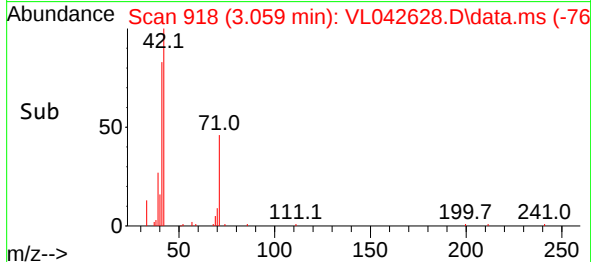
Instrument :
MSVOA_L
ClientSampleId :
115-IA-1



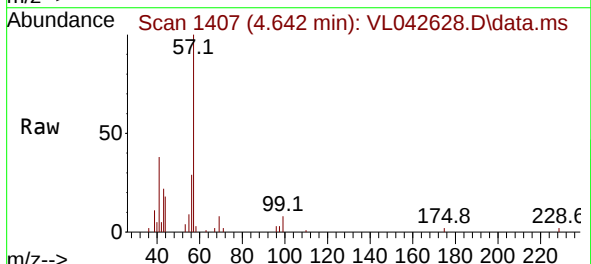
Tgt Ion: 42 Resp: 17240
Ion Ratio Lower Upper
42 100
72 33.5 28.9 43.3
71 34.0 28.5 42.7

Manual Integrations
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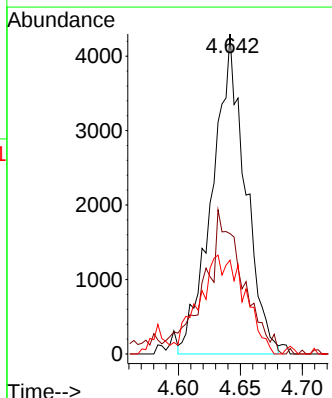
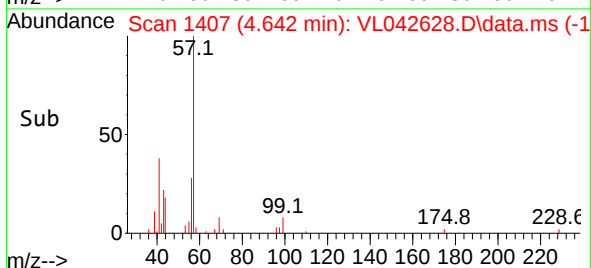
Reviewed By :Semsettin Yesilyurt 06/17/2025
Supervised By :Mahesh Dadoda 06/17/2025

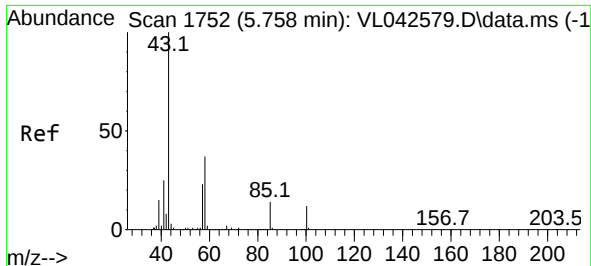


#44
2,2,4-Trimethylpentane
Concen: 0.158 ppbv
RT: 4.642 min Scan# 1407
Delta R.T. -0.006 min
Lab File: VL042628.D
Acq: 16 Jun 2025 14:35



Tgt Ion: 57 Resp: 7963
Ion Ratio Lower Upper
57 100
41 57.2 26.1 39.1#
56 48.1 25.9 38.9#





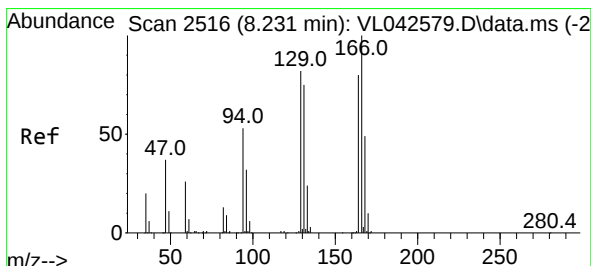
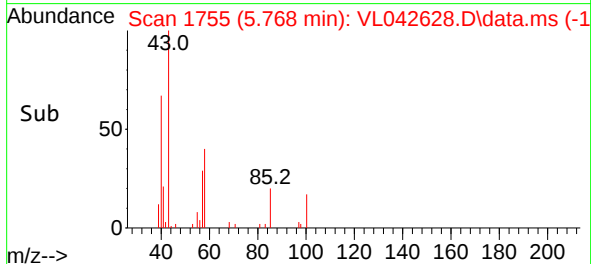
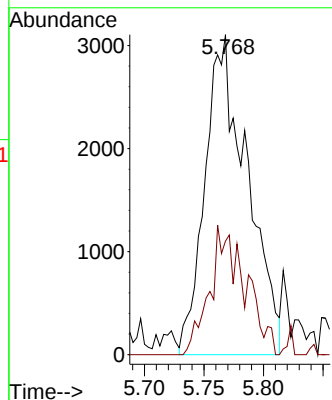
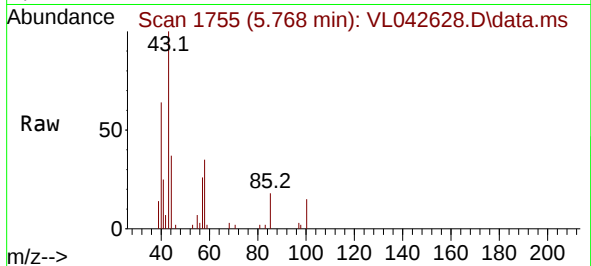
#50
4-Methyl-2-Pentanone
Concen: 0.258 ppbv m
RT: 5.768 min Scan# 1752
Delta R.T. 0.010 min
Lab File: VL042628.D
Acq: 16 Jun 2025 14:35

Instrument :
MSVOA_L
ClientSampleId :
115-IA-1

Tgt Ion: 43 Resp: 762
Ion Ratio Lower Upper
43 100
58 35.2 28.3 42.5

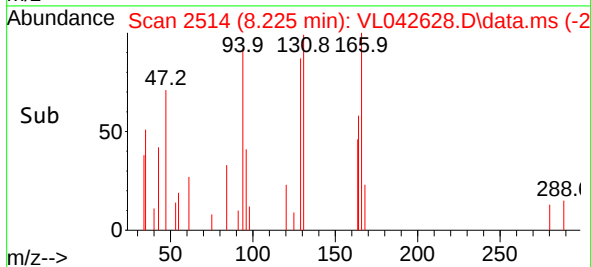
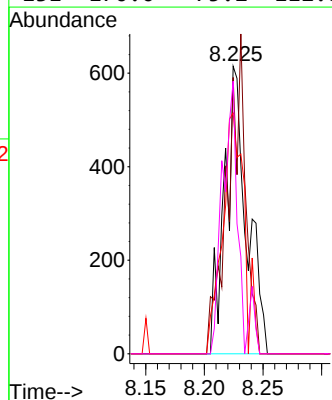
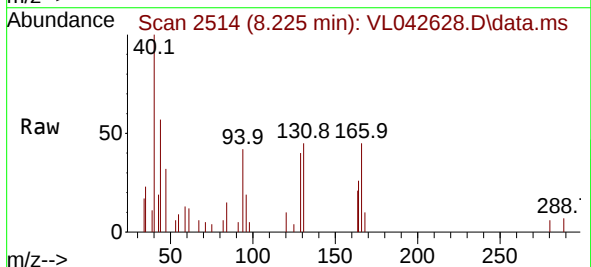
Manual Integrations
APPROVED

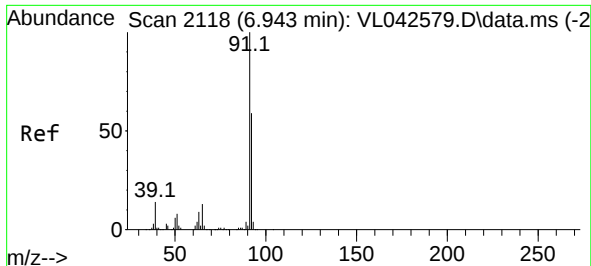
Reviewed By :Semsettin Yesilyurt 06/17/2025
Supervised By :Mahesh Dadoda 06/17/2025



#52
Tetrachloroethene
Concen: 0.073 ppbv m
RT: 8.225 min Scan# 2514
Delta R.T. -0.006 min
Lab File: VL042628.D
Acq: 16 Jun 2025 14:35

Tgt Ion:164 Resp: 799
Ion Ratio Lower Upper
164 100
166 172.3 100.0 150.0#
129 150.1 82.2 123.4#
131 170.0 75.2 112.8#





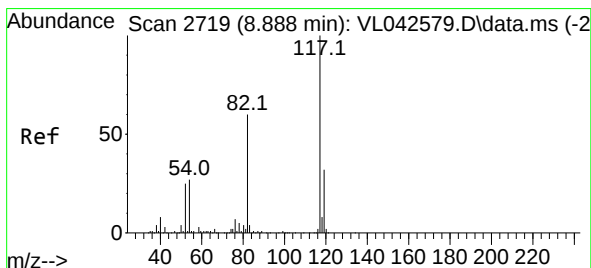
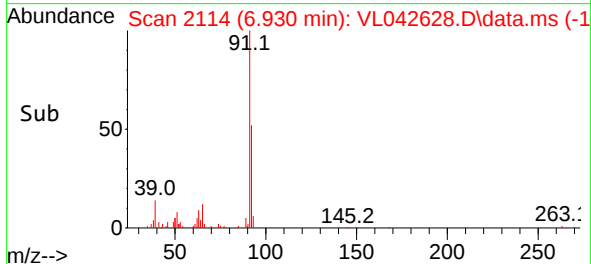
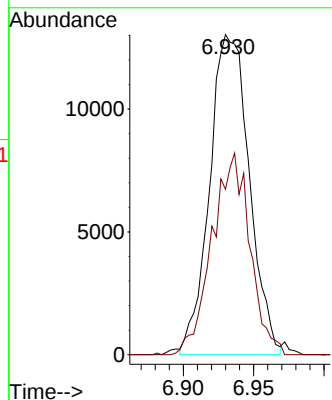
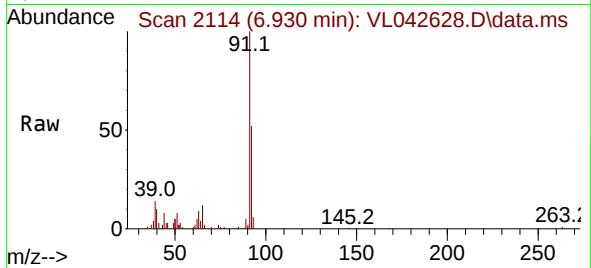
#53
Toluene
Concen: 0.753 ppbv
RT: 6.930 min Scan# 2114
Delta R.T. -0.013 min
Lab File: VL042628.D
Acq: 16 Jun 2025 14:35

Instrument :
MSVOA_L
ClientSampleId :
115-IA-1

Tgt Ion: 91 Resp: 2556
Ion Ratio Lower Upper
91 100
92 60.0 48.2 72.4

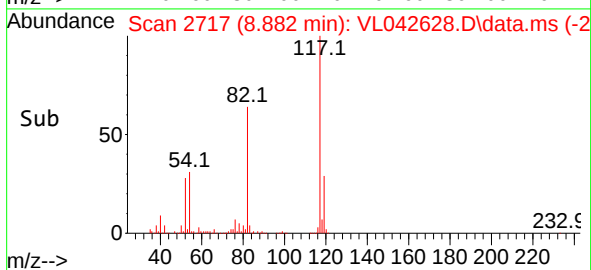
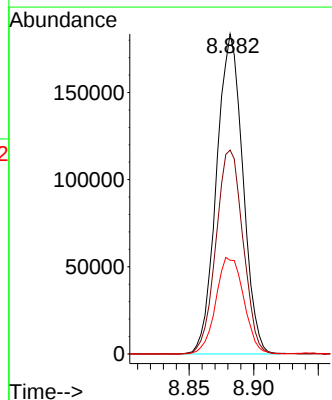
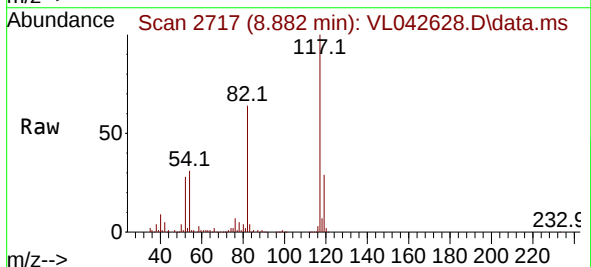
Manual Integrations
APPROVED

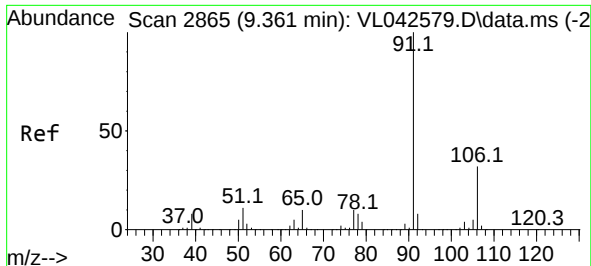
Reviewed By :Semsettin Yesilyurt 06/17/2025
Supervised By :Mahesh Dadoda 06/17/2025



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2717
Delta R.T. -0.006 min
Lab File: VL042628.D
Acq: 16 Jun 2025 14:35

Tgt Ion:117 Resp: 259856
Ion Ratio Lower Upper
117 100
82 65.6 51.2 76.8
119 32.0 26.3 39.5





#58

Ethyl Benzene

Concen: 0.120 ppbv m

RT: 9.354 min Scan# 2918

Delta R.T. -0.006 min

Lab File: VL042628.D

Acq: 16 Jun 2025 14:35

Instrument :

MSVOA_L

ClientSampleId :

115-IA-1

Tgt Ion: 91 Resp: 5269

Ion Ratio Lower Upper

91 100

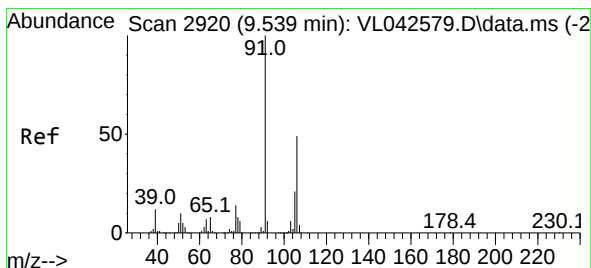
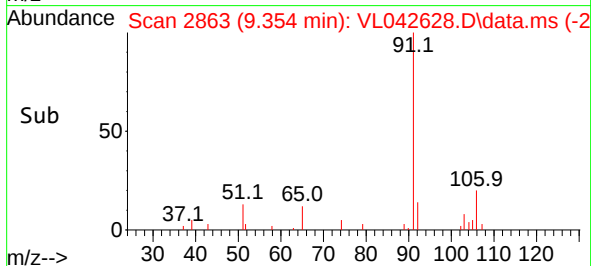
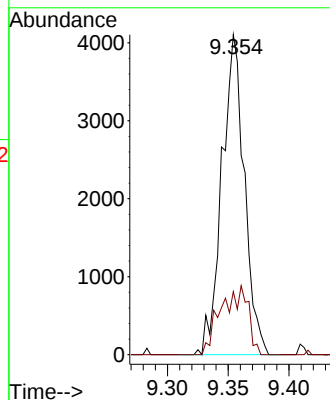
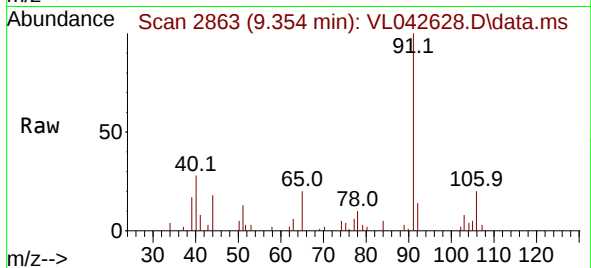
106 19.7 25.9 38.9

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 06/17/2025

Supervised By :Mahesh Dadoda 06/17/2025



#59

m/p-Xylene

Concen: 0.388 ppbv

RT: 9.532 min Scan# 2918

Delta R.T. -0.006 min

Lab File: VL042628.D

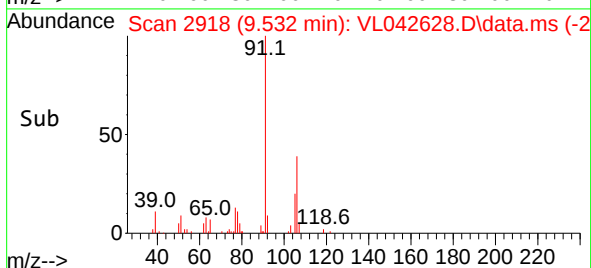
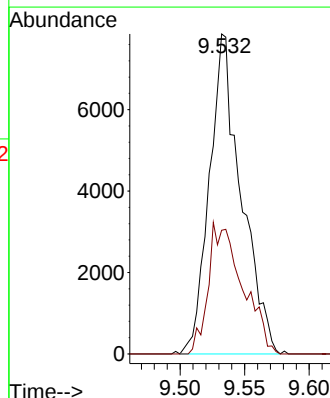
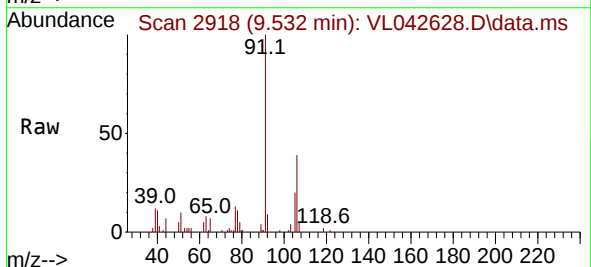
Acq: 16 Jun 2025 14:35

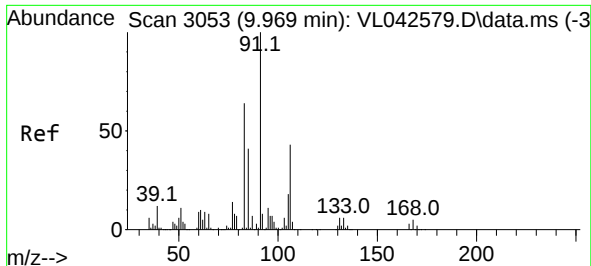
Tgt Ion: 91 Resp: 13470

Ion Ratio Lower Upper

91 100

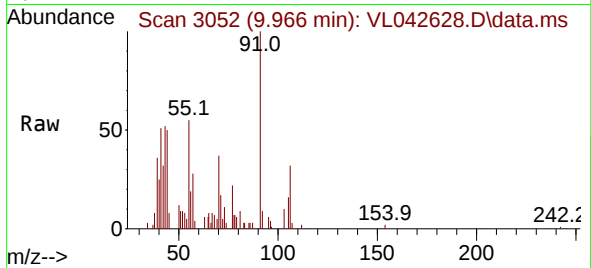
106 44.2 38.8 58.2





#60
o-Xylene
Concen: 0.170 ppbv m
RT: 9.966 min Scan# 3053
Delta R.T. -0.003 min
Lab File: VL042628.D
Acq: 16 Jun 2025 14:35

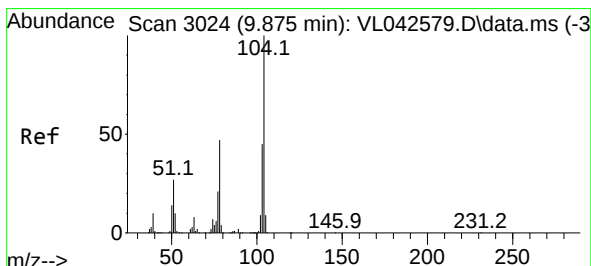
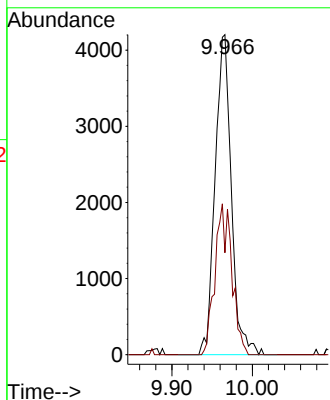
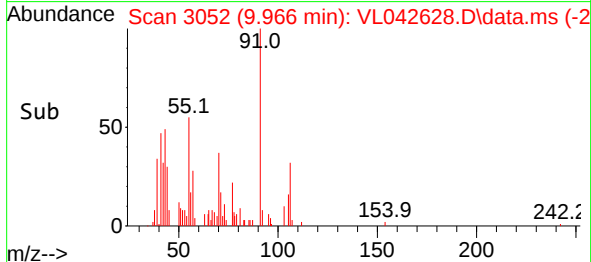
Instrument :
MSVOA_L
ClientSampleId :
115-IA-1



Tgt Ion: 91 Resp: 5870
Ion Ratio Lower Upper
91 100
106 49.1 22.9 68.5

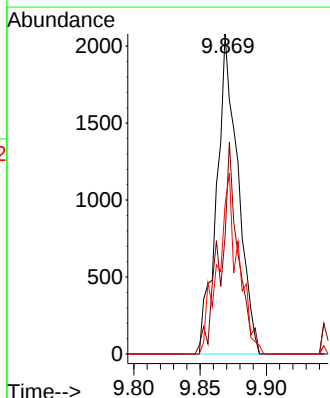
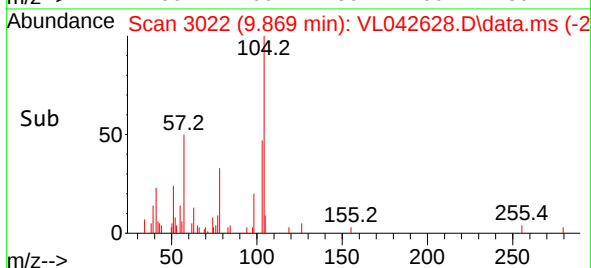
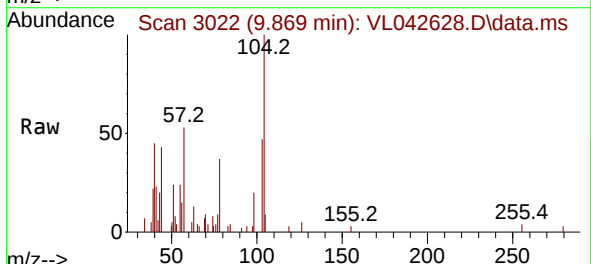
Manual Integrations
APPROVED

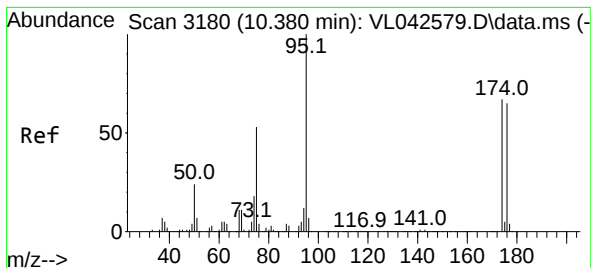
Reviewed By :Semsettin Yesilyurt 06/17/2025
Supervised By :Mahesh Dadoda 06/17/2025



#61
Styrene
Concen: 0.141 ppbv m
RT: 9.869 min Scan# 3022
Delta R.T. -0.006 min
Lab File: VL042628.D
Acq: 16 Jun 2025 14:35

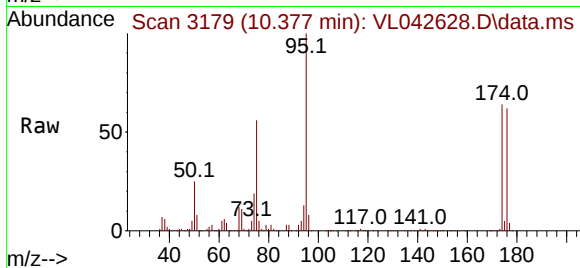
Tgt Ion:104 Resp: 2313
Ion Ratio Lower Upper
104 100
78 56.2 38.2 57.4
103 54.3 36.7 55.1





#68
1-Bromo-4-Fluorobenzene
Concen: 10.376 ppbv
RT: 10.377 min Scan# 3180
Delta R.T. -0.003 min
Lab File: VL042628.D
Acq: 16 Jun 2025 14:35

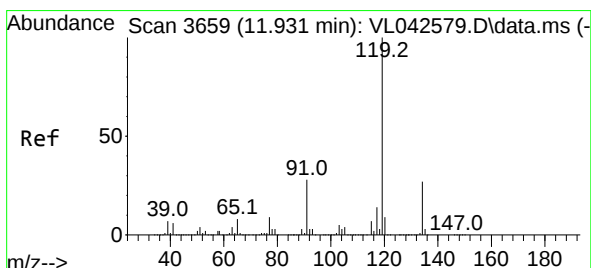
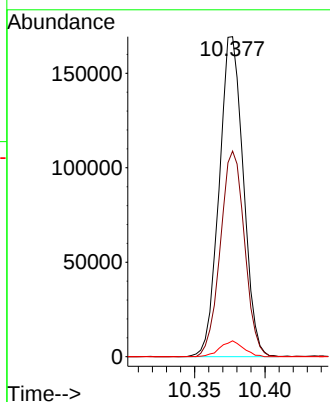
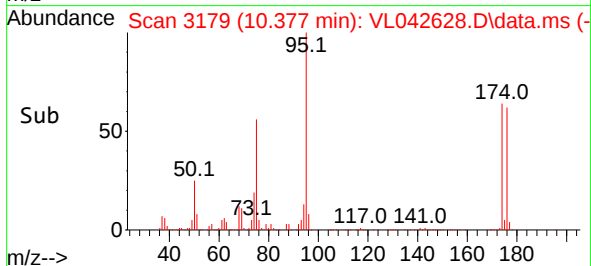
Instrument :
MSVOA_L
ClientSampleId :
115-IA-1



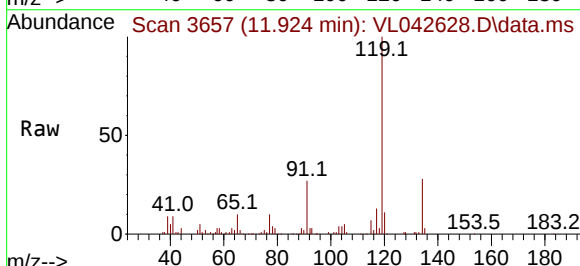
Tgt Ion: 95 Resp: 202110
Ion Ratio Lower Upper
95 100
174 64.4 53.1 79.7
175 4.8 4.2 6.2

Manual Integrations
APPROVED

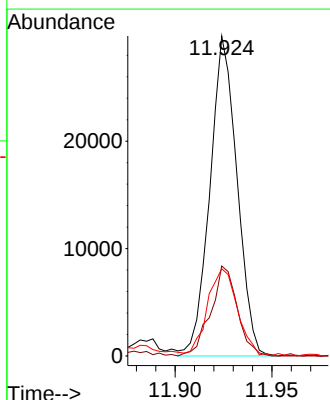
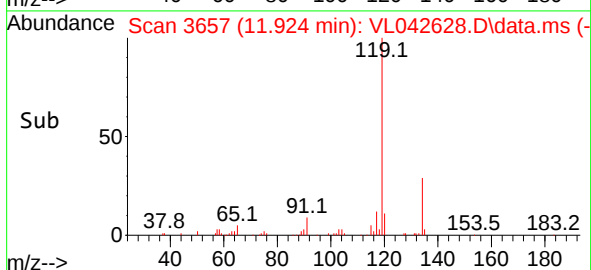
Reviewed By :Semsettin Yesilyurt 06/17/2025
Supervised By :Mahesh Dadoda 06/17/2025

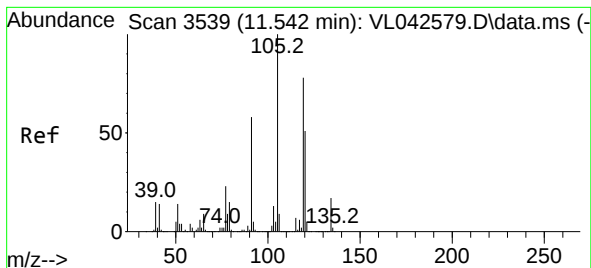


#69
p-Isopropyltoluene
Concen: 0.531 ppbv
RT: 11.924 min Scan# 3657
Delta R.T. -0.006 min
Lab File: VL042628.D
Acq: 16 Jun 2025 14:35



Tgt Ion:119 Resp: 29010
Ion Ratio Lower Upper
119 100
134 27.7 21.1 31.7
91 31.1 21.9 32.9





#74

1,2,4-Trimethylbenzene

Concen: 0.279 ppbv

RT: 11.532 min Scan# 3539

Delta R.T. -0.010 min

Lab File: VL042628.D

Acq: 16 Jun 2025 14:35

Instrument :

MSVOA_L

ClientSampleId :

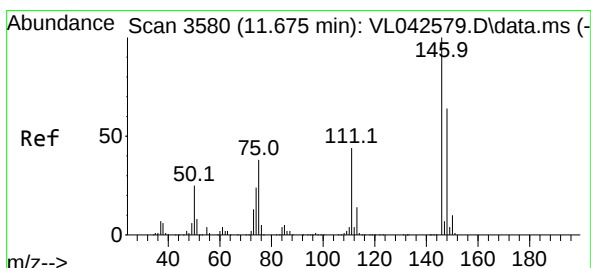
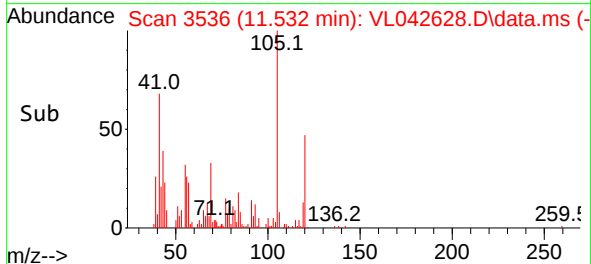
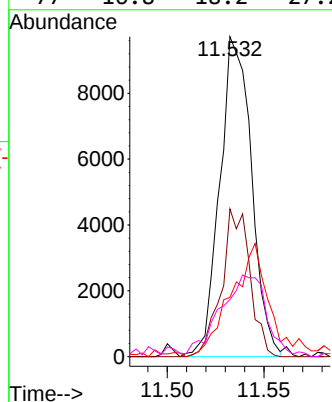
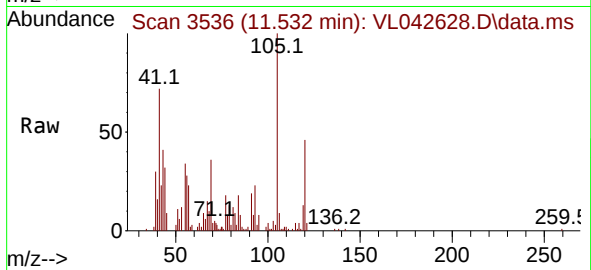
115-IA-1

Tgt Ion:	105	Resp:	11072
Ion Ratio	Lower	Upper	
105	100		
120	46.1	40.8	61.2
91	17.4	46.8	70.2
77	16.8	18.2	27.2

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 06/17/2025
Supervised By :Mahesh Dadoda 06/17/2025



#76

1,4-Dichlorobenzene

Concen: 17.371 ppbv

RT: 11.672 min Scan# 3579

Delta R.T. -0.003 min

Lab File: VL042628.D

Acq: 16 Jun 2025 14:35

Tgt Ion:	146	Resp:	430999
Ion Ratio	Lower	Upper	
146	100		
111	43.8	21.6	64.8
148	63.9	32.1	96.5

