

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
 Data File : VL042186.D
 Acq On : 27 Mar 2025 18:59
 Operator : SY/MD
 Sample : Q1669-02
 Misc : 400mL/MSVOA_L
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-B9-2-3262025

Manual Integrations
 APPROVED

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

Quant Time: Mar 28 02:15:31 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M

Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Fri Aug 2

QLast Update : Fri Mar 28 02:00:52 2025

Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.784	49	187729	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.955	114	538422	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.878	117	491411	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	400118	9.915	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.100%
Target Compounds						
						Qvalue
2) Dichlorodifluoromethane	1.496	85	11483	0.414	ppbv	94
3) Chlorodifluoromethane	1.473	51	6817m	0.241	ppbv	
4) Chloromethane	1.531	50	2440	0.215	ppbv	96
9) Propene	1.486	41	20814m	1.604	ppbv	
10) Heptane	4.978	43	16872m	0.489	ppbv	
11) Trichlorofluoromethane	1.877	101	5432	0.201	ppbv	87
13) Ethanol	1.719	45	57647	46.985	ppbv	83
15) Acetone	1.835	43	64251	2.447	ppbv #	82
17) tert-Butyl alcohol	2.043	59	12249	0.375	ppbv #	83
20) Methylene Chloride	2.059	84	3376	0.345	ppbv #	91
26) Hexane	2.826	57	60389	2.294	ppbv #	34
29) Chloroform	2.845	83	4455	0.116	ppbv	92
30) Cyclohexane	3.849	84	5046m	0.221	ppbv	
34) 2-Butanone	2.564	43	16547	0.424	ppbv	96
35) Carbon Tetrachloride	3.758	117	2811m	0.067	ppbv	
36) Benzene	3.654	78	35891	0.672	ppbv #	90
44) 2,2,4-Trimethylpentane	4.638	57	33449m	0.371	ppbv	
50) 4-Methyl-2-Pentanone	5.765	43	26447	0.427	ppbv	99
53) Toluene	6.933	91	146301	2.312	ppbv	99
58) Ethyl Benzene	9.351	91	33902	0.388	ppbv #	89
59) m/p-Xylene	9.532	91	96658	1.387	ppbv	97
60) o-Xylene	9.959	91	45203	0.647	ppbv	99
61) Styrene	9.872	104	4574m	0.132	ppbv	
72) 4-Ethyltoluene	11.125	105	17501	0.201	ppbv #	55
73) 1,3,5-Trimethylbenzene	11.199	105	13983	0.184	ppbv	97
74) 1,2,4-Trimethylbenzene	11.536	105	47154	0.539	ppbv #	63

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

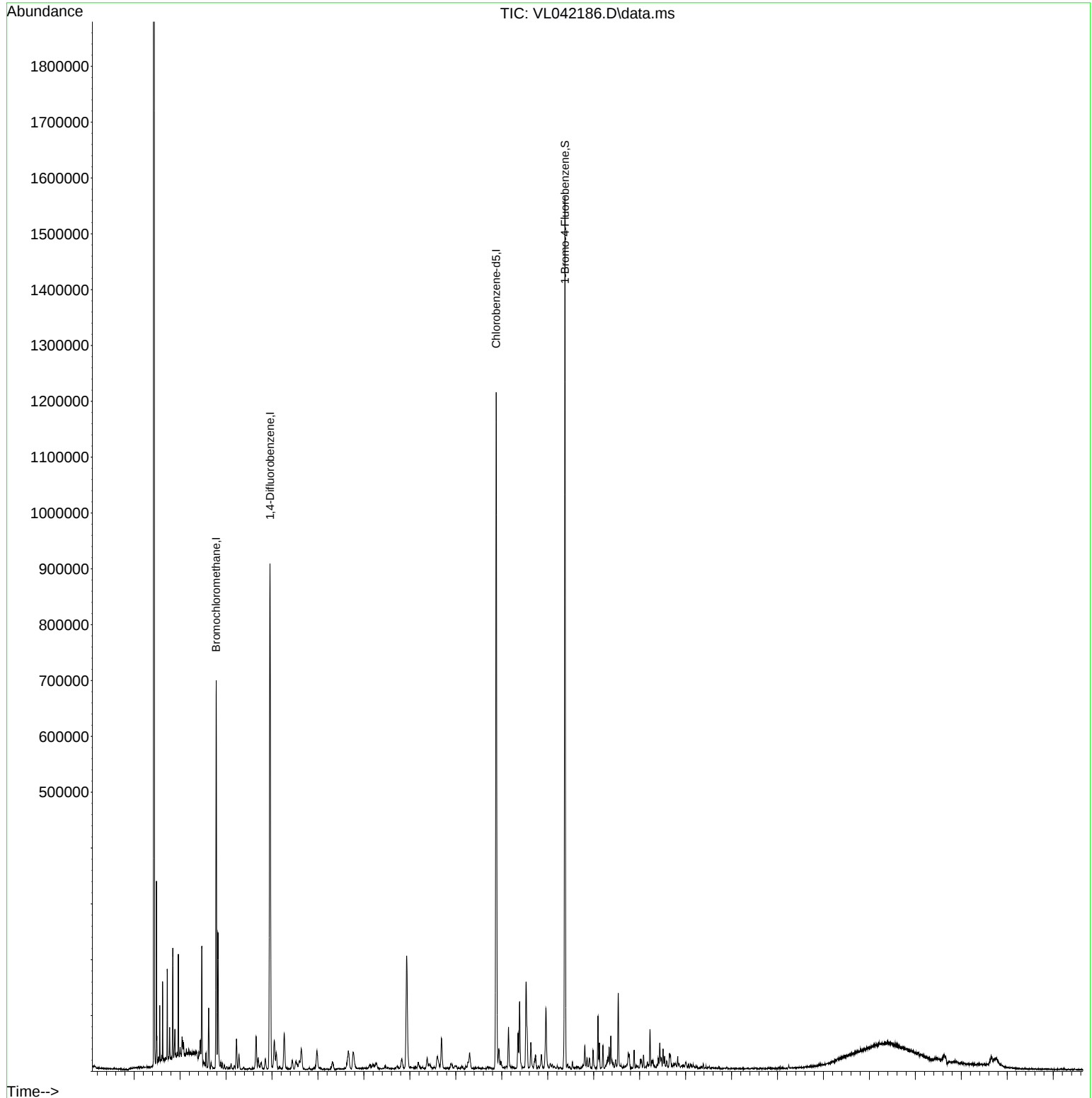
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042186.D
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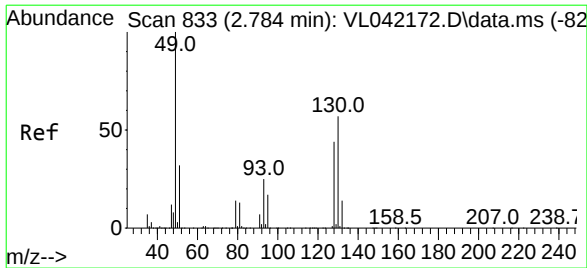
Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Manual Integrations
APPROVED

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Supervised By :Mahesh Dadoda 04/03/2025

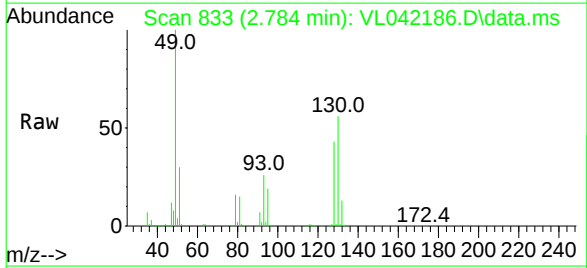
Quant Time: Mar 28 02:15:31 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration





#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 833
Delta R.T. -0.000 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

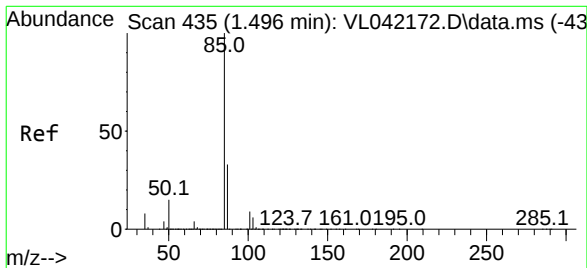
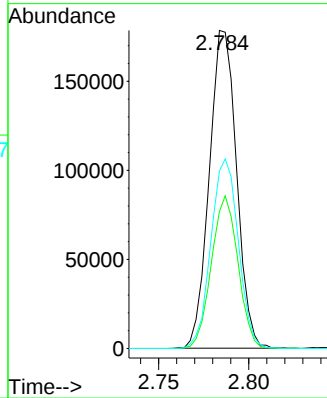
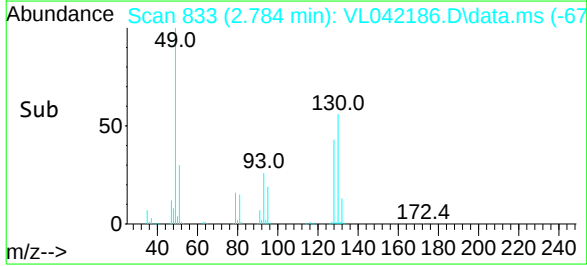
Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025



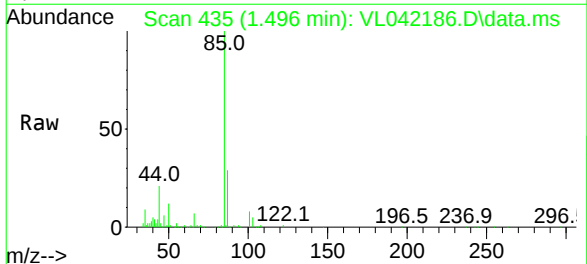
Tgt Ion: 49 Resp: 187729
Ion Ratio Lower Upper
49 100
128 46.8 22.9 68.5
130 60.0 28.8 86.4

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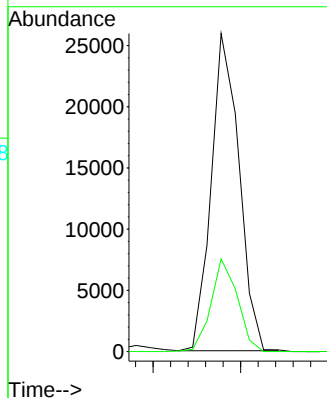
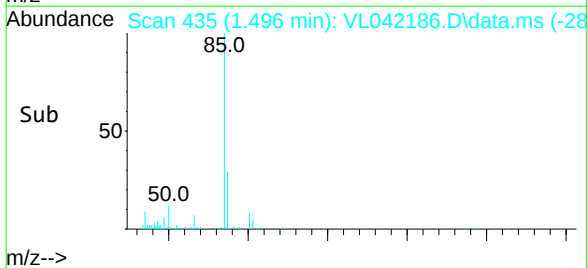
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

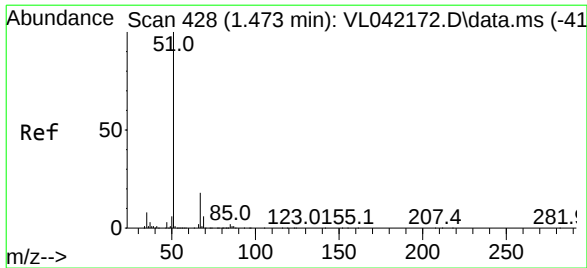


#2
Dichlorodifluoromethane
Concen: 0.414 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59



Tgt Ion: 85 Resp: 11483
Ion Ratio Lower Upper
85 100
87 29.2 26.1 39.1





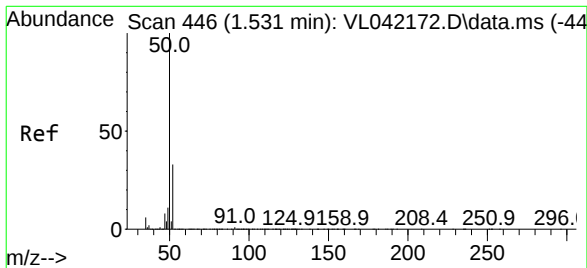
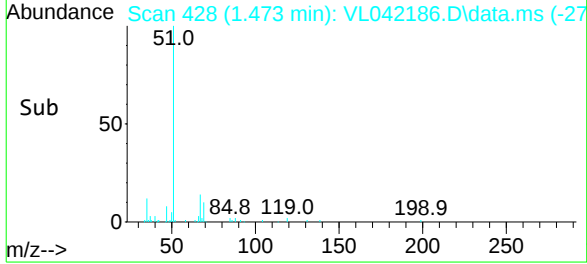
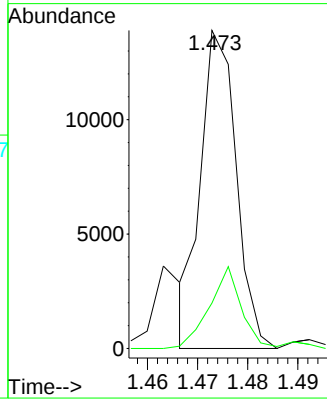
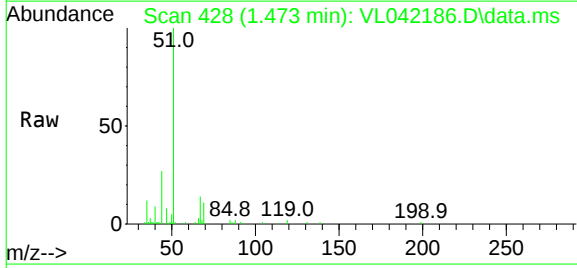
#3
Chlorodifluoromethane
Concen: 0.241 ppbv m
RT: 1.473 min Scan# 428
Delta R.T. -0.000 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Instrument : MSVOA_L
ClientSampleId : IA-B9-2-3262025

Tgt Ion: 51 Resp: 6817
Ion Ratio Lower Upper
51 100
67 26.8 15.0 22.6

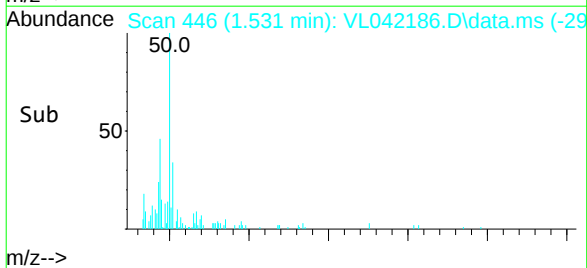
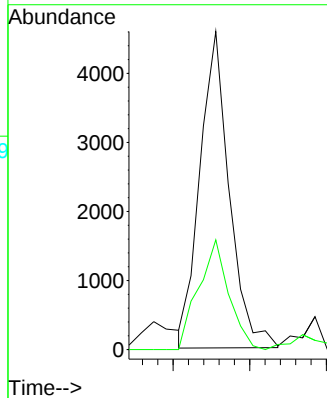
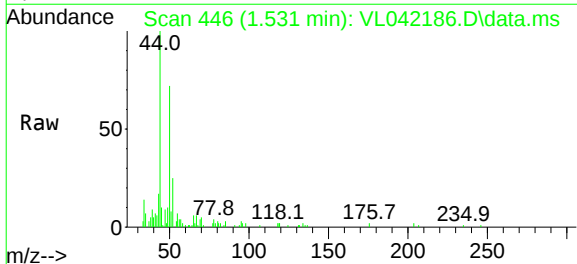
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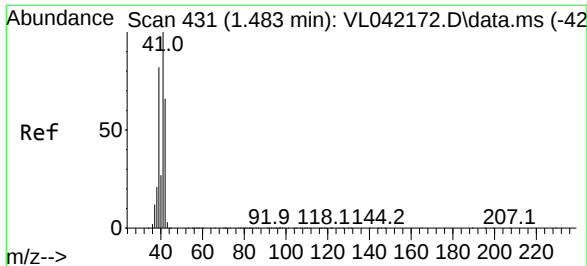
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025



#4
Chloromethane
Concen: 0.215 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

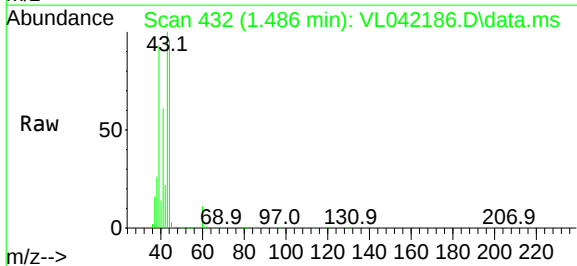
Tgt Ion: 50 Resp: 2440
Ion Ratio Lower Upper
50 100
52 34.9 26.1 39.1





#9
Propene
Concen: 1.604 ppbv m
RT: 1.486 min Scan# 431
Delta R.T. 0.003 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

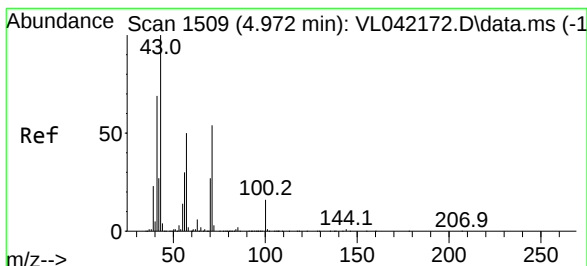
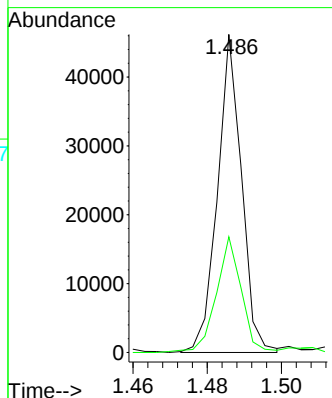
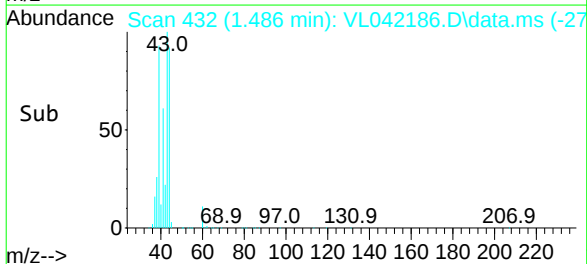
Instrument : MSVOA_L
ClientSampleId : IA-B9-2-3262025



Tgt Ion: 41 Resp: 20814
Ion Ratio Lower Upper
41 100
42 32.6 55.4 83.2#

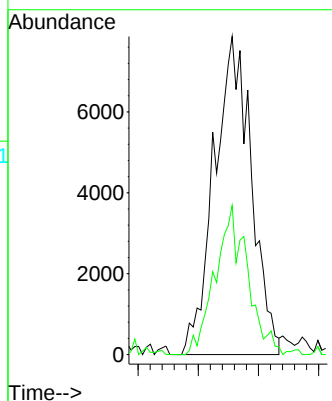
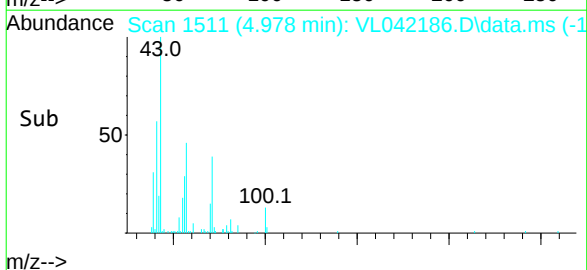
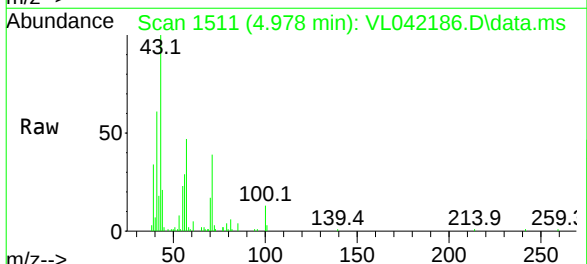
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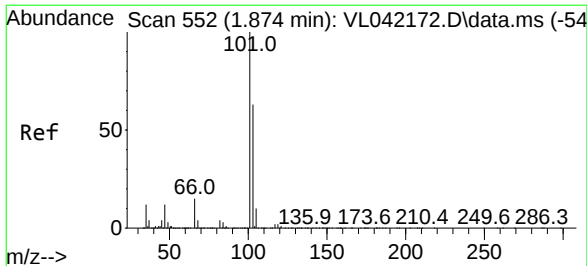
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025



#10
Heptane
Concen: 0.489 ppbv m
RT: 4.978 min Scan# 1511
Delta R.T. 0.006 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 43 Resp: 16872
Ion Ratio Lower Upper
43 100
57 41.3 39.4 59.2





#11

Trichlorofluoromethane

Concen: 0.201 ppbv

RT: 1.877 min Scan# 552

Delta R.T. 0.003 min

Lab File: VL042186.D

Acq: 27 Mar 2025 18:59

Instrument :

MSVOA_L

ClientSampleId :

IA-B9-2-3262025

Tgt Ion:101 Resp: 5432

Ion Ratio Lower Upper

101 100

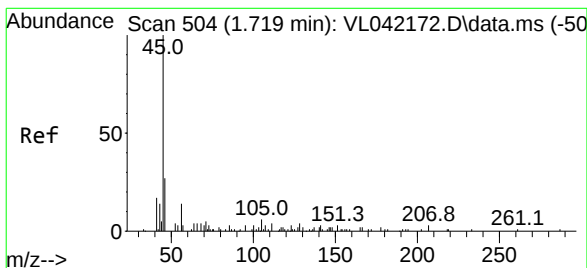
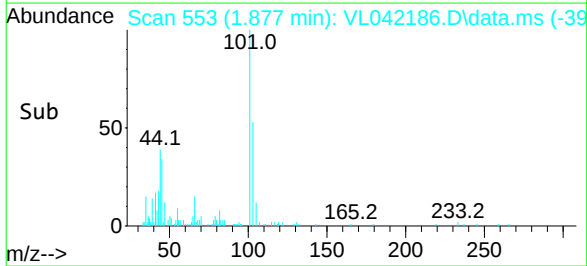
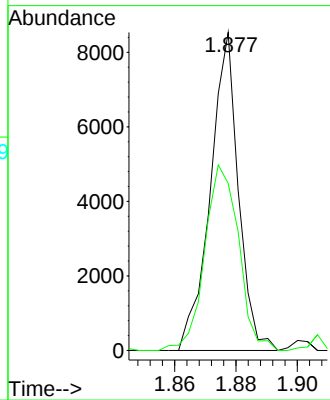
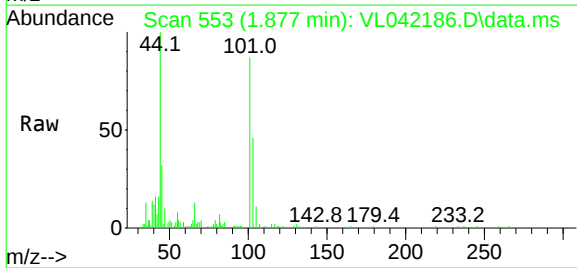
103 52.5 50.2 75.2

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 03/31/2025

Supervised By :Mahesh Dadoda 04/03/2025



#13

Ethanol

Concen: 46.985 ppbv

RT: 1.719 min Scan# 504

Delta R.T. -0.000 min

Lab File: VL042186.D

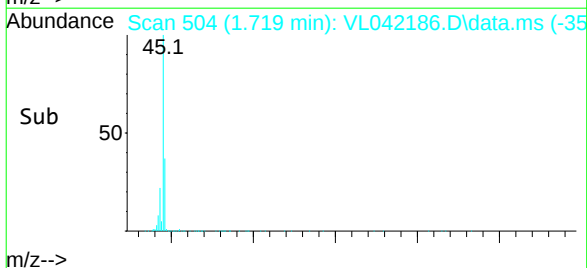
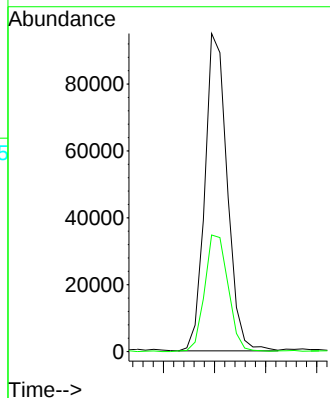
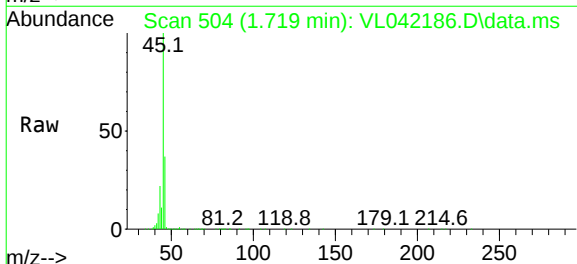
Acq: 27 Mar 2025 18:59

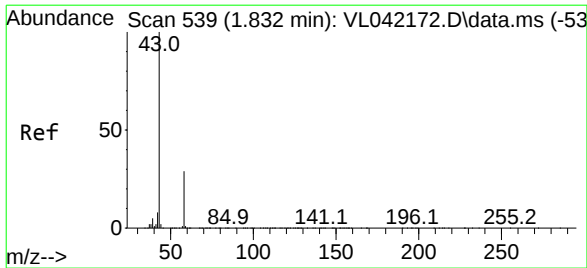
Tgt Ion: 45 Resp: 57647

Ion Ratio Lower Upper

45 100

46 39.0 20.2 80.8





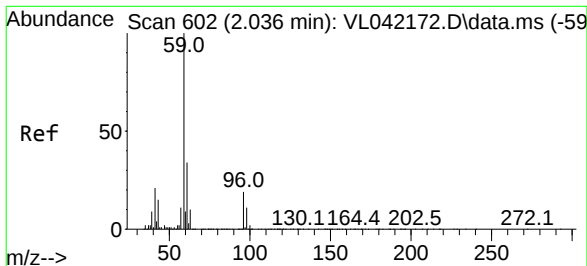
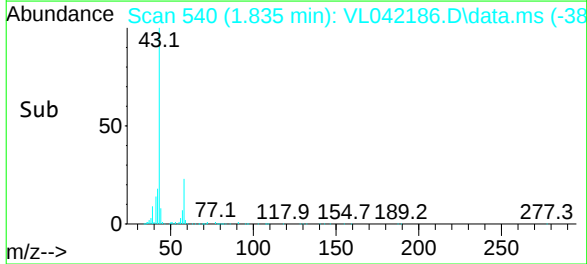
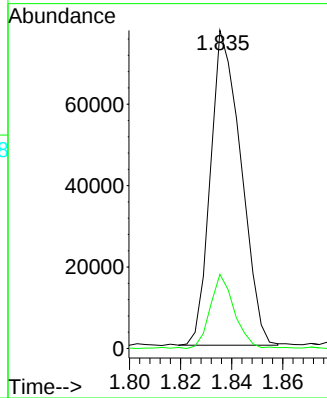
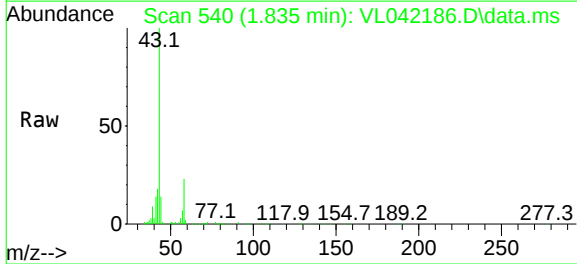
#15
Acetone
Concen: 2.447 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Tgt Ion: 43 Resp: 64251
Ion Ratio Lower Upper
43 100
58 19.2 23.2 34.8#

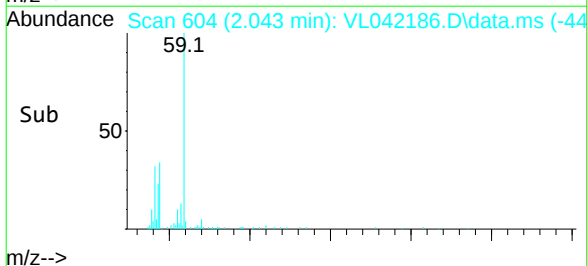
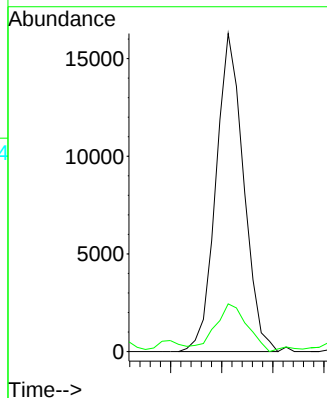
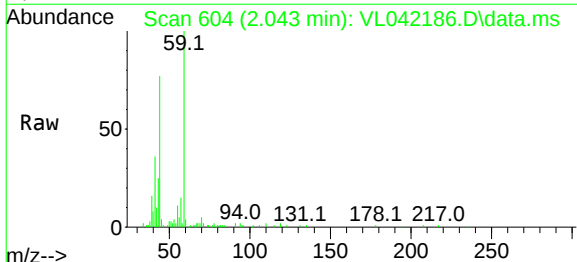
Manual Integrations
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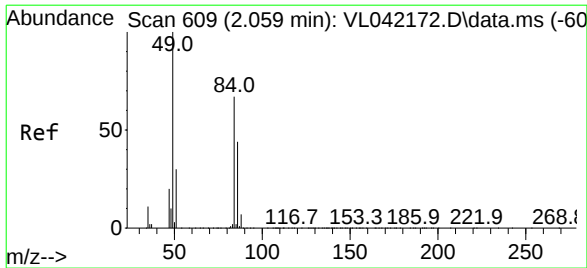
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025



#17
tert-Butyl alcohol
Concen: 0.375 ppbv
RT: 2.043 min Scan# 604
Delta R.T. 0.006 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

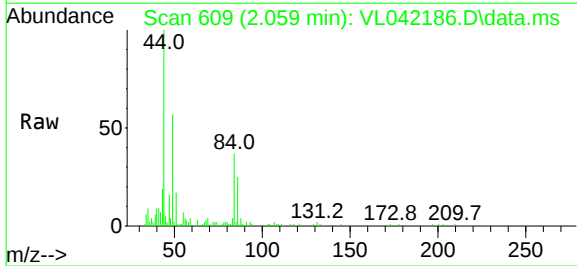
Tgt Ion: 59 Resp: 12249
Ion Ratio Lower Upper
59 100
57 17.6 8.9 13.3#





#20
Methylene Chloride
Concen: 0.345 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.000 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

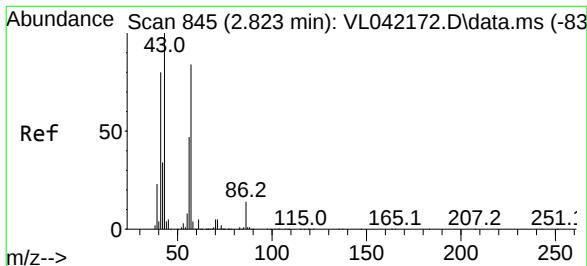
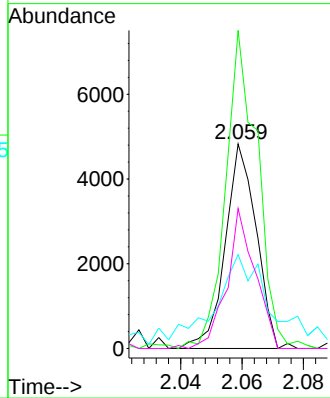
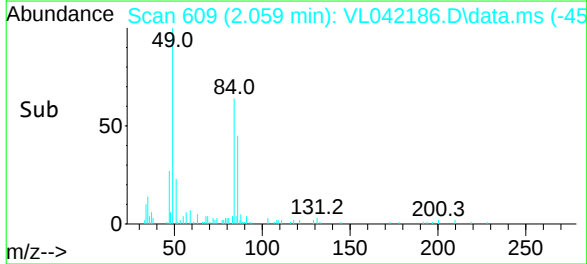
Instrument : MSVOA_L
ClientSampleId : IA-B9-2-3262025



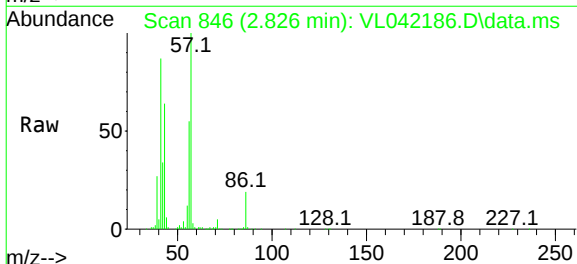
Tgt Ion	Ratio	Lower	Upper
84	100		
49	161.5	120.2	180.4
51	34.0	37.4	56.0
86	68.4	52.4	78.6

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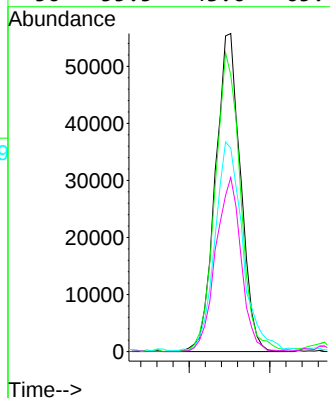
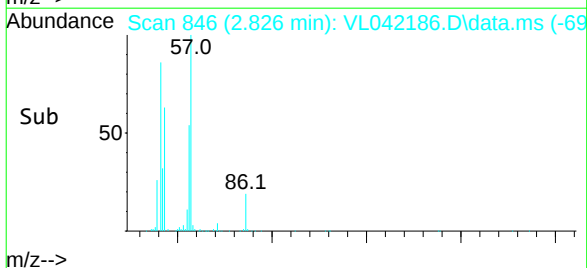
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

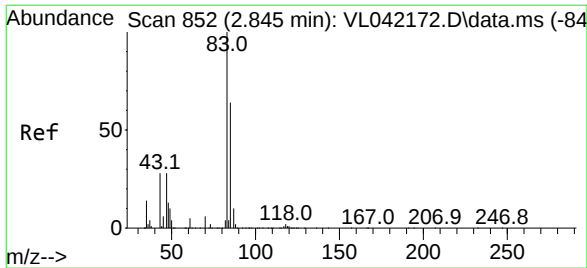


#26
Hexane
Concen: 2.294 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.003 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59



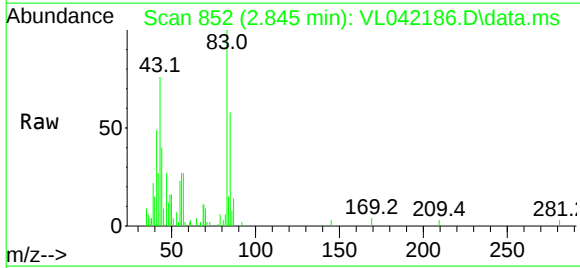
Tgt Ion	Ratio	Lower	Upper
57	100		
41	94.6	76.6	114.8
43	73.8	207.8	311.8
56	55.5	43.6	65.4





#29
Chloroform
Concen: 0.116 ppbv
RT: 2.845 min Scan# 85
Delta R.T. -0.000 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

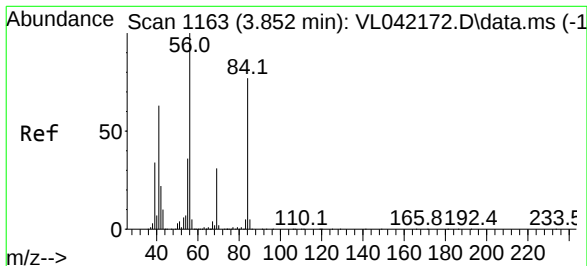
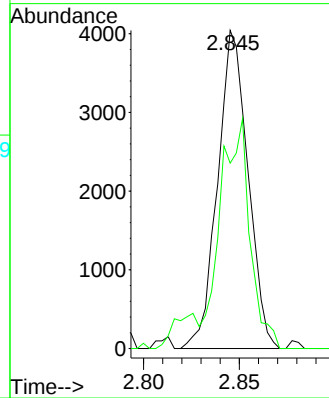
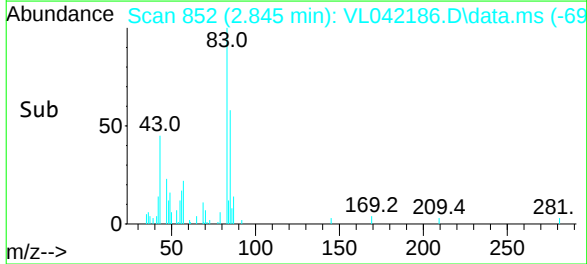
Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025



Tgt Ion: 83 Resp: 4455
Ion Ratio Lower Upper
83 100
85 58.3 51.4 77.2

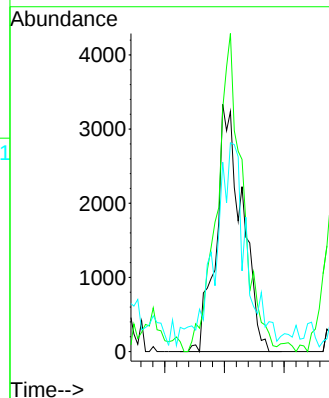
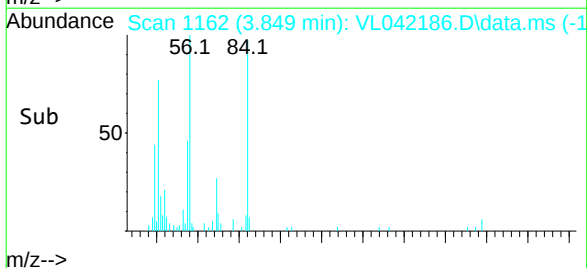
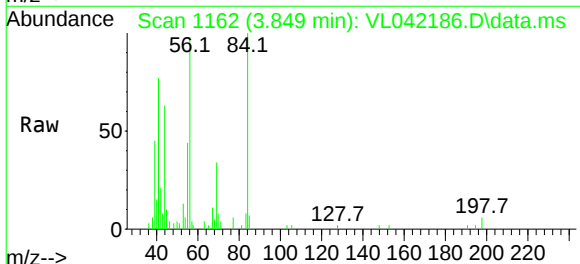
Manual Integrations
APPROVED

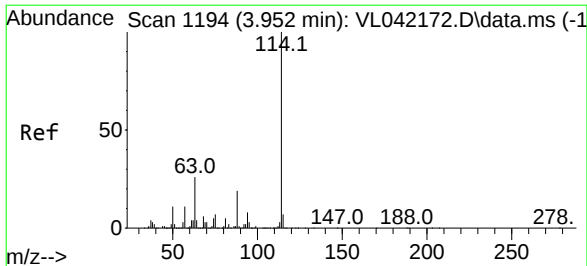
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025



#30
Cyclohexane
Concen: 0.221 ppbv m
RT: 3.849 min Scan# 1162
Delta R.T. -0.003 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

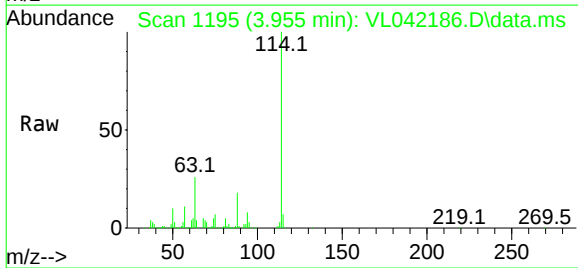
Tgt Ion: 84 Resp: 5046
Ion Ratio Lower Upper
84 100
56 127.6 102.8 154.2
41 90.5 66.5 99.7





#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 1194
Delta R.T. 0.003 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

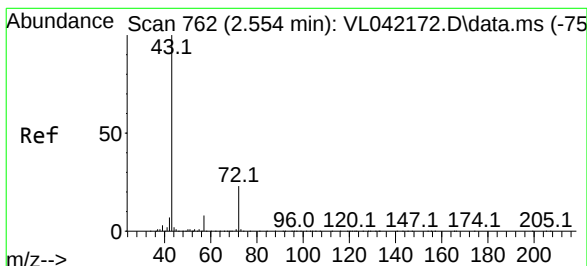
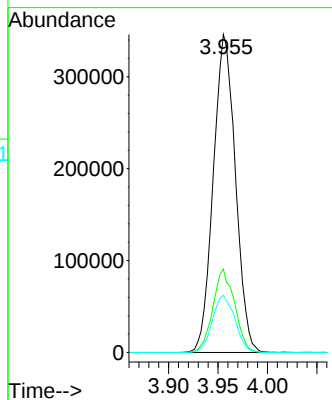
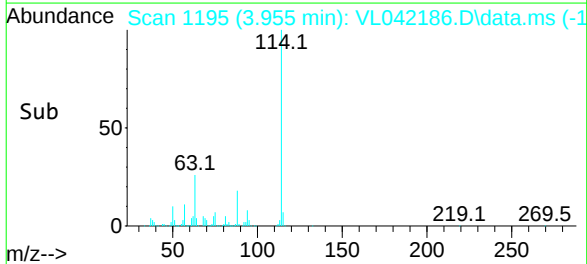
Instrument : MSVOA_L
ClientSampleId : IA-B9-2-3262025



Tgt Ion: 114 Resp: 538422
Ion Ratio Lower Upper
114 100
63 25.7 20.7 31.1
88 18.3 15.0 22.4

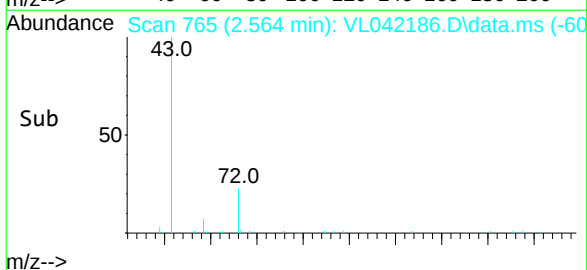
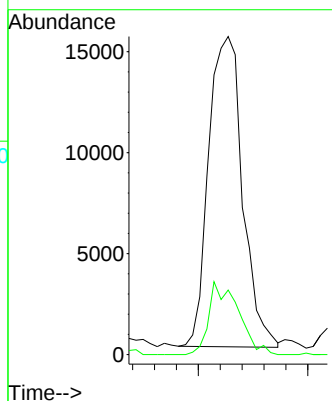
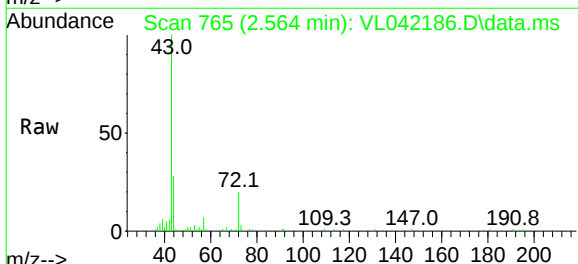
Manual Integrations
APPROVED

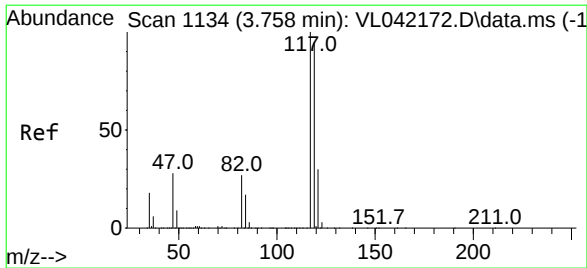
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025



#34
2-Butanone
Concen: 0.424 ppbv
RT: 2.564 min Scan# 765
Delta R.T. 0.009 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

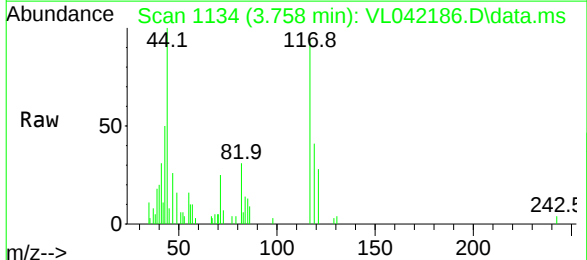
Tgt Ion: 43 Resp: 16547
Ion Ratio Lower Upper
43 100
72 20.6 18.2 27.2





#35
Carbon Tetrachloride
Concen: 0.067 ppbv m
RT: 3.758 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

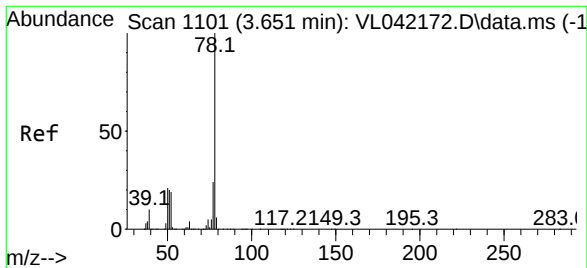
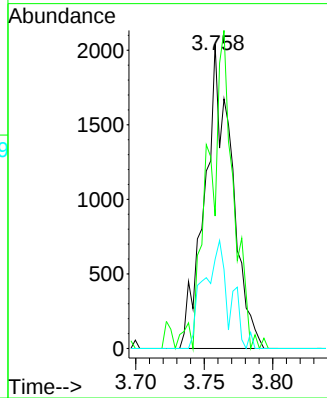
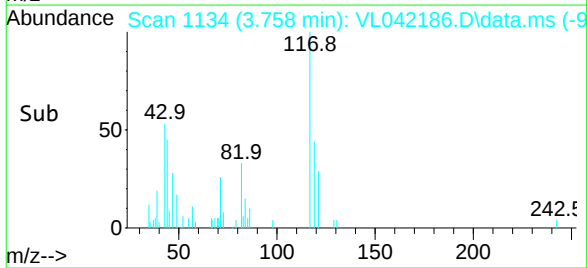
Instrument : MSVOA_L
ClientSampleId : IA-B9-2-3262025



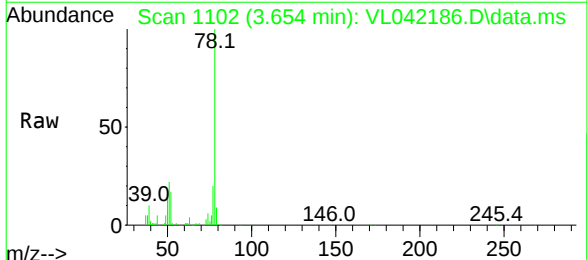
Tgt Ion: 117 Resp: 2811
Ion Ratio Lower Upper
117 100
119 43.5 76.2 114.2#
121 29.3 24.2 36.4

Manual Integrations
APPROVED

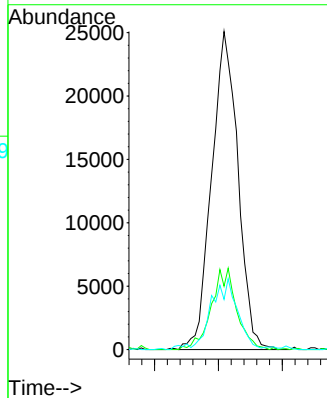
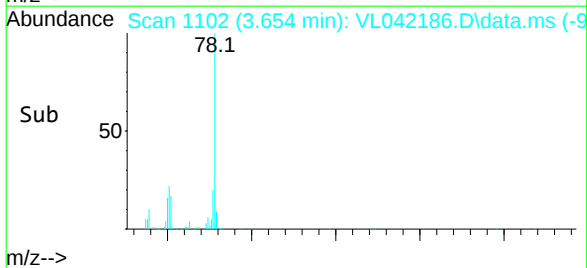
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

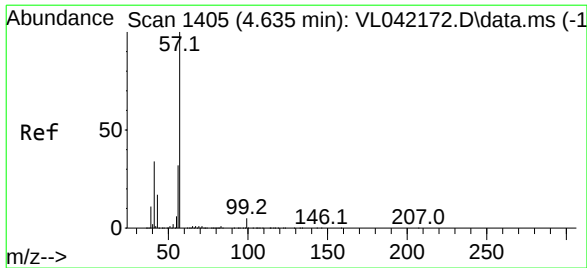


#36
Benzene
Concen: 0.672 ppbv
RT: 3.654 min Scan# 1102
Delta R.T. 0.003 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59



Tgt Ion: 78 Resp: 35891
Ion Ratio Lower Upper
78 100
77 19.9 19.1 28.7
50 15.3 16.6 24.8#





#44

2,2,4-Trimethylpentane

Concen: 0.371 ppbv m

RT: 4.638 min Scan# 14

Delta R.T. 0.003 min

Lab File: VL042186.D

Acq: 27 Mar 2025 18:59

Instrument :

MSVOA_L

ClientSampleId :

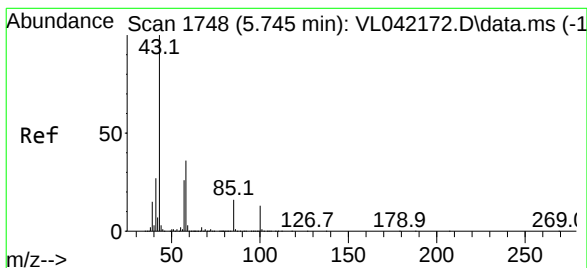
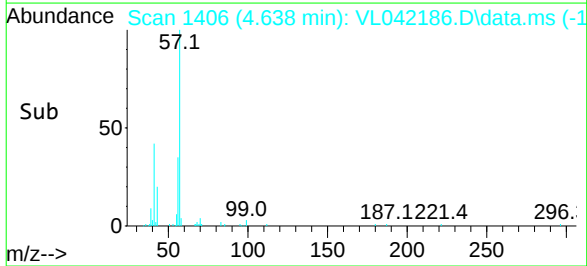
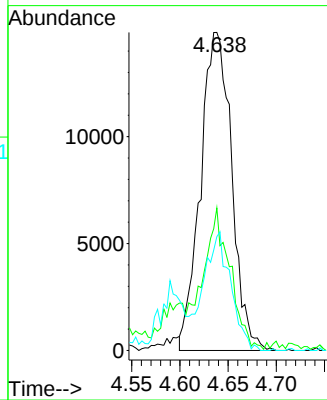
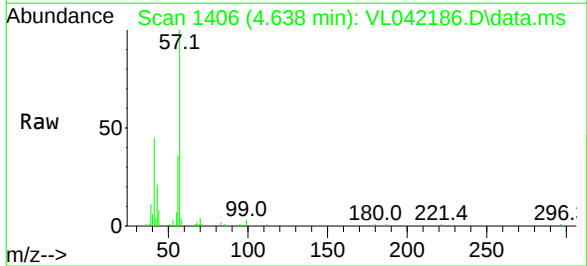
IA-B9-2-3262025

Tgt Ion:	57	Resp:	33449
Ion	Ratio	Lower	Upper
57	100		
41	49.4	26.8	40.2
56	33.6	25.6	38.4

Manual Integrations

APPROVED

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



#50

4-Methyl-2-Pentanone

Concen: 0.427 ppbv

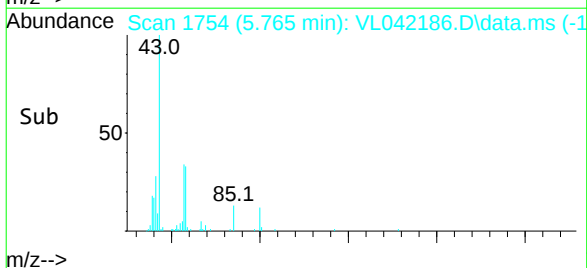
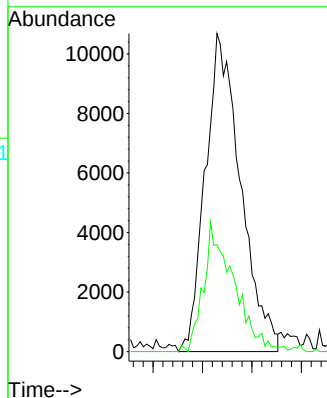
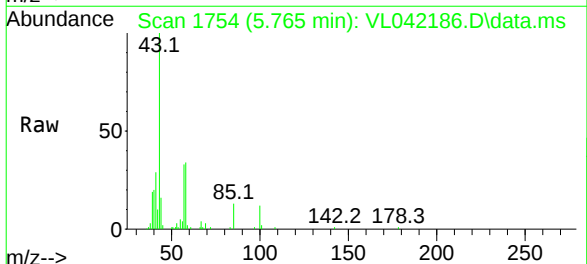
RT: 5.765 min Scan# 1754

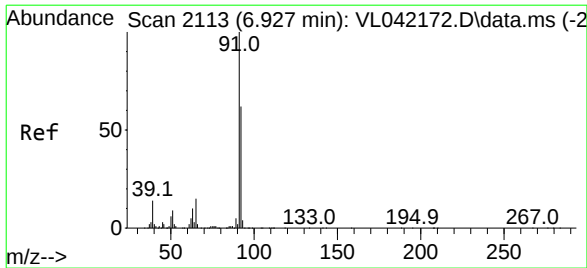
Delta R.T. 0.019 min

Lab File: VL042186.D

Acq: 27 Mar 2025 18:59

Tgt Ion:	43	Resp:	26447
Ion	Ratio	Lower	Upper
43	100		
58	35.4	29.0	43.6





#53

Toluene

Concen: 2.312 ppbv

RT: 6.933 min Scan# 2113

Delta R.T. 0.006 min

Lab File: VL042186.D

Acq: 27 Mar 2025 18:59

Instrument :

MSVOA_L

ClientSampleId :

IA-B9-2-3262025

Tgt Ion: 91 Resp: 146301

Ion Ratio Lower Upper

91 100

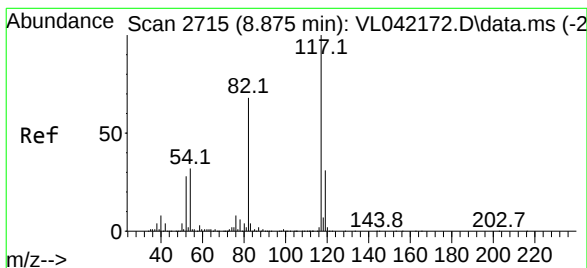
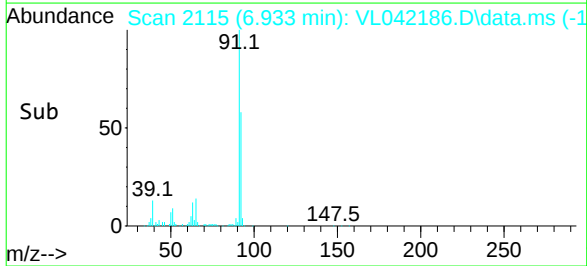
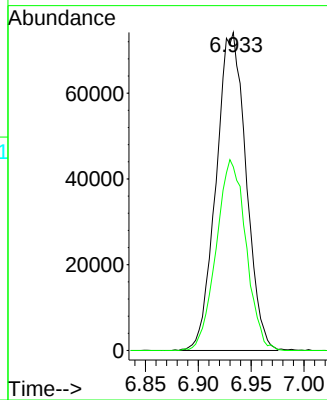
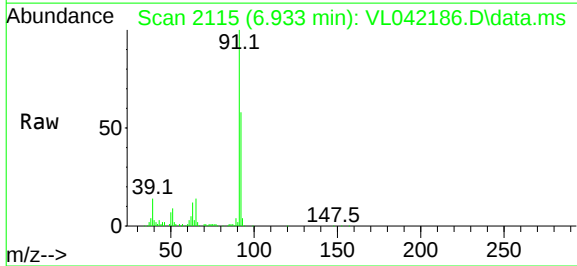
92 59.5 48.4 72.6

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025

Supervised By :Mahesh Dadoda 04/03/2025



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.878 min Scan# 2716

Delta R.T. 0.003 min

Lab File: VL042186.D

Acq: 27 Mar 2025 18:59

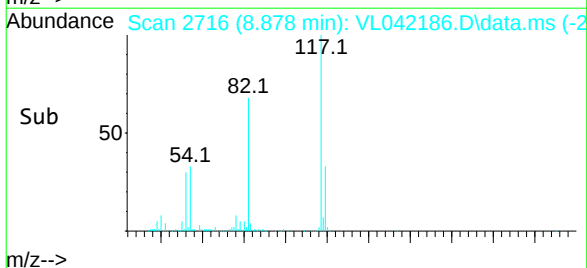
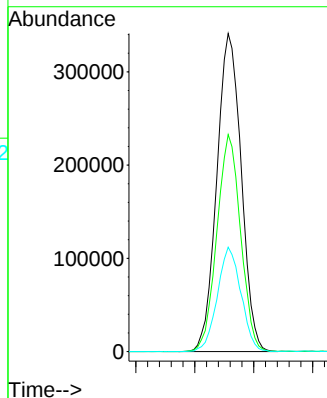
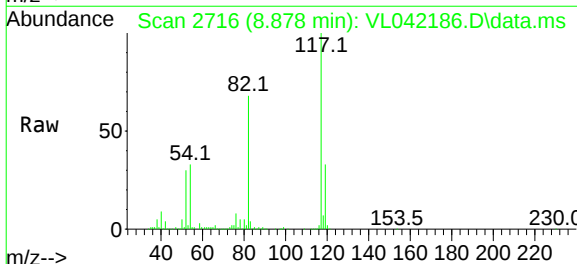
Tgt Ion:117 Resp: 491411

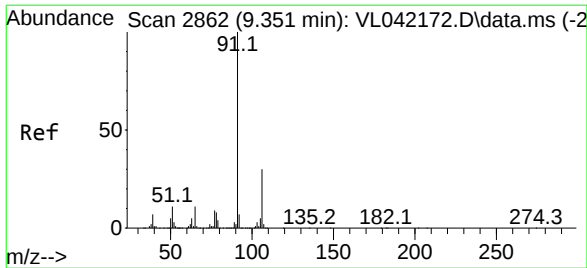
Ion Ratio Lower Upper

117 100

82 66.3 55.8 83.6

119 31.8 25.5 38.3





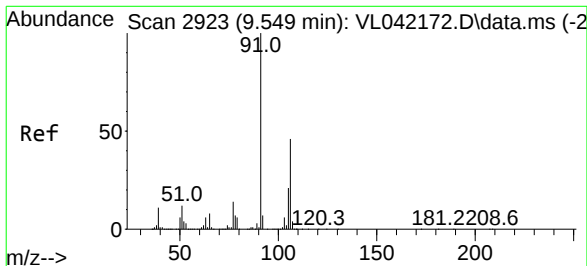
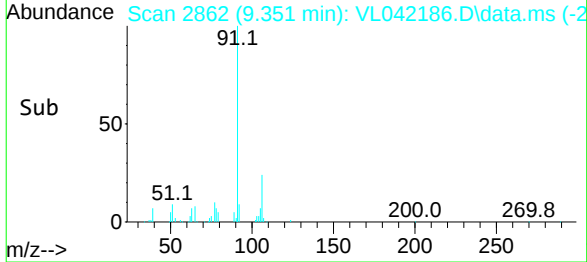
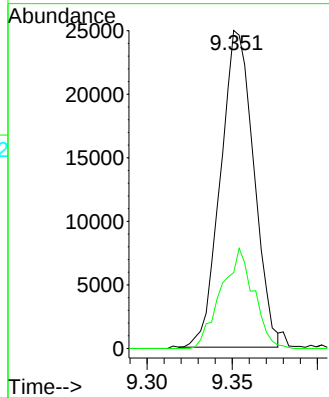
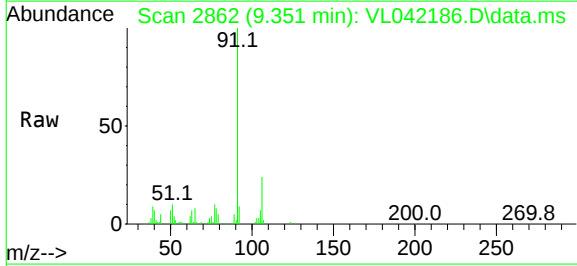
#58
Ethyl Benzene
Concen: 0.388 ppbv
RT: 9.351 min Scan# 2862
Delta R.T. -0.000 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Instrument : MSVOA_L
ClientSampleId : IA-B9-2-3262025

Tgt Ion: 91 Resp: 33902
Ion Ratio Lower Upper
91 100
106 24.0 24.2 36.2

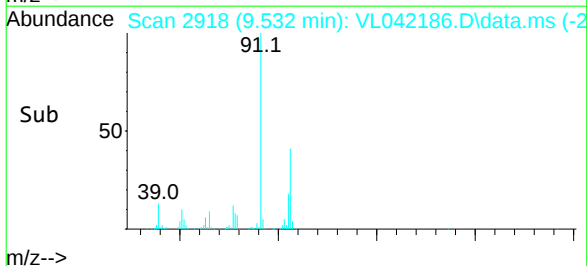
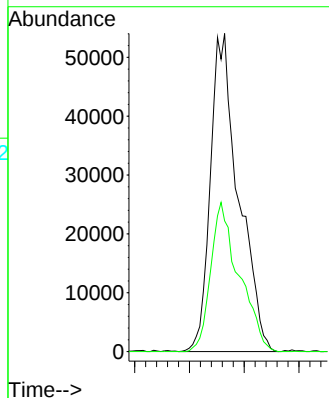
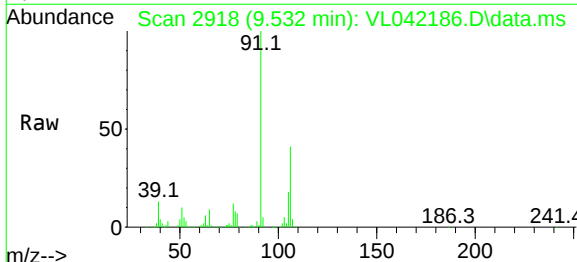
Manual Integrations
APPROVED

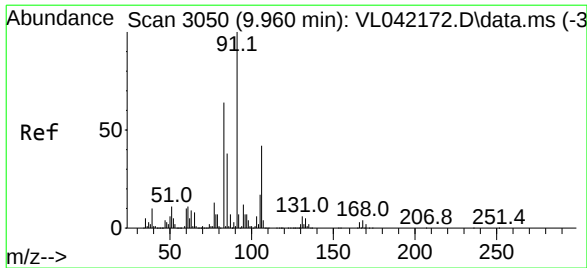
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025



#59
m/p-Xylene
Concen: 1.387 ppbv
RT: 9.532 min Scan# 2918
Delta R.T. -0.016 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Tgt Ion: 91 Resp: 96658
Ion Ratio Lower Upper
91 100
106 47.3 36.4 54.6





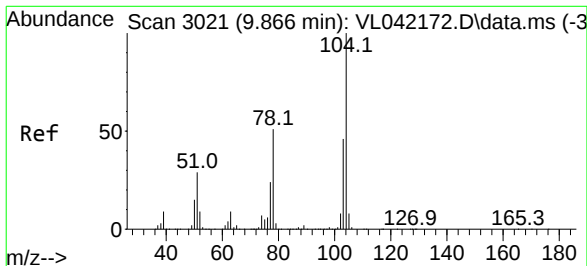
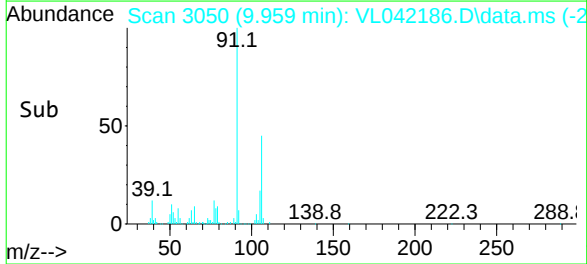
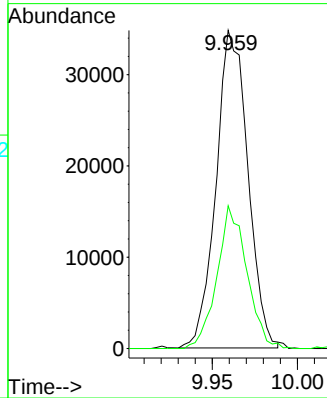
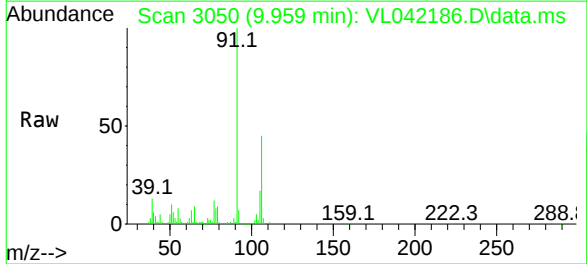
#60
o-Xylene
Concen: 0.647 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.000 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025

Tgt Ion: 91 Resp: 45203
Ion Ratio Lower Upper
91 100
106 42.1 20.8 62.5

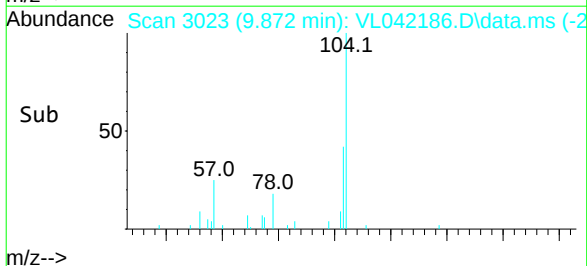
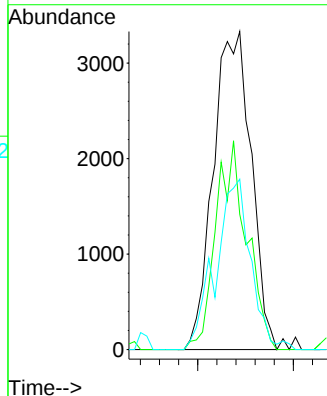
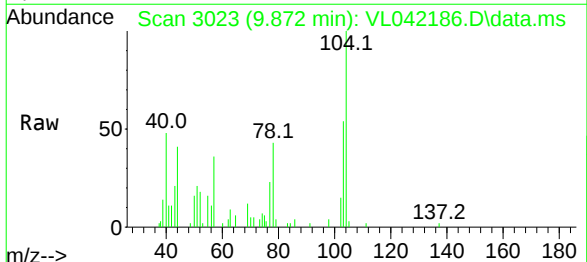
Manual Integrations
APPROVED

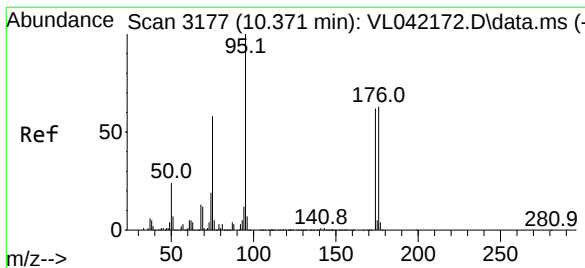
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025



#61
Styrene
Concen: 0.132 ppbv m
RT: 9.872 min Scan# 3023
Delta R.T. 0.006 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

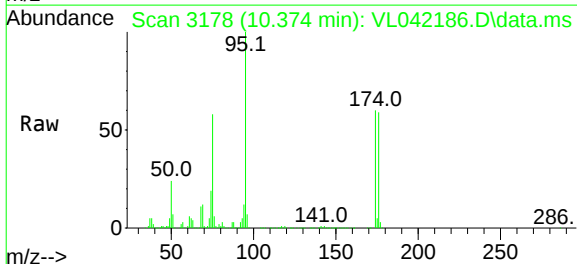
Tgt Ion:104 Resp: 4574
Ion Ratio Lower Upper
104 100
78 53.8 41.8 62.6
103 49.7 37.0 55.4





#68
1-Bromo-4-Fluorobenzene
Concen: 9.915 ppbv
RT: 10.374 min Scan# 3177
Delta R.T. 0.003 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59

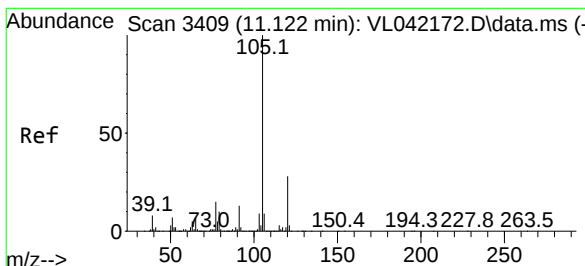
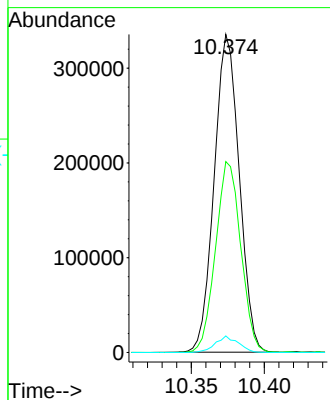
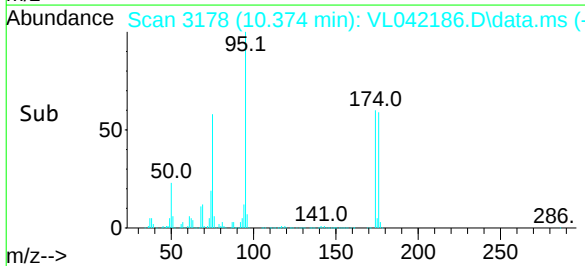
Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3262025



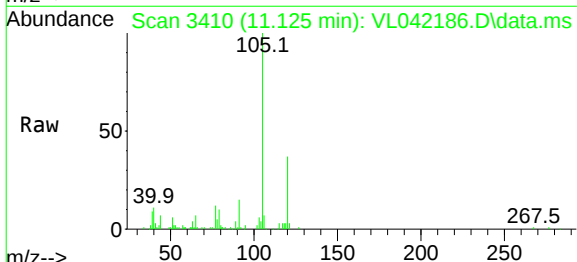
Tgt Ion: 95 Resp: 400118
Ion Ratio Lower Upper
95 100
174 60.8 50.6 76.0
175 4.7 3.8 5.6

Manual Integrations
APPROVED

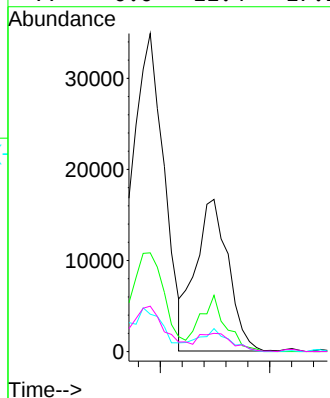
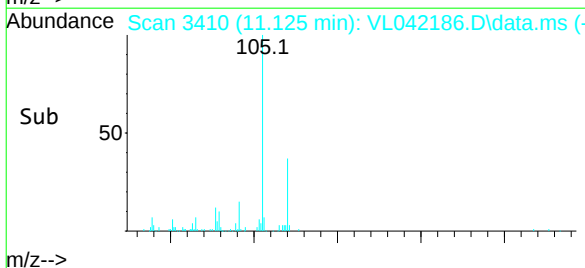
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

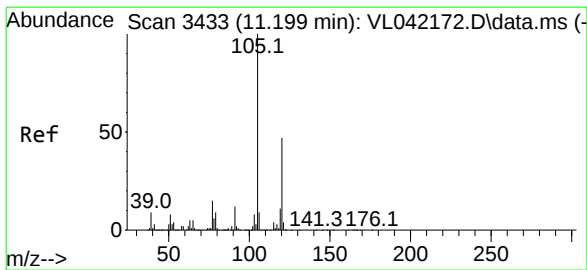


#72
4-Ethyltoluene
Concen: 0.201 ppbv
RT: 11.125 min Scan# 3410
Delta R.T. 0.003 min
Lab File: VL042186.D
Acq: 27 Mar 2025 18:59



Tgt Ion:105 Resp: 17501
Ion Ratio Lower Upper
105 100
120 0.0 23.4 35.0#
91 0.0 10.3 15.5#
77 0.0 11.4 17.2#





#73

1,3,5-Trimethylbenzene

Concen: 0.184 ppbv

RT: 11.199 min Scan# 3433

Delta R.T. -0.000 min

Lab File: VL042186.D

Acq: 27 Mar 2025 18:59

Instrument :

MSVOA_L

ClientSampleId :

IA-B9-2-3262025

Tgt Ion:105 Resp: 13983

Ion Ratio Lower Upper

105 100

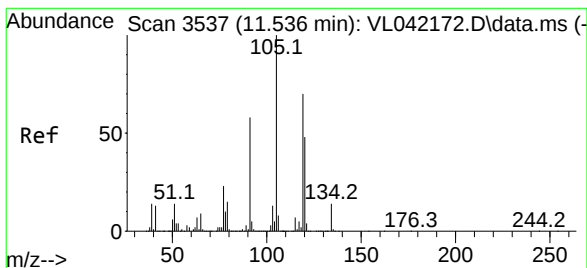
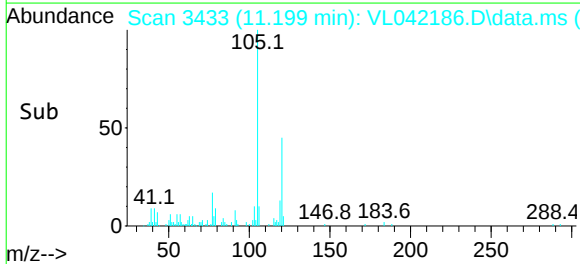
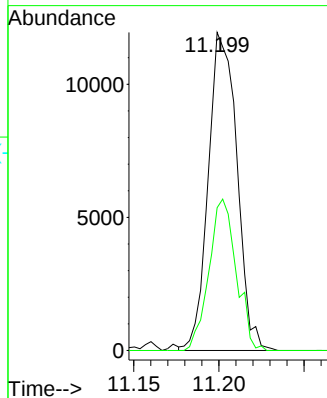
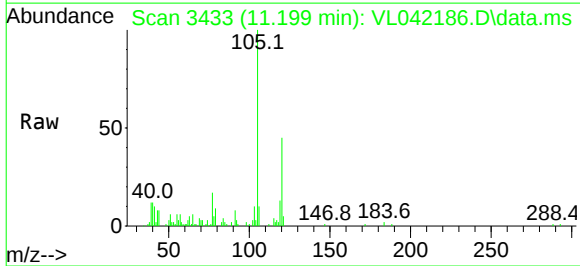
120 44.9 37.4 56.0

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025

Supervised By :Mahesh Dadoda 04/03/2025



#74

1,2,4-Trimethylbenzene

Concen: 0.539 ppbv

RT: 11.536 min Scan# 3537

Delta R.T. -0.000 min

Lab File: VL042186.D

Acq: 27 Mar 2025 18:59

Tgt Ion:105 Resp: 47154

Ion Ratio Lower Upper

105 100

120 36.7 38.6 58.0#

91 12.5 46.2 69.2#

77 13.1 18.6 27.8#

