

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
 Data File : VL042187.D
 Acq On : 27 Mar 2025 19:36
 Operator : SY/MD
 Sample : Q1669-03
 Misc : 400mL/MSVOA_L
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-B9-1-3262025

Manual Integrations
 APPROVED

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

Quant Time: Mar 28 02:16:07 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	185410	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.955	114	523694	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.878	117	484321	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	389805	9.801	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.000%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.495	85	10428	0.381	ppbv	96
3) Chlorodifluoromethane	1.473	51	9747	0.349	ppbv	97
4) Chloromethane	1.528	50	2809	0.251	ppbv #	86
9) Propene	1.486	41	7879	0.615	ppbv	84
10) Heptane	4.981	43	17273m	0.507	ppbv	
11) Trichlorofluoromethane	1.877	101	5528	0.208	ppbv	96
13) Ethanol	1.719	45	58391	48.187	ppbv	80
15) Acetone	1.835	43	82901	3.197	ppbv #	82
17) tert-Butyl alcohol	2.042	59	13650	0.423	ppbv	95
20) Methylene Chloride	2.059	84	7860	0.814	ppbv #	86
26) Hexane	2.822	57	57580	2.215	ppbv #	34
30) Cyclohexane	3.849	84	6351m	0.281	ppbv	
34) 2-Butanone	2.560	43	20631	0.543	ppbv	95
35) Carbon Tetrachloride	3.758	117	2812m	0.069	ppbv	
36) Benzene	3.651	78	38888	0.749	ppbv	99
44) 2,2,4-Trimethylpentane	4.641	57	27186m	0.310	ppbv	
50) 4-Methyl-2-Pentanone	5.761	43	52014m	0.864	ppbv	
53) Toluene	6.930	91	159613	2.593	ppbv	99
58) Ethyl Benzene	9.351	91	32819	0.381	ppbv	93
59) m/p-Xylene	9.529	91	96052	1.398	ppbv	100
60) o-Xylene	9.959	91	38965	0.566	ppbv	97
61) Styrene	9.869	104	86112	2.528	ppbv	99
64) n-propylbenzene	10.992	120	2810m	0.106	ppbv	
72) 4-Ethyltoluene	11.124	105	10792	0.126	ppbv #	55
73) 1,3,5-Trimethylbenzene	11.199	105	10875	0.145	ppbv	92
74) 1,2,4-Trimethylbenzene	11.536	105	35817	0.415	ppbv #	66

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

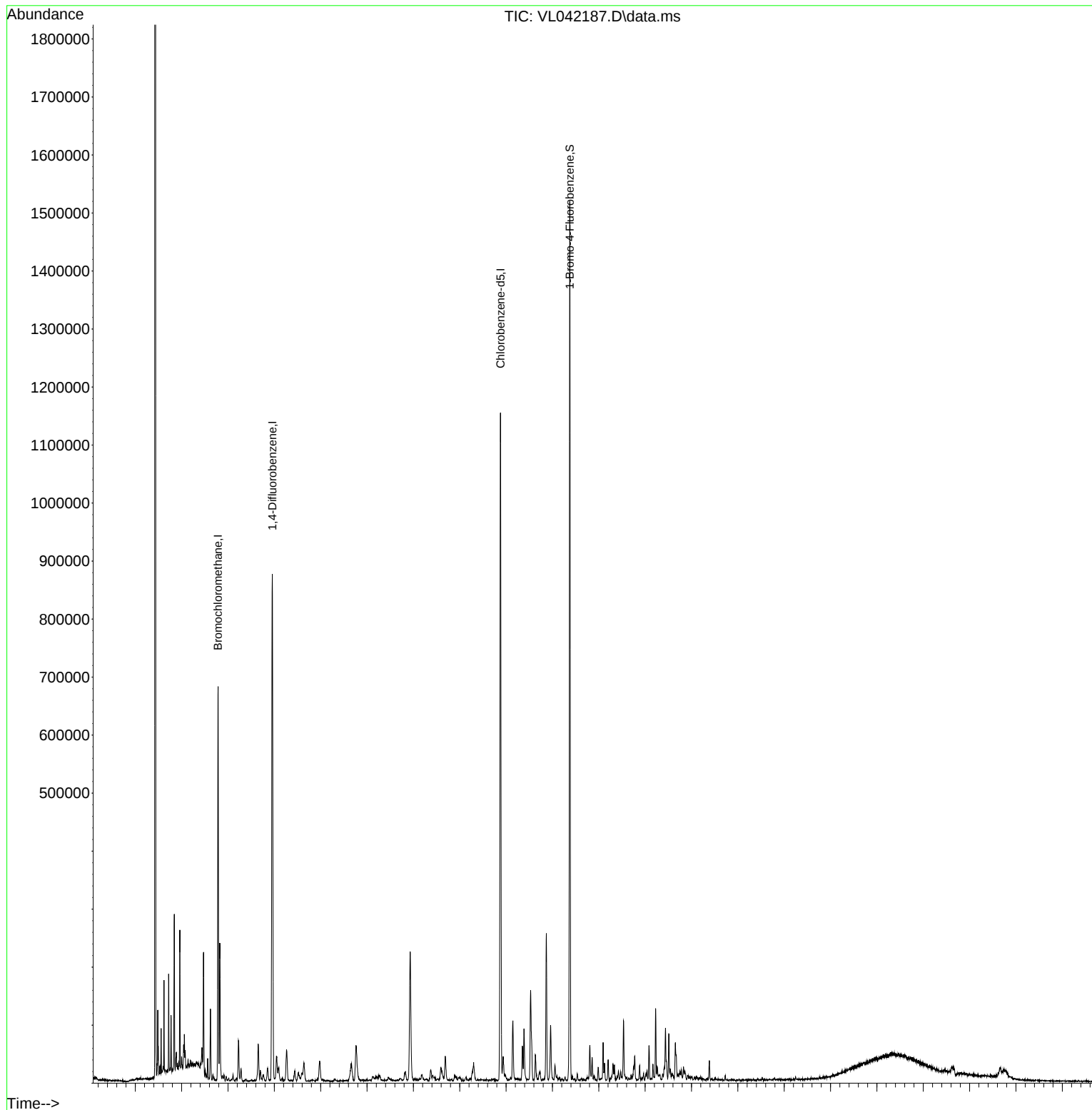
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042187.D
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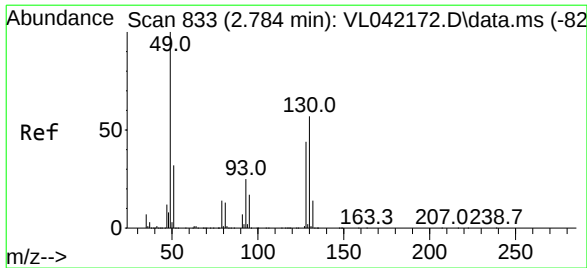
Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

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

Quant Time: Mar 28 02:16:07 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
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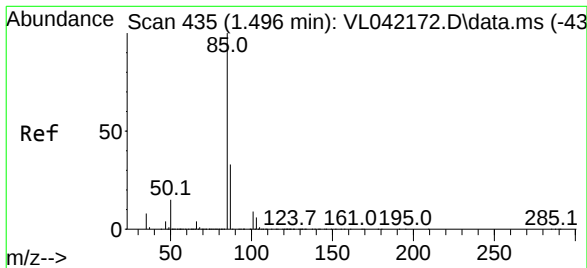
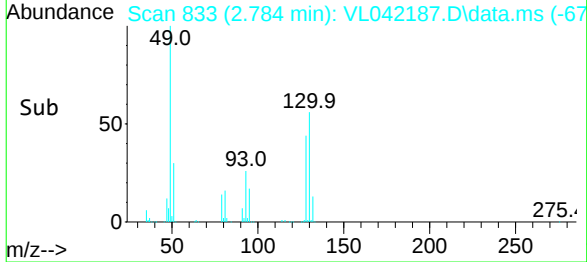
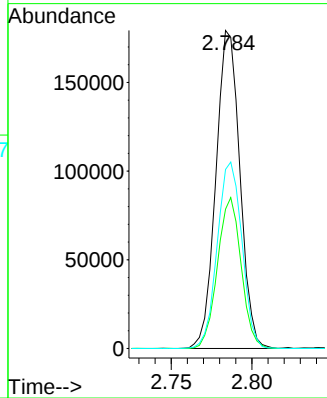
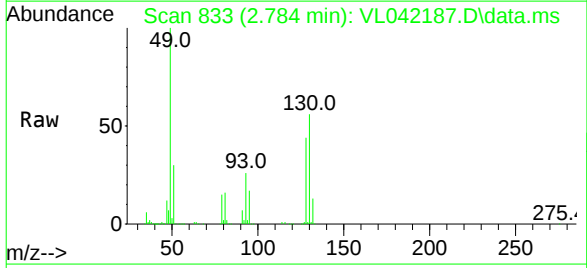
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Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 833
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Instrument : MSVOA_L
ClientSampleId : IA-B9-1-3262025

Tgt Ion: 49 Resp: 185410
Ion Ratio Lower Upper
49 100
128 46.8 22.9 68.5
130 60.2 28.8 86.4

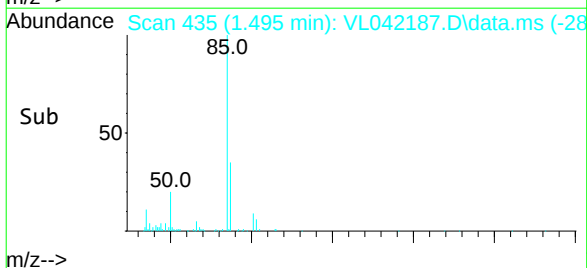
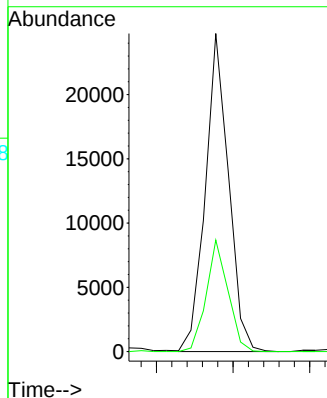
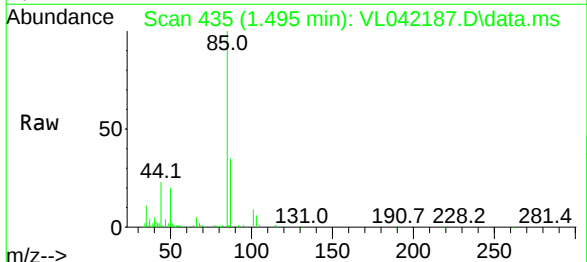
Manual Integrations
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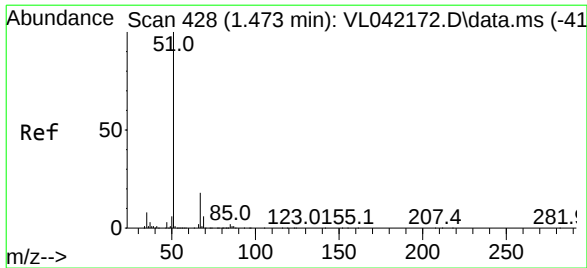
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025



#2
Dichlorodifluoromethane
Concen: 0.381 ppbv
RT: 1.495 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

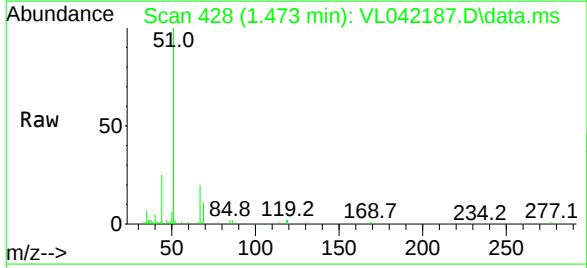
Tgt Ion: 85 Resp: 10428
Ion Ratio Lower Upper
85 100
87 35.1 26.1 39.1





#3
Chlorodifluoromethane
Concen: 0.349 ppbv
RT: 1.473 min Scan# 428
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

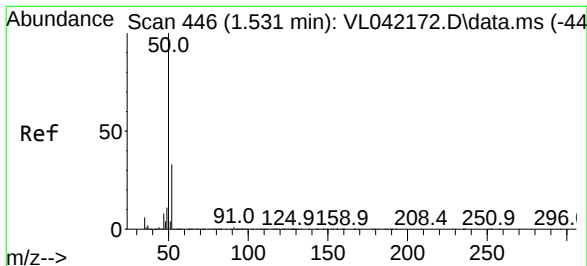
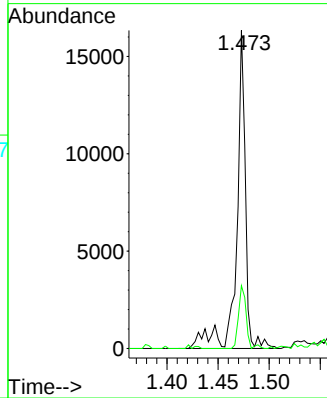
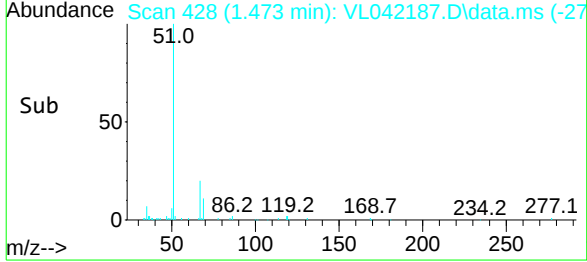
Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025



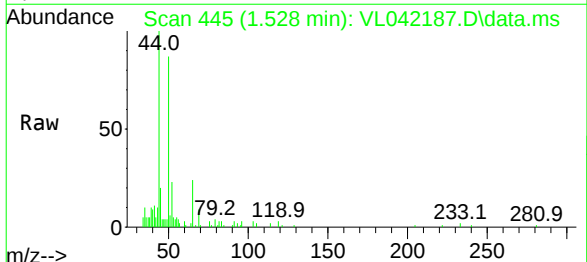
Tgt Ion: 51 Resp: 9747
Ion Ratio Lower Upper
51 100
67 17.4 15.0 22.6

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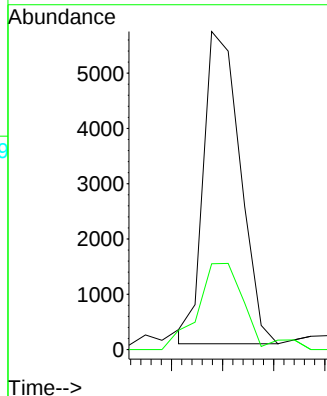
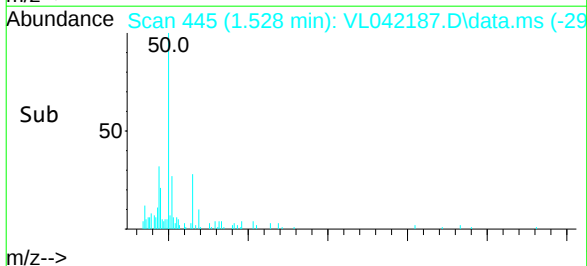
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

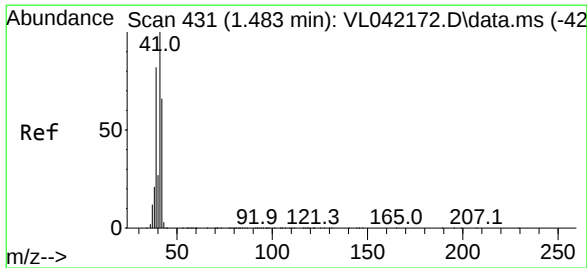


#4
Chloromethane
Concen: 0.251 ppbv
RT: 1.528 min Scan# 445
Delta R.T. -0.004 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36



Tgt Ion: 50 Resp: 2809
Ion Ratio Lower Upper
50 100
52 24.5 26.1 39.1#





#9

Propene

Concen: 0.615 ppbv

RT: 1.486 min Scan# 431

Delta R.T. 0.003 min

Lab File: VL042187.D

Acq: 27 Mar 2025 19:36

Instrument :

MSVOA_L

ClientSampleId :

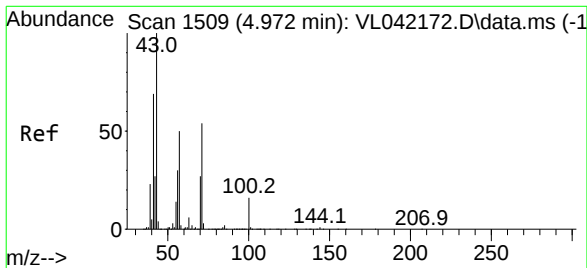
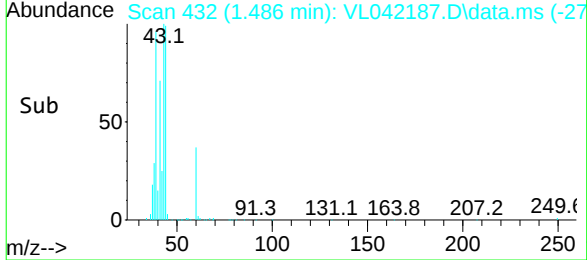
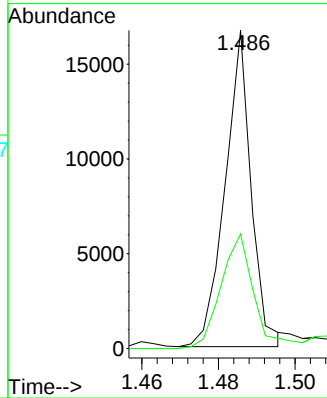
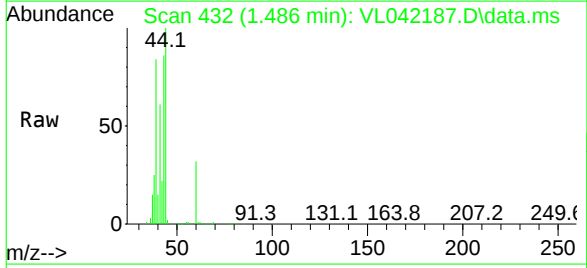
IA-B9-1-3262025

Tgt Ion: 41 Resp: 7879
 Ion Ratio Lower Upper
 41 100
 42 56.3 55.4 83.2

Manual Integrations

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 Supervised By :Mahesh Dadoda 04/03/2025



#10

Heptane

Concen: 0.507 ppbv m

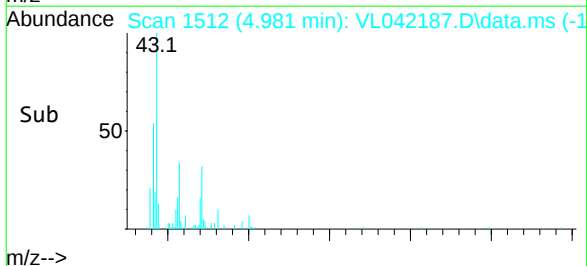
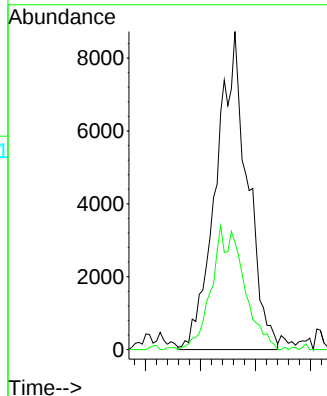
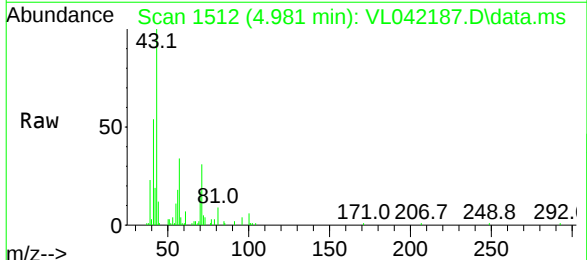
RT: 4.981 min Scan# 1512

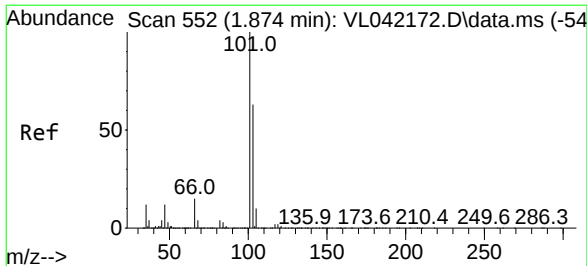
Delta R.T. 0.009 min

Lab File: VL042187.D

Acq: 27 Mar 2025 19:36

Tgt Ion: 43 Resp: 17273
 Ion Ratio Lower Upper
 43 100
 57 40.4 39.4 59.2





#11

Trichlorofluoromethane

Concen: 0.208 ppbv

RT: 1.877 min Scan# 552

Delta R.T. 0.003 min

Lab File: VL042187.D

Acq: 27 Mar 2025 19:36

Instrument :

MSVOA_L

ClientSampleId :

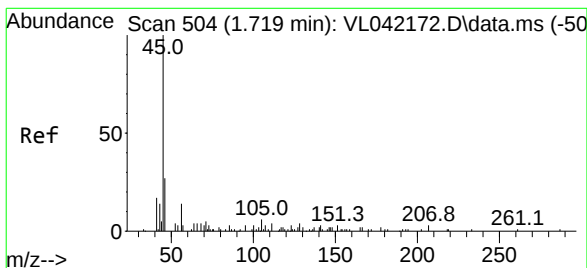
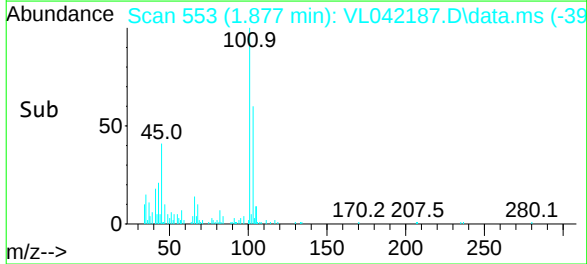
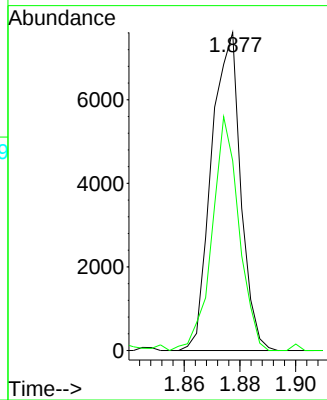
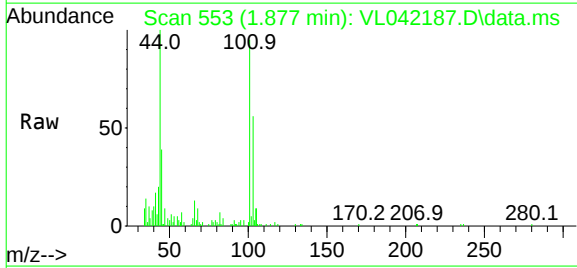
IA-B9-1-3262025

Tgt Ion	Ratio	Lower	Upper
101	100		
103	59.6	50.2	75.2

Manual Integrations

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Supervised By :Mahesh Dadoda 04/03/2025



#13

Ethanol

Concen: 48.187 ppbv

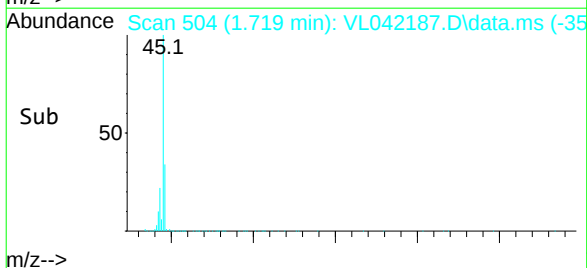
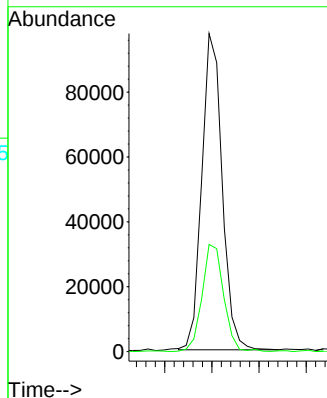
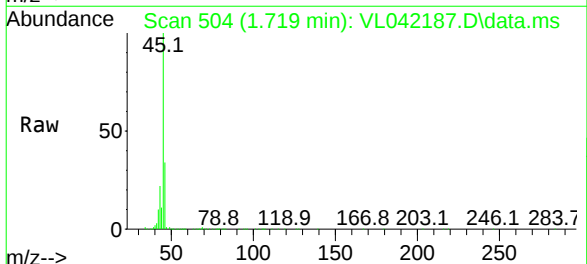
RT: 1.719 min Scan# 504

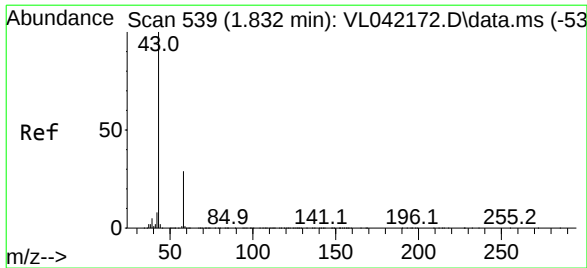
Delta R.T. -0.000 min

Lab File: VL042187.D

Acq: 27 Mar 2025 19:36

Tgt Ion	Ratio	Lower	Upper
45	100		
46	36.4	20.2	80.8





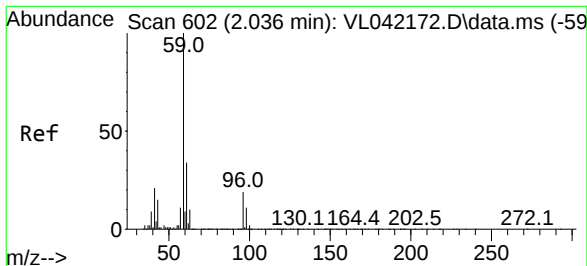
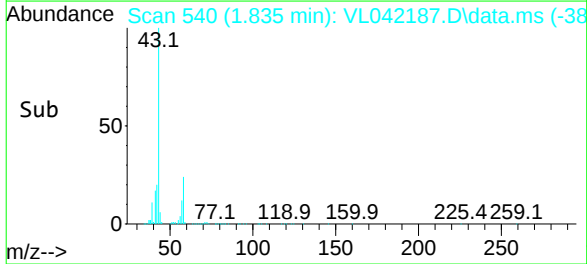
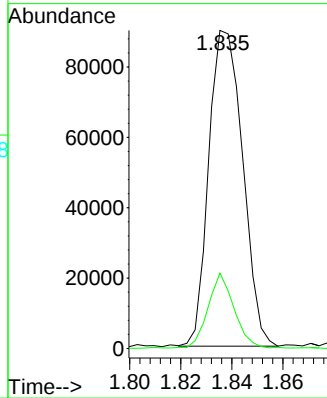
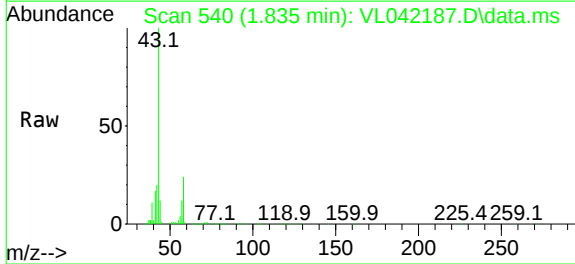
#15
Acetone
Concen: 3.197 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Tgt Ion: 43 Resp: 82901
Ion Ratio Lower Upper
43 100
58 19.3 23.2 34.8#

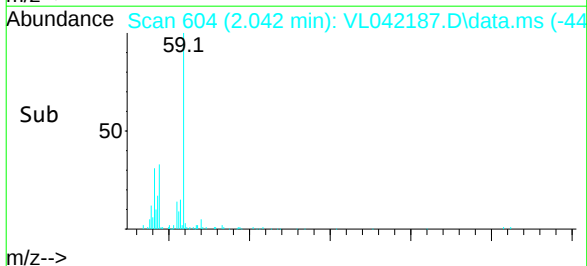
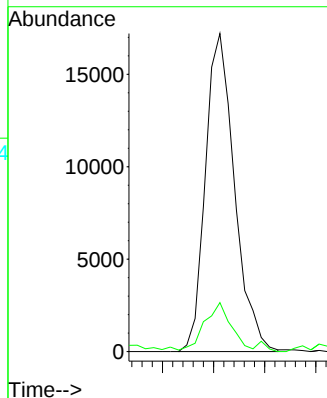
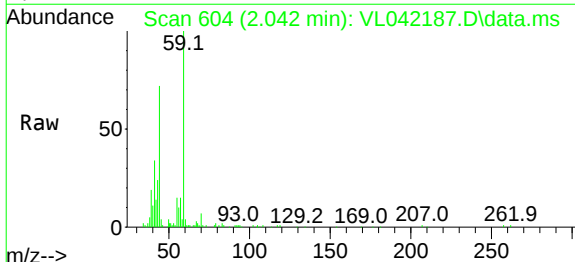
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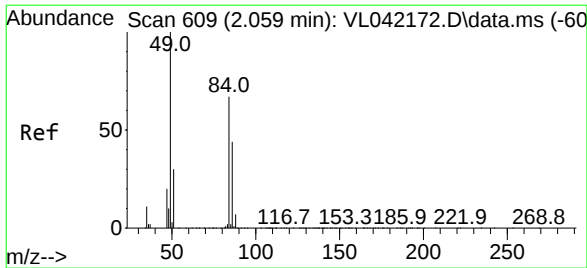
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025



#17
tert-Butyl alcohol
Concen: 0.423 ppbv
RT: 2.042 min Scan# 604
Delta R.T. 0.006 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 59 Resp: 13650
Ion Ratio Lower Upper
59 100
57 13.1 8.9 13.3





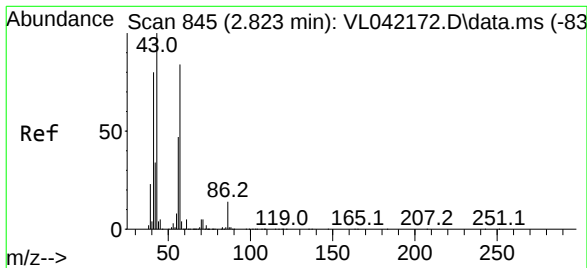
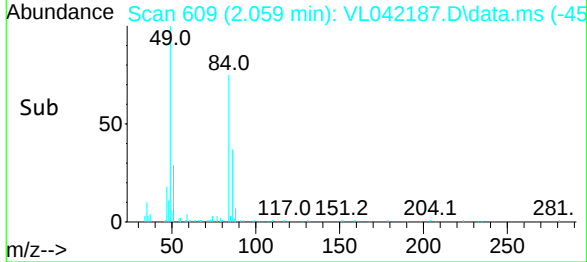
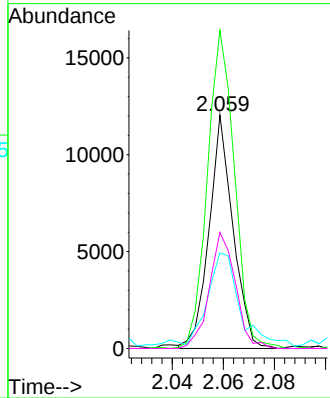
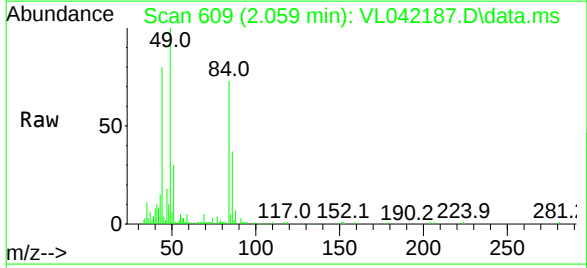
#20
Methylene Chloride
Concen: 0.814 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Instrument : MSVOA_L
ClientSampleId : IA-B9-1-3262025

Tgt Ion	Ratio	Lower	Upper
84	100		
49	135.0	120.2	180.4
51	38.4	37.4	56.0
86	49.8	52.4	78.6

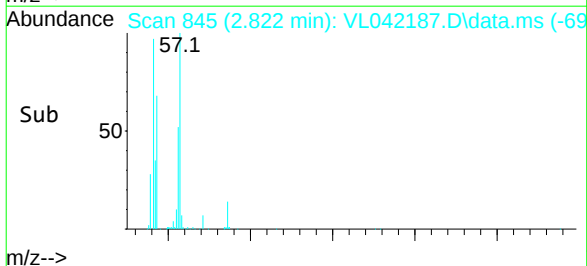
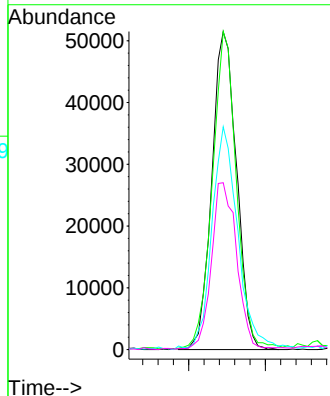
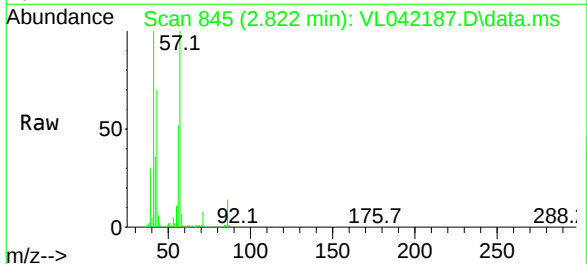
Manual Integrations
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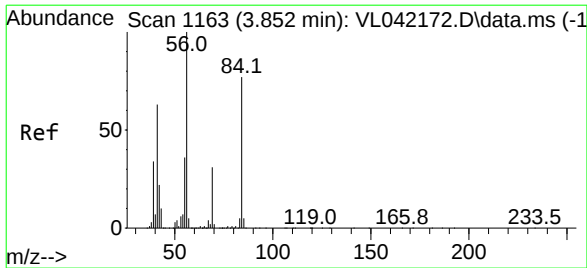
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025



#26
Hexane
Concen: 2.215 ppbv
RT: 2.822 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion	Ratio	Lower	Upper
57	100		
41	98.0	76.6	114.8
43	74.4	207.8	311.8
56	54.3	43.6	65.4





#30

Cyclohexane

Concen: 0.281 ppbv m

RT: 3.849 min Scan# 11

Delta R.T. -0.004 min

Lab File: VL042187.D

Acq: 27 Mar 2025 19:36

Instrument :

MSVOA_L

ClientSampleId :

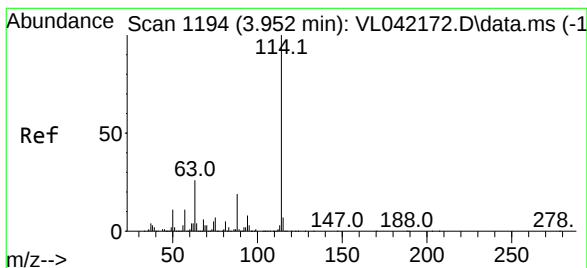
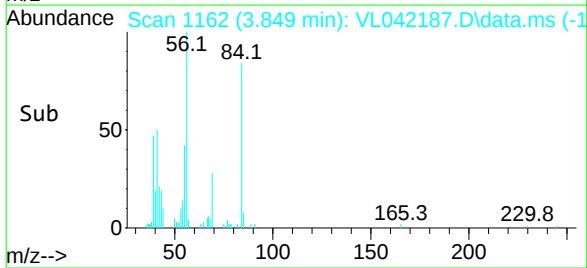
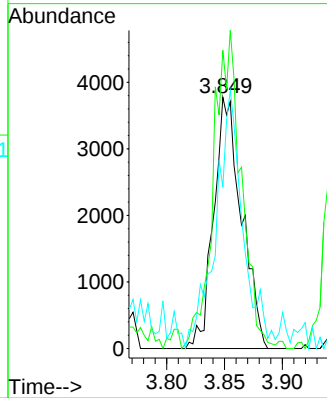
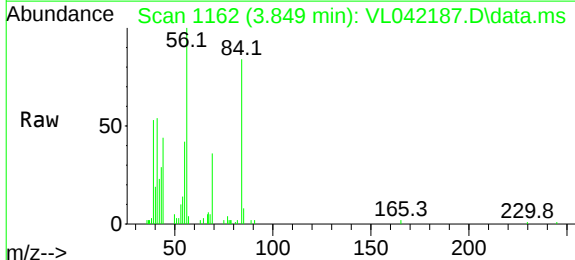
IA-B9-1-3262025

Tgt	Ion: 84	Resp:	6351
Ion	Ratio	Lower	Upper
84	100		
56	128.6	102.8	154.2
41	106.7	66.5	99.7#

Manual Integrations

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



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

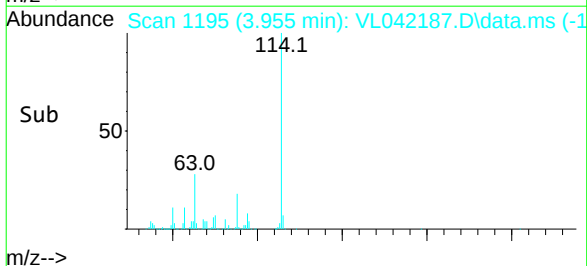
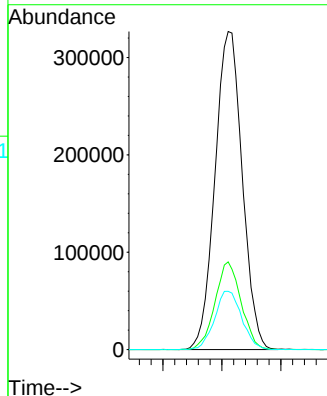
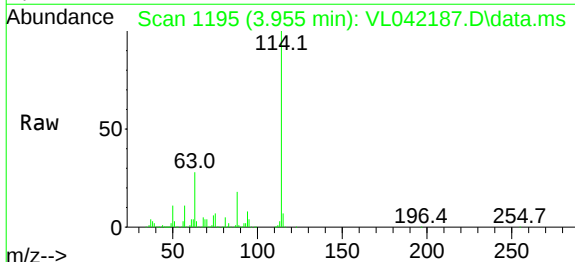
RT: 3.955 min Scan# 1195

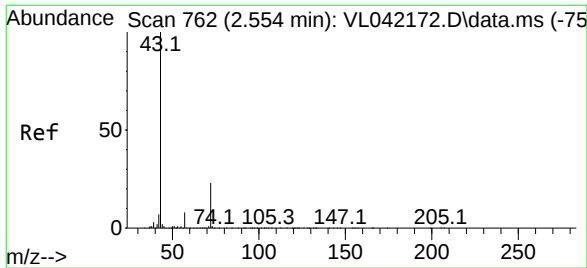
Delta R.T. 0.003 min

Lab File: VL042187.D

Acq: 27 Mar 2025 19:36

Tgt	Ion:114	Resp:	523694
Ion	Ratio	Lower	Upper
114	100		
63	26.4	20.7	31.1
88	18.3	15.0	22.4





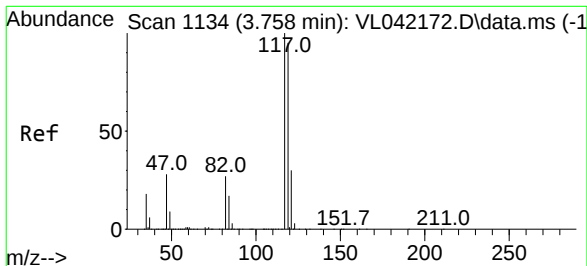
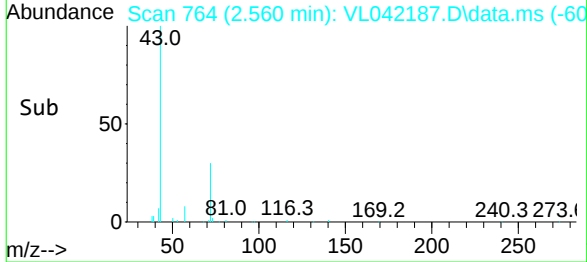
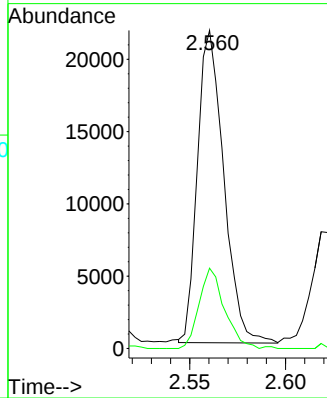
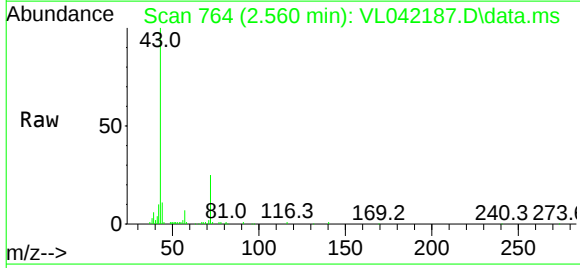
#34
2-Butanone
Concen: 0.543 ppbv
RT: 2.560 min Scan# 762
Delta R.T. 0.006 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025

Tgt Ion: 43 Resp: 20631
Ion Ratio Lower Upper
43 100
72 24.9 18.2 27.2

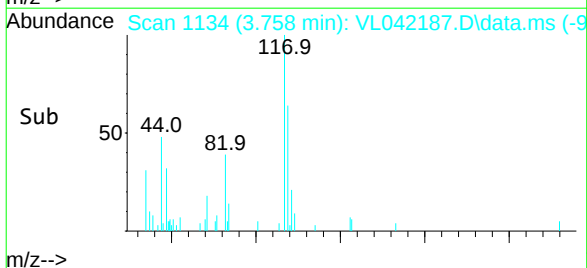
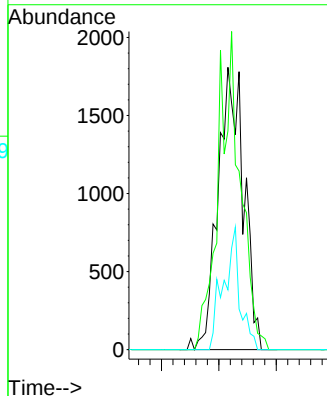
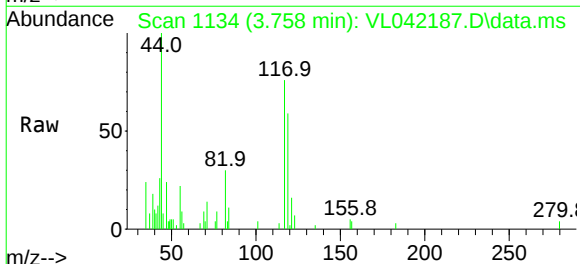
Manual Integrations
APPROVED

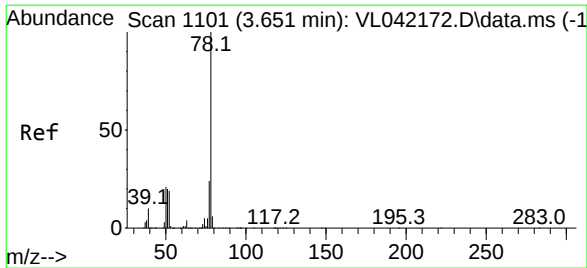
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025



#35
Carbon Tetrachloride
Concen: 0.069 ppbv m
RT: 3.758 min Scan# 1134
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

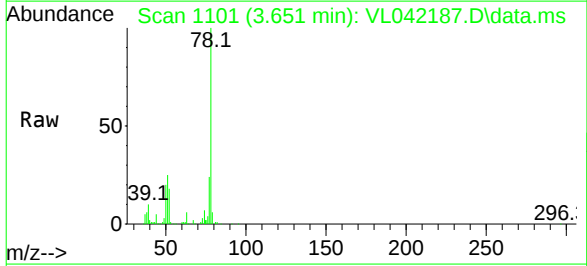
Tgt Ion:117 Resp: 2812
Ion Ratio Lower Upper
117 100
119 77.4 76.2 114.2
121 21.2 24.2 36.4#





#36
Benzene
Concen: 0.749 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

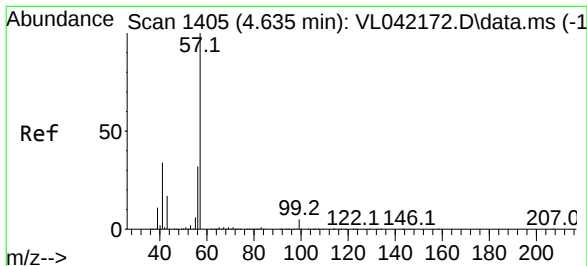
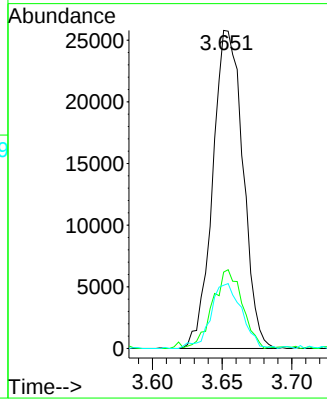
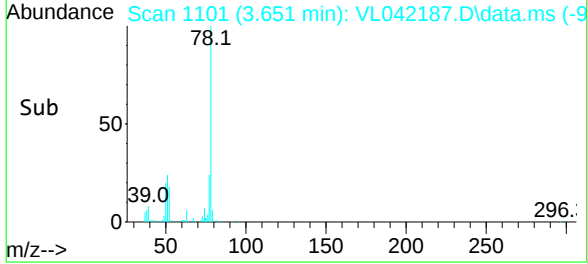
Instrument : MSVOA_L
ClientSampleId : IA-B9-1-3262025



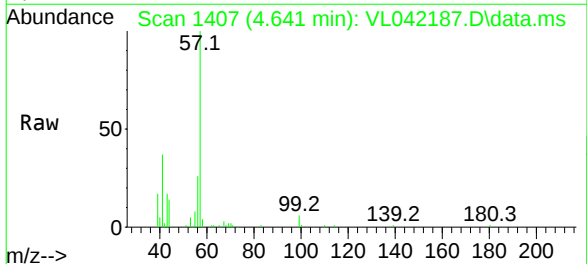
Tgt Ion	Ratio	Lower	Upper
78	100		
77	23.6	19.1	28.7
50	19.9	16.6	24.8

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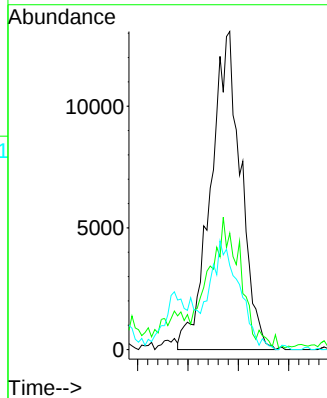
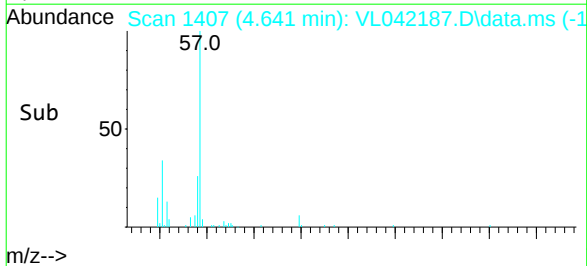
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

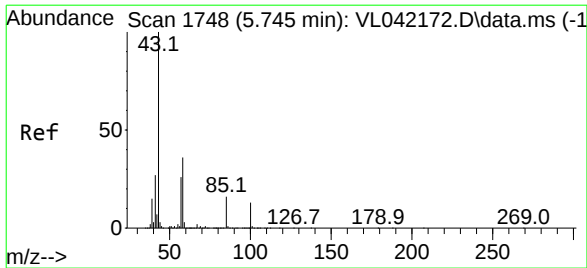


#44
2,2,4-Trimethylpentane
Concen: 0.310 ppbv m
RT: 4.641 min Scan# 1407
Delta R.T. 0.006 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36



Tgt Ion	Ratio	Lower	Upper
57	100		
41	52.8	26.8	40.2
56	35.2	25.6	38.4





#50

4-Methyl-2-Pentanone

Concen: 0.864 ppbv m

RT: 5.761 min Scan# 1748

Delta R.T. 0.016 min

Lab File: VL042187.D

Acq: 27 Mar 2025 19:36

Instrument :

MSVOA_L

ClientSampleId :

IA-B9-1-3262025

Tgt Ion: 43 Resp: 52014

Ion Ratio Lower Upper

43 100

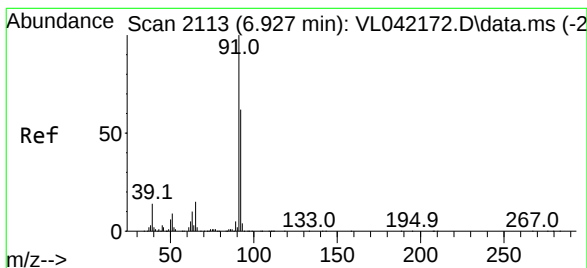
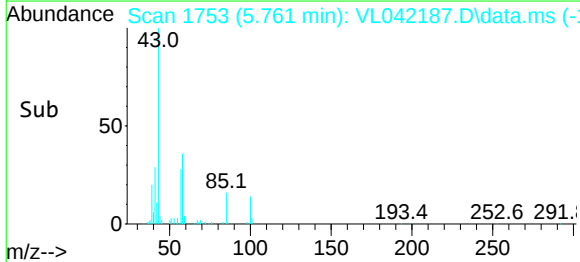
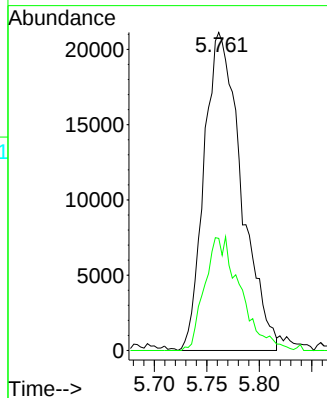
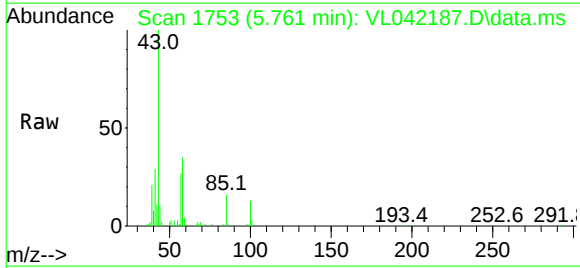
58 34.7 29.0 43.6

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025

Supervised By :Mahesh Dadoda 04/03/2025



#53

Toluene

Concen: 2.593 ppbv

RT: 6.930 min Scan# 2114

Delta R.T. 0.003 min

Lab File: VL042187.D

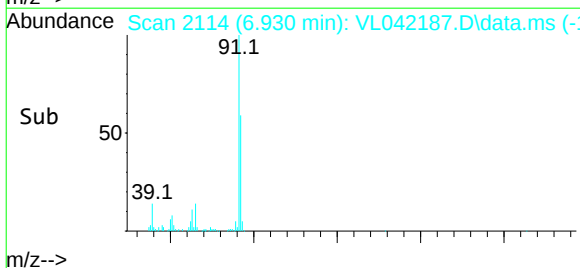
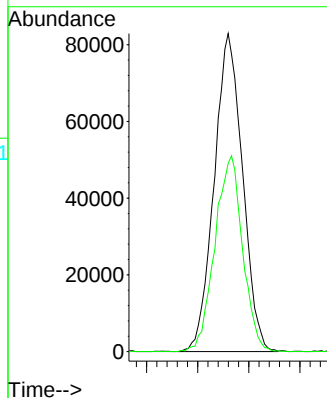
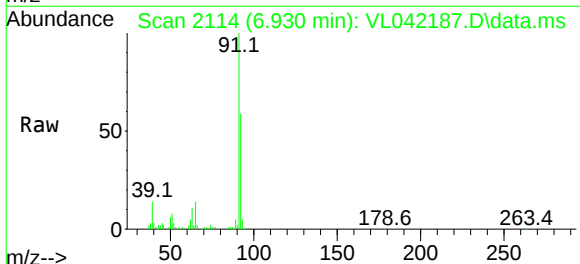
Acq: 27 Mar 2025 19:36

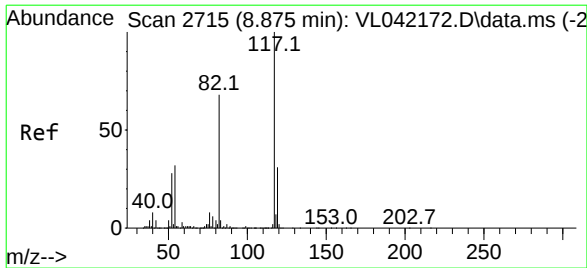
Tgt Ion: 91 Resp: 159613

Ion Ratio Lower Upper

91 100

92 60.1 48.4 72.6





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 8.878 min Scan# 2715

Delta R.T. 0.003 min

Lab File: VL042187.D

Acq: 27 Mar 2025 19:36

Instrument :

MSVOA_L

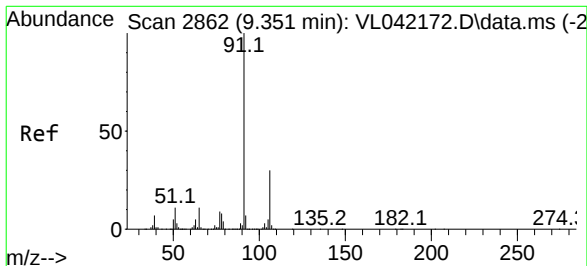
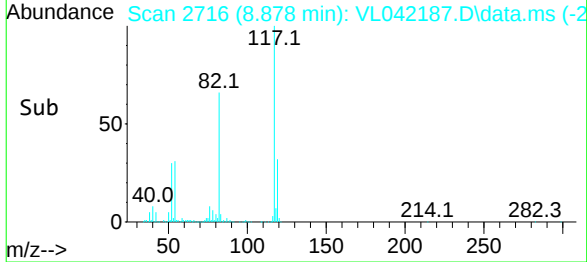
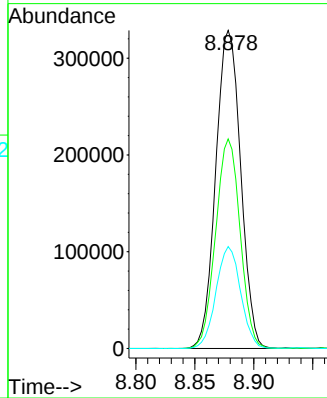
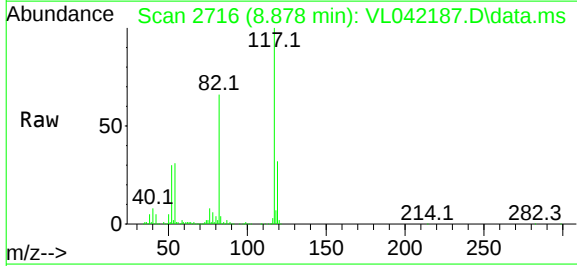
ClientSampleId :

IA-B9-1-3262025

Tgt Ion:	117	Resp:	484321
Ion	Ratio	Lower	Upper
117	100		
82	64.6	55.8	83.6
119	31.9	25.5	38.3

Manual Integrations
APPROVED

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



#58

Ethyl Benzene

Concen: 0.381 ppbv

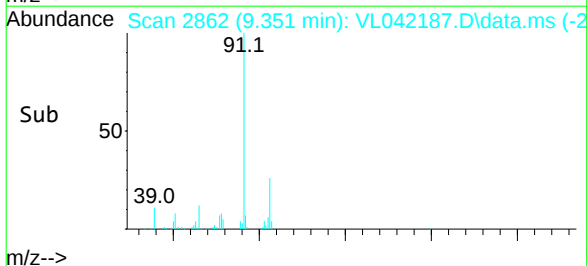
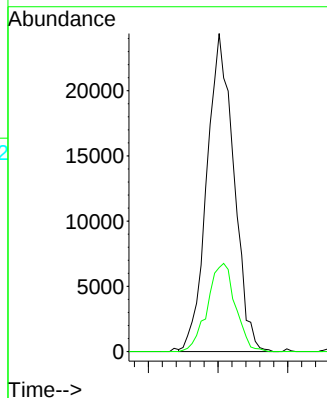
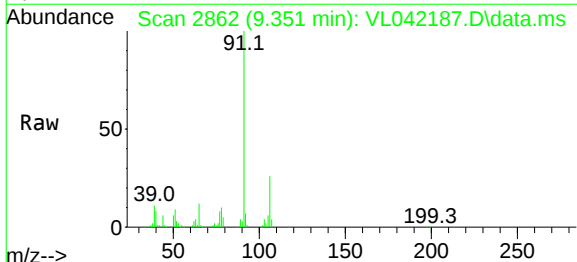
RT: 9.351 min Scan# 2862

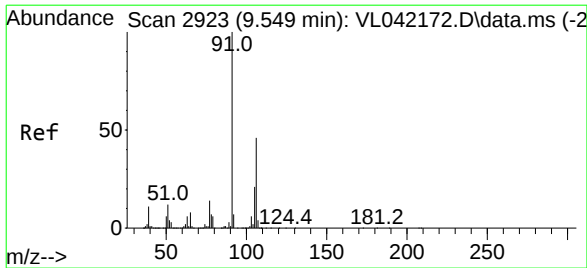
Delta R.T. -0.000 min

Lab File: VL042187.D

Acq: 27 Mar 2025 19:36

Tgt Ion:	91	Resp:	32819
Ion	Ratio	Lower	Upper
91	100		
106	26.4	24.2	36.2





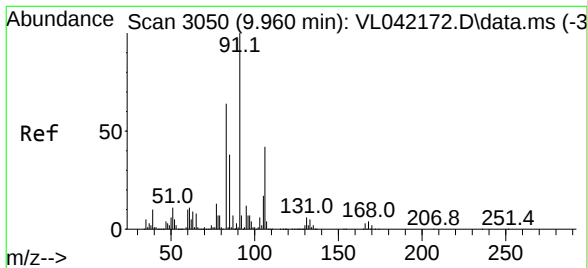
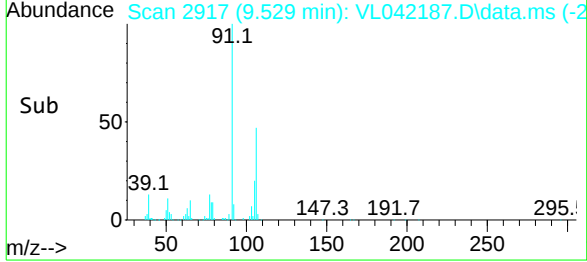
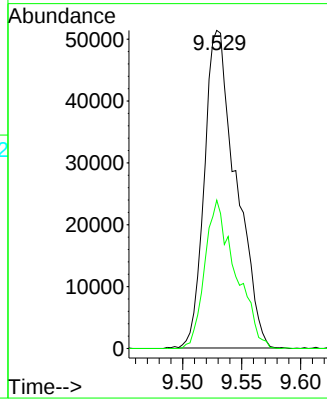
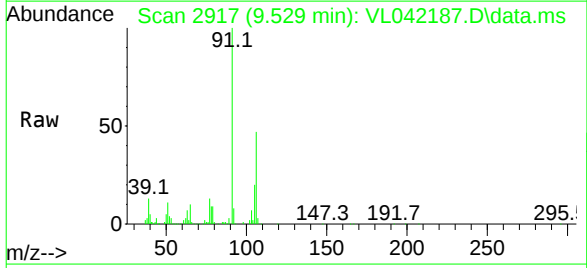
#59
m/p-Xylene
Concen: 1.398 ppbv
RT: 9.529 min Scan# 2917
Delta R.T. -0.020 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Instrument : MSVOA_L
ClientSampleId : IA-B9-1-3262025

Tgt Ion: 91 Resp: 96052
Ion Ratio Lower Upper
91 100
106 45.6 36.4 54.6

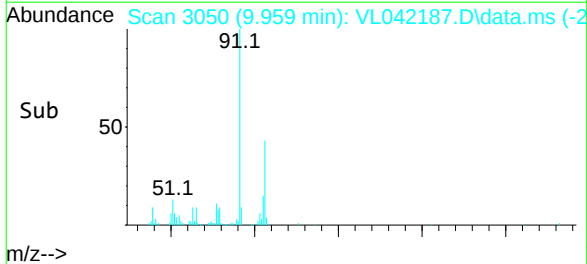
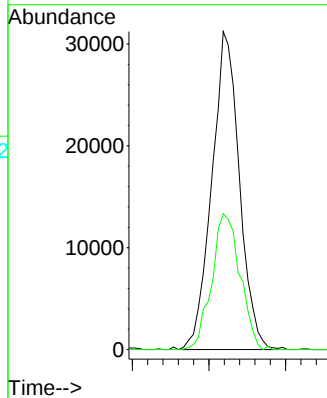
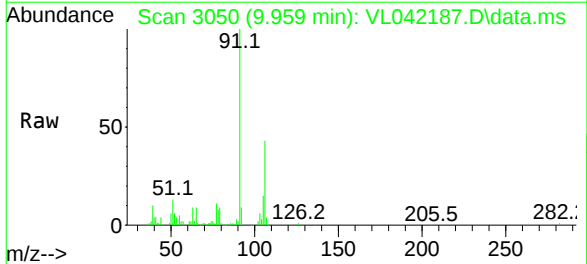
Manual Integrations
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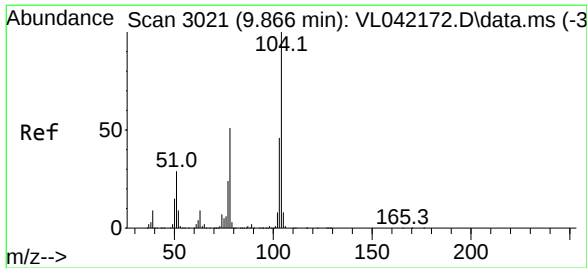
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025



#60
o-Xylene
Concen: 0.566 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.000 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

Tgt Ion: 91 Resp: 38965
Ion Ratio Lower Upper
91 100
106 43.9 20.8 62.5





#61

Styrene

Concen: 2.528 ppbv

RT: 9.869 min Scan# 3021

Delta R.T. 0.003 min

Lab File: VL042187.D

Acq: 27 Mar 2025 19:36

Instrument :

MSVOA_L

ClientSampleId :

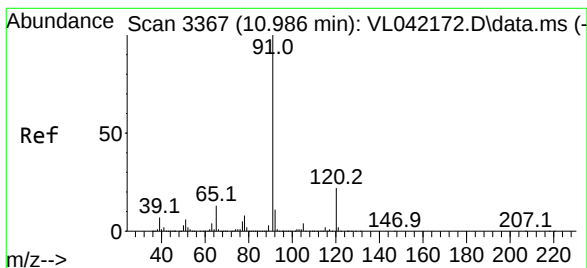
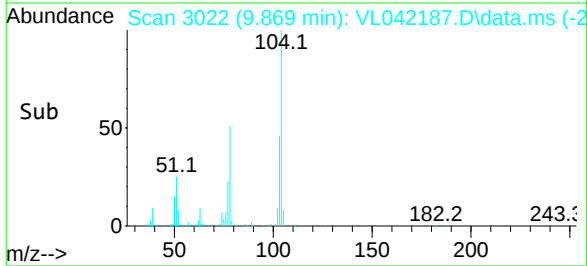
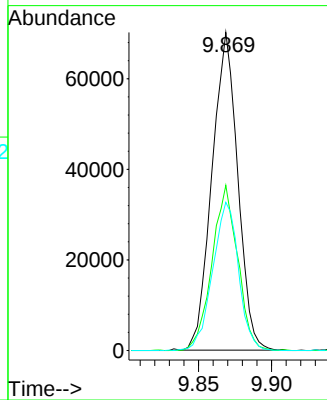
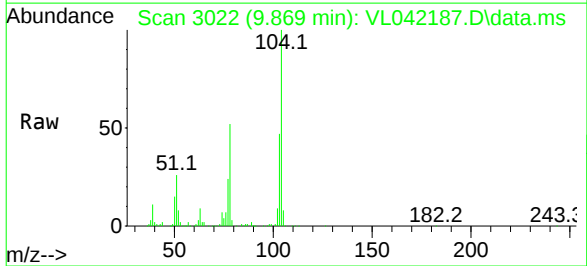
IA-B9-1-3262025

Tgt Ion:	104	Resp:	86112
Ion Ratio	Lower	Upper	
104	100		
78	51.9	41.8	62.6
103	46.9	37.0	55.4

Manual Integrations

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



#64

n-propylbenzene

Concen: 0.106 ppbv m

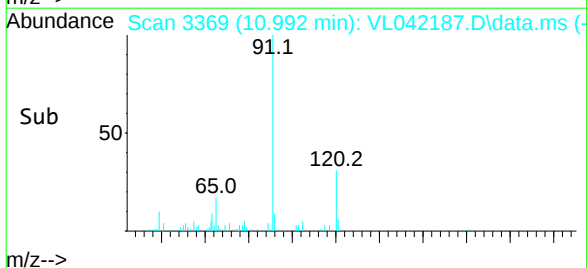
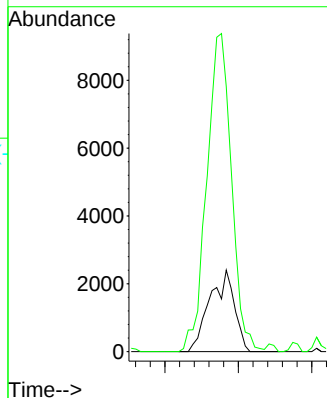
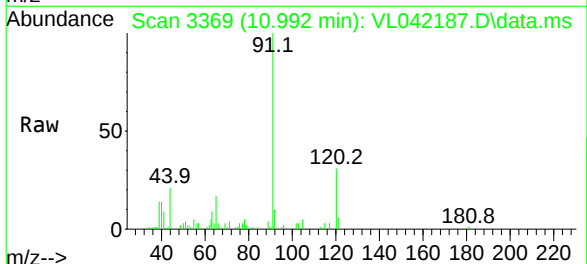
RT: 10.992 min Scan# 3369

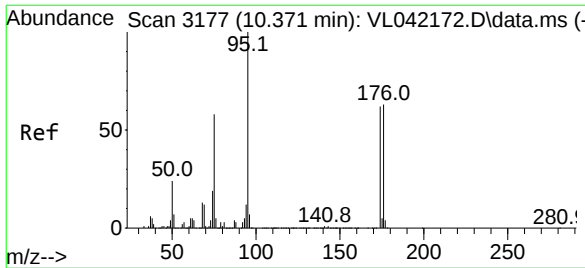
Delta R.T. 0.006 min

Lab File: VL042187.D

Acq: 27 Mar 2025 19:36

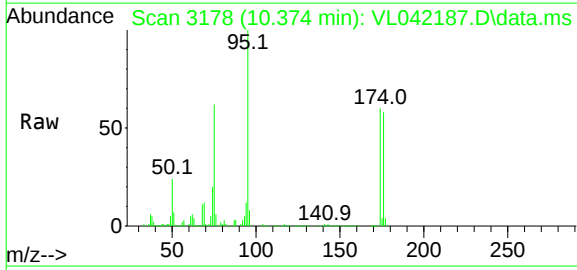
Tgt Ion:	120	Resp:	2810
Ion Ratio	Lower	Upper	
120	100		
91	396.5	376.9	565.3





#68
1-Bromo-4-Fluorobenzene
Concen: 9.801 ppbv
RT: 10.374 min Scan# 3177
Delta R.T. 0.003 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36

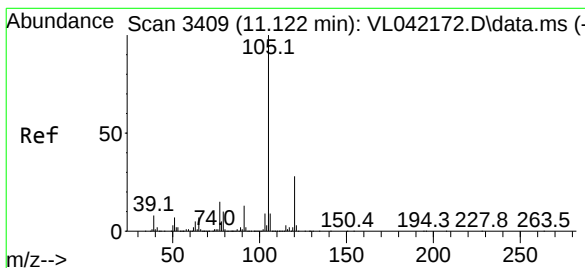
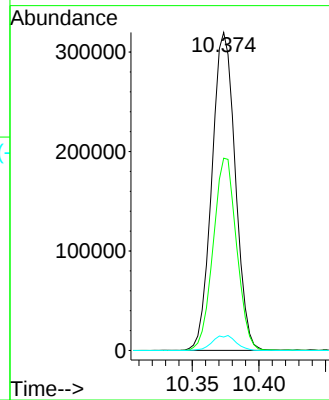
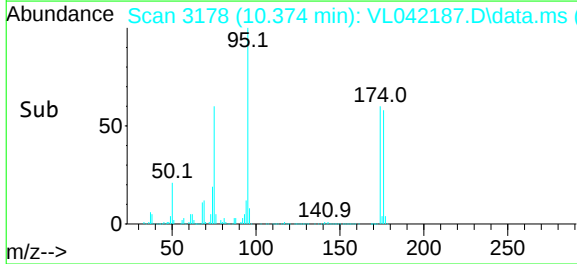
Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3262025



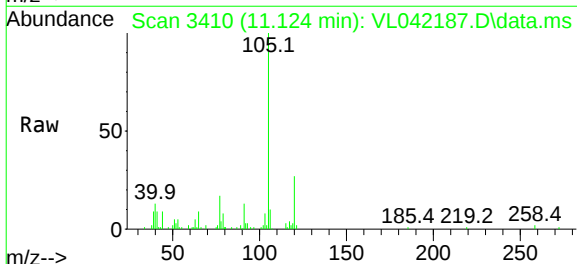
Tgt Ion: 95 Resp: 389805
Ion Ratio Lower Upper
95 100
174 60.8 50.6 76.0
175 4.8 3.8 5.6

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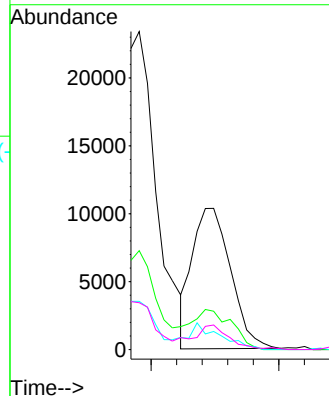
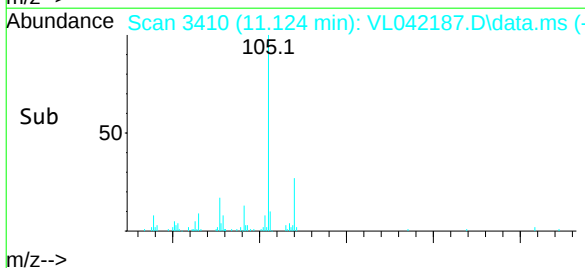
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

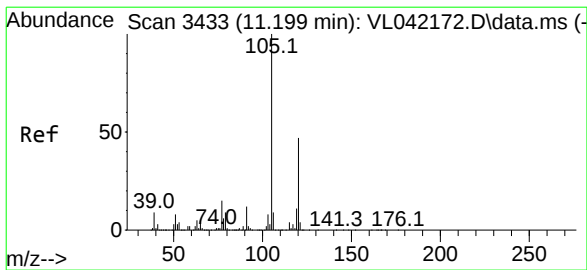


#72
4-Ethyltoluene
Concen: 0.126 ppbv
RT: 11.124 min Scan# 3410
Delta R.T. 0.003 min
Lab File: VL042187.D
Acq: 27 Mar 2025 19:36



Tgt Ion:105 Resp: 10792
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: 0.145 ppbv

RT: 11.199 min Scan# 3433

Delta R.T. -0.000 min

Lab File: VL042187.D

Acq: 27 Mar 2025 19:36

Instrument :

MSVOA_L

ClientSampleId :

IA-B9-1-3262025

Tgt Ion:105 Resp: 10875

Ion Ratio Lower Upper

105 100

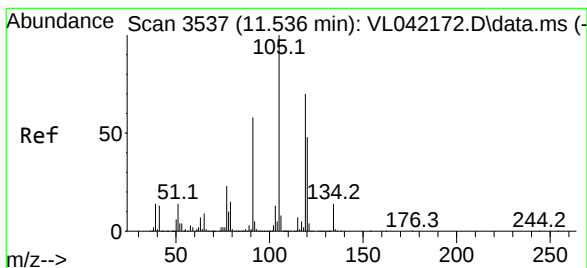
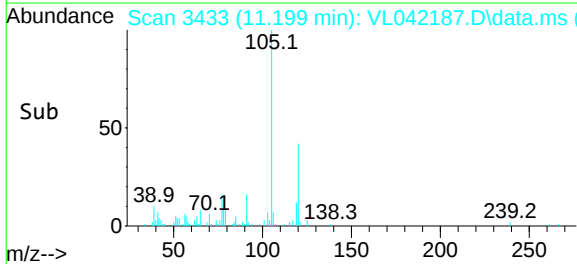
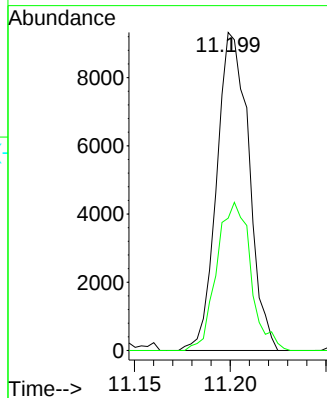
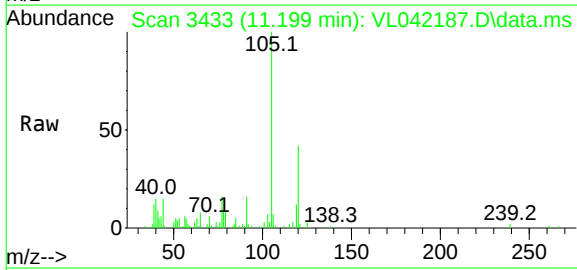
120 41.6 37.4 56.0

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 03/31/2025

Supervised By :Mahesh Dadoda 04/03/2025



#74

1,2,4-Trimethylbenzene

Concen: 0.415 ppbv

RT: 11.536 min Scan# 3537

Delta R.T. -0.000 min

Lab File: VL042187.D

Acq: 27 Mar 2025 19:36

Tgt Ion:105 Resp: 35817

Ion Ratio Lower Upper

105 100

120 39.3 38.6 58.0

91 14.1 46.2 69.2#

77 17.0 18.6 27.8#

