

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111825\
 Data File : VL043220.D
 Acq On : 18 Nov 2025 19:23
 Operator : SY/MD
 Sample : Q3650-05
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA3

Manual Integrations
 APPROVED

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

Quant Time: Nov 19 01:38:59 2025

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

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

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

Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.784	49	91519	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	244106	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.875	117	189099	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.371	95	145646	10.508	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	105.100%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	5591	0.433	ppbv	94
3) Chlorodifluoromethane	1.476	51	3162m	0.249	ppbv	
4) Chloromethane	1.535	50	2234	0.463	ppbv	92
9) Propene	1.489	41	4189	0.777	ppbv #	1
11) Trichlorofluoromethane	1.878	101	2937m	0.235	ppbv	
13) Ethanol	1.722	45	24108	12.718	ppbv	97
15) Acetone	1.836	43	386426	30.391	ppbv	98
19) Isopropyl Alcohol	1.884	45	28082	3.908	ppbv #	1
20) Methylene Chloride	2.062	84	5011	0.600	ppbv	94
26) Hexane	2.826	57	4135	0.344	ppbv #	77
34) 2-Butanone	2.557	43	6841	0.397	ppbv	98
35) Carbon Tetrachloride	3.761	117	1242m	0.067	ppbv	
36) Benzene	3.658	78	2658m	0.114	ppbv	
43) Methyl Methacrylate	4.875	69	3369m	0.272	ppbv	
44) 2,2,4-Trimethylpentane	4.639	57	4310m	0.107	ppbv	
53) Toluene	6.927	91	11573	0.418	ppbv	96
59) m/p-Xylene	9.523	91	6417m	0.220	ppbv	

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

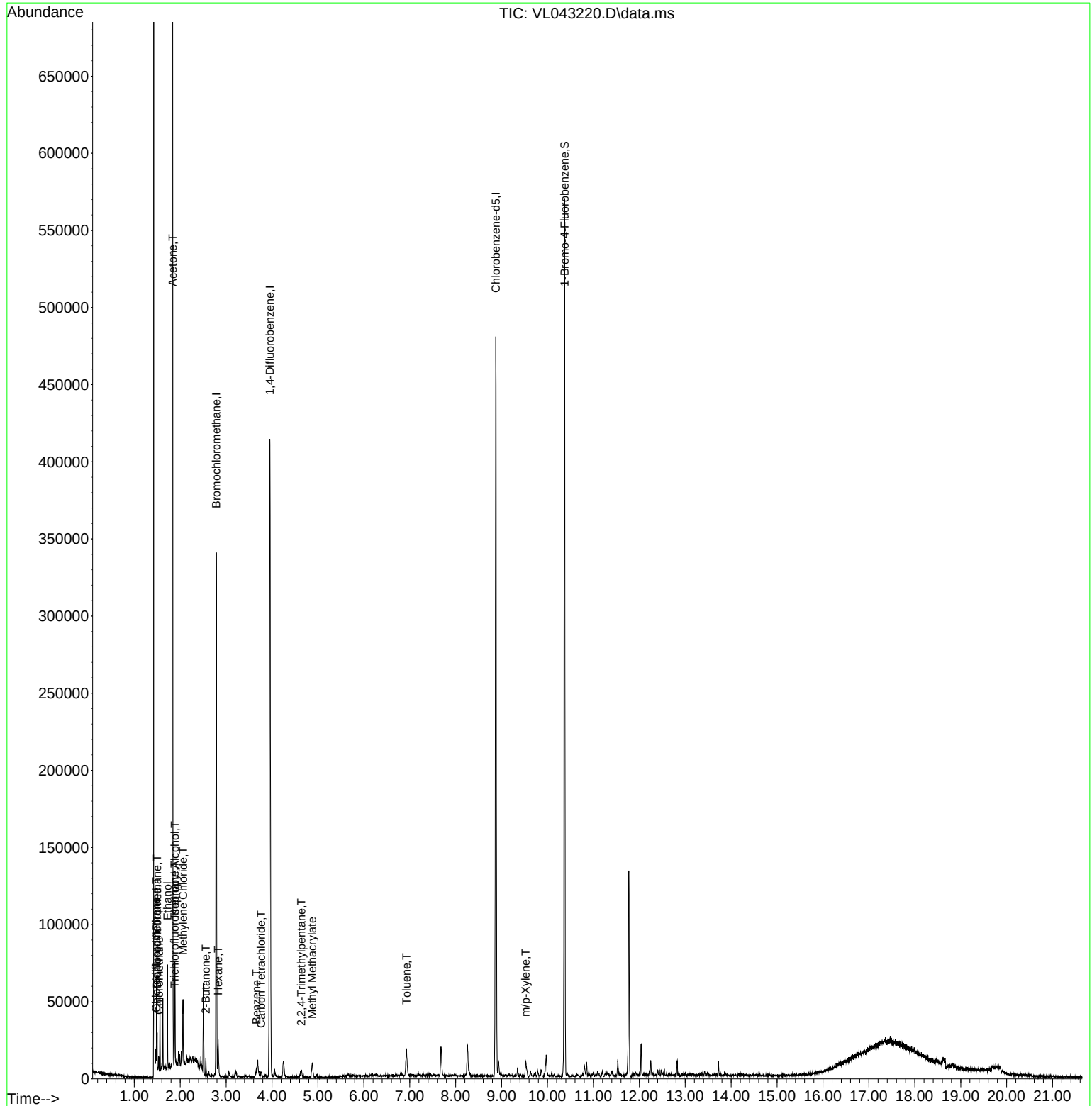
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111825\
Data File : VL043220.D
Acq On : 18 Nov 2025 19:23
Operator : SY/MD
Sample : Q3650-05
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

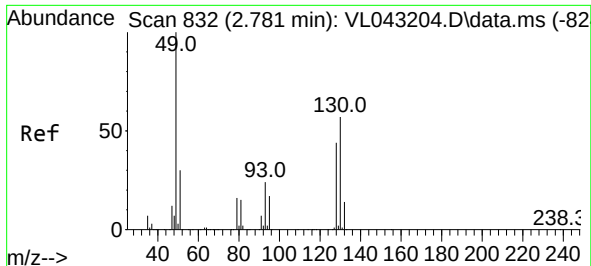
Instrument :
MSVOA_L
ClientSampleId :
IA3

Quant Time: Nov 19 01:38:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Wed Nov 19 01:11:25 2025
Response via : Initial Calibration

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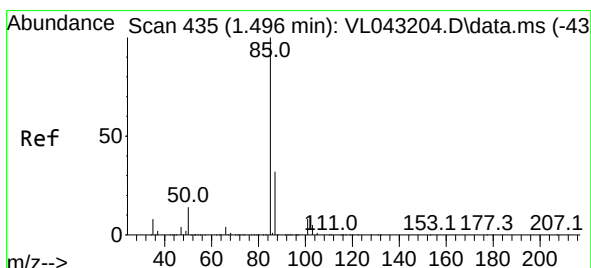
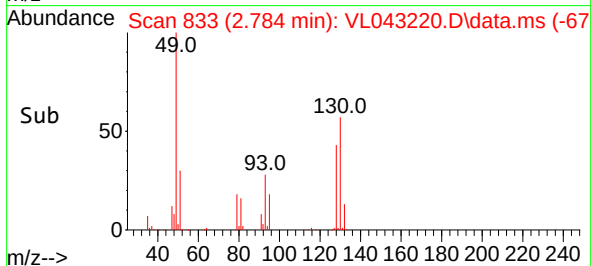
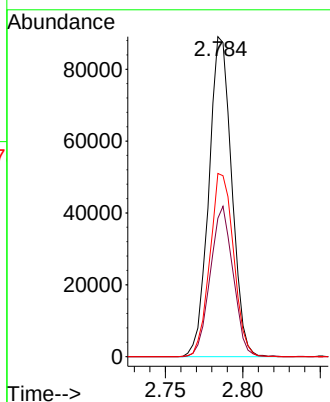
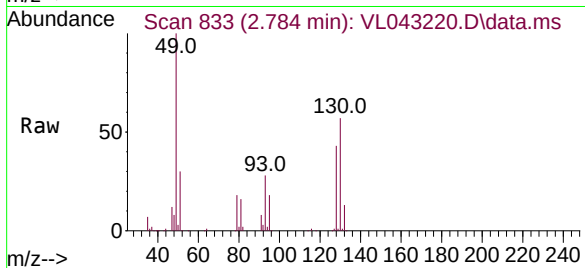
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 832
Delta R.T. 0.003 min
Lab File: VL043220.D
Acq: 18 Nov 2025 19:23

Instrument :
MSVOA_L
ClientSampleId :
IA3

Tgt Ion: 49 Resp: 91519
Ion Ratio Lower Upper
49 100
128 46.7 23.0 69.0
130 59.4 29.9 89.7

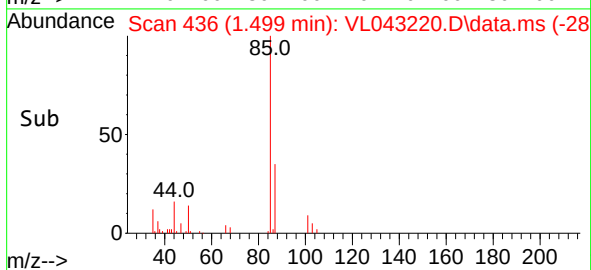
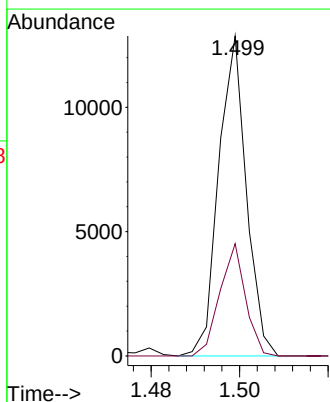
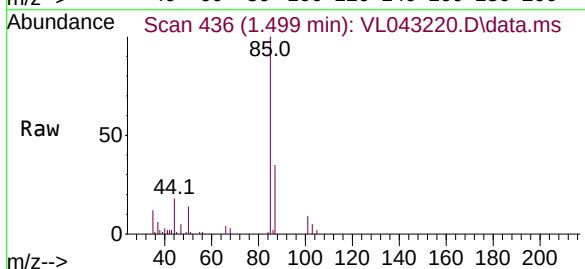
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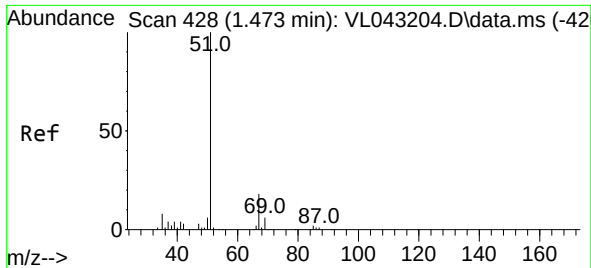
Reviewed By :Semsettin Yesilyurt 11/19/2025
Supervised By :Mahesh Dadoda 11/19/2025



#2
Dichlorodifluoromethane
Concen: 0.433 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL043220.D
Acq: 18 Nov 2025 19:23

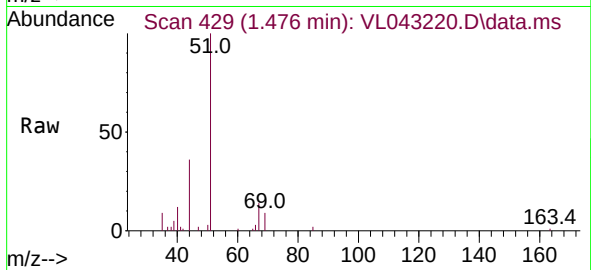
Tgt Ion: 85 Resp: 5591
Ion Ratio Lower Upper
85 100
87 35.1 25.4 38.2





#3
Chlorodifluoromethane
Concen: 0.249 ppbv m
RT: 1.476 min Scan# 41
Delta R.T. 0.003 min
Lab File: VL043220.D
Acq: 18 Nov 2025 19:23

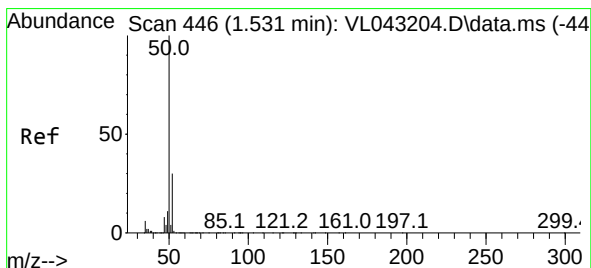
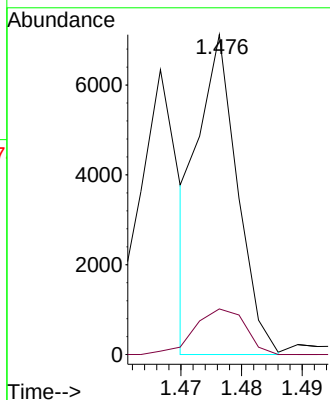
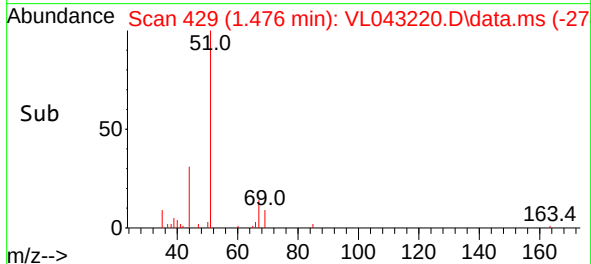
Instrument :
MSVOA_L
ClientSampleId :
IA3



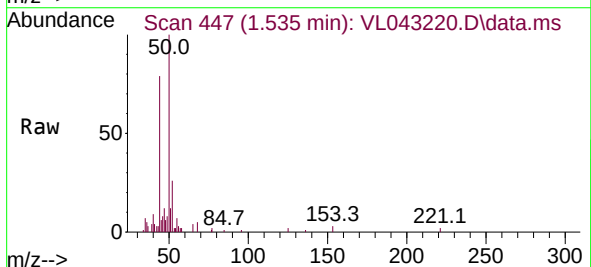
Tgt Ion: 51 Resp: 3162
Ion Ratio Lower Upper
51 100
67 2.3 14.9 22.3

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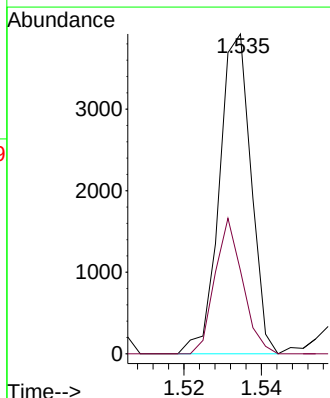
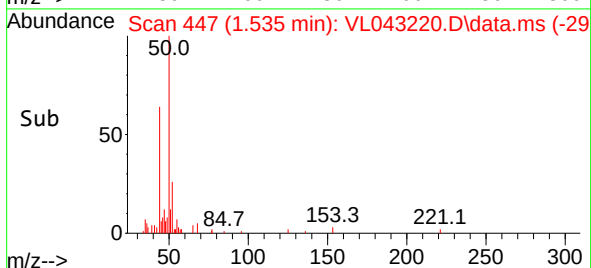
Reviewed By :Semsettin Yesilyurt 11/19/2025
Supervised By :Mahesh Dadoda 11/19/2025

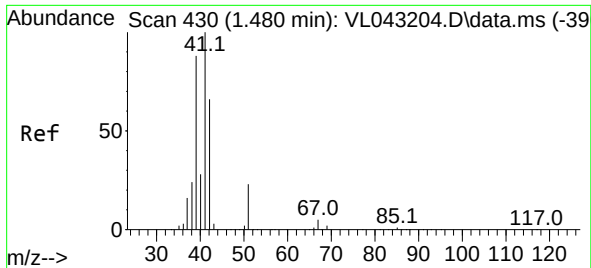


#4
Chloromethane
Concen: 0.463 ppbv
RT: 1.535 min Scan# 447
Delta R.T. 0.003 min
Lab File: VL043220.D
Acq: 18 Nov 2025 19:23



Tgt Ion: 50 Resp: 2234
Ion Ratio Lower Upper
50 100
52 26.0 24.1 36.1





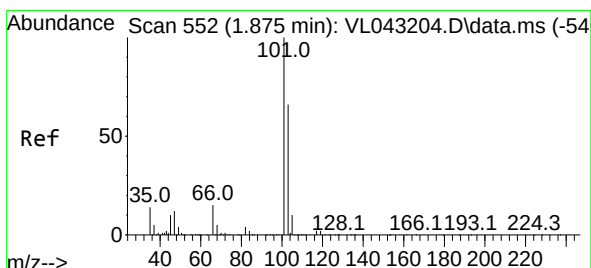
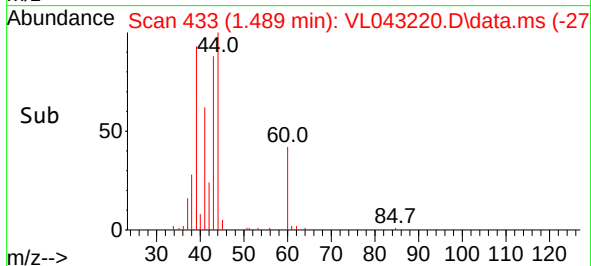
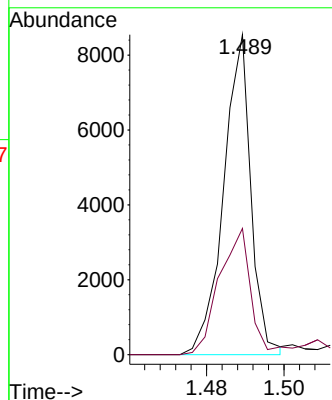
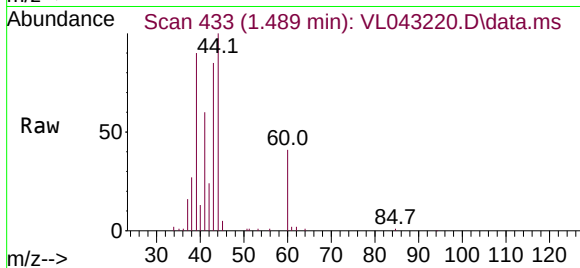
#9
Propene
Concen: 0.777 ppbv
RT: 1.489 min Scan# 430
Delta R.T. 0.010 min
Lab File: VL043220.D
Acq: 18 Nov 2025 19:23

Instrument :
MSVOA_L
ClientSampleId :
IA3

Tgt Ion: 41 Resp: 4189
Ion Ratio Lower Upper
41 100
42 56.3 3.7 5.5

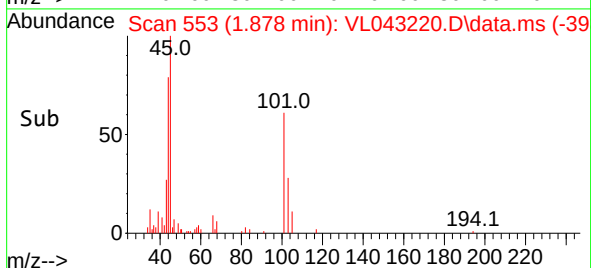
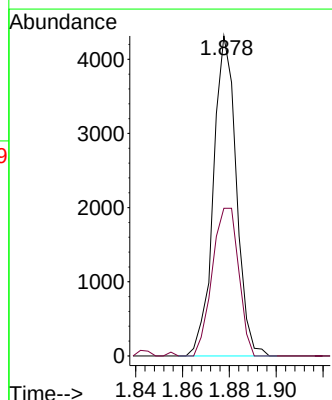
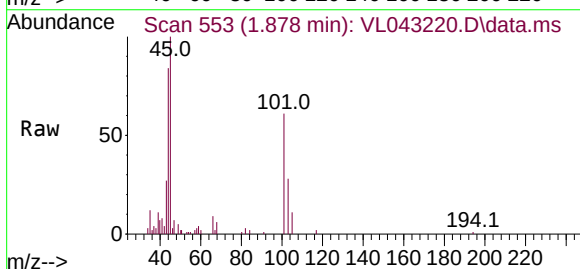
Manual Integrations
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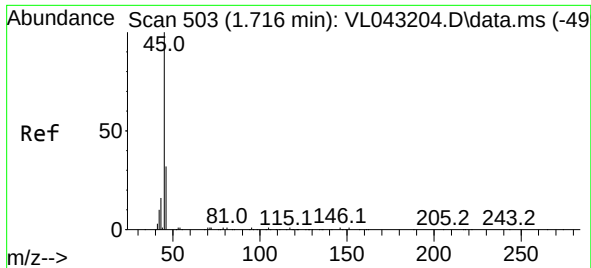
Reviewed By :Semsettin Yesilyurt 11/19/2025
Supervised By :Mahesh Dadoda 11/19/2025



#11
Trichlorofluoromethane
Concen: 0.235 ppbv m
RT: 1.878 min Scan# 553
Delta R.T. 0.003 min
Lab File: VL043220.D
Acq: 18 Nov 2025 19:23

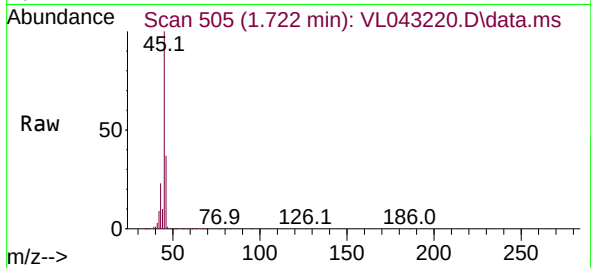
Tgt Ion:101 Resp: 2937
Ion Ratio Lower Upper
101 100
103 46.1 52.6 79.0





#13
Ethanol
Concen: 12.718 ppbv
RT: 1.722 min Scan# 50
Delta R.T. 0.006 min
Lab File: VL043220.D
Acq: 18 Nov 2025 19:23

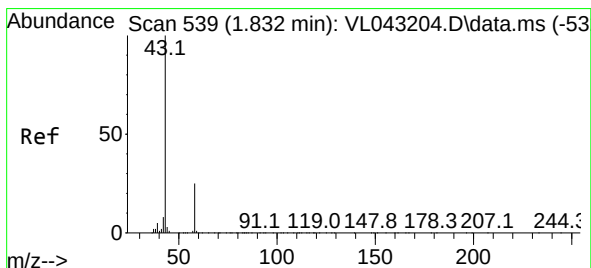
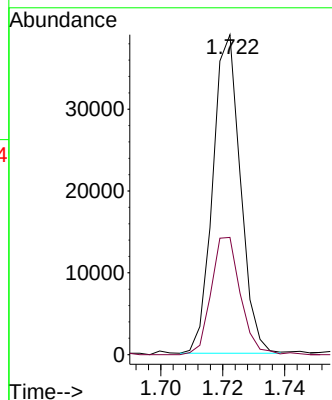
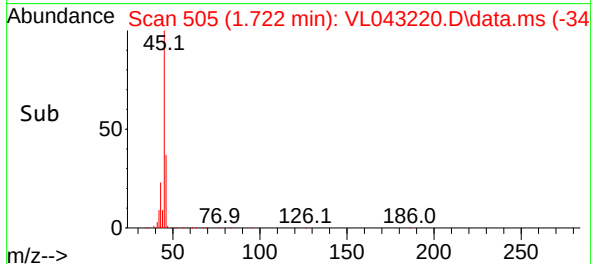
Instrument :
MSVOA_L
ClientSampleId :
IA3



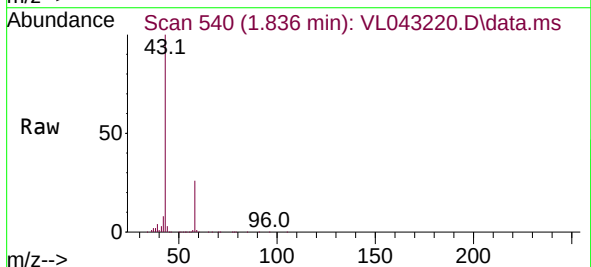
Tgt Ion: 45 Resp: 24108
Ion Ratio Lower Upper
45 100
46 39.2 15.0 59.8

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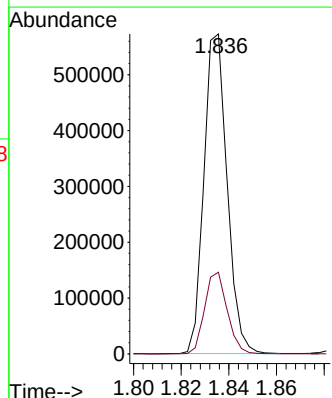
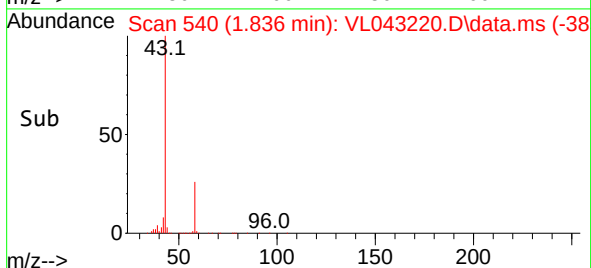
Reviewed By :Semsettin Yesilyurt 11/19/2025
Supervised By :Mahesh Dadoda 11/19/2025

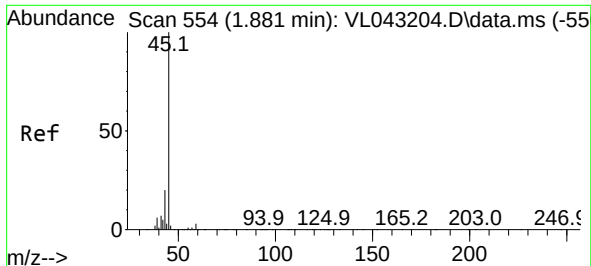


#15
Acetone
Concen: 30.391 ppbv
RT: 1.836 min Scan# 540
Delta R.T. 0.003 min
Lab File: VL043220.D
Acq: 18 Nov 2025 19:23



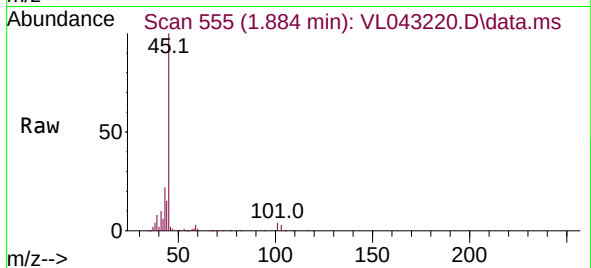
Tgt Ion: 43 Resp: 386426
Ion Ratio Lower Upper
43 100
58 25.0 20.7 31.1





#19
Isopropyl Alcohol
Concen: 3.908 ppbv
RT: 1.884 min Scan# 511
Delta R.T. 0.003 min
Lab File: VL043220.D
Acq: 18 Nov 2025 19:23

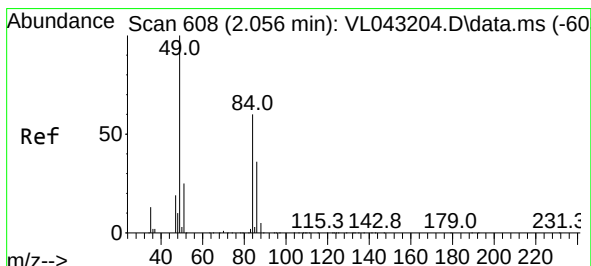
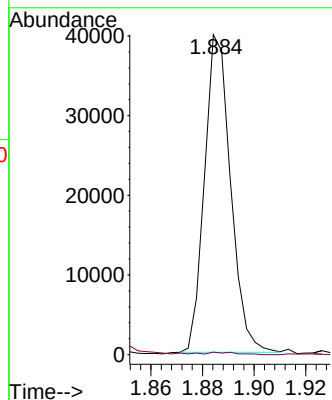
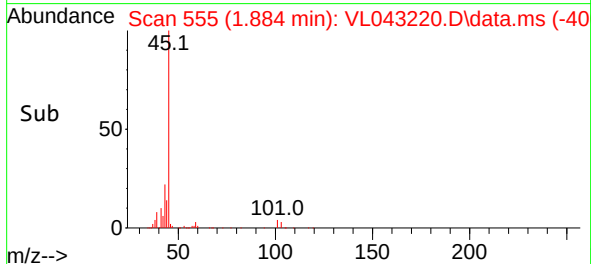
Instrument :
MSVOA_L
ClientSampleId :
IA3



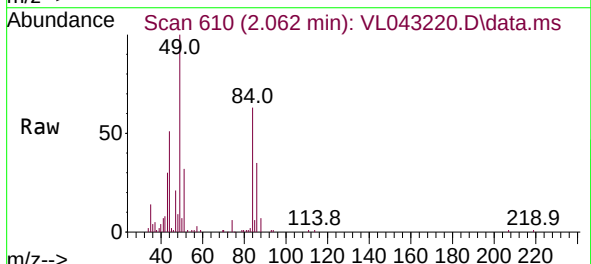
Tgt Ion: 45 Resp: 28082
Ion Ratio Lower Upper
45 100
58 344.5 31.3 46.9

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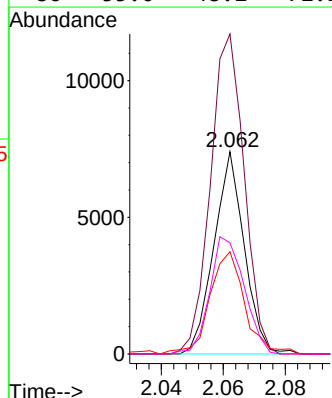
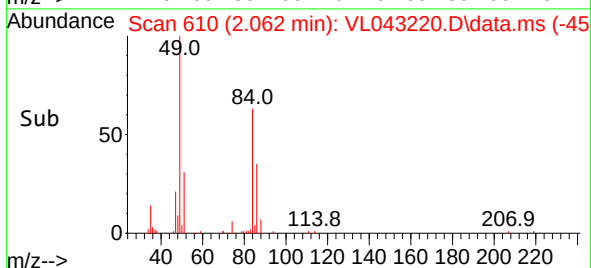
Reviewed By :Semsettin Yesilyurt 11/19/2025
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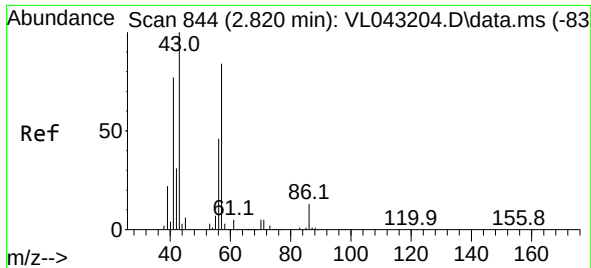


#20
Methylene Chloride
Concen: 0.600 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.006 min
Lab File: VL043220.D
Acq: 18 Nov 2025 19:23



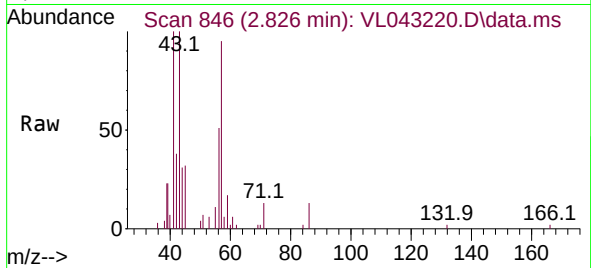
Tgt Ion: 84 Resp: 5011
Ion Ratio Lower Upper
84 100
49 158.3 132.9 199.3
51 48.4 34.8 52.2
86 55.0 48.2 72.2





#26
Hexane
Concen: 0.344 ppbv
RT: 2.826 min Scan# 844
Delta R.T. 0.006 min
Lab File: VL043220.D
Acq: 18 Nov 2025 19:23

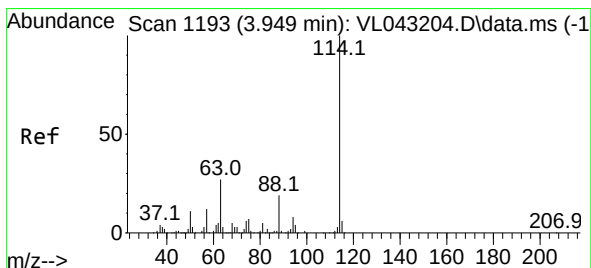
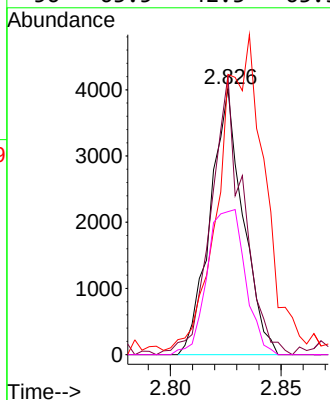
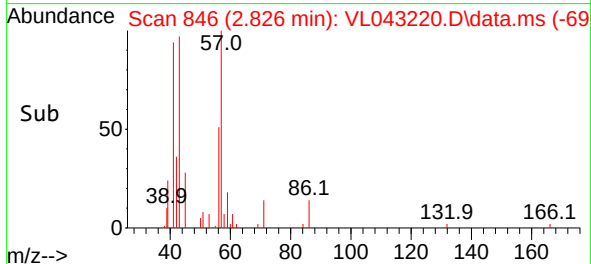
Instrument :
MSVOA_L
ClientSampleId :
IA3



Tgt Ion: 57 Resp: 4135
Ion Ratio Lower Upper
57 100
41 107.4 74.6 111.8
43 177.2 179.0 268.4
56 63.5 42.3 63.5

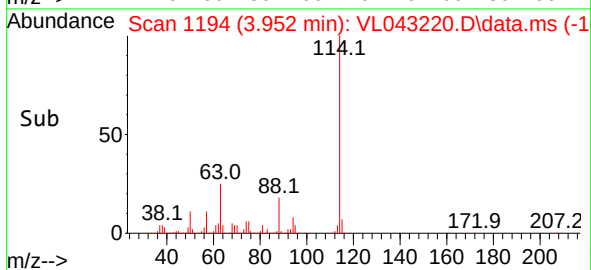
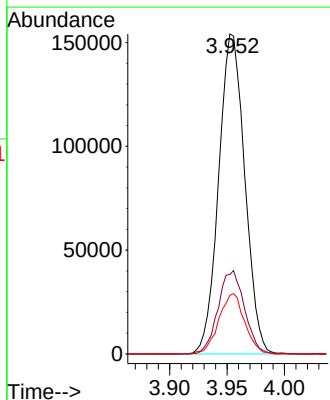
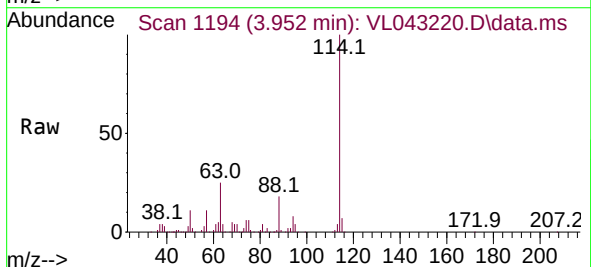
Manual Integrations
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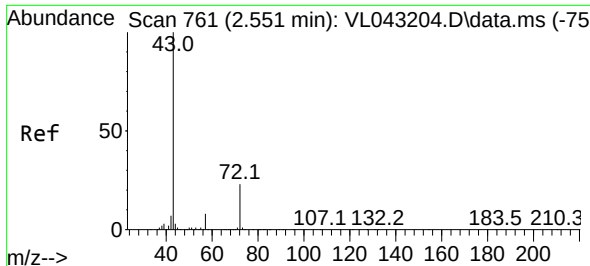
Reviewed By :Semsettin Yesilyurt 11/19/2025
Supervised By :Mahesh Dadoda 11/19/2025



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 1194
Delta R.T. 0.003 min
Lab File: VL043220.D
Acq: 18 Nov 2025 19:23

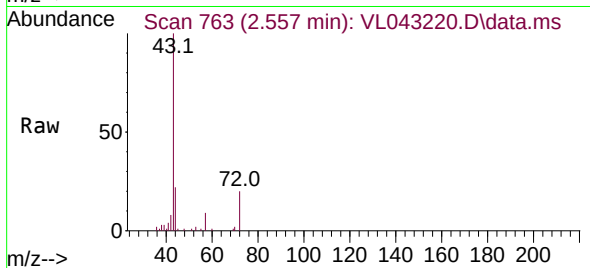
Tgt Ion:114 Resp: 244106
Ion Ratio Lower Upper
114 100
63 26.4 21.0 31.6
88 18.5 14.9 22.3





#34
2-Butanone
Concen: 0.397 ppbv
RT: 2.557 min Scan# 761
Delta R.T. 0.006 min
Lab File: VL043220.D
Acq: 18 Nov 2025 19:23

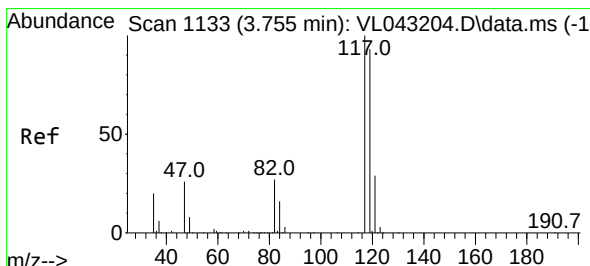
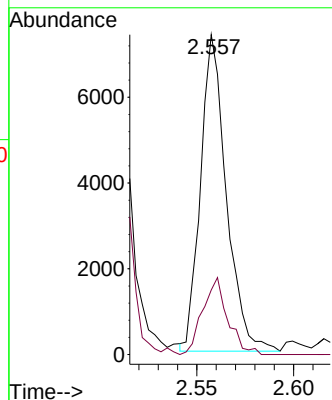
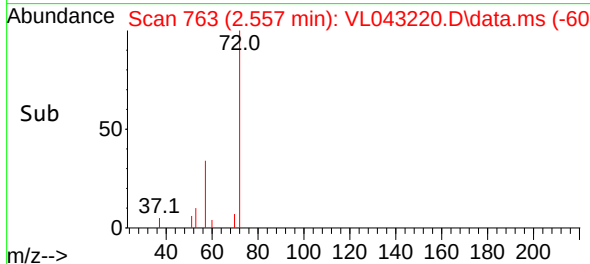
Instrument :
MSVOA_L
ClientSampleId :
IA3



Tgt Ion: 43 Resp: 684
Ion Ratio Lower Upper
43 100
72 23.6 18.1 27.1

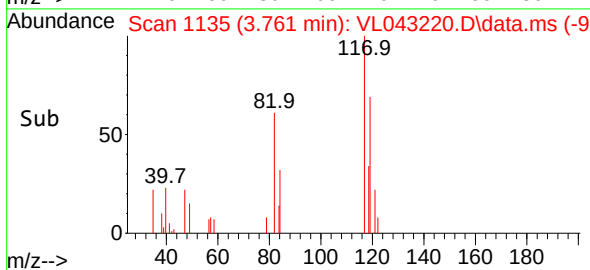
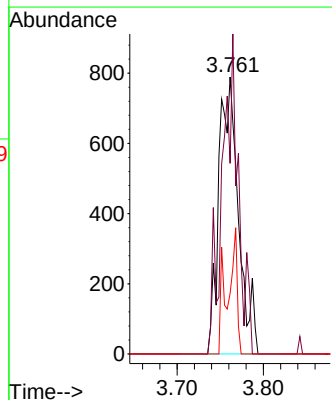
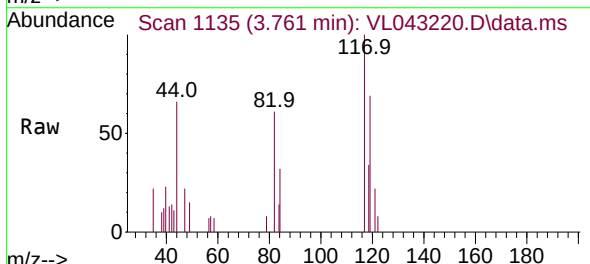
Manual Integrations
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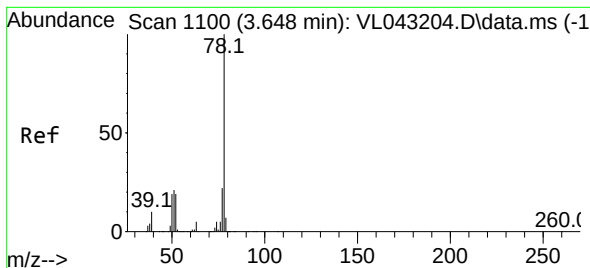
Reviewed By :Semsettin Yesilyurt 11/19/2025
Supervised By :Mahesh Dadoda 11/19/2025



#35
Carbon Tetrachloride
Concen: 0.067 ppbv m
RT: 3.761 min Scan# 1135
Delta R.T. 0.006 min
Lab File: VL043220.D
Acq: 18 Nov 2025 19:23

Tgt Ion:117 Resp: 1242
Ion Ratio Lower Upper
117 100
119 68.8 74.6 112.0#
121 21.9 23.2 34.8#





#36

Benzene

Concen: 0.114 ppbv m

RT: 3.658 min Scan# 1100

Delta R.T. 0.010 min

Lab File: VL043220.D

Acq: 18 Nov 2025 19:23

Instrument :

MSVOA_L

ClientSampleId :

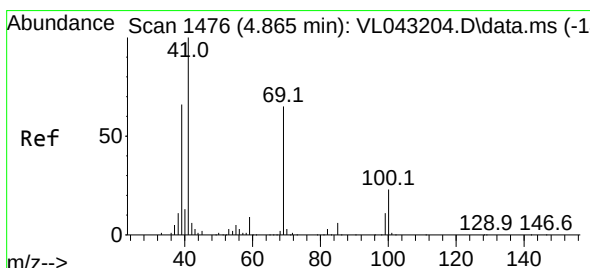
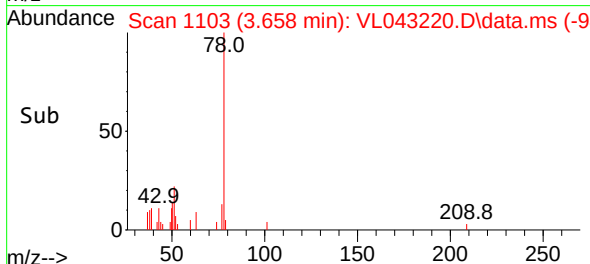
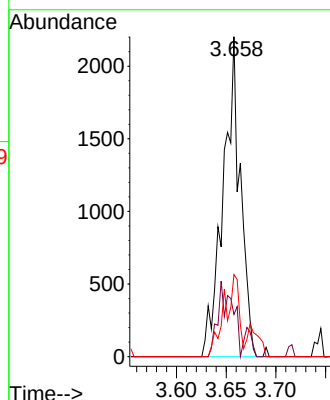
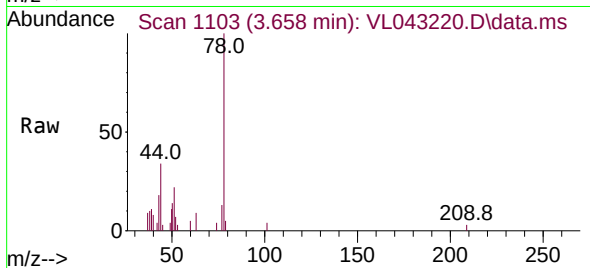
IA3

Tgt Ion: 78	Resp: 2658
Ion Ratio	Lower Upper
78 100	
77 13.2	17.5 26.3
50 14.2	15.5 23.3

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



#43

Methyl Methacrylate

Concen: 0.272 ppbv m

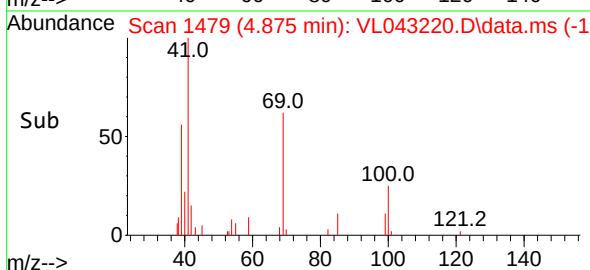
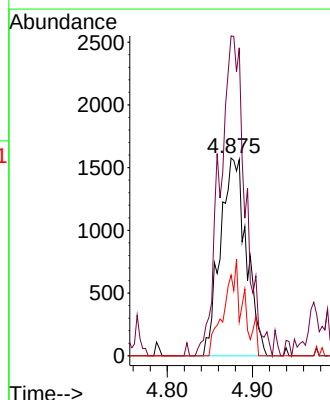
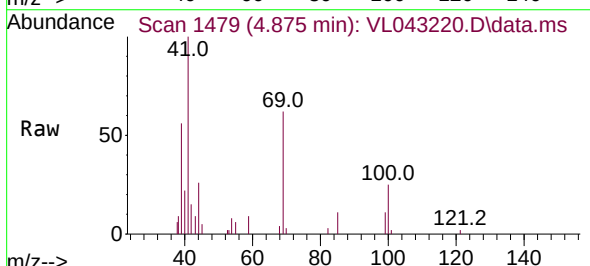
RT: 4.875 min Scan# 1479

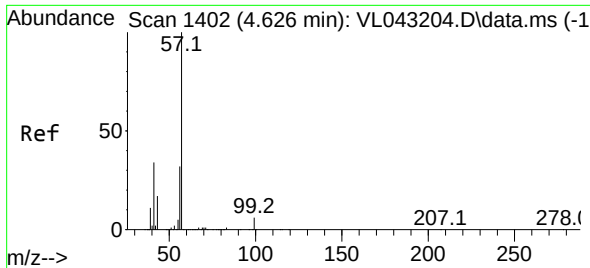
Delta R.T. 0.010 min

Lab File: VL043220.D

Acq: 18 Nov 2025 19:23

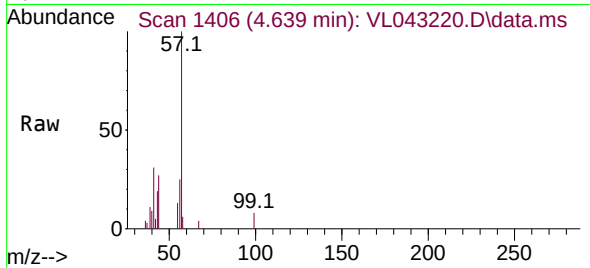
Tgt Ion: 69	Resp: 3369
Ion Ratio	Lower Upper
69 100	
41 0.0	126.7 190.1
100 0.0	28.6 43.0





#44
2,2,4-Trimethylpentane
Concen: 0.107 ppbv m
RT: 4.639 min Scan# 1406
Delta R.T. 0.013 min
Lab File: VL043220.D
Acq: 18 Nov 2025 19:23

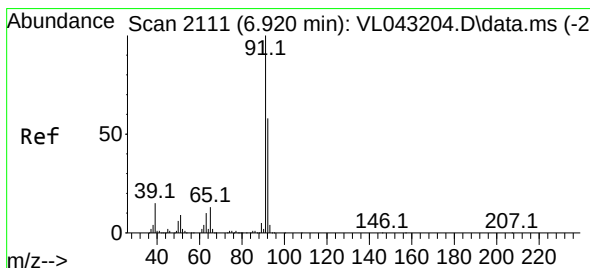
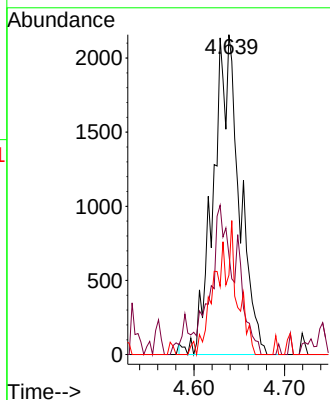
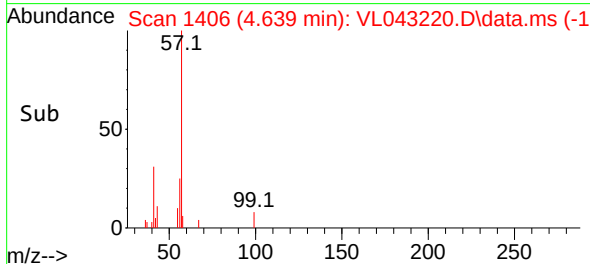
Instrument :
MSVOA_L
ClientSampleId :
IA3



Tgt Ion: 57 Resp: 4310
Ion Ratio Lower Upper
57 100
41 49.7 28.0 42.0
56 0.0 25.6 38.4

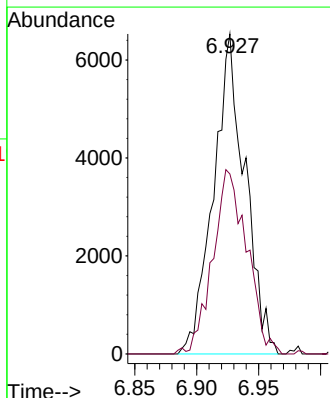
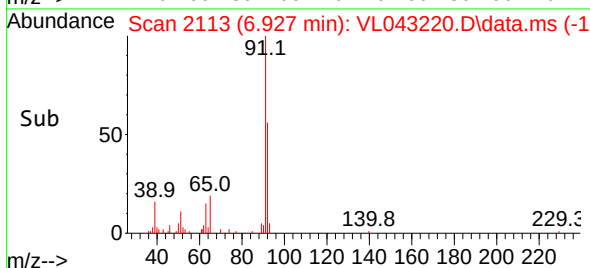
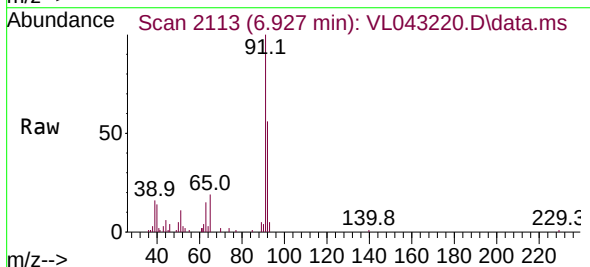
Manual Integrations
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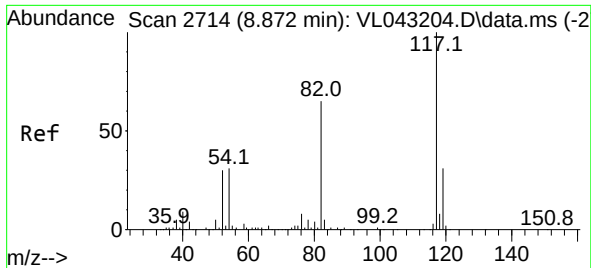
Reviewed By :Semsettin Yesilyurt 11/19/2025
Supervised By :Mahesh Dadoda 11/19/2025



#53
Toluene
Concen: 0.418 ppbv
RT: 6.927 min Scan# 2113
Delta R.T. 0.006 min
Lab File: VL043220.D
Acq: 18 Nov 2025 19:23

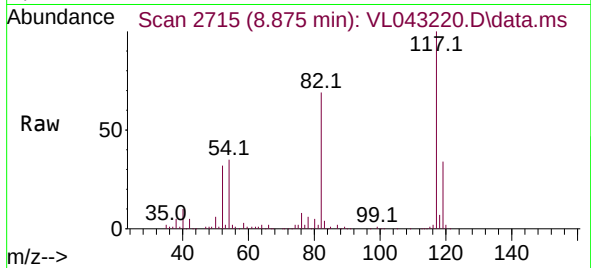
Tgt Ion: 91 Resp: 11573
Ion Ratio Lower Upper
91 100
92 62.2 47.4 71.0





#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 2715
Delta R.T. 0.003 min
Lab File: VL043220.D
Acq: 18 Nov 2025 19:23

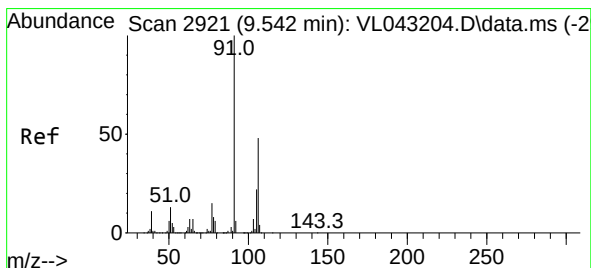
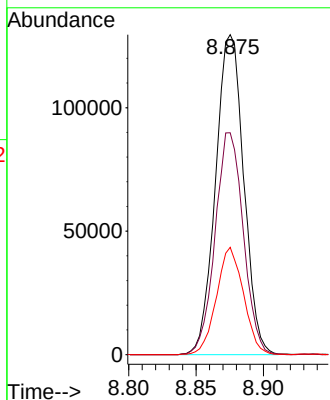
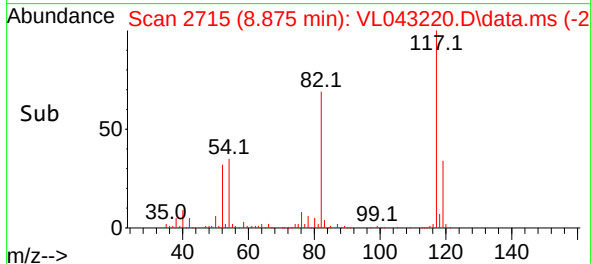
Instrument :
MSVOA_L
ClientSampleId :
IA3



Tgt Ion:117 Resp: 189099
Ion Ratio Lower Upper
117 100
82 69.2 56.1 84.1
119 32.2 25.0 37.6

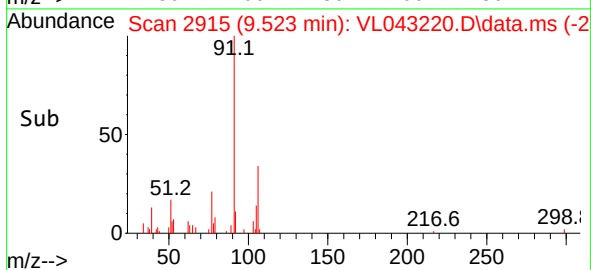
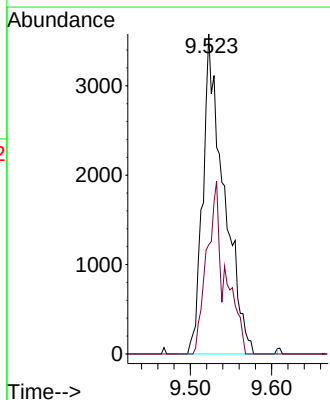
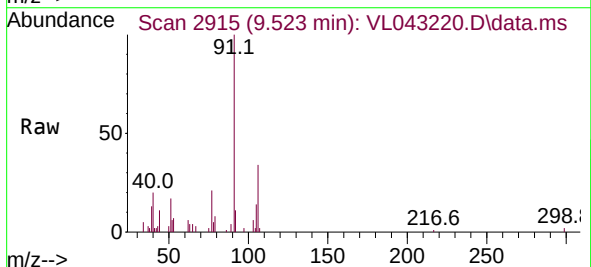
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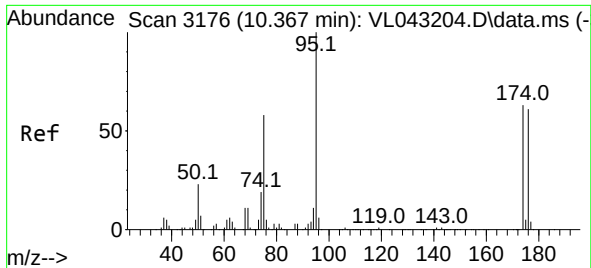
Reviewed By :Semsettin Yesilyurt 11/19/2025
Supervised By :Mahesh Dadoda 11/19/2025



#59
m/p-Xylene
Concen: 0.220 ppbv m
RT: 9.523 min Scan# 2915
Delta R.T. -0.019 min
Lab File: VL043220.D
Acq: 18 Nov 2025 19:23

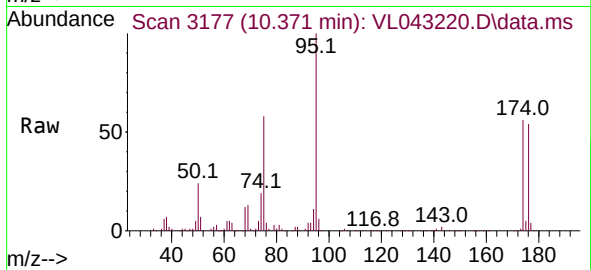
Tgt Ion: 91 Resp: 6417
Ion Ratio Lower Upper
91 100
106 0.0 36.1 54.1#





#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.508 ppbv
 RT: 10.371 min Scan# 3177
 Delta R.T. 0.003 min
 Lab File: VL043220.D
 Acq: 18 Nov 2025 19:23

Instrument :
 MSVOA_L
 ClientSampleId :
 IA3



Tgt Ion: 95 Resp: 145646
 Ion Ratio Lower Upper
 95 100
 174 59.0 50.2 75.2
 175 4.7 4.1 6.1

Manual Integrations
 APPROVED

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

