

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
 Data File : VL042421.D
 Acq On : 28 Apr 2025 12:17
 Operator : SY/MD
 Sample : Q1665-12
 Misc : 400mL/MSVOA_L
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-B2-6-3242025

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 04/29/2025
 Supervised By :Mahesh Dadoda 04/30/2025

Quant Time: Apr 29 01:35:07 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M

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

QLast Update : Fri Apr 18 02:14:00 2025

Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.781	49	140992	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.953	114	398020	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.875	117	341014	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.371	95	295244	10.536	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	105.400%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.496	85	11407	0.458	ppbv	97
3) Chlorodifluoromethane	1.473	51	5728m	0.241	ppbv	
4) Chloromethane	1.532	50	5396	0.547	ppbv	89
9) Propene	1.483	41	12113m	1.121	ppbv	
10) Heptane	4.972	43	10567m	0.348	ppbv	
11) Trichlorofluoromethane	1.875	101	5389	0.227	ppbv	95
13) Ethanol	1.719	45	124500	72.509	ppbv	76
17) tert-Butyl alcohol	2.040	59	53033	1.854	ppbv #	71
19) Isopropyl Alcohol	1.881	45	791511	61.732	ppbv #	34
20) Methylene Chloride	2.059	84	39463	4.366	ppbv #	77
26) Hexane	2.820	57	111715	4.851	ppbv #	33
30) Cyclohexane	3.852	84	3883m	0.209	ppbv	
34) 2-Butanone	2.554	43	25006	0.794	ppbv	99
35) Carbon Tetrachloride	3.755	117	2578m	0.072	ppbv	
36) Benzene	3.645	78	15779m	0.368	ppbv	
41) Tetrahydrofuran	3.059	42	2097m	0.114	ppbv	
44) 2,2,4-Trimethylpentane	4.632	57	15729	0.212	ppbv #	65
50) 4-Methyl-2-Pentanone	5.749	43	54716	1.046	ppbv	96
53) Toluene	6.921	91	71766	1.393	ppbv	99
58) Ethyl Benzene	9.345	91	33666	0.498	ppbv	96
59) m/p-Xylene	9.526	91	44376m	0.815	ppbv	
60) o-Xylene	9.957	91	18390	0.336	ppbv	97
61) Styrene	9.863	104	11677	0.446	ppbv	91
62) Isopropylbenzene	10.529	105	9651	0.120	ppbv	98
64) n-propylbenzene	10.986	120	3222m	0.159	ppbv	
72) 4-Ethyltoluene	11.118	105	10909	0.163	ppbv #	56
73) 1,3,5-Trimethylbenzene	11.199	105	11852	0.200	ppbv	92
74) 1,2,4-Trimethylbenzene	11.533	105	45414	0.657	ppbv #	59

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

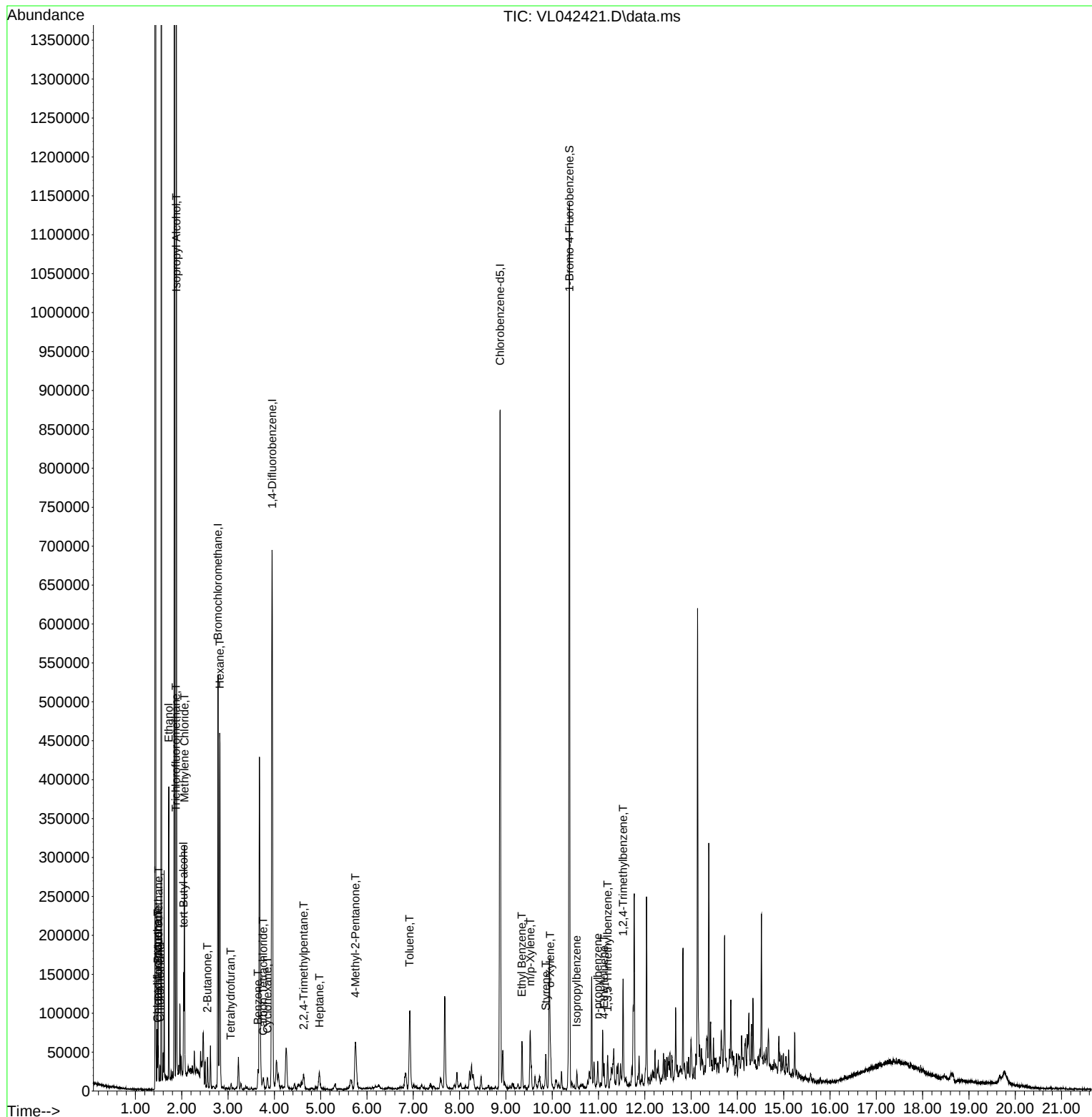
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042421.D
Acq On : 28 Apr 2025 12:17
Operator : SY/MD
Sample : Q1665-12
Misc : 400mL/MSVOA_L
ALS Vial : 8 Sample Multiplier: 1

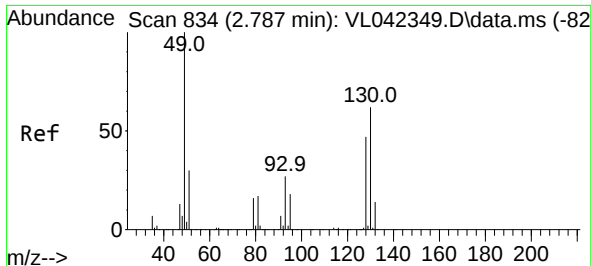
Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Quant Time: Apr 29 01:35:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Manual Integrations
APPROVED

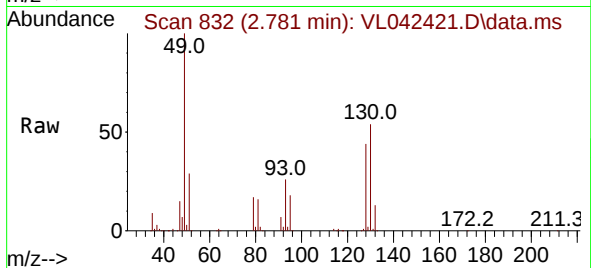
Reviewed By : Semsettin Yesilyurt 04/29/2025
Supervised By : Mahesh Dadoda 04/30/2025





#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.781 min Scan# 81
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

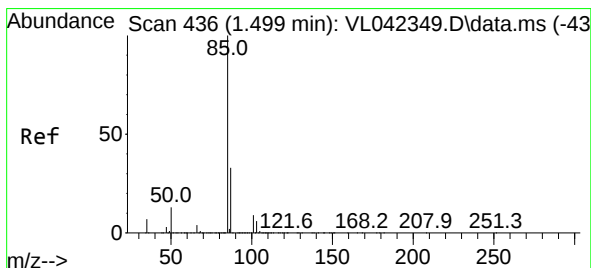
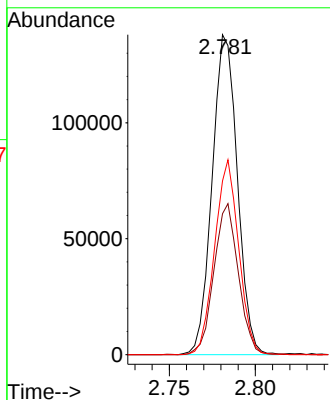
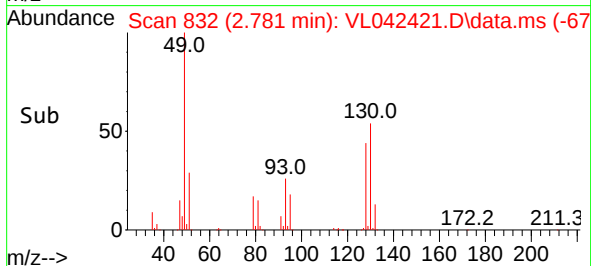
Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025



Tgt Ion: 49 Resp: 140992
Ion Ratio Lower Upper
49 100
128 45.9 22.8 68.4
130 58.0 29.3 88.0

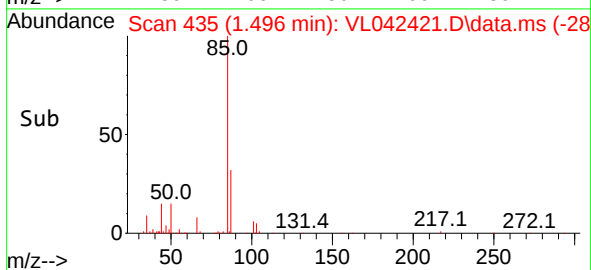
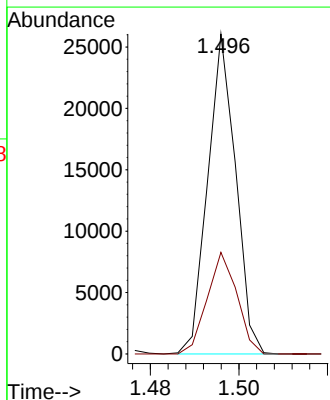
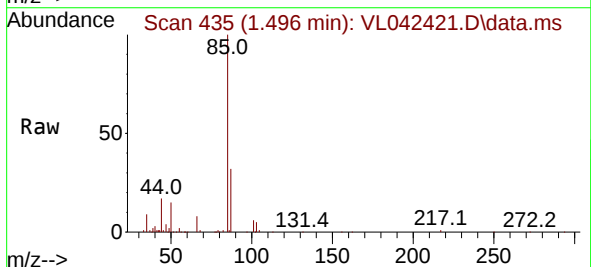
Manual Integrations
APPROVED

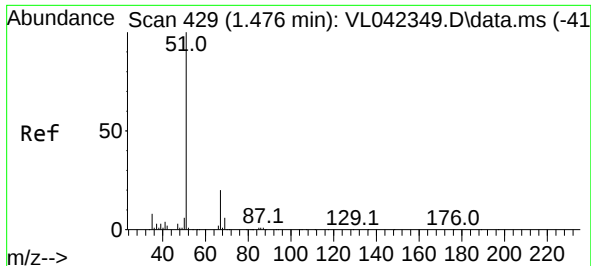
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025



#2
Dichlorodifluoromethane
Concen: 0.458 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.003 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

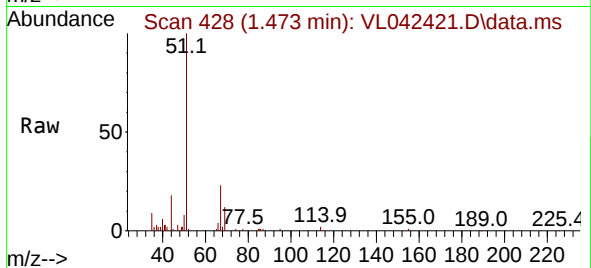
Tgt Ion: 85 Resp: 11407
Ion Ratio Lower Upper
85 100
87 31.7 26.6 39.8





#3
Chlorodifluoromethane
Concen: 0.241 ppbv m
RT: 1.473 min Scan# 428
Delta R.T. -0.003 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

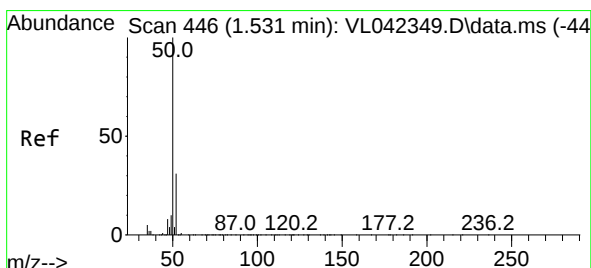
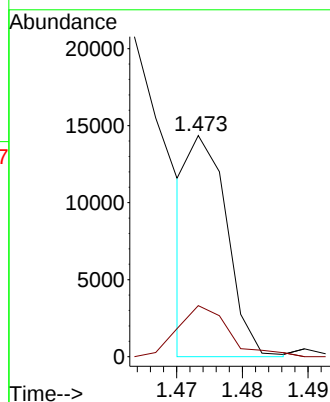
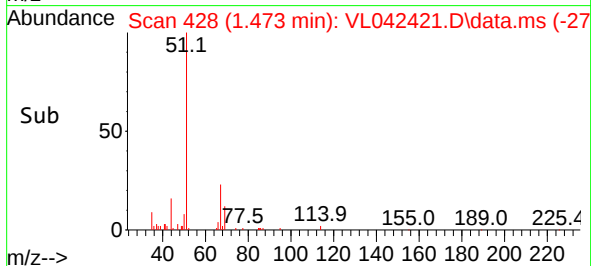
Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025



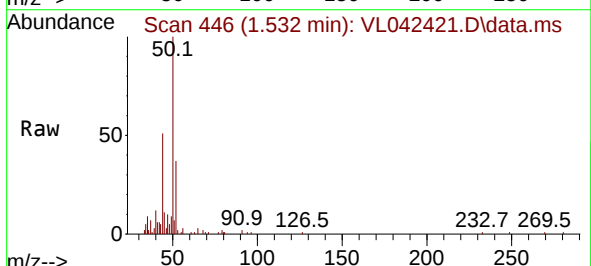
Tgt Ion: 51 Resp: 5728
Ion Ratio Lower Upper
51 100
67 32.1 16.2 24.4

Manual Integrations
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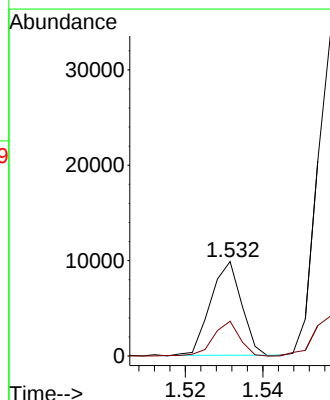
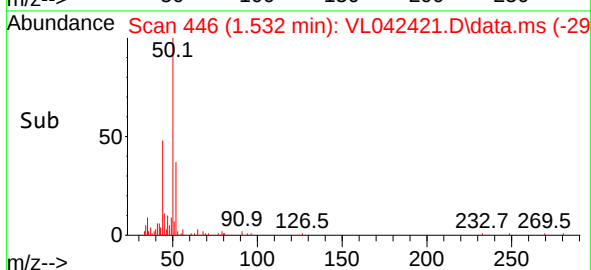
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

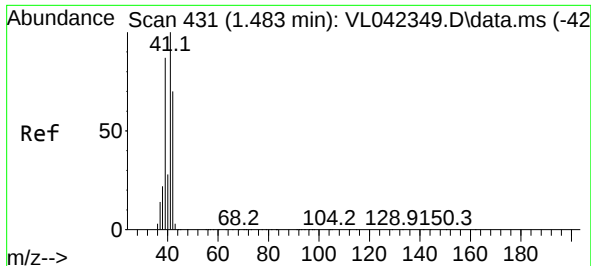


#4
Chloromethane
Concen: 0.547 ppbv
RT: 1.532 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17



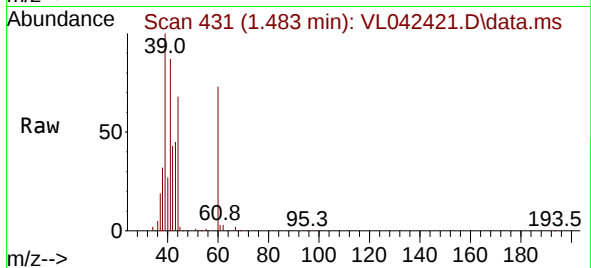
Tgt Ion: 50 Resp: 5396
Ion Ratio Lower Upper
50 100
52 37.0 24.7 37.1





#9
 Propene
 Concen: 1.121 ppbv m
 RT: 1.483 min Scan# 41
 Delta R.T. 0.000 min
 Lab File: VL042421.D
 Acq: 28 Apr 2025 12:17

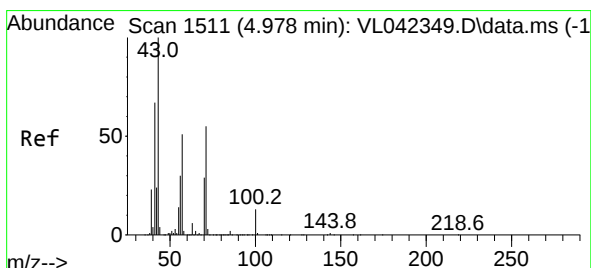
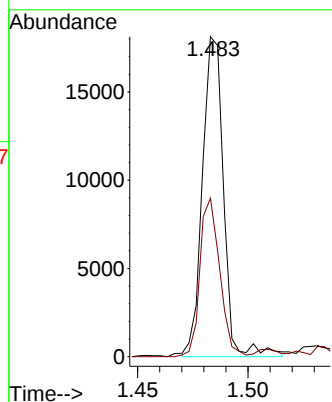
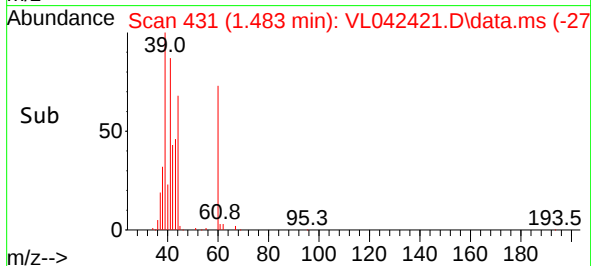
Instrument :
 MSVOA_L
 ClientSampleId :
 IA-B2-6-3242025



Tgt Ion: 41 Resp: 1211
 Ion Ratio Lower Upper
 41 100
 42 3382.2 56.2 84.4

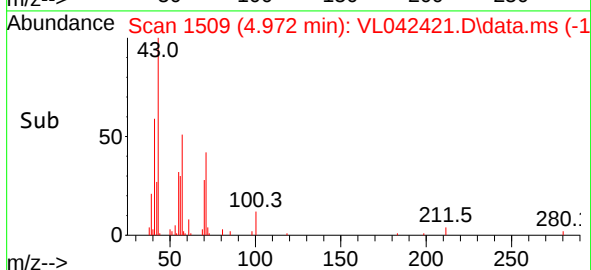
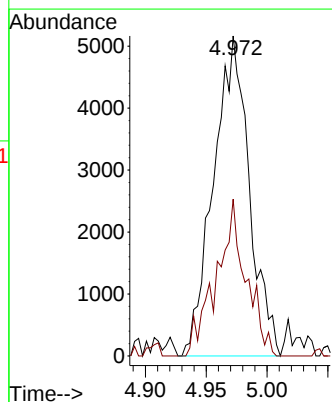
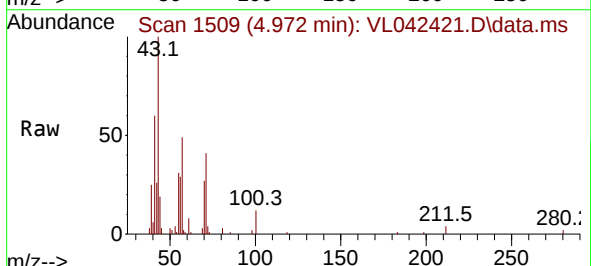
Manual Integrations
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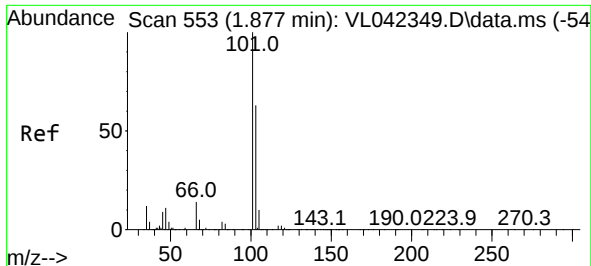
Reviewed By :Semsettin Yesilyurt 04/29/2025
 Supervised By :Mahesh Dadoda 04/30/2025



#10
 Heptane
 Concen: 0.348 ppbv m
 RT: 4.972 min Scan# 1509
 Delta R.T. -0.006 min
 Lab File: VL042421.D
 Acq: 28 Apr 2025 12:17

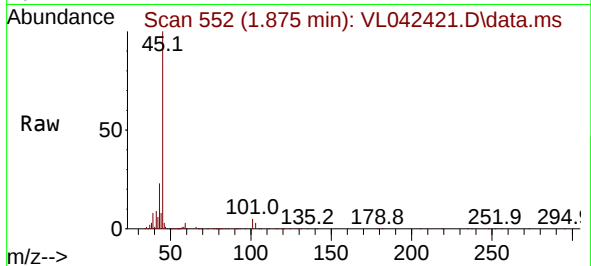
Tgt Ion: 43 Resp: 10567
 Ion Ratio Lower Upper
 43 100
 57 40.8 39.9 59.9





#11
Trichlorofluoromethane
Concen: 0.227 ppbv
RT: 1.875 min Scan# 511
Delta R.T. -0.003 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

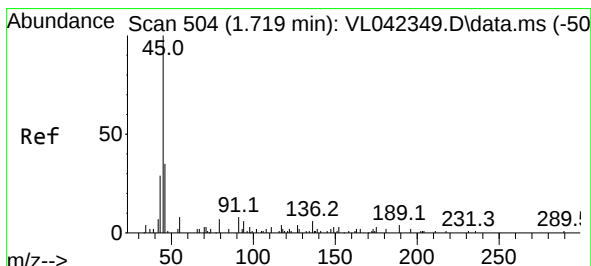
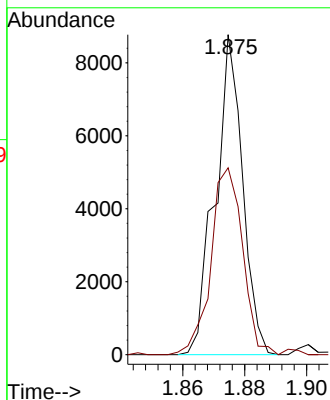
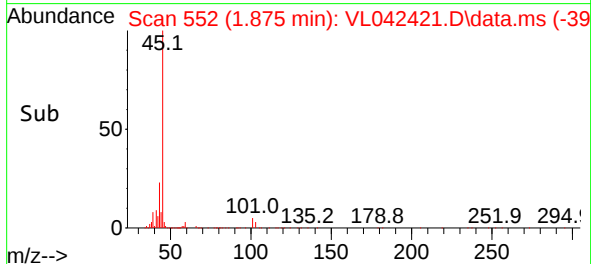
Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025



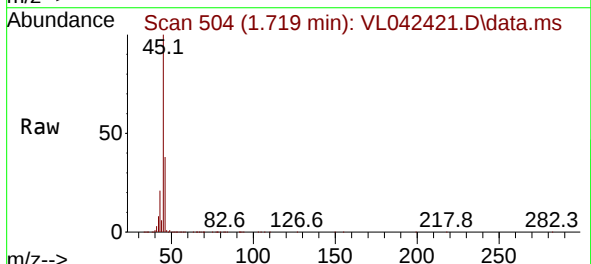
Tgt Ion:101 Resp: 5389
Ion Ratio Lower Upper
101 100
103 58.4 50.1 75.1

Manual Integrations
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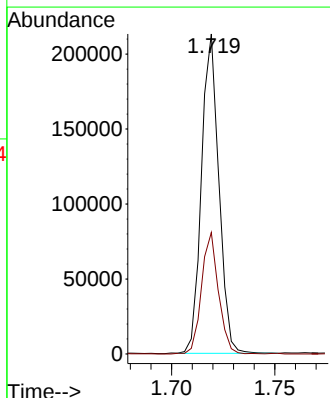
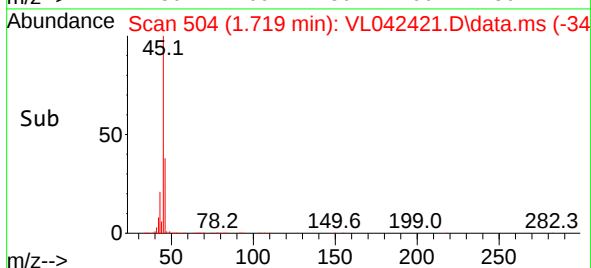
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

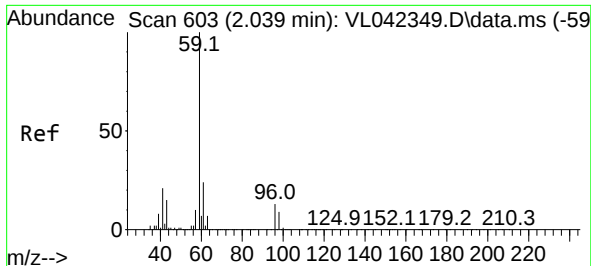


#13
Ethanol
Concen: 72.509 ppbv
RT: 1.719 min Scan# 504
Delta R.T. 0.000 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17



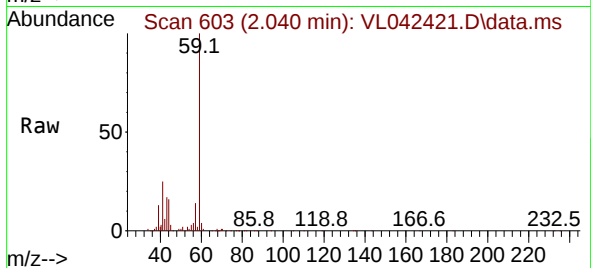
Tgt Ion: 45 Resp: 124500
Ion Ratio Lower Upper
45 100
46 37.4 21.9 87.7





#17
tert-Butyl alcohol
Concen: 1.854 ppbv
RT: 2.040 min Scan# 603
Delta R.T. 0.000 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

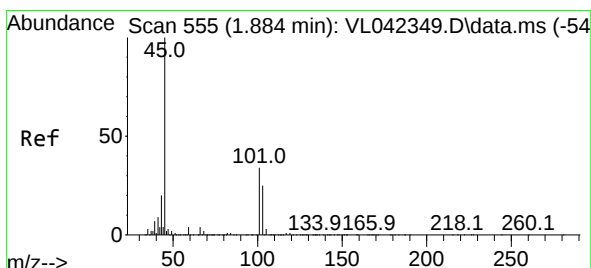
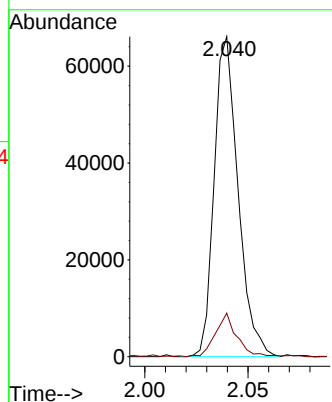
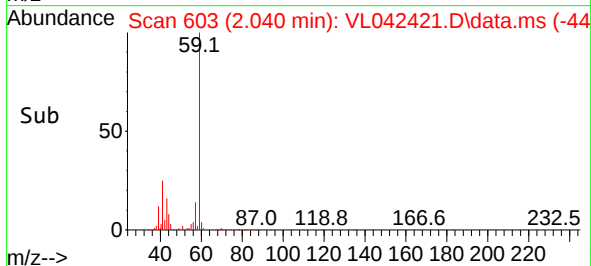
Instrument :
MSVOA_L
ClientSampleId :
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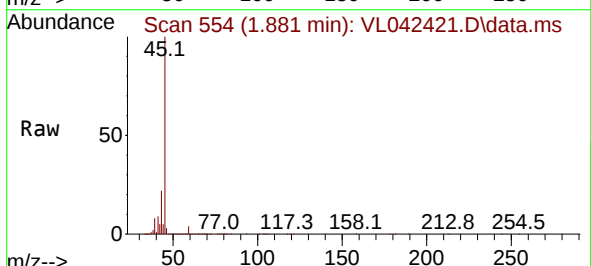
Tgt Ion: 59 Resp: 5303
Ion Ratio Lower Upper
59 100
57 0.0 8.7 13.1

Manual Integrations
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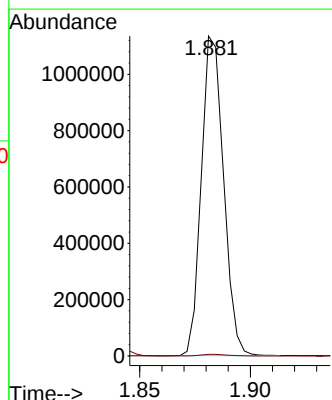
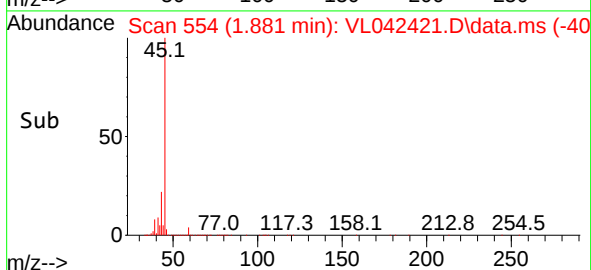
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

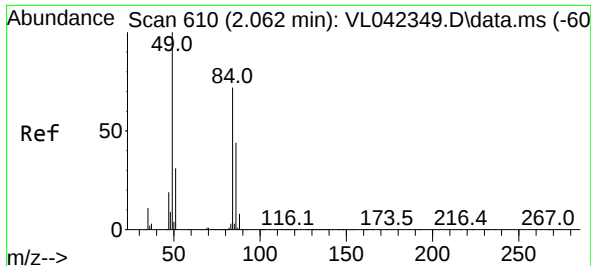


#19
Isopropyl Alcohol
Concen: 61.732 ppbv
RT: 1.881 min Scan# 554
Delta R.T. -0.003 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17



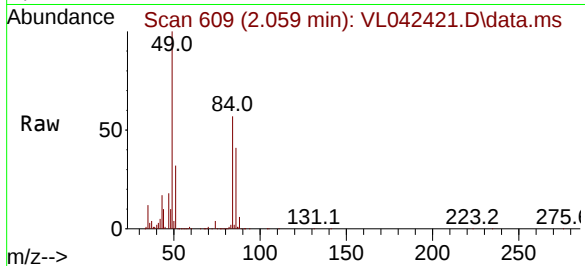
Tgt Ion: 45 Resp: 791511
Ion Ratio Lower Upper
45 100
58 0.6 34.5 51.7





#20
Methylene Chloride
Concen: 4.366 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.003 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

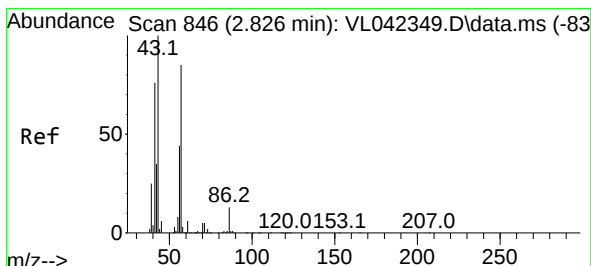
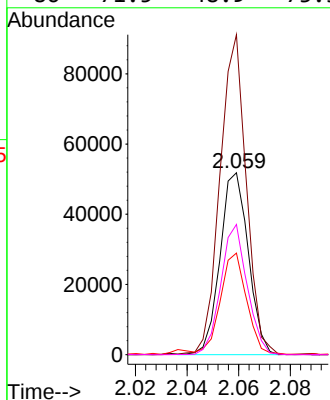
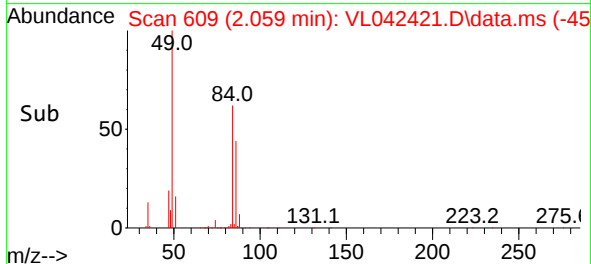
Instrument : MSVOA_L
Client Sample Id : IA-B2-6-3242025



Tgt Ion: 84 Resp: 3946
Ion Ratio Lower Upper
84 100
49 175.5 111.6 167.4
51 55.1 35.1 52.7
86 71.5 48.9 73.3

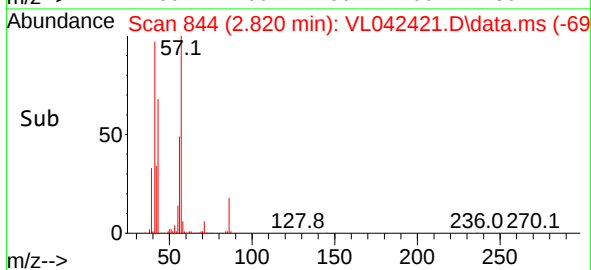
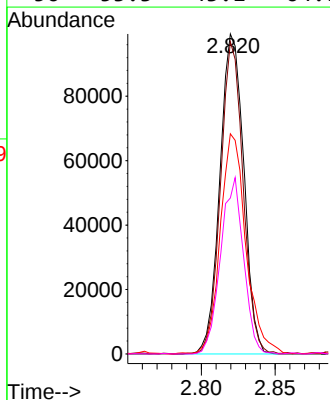
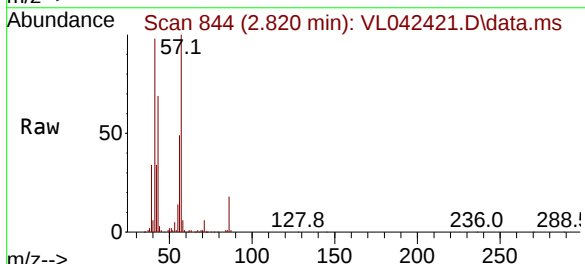
Manual Integrations
APPROVED

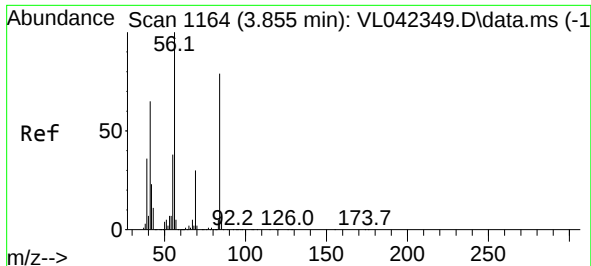
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025



#26
Hexane
Concen: 4.851 ppbv
RT: 2.820 min Scan# 844
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

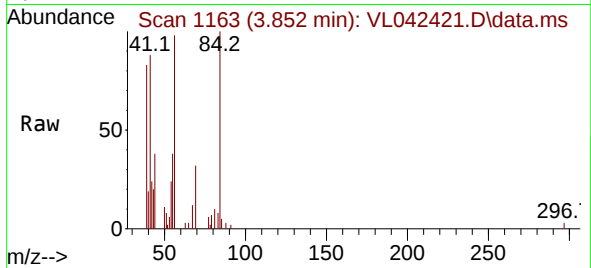
Tgt Ion: 57 Resp: 111715
Ion Ratio Lower Upper
57 100
41 92.0 77.9 116.9
43 74.4 208.4 312.6
56 53.3 43.1 64.7





#30
Cyclohexane
Concen: 0.209 ppbv m
RT: 3.852 min Scan# 1163
Delta R.T. -0.003 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

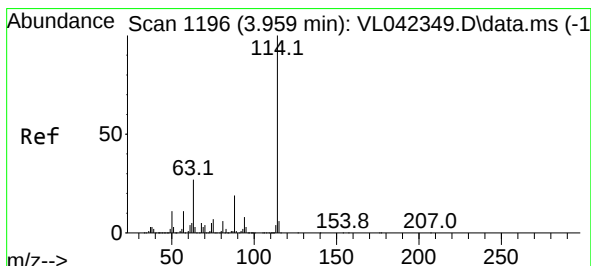
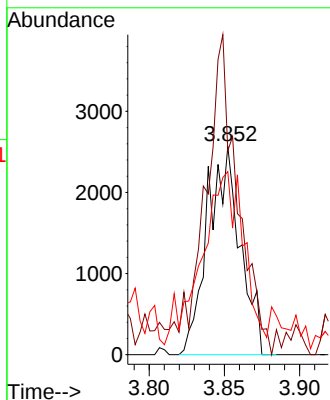
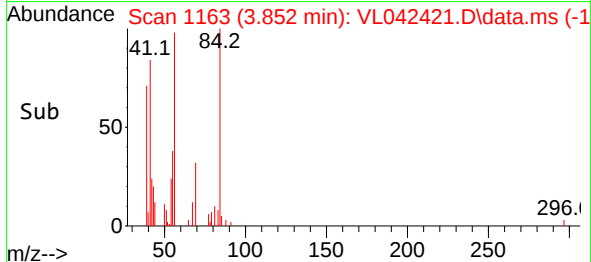
Instrument : MSVOA_L
ClientSampleId : IA-B2-6-3242025



Tgt Ion: 84 Resp: 388
Ion Ratio Lower Upper
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56 163.8 101.0 151.4
41 0.0 67.4 101.0

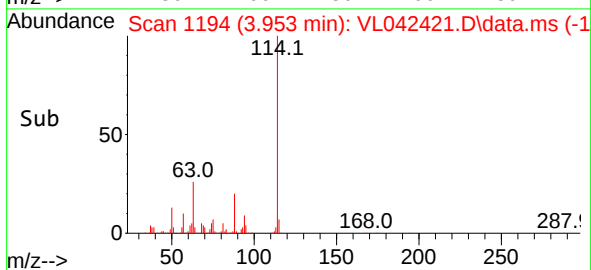
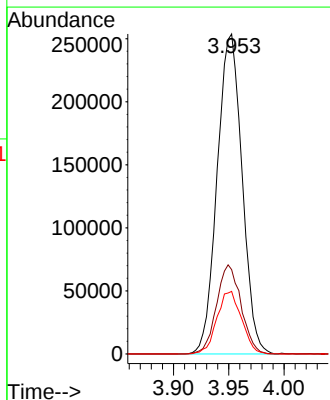
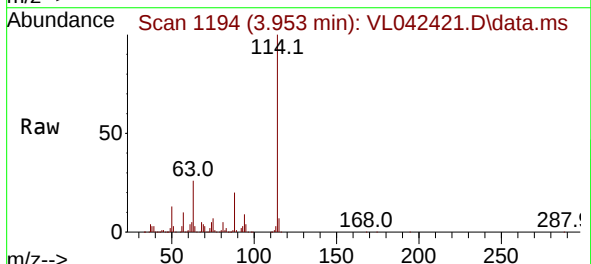
Manual Integrations
APPROVED

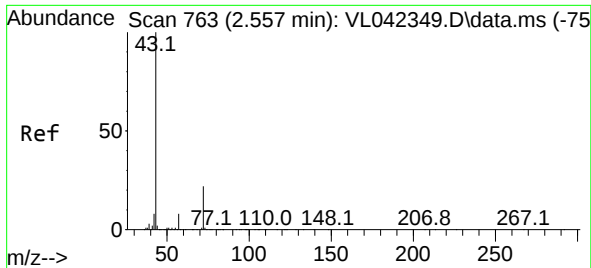
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.953 min Scan# 1194
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

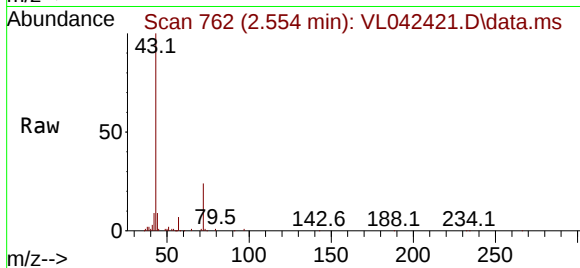
Tgt Ion:114 Resp: 398020
Ion Ratio Lower Upper
114 100
63 27.3 21.8 32.6
88 19.3 15.5 23.3





#34
2-Butanone
Concen: 0.794 ppbv
RT: 2.554 min Scan# 762
Delta R.T. -0.003 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

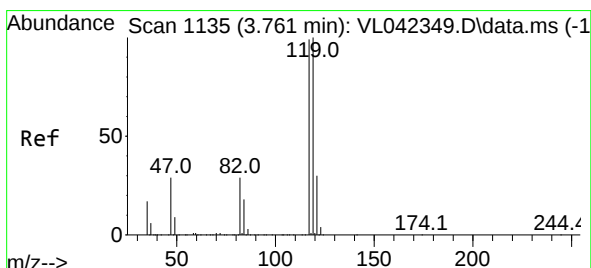
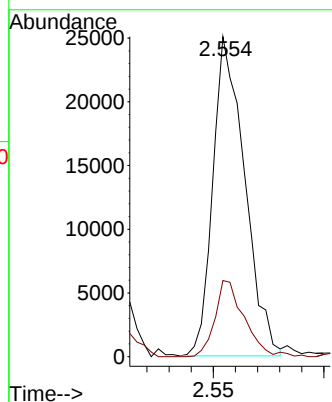
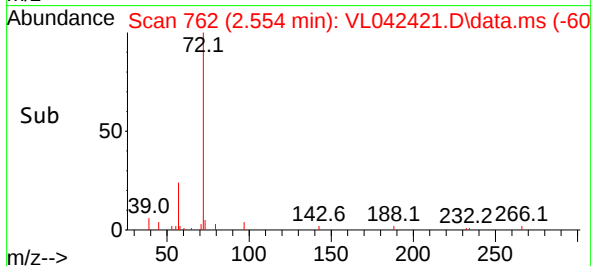
Instrument : MSVOA_L
ClientSampleId : IA-B2-6-3242025



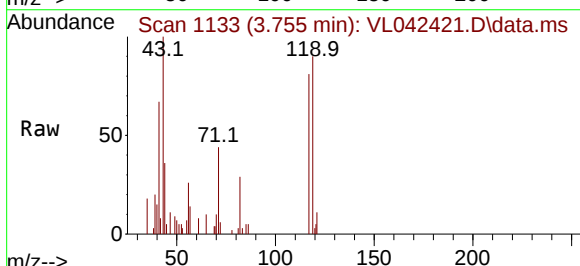
Tgt Ion: 43 Resp: 25000
Ion Ratio Lower Upper
43 100
72 22.5 18.2 27.2

Manual Integrations
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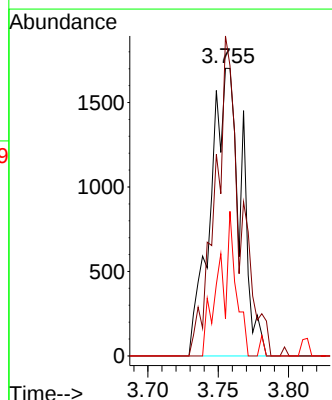
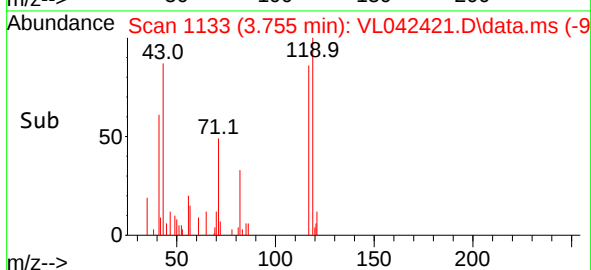
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

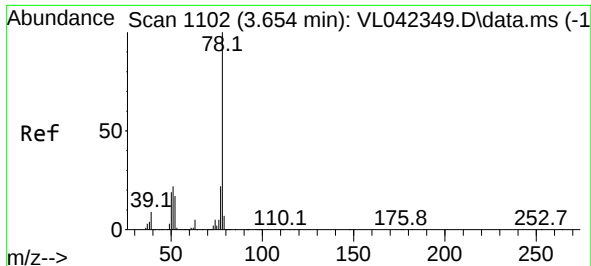


#35
Carbon Tetrachloride
Concen: 0.072 ppbv m
RT: 3.755 min Scan# 1133
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17



Tgt Ion:117 Resp: 2578
Ion Ratio Lower Upper
117 100
119 111.2 80.5 120.7
121 13.0 24.2 36.2#





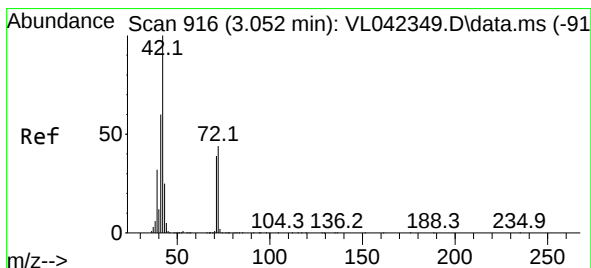
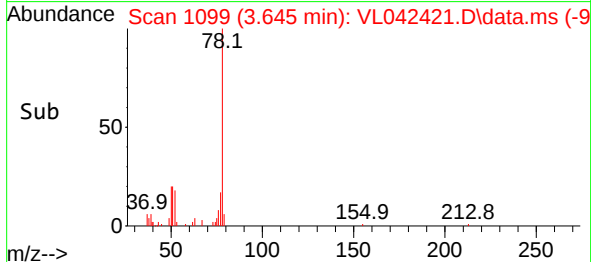
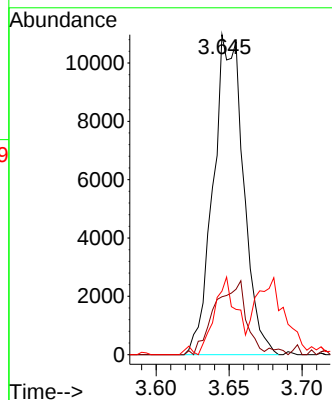
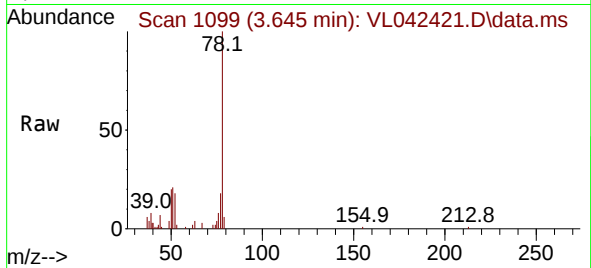
#36
Benzene
Concen: 0.368 ppbv m
RT: 3.645 min Scan# 1099
Delta R.T. -0.009 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Tgt Ion: 78 Resp: 15779
Ion Ratio Lower Upper
78 100
77 18.1 17.4 26.0
50 19.9 15.5 23.3

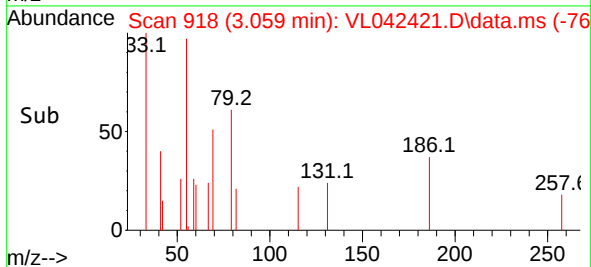
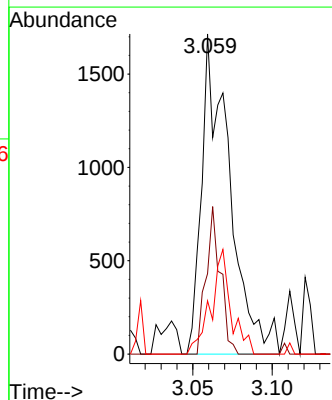
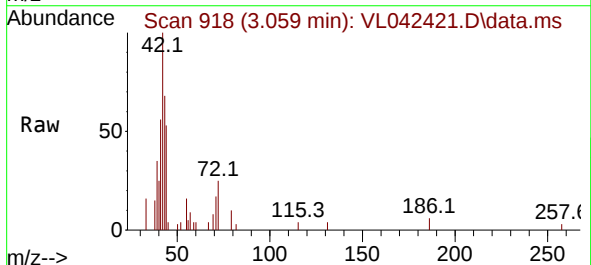
Manual Integrations
APPROVED

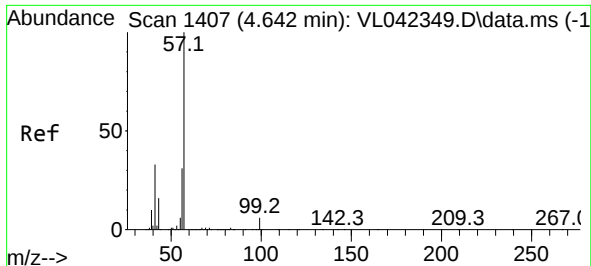
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025



#41
Tetrahydrofuran
Concen: 0.114 ppbv m
RT: 3.059 min Scan# 918
Delta R.T. 0.007 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

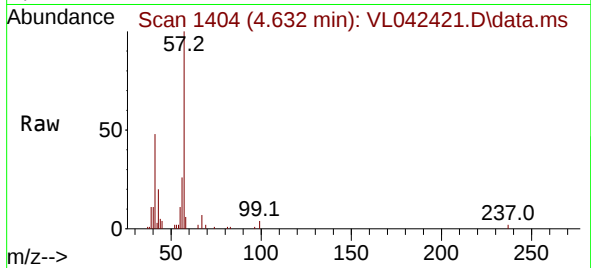
Tgt Ion: 42 Resp: 2097
Ion Ratio Lower Upper
42 100
72 23.6 32.3 48.5#
71 0.0 31.4 47.2#





#44
 2,2,4-Trimethylpentane
 Concen: 0.212 ppbv
 RT: 4.632 min Scan# 1404
 Delta R.T. -0.009 min
 Lab File: VL042421.D
 Acq: 28 Apr 2025 12:17

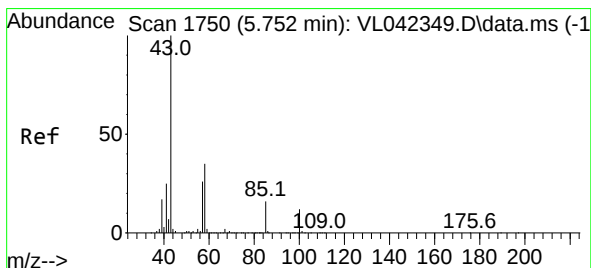
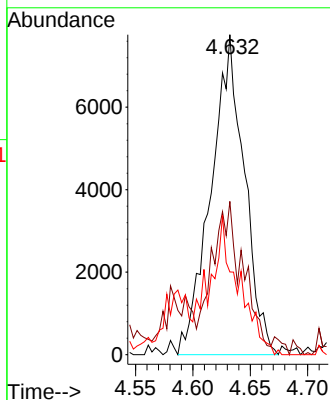
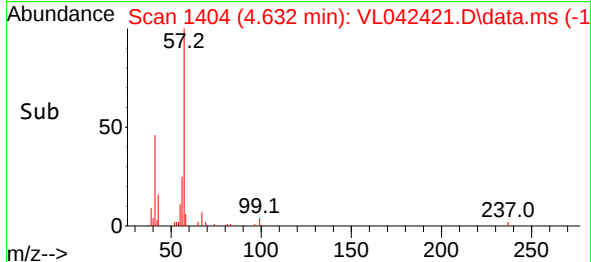
Instrument : MSVOA_L
 ClientSampleId : IA-B2-6-3242025



Tgt Ion: 57 Resp: 15729
 Ion Ratio Lower Upper
 57 100
 41 52.6 27.2 40.8
 56 53.5 25.7 38.5

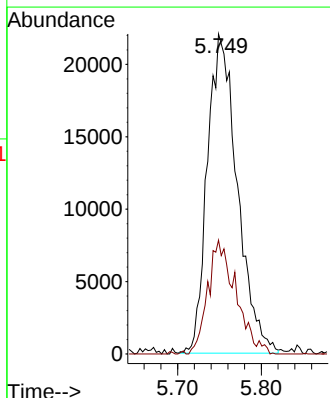
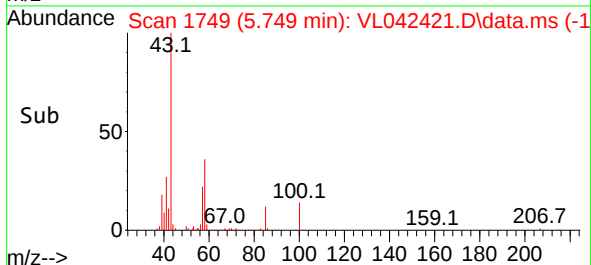
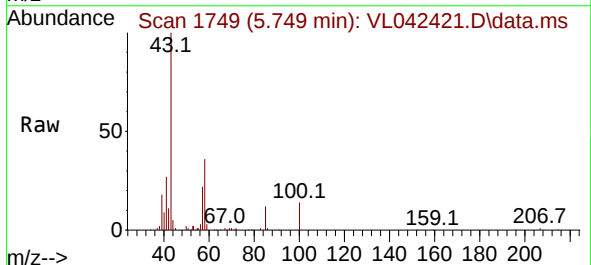
Manual Integrations
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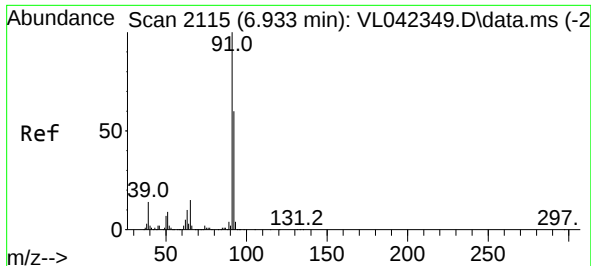
Reviewed By :Semsettin Yesilyurt 04/29/2025
 Supervised By :Mahesh Dadoda 04/30/2025



#50
 4-Methyl-2-Pentanone
 Concen: 1.046 ppbv
 RT: 5.749 min Scan# 1749
 Delta R.T. -0.003 min
 Lab File: VL042421.D
 Acq: 28 Apr 2025 12:17

Tgt Ion: 43 Resp: 54716
 Ion Ratio Lower Upper
 43 100
 58 33.7 28.6 43.0





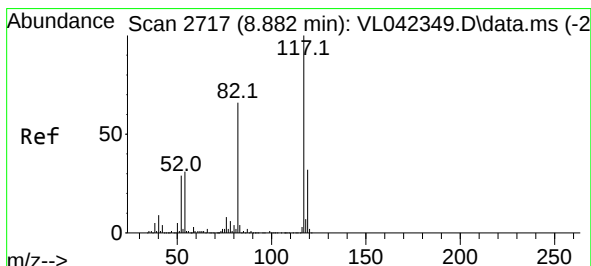
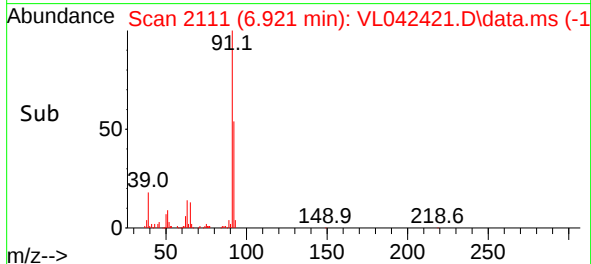
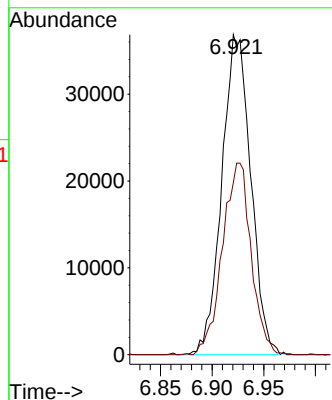
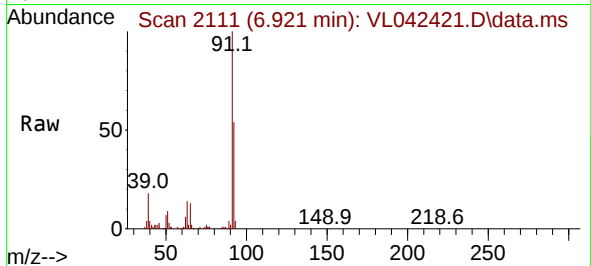
#53
Toluene
Concen: 1.393 ppbv
RT: 6.921 min Scan# 2115
Delta R.T. -0.013 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Instrument : MSVOA_L
ClientSampleId : IA-B2-6-3242025

Tgt Ion: 91 Resp: 71760
Ion Ratio Lower Upper
91 100
92 59.6 48.2 72.4

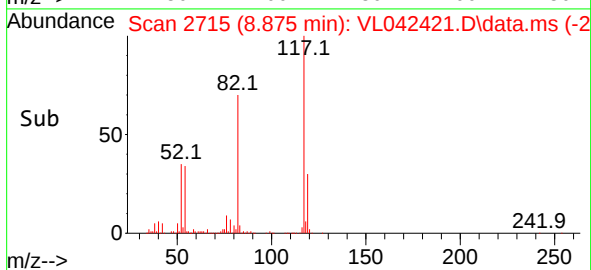
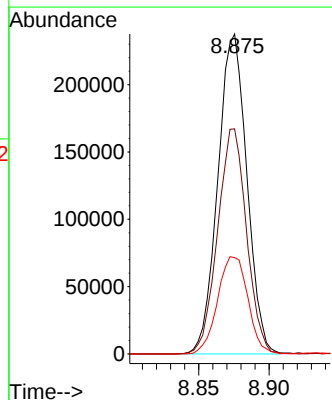
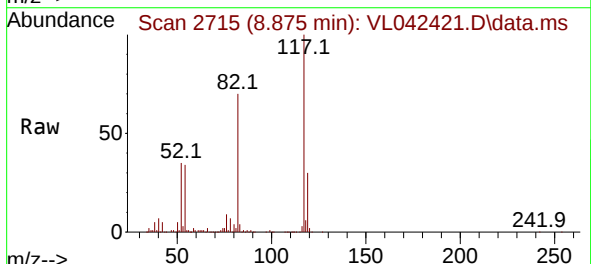
Manual Integrations
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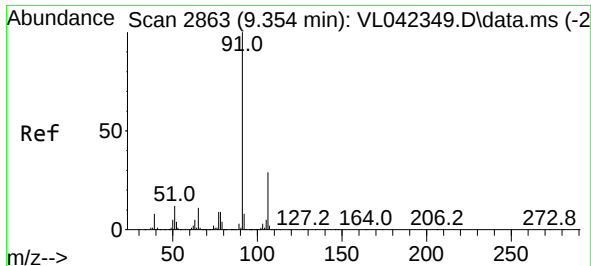
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 2715
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

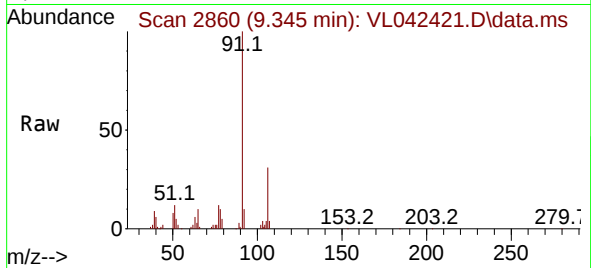
Tgt Ion:117 Resp: 341014
Ion Ratio Lower Upper
117 100
82 70.2 57.8 86.6
119 31.8 25.2 37.8





#58
Ethyl Benzene
Concen: 0.498 ppbv
RT: 9.345 min Scan# 2860
Delta R.T. -0.009 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

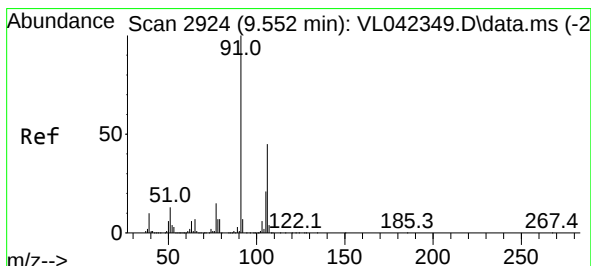
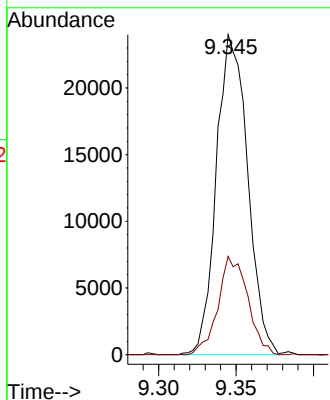
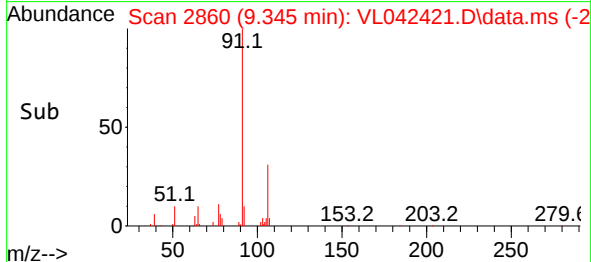
Instrument : MSVOA_L
ClientSampleId : IA-B2-6-3242025



Tgt Ion: 91 Resp: 3366
Ion Ratio Lower Upper
91 100
106 30.7 23.0 34.4

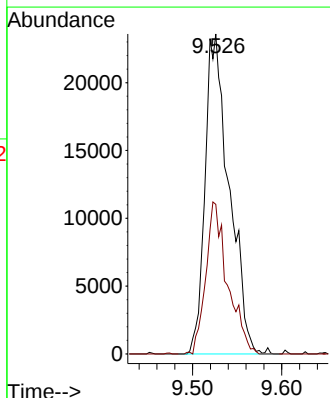
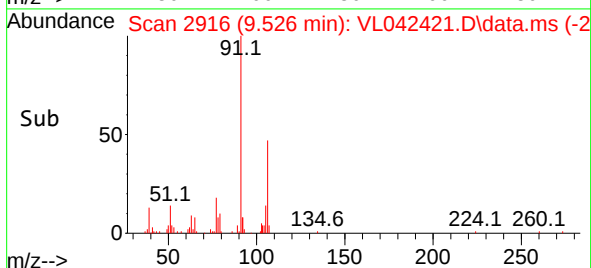
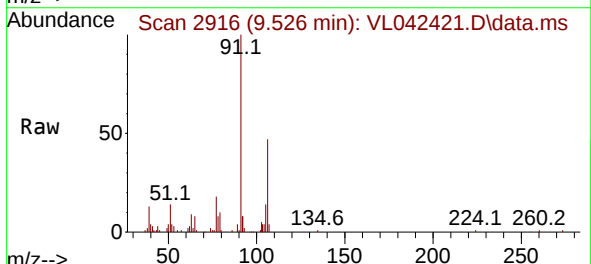
Manual Integrations
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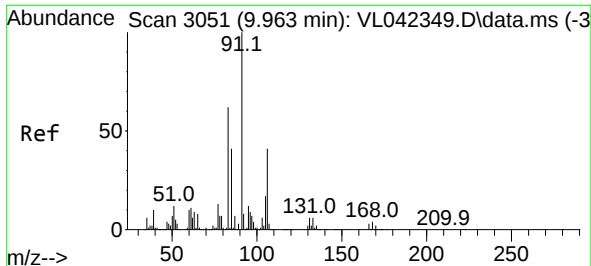
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025



#59
m/p-Xylene
Concen: 0.815 ppbv m
RT: 9.526 min Scan# 2916
Delta R.T. -0.026 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

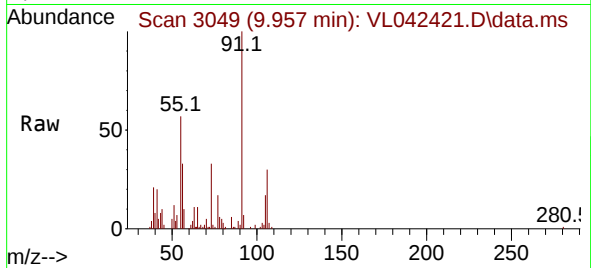
Tgt Ion: 91 Resp: 44376
Ion Ratio Lower Upper
91 100
106 0.0 35.4 53.2#





#60
o-Xylene
Concen: 0.336 ppbv
RT: 9.957 min Scan# 3051
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

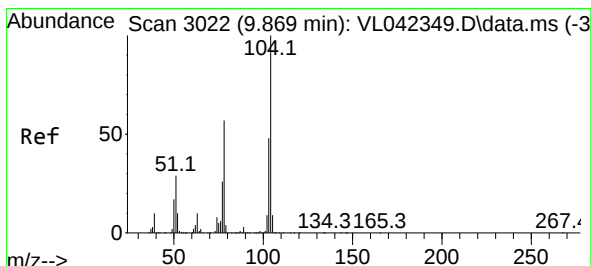
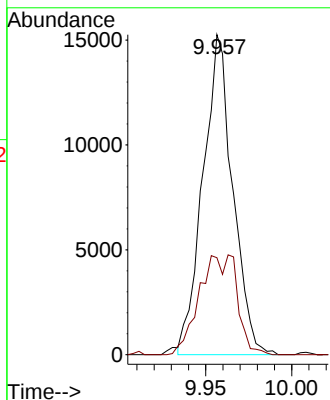
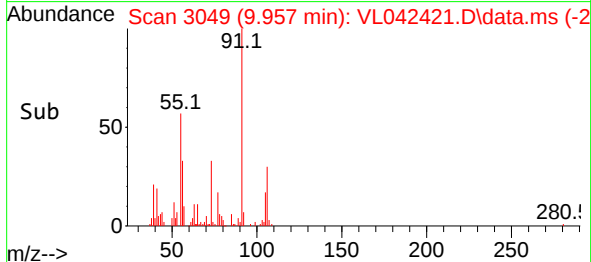
Instrument : MSVOA_L
ClientSampleId : IA-B2-6-3242025



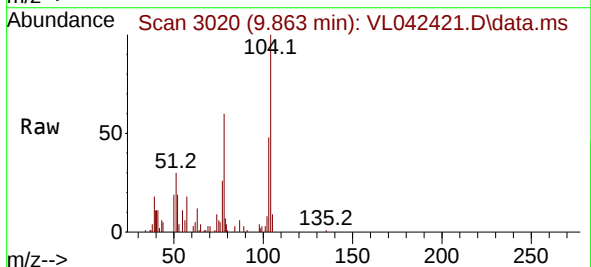
Tgt Ion: 91 Resp: 18390
Ion Ratio Lower Upper
91 100
106 40.3 21.1 63.4

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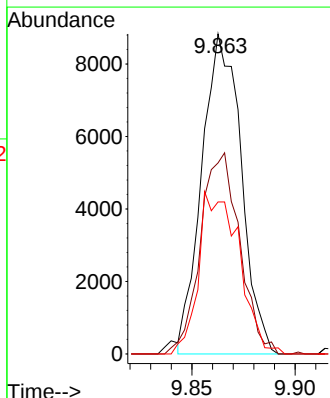
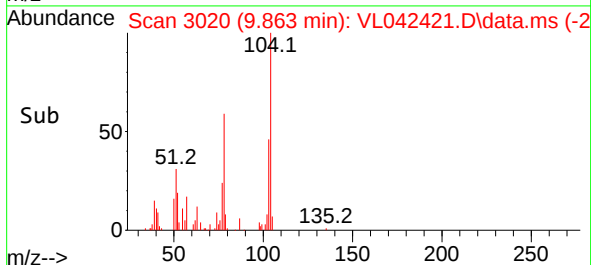
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

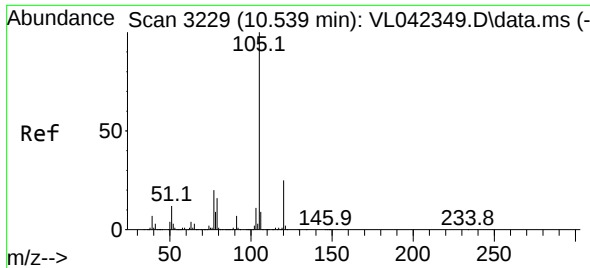


#61
Styrene
Concen: 0.446 ppbv
RT: 9.863 min Scan# 3020
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17



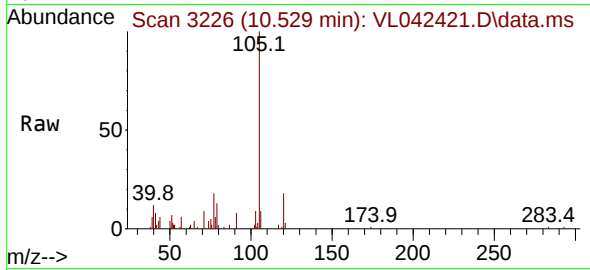
Tgt Ion:104 Resp: 11677
Ion Ratio Lower Upper
104 100
78 62.9 44.6 66.8
103 52.1 37.4 56.0





#62
Isopropylbenzene
Concen: 0.120 ppbv
RT: 10.529 min Scan# 31
Delta R.T. -0.009 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

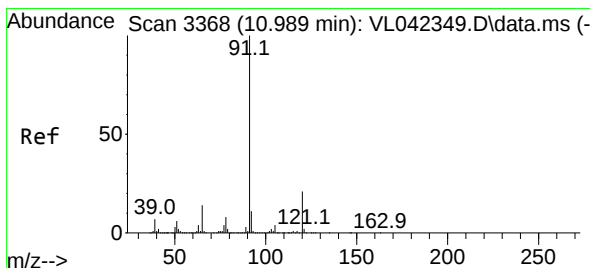
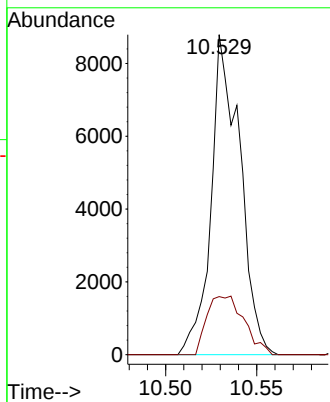
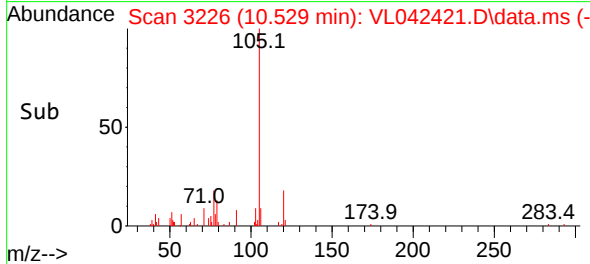
Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025



Tgt Ion:105 Resp: 965
Ion Ratio Lower Upper
105 100
120 23.7 19.8 29.8

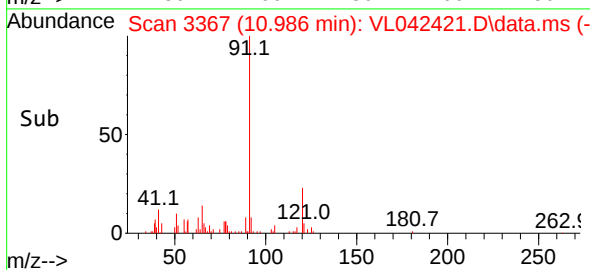
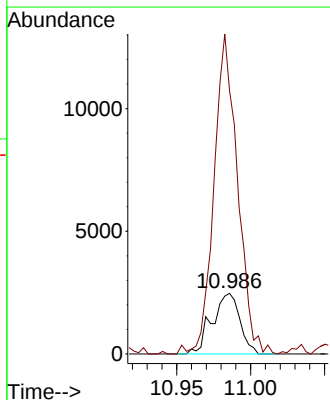
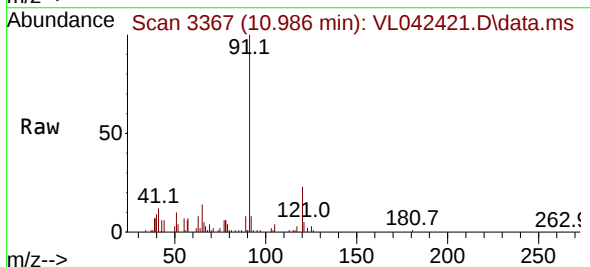
Manual Integrations
APPROVED

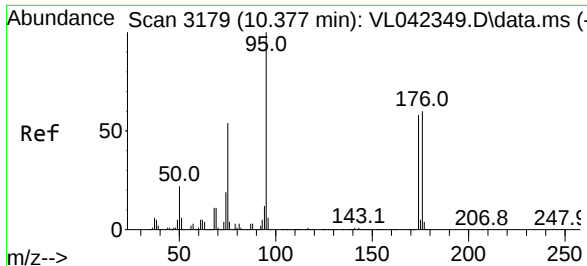
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025



#64
n-propylbenzene
Concen: 0.159 ppbv m
RT: 10.986 min Scan# 3367
Delta R.T. -0.003 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

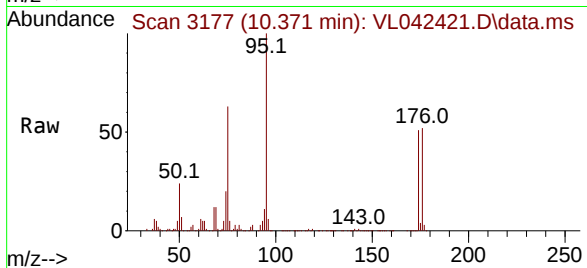
Tgt Ion:120 Resp: 3222
Ion Ratio Lower Upper
120 100
91 451.4 392.4 588.6





#68
1-Bromo-4-Fluorobenzene
Concen: 10.536 ppbv
RT: 10.371 min Scan# 3179
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

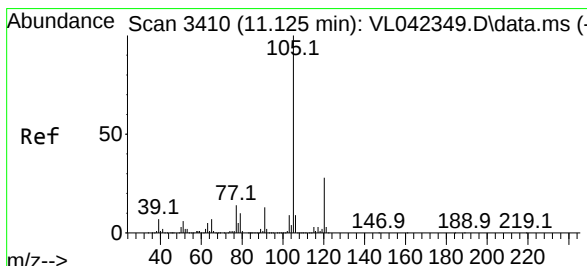
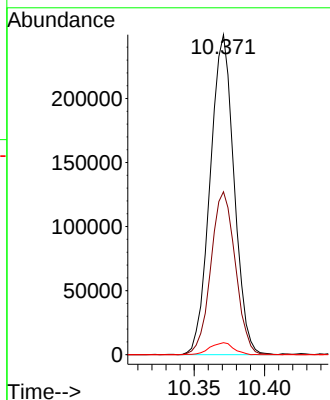
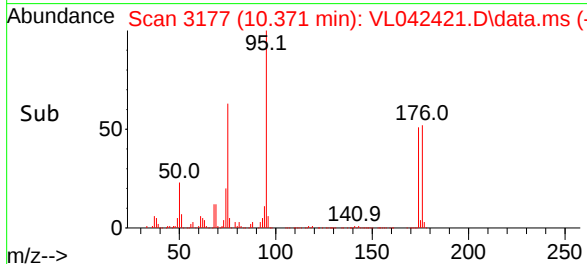
Instrument : MSVOA_L
ClientSampleId : IA-B2-6-3242025



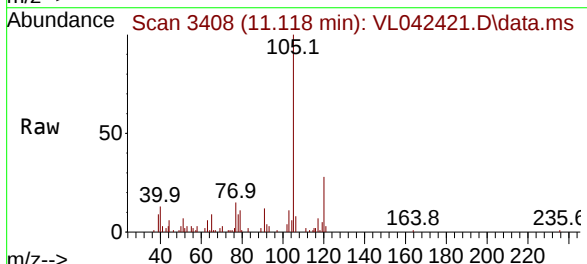
Tgt Ion: 95 Resp: 295244
Ion Ratio Lower Upper
95 100
174 52.1 48.5 72.7
175 3.7 3.7 5.5

Manual Integrations
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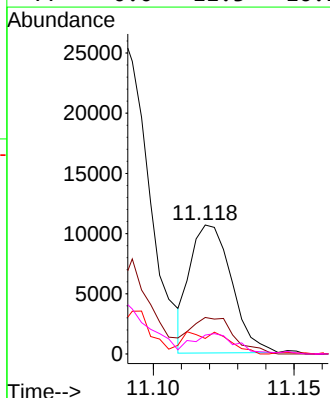
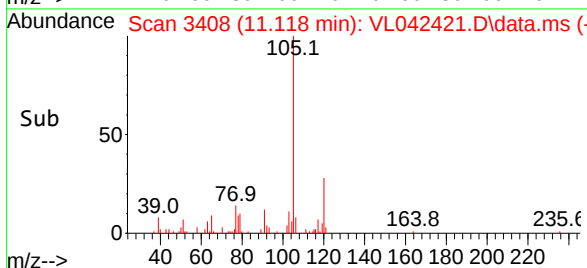
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

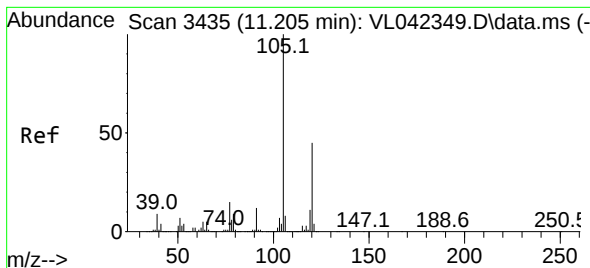


#72
4-Ethyltoluene
Concen: 0.163 ppbv
RT: 11.118 min Scan# 3408
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17



Tgt Ion:105 Resp: 10909
Ion Ratio Lower Upper
105 100
120 0.0 23.2 34.8#
91 0.0 10.4 15.6#
77 0.0 11.3 16.9#





#73

1,3,5-Trimethylbenzene

Concen: 0.200 ppbv

RT: 11.199 min Scan# 3435

Delta R.T. -0.006 min

Lab File: VL042421.D

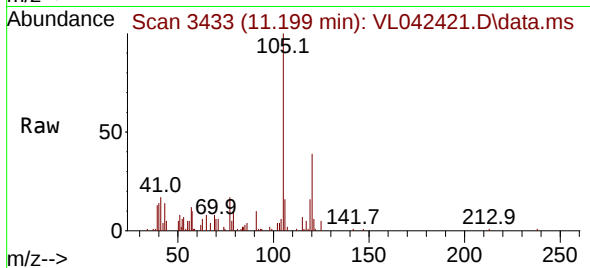
Acq: 28 Apr 2025 12:17

Instrument :

MSVOA_L

ClientSampleId :

IA-B2-6-3242025



Tgt Ion:105 Resp: 11852

Ion Ratio Lower Upper

105 100

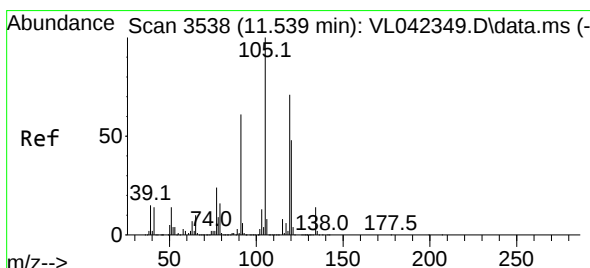
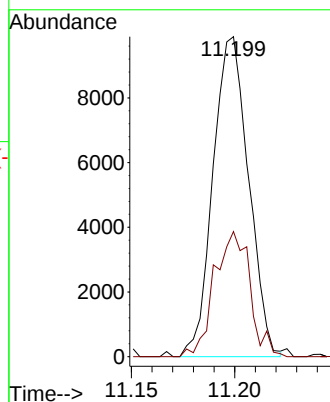
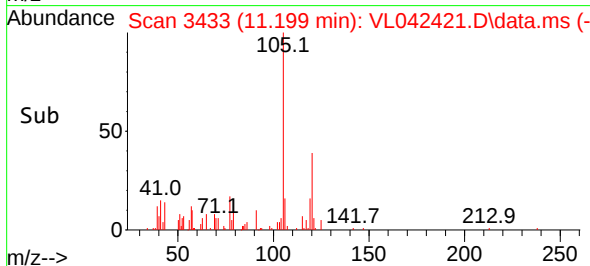
120 39.1 35.6 53.4

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 04/29/2025

Supervised By :Mahesh Dadoda 04/30/2025



#74

1,2,4-Trimethylbenzene

Concen: 0.657 ppbv

RT: 11.533 min Scan# 3536

Delta R.T. -0.006 min

Lab File: VL042421.D

Acq: 28 Apr 2025 12:17

Tgt Ion:105 Resp: 45414

Ion Ratio Lower Upper

105 100

120 34.6 38.1 57.1#

91 11.1 48.8 73.2#

77 11.8 19.0 28.4#

