

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL112921\
 Data File : VL038139.D
 Acq On : 29 Nov 2021 17:36
 Operator : SY/AP
 Sample : M4827-02
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA L
 ClientSampleId :
 IA-2

Manual Integrations
 APPROVED

Reviewed By : Semsettin Yesilyurt 11/30/2021
 Supervised By : Mahesh Dadoda 12/01/2021

Quant Time: Nov 30 06:29:53 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL111821A
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument:
 QLast Update : Thu Nov 18 13:16:09 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	935697	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	2563392	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.10	117	2169083	10.00	ppbv	0.02

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.42	95	1740768	11.13	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	111.30%

Target Compounds

					Ovalue
2) Dichlorodifluoromethane	3.06	85	31182	0.202 ppbv	95
3) Chlorodifluoromethane	3.01	51	62003	0.316 ppbv #	92
4) Chloromethane	3.15	50	30502	0.456 ppbv	100
7) Chloroethane	3.57	64	13900	0.597 ppbv	88
9) Propene	3.03	41	330760m	4.571 ppbv	
10) Heptane	8.12	43	36755m	0.205 ppbv	
11) Trichlorofluoromethane	3.96	101	32561m	0.222 ppbv	
13) Ethanol	3.61	45	629221	89.973 ppbv	92
15) Acetone	3.86	43	394687	4.865 ppbv	95
16) 1,3-Butadiene	3.34	39	28014m	0.443 ppbv	
19) Isopropyl Alcohol	3.98	45	216030	3.685 ppbv #	96
20) Methylene Chloride	4.35	84	980387	21.575 ppbv	99
26) Hexane	5.69	57	514773	3.961 ppbv #	45
29) Chloroform	5.75	83	284700	1.486 ppbv	97
31) cis-1,2-Dichloroethene	5.55	61	15561m	0.126 ppbv	
34) 2-Butanone	5.26	43	25323m	0.245 ppbv	
35) Carbon Tetrachloride	7.02	117	11598m	0.064 ppbv	
36) Benzene	6.89	78	2892206	11.311 ppbv	99
38) Trichloroethene	7.84	130	14938	0.155 ppbv #	76
42) Bromodichloromethane	7.79	83	21867m	0.116 ppbv	
52) Tetrachloroethene	11.30	164	32446212	342.933 ppbv	87
53) Toluene	9.81	91	118330	0.402 ppbv	99
58) Ethyl Benzene	12.72	91	49128m	0.137 ppbv	
59) m/p-Xylene	12.98	91	150987m	0.500 ppbv	
60) o-Xylene	13.69	91	62002	0.221 ppbv	99
72) 4-Ethyltoluene	15.85	105	52902m	0.163 ppbv	
73) 1,3,5-Trimethylbenzene	16.00	105	41812	0.141 ppbv #	84
74) 1,2,4-Trimethylbenzene	16.76	105	121901	0.399 ppbv #	64
79) Naphthalene	22.19	128	231508	1.439 ppbv	98

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

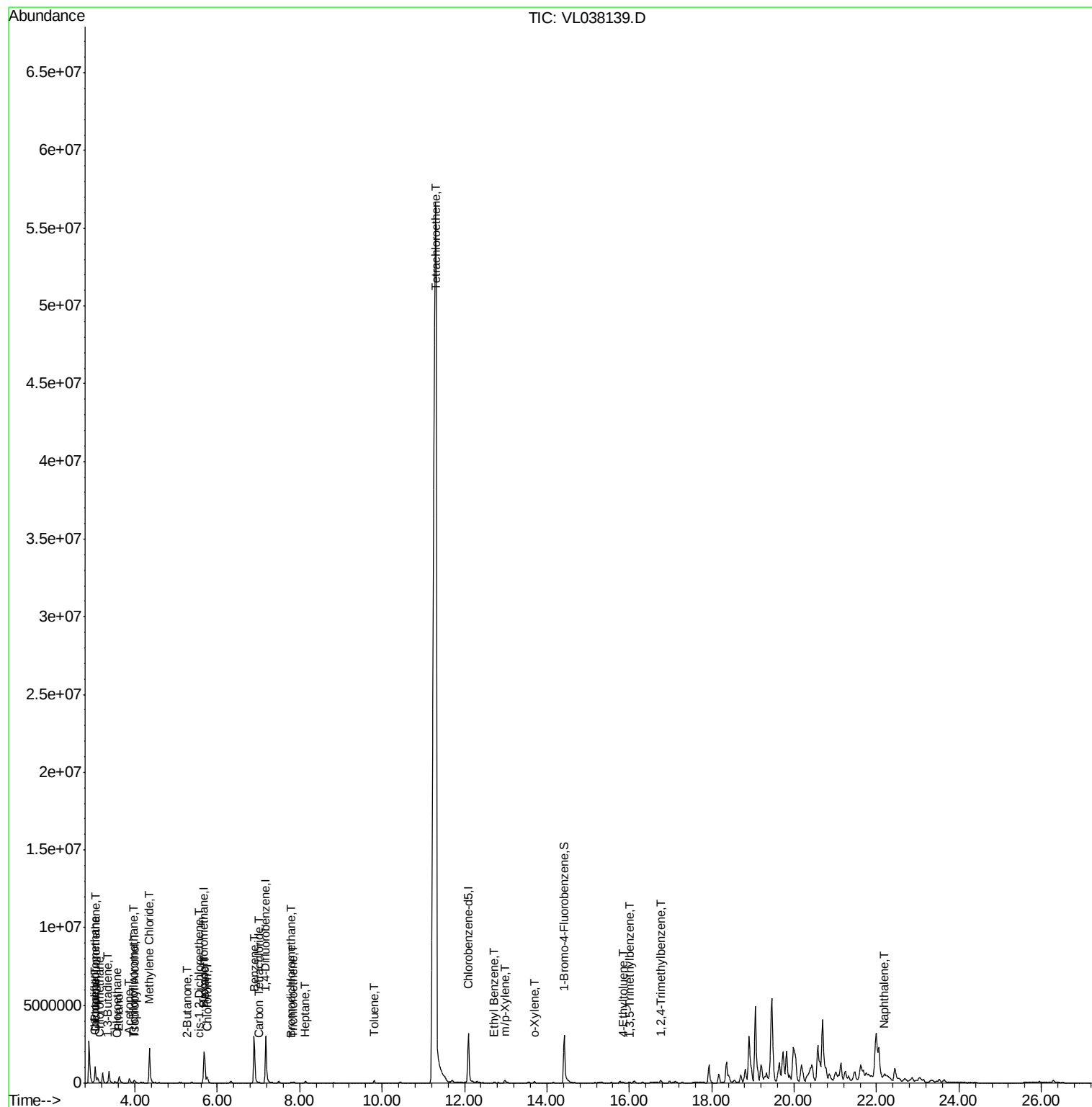
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL112921\
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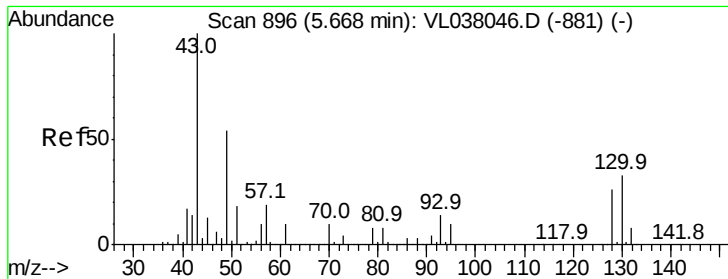
Instrument :
MSVOA_L
ClientSampleId :
IA-2

Quant Time: Nov 30 06:29:53 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL111821
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument:
QLast Update : Thu Nov 18 13:16:09 2021
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Supervised By :Mahesh Dadoda 12/01/2021





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 29 Nov 2021 17:30

Tot Ion:

Ion Ratio

49 100

128 47.

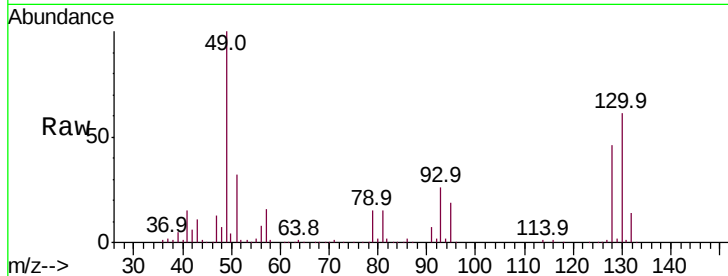
130 62.

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 11/30/2021

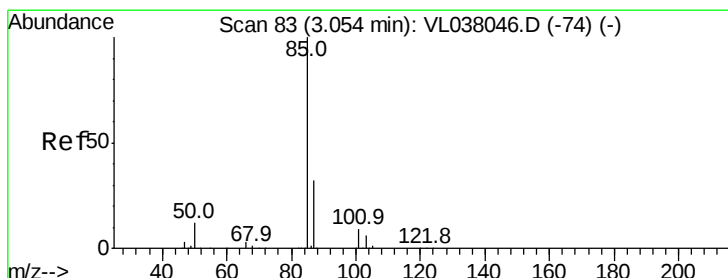
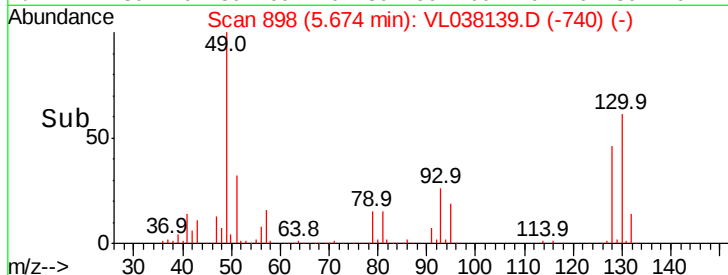
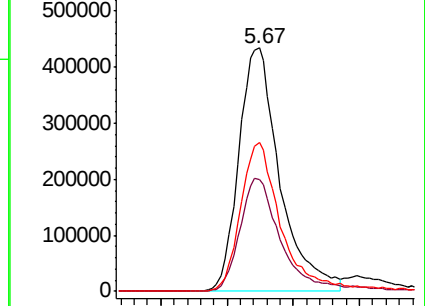
Supervised By :Mahesh Dadoda 12/01/2021



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.202 ppbv

RT: 3.06 min Scan# 85

Delta R.T. 0.01 min

Lab File: VL038139.D

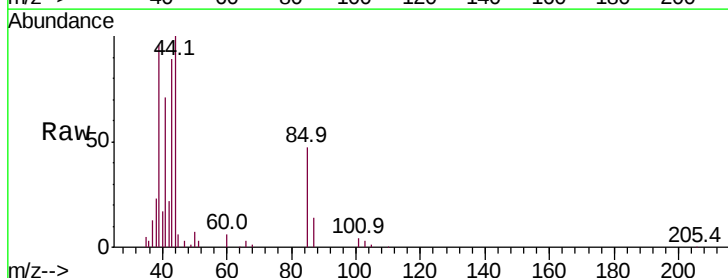
Acq: 29 Nov 2021 17:36

Tgt Ion: 85 Resp: 31182

Ion Ratio Lower Upper

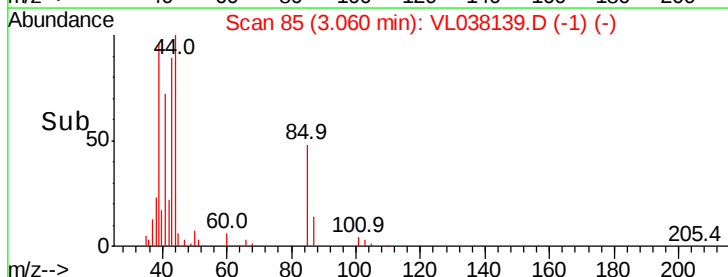
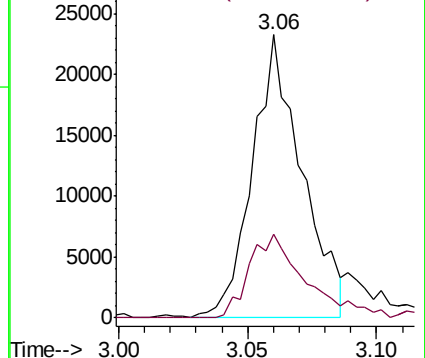
85 100

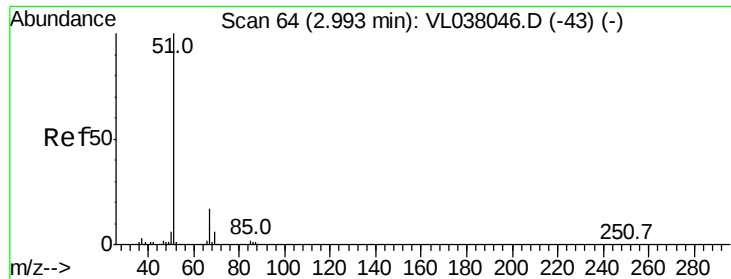
87 29.5 25.8 38.6



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.316 ppbv

RT: 3.01

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 29 Nov 2021 17:30

Tot Ion:

Ion Ratio

51 100

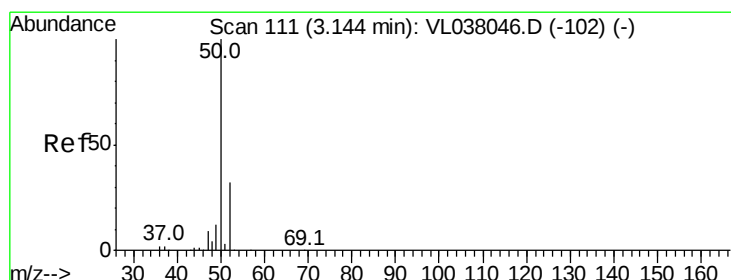
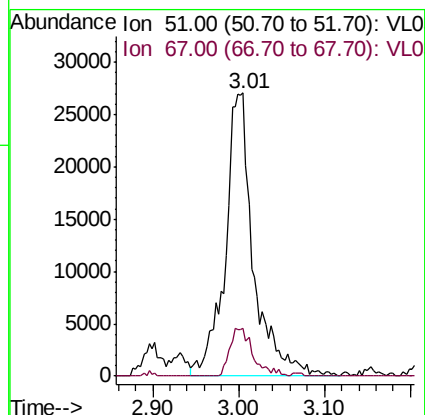
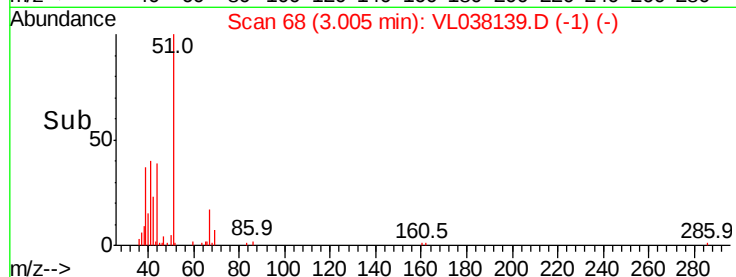
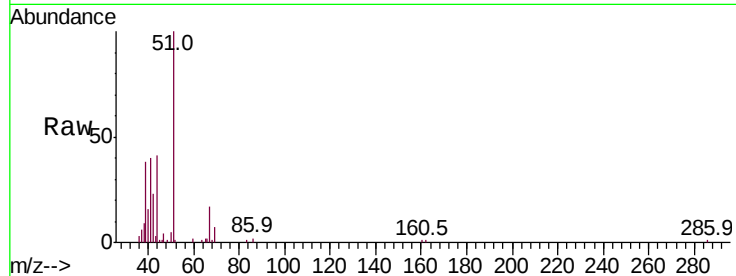
67 13.

Manual Integrations

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#4

Chloromethane

Concen: 0.456 ppbv

RT: 3.15 min Scan# 114

Delta R.T. 0.01 min

Lab File: VL038139.D

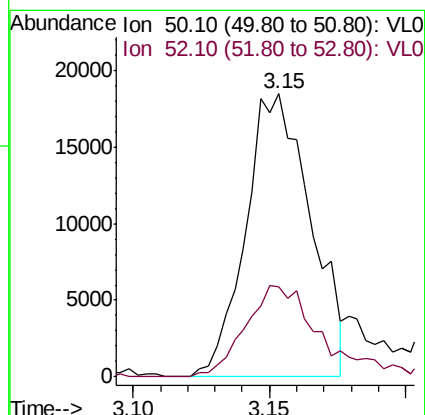
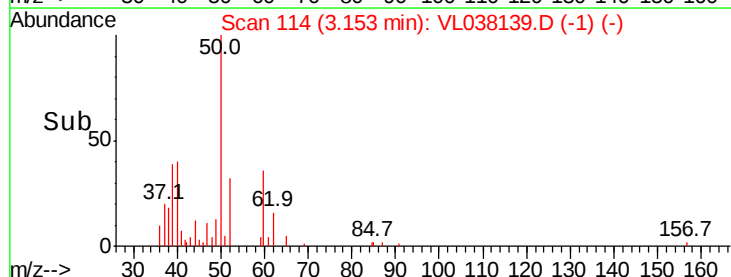
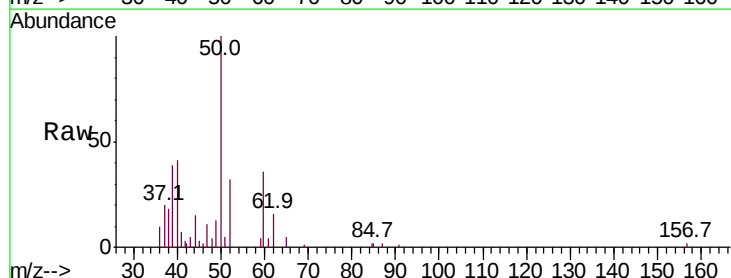
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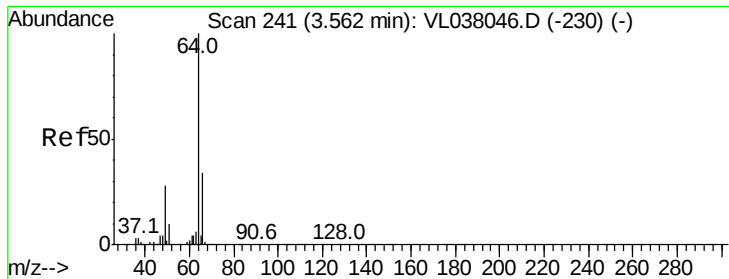
Tgt Ion: 50 Resp: 30502

Ion Ratio Lower Upper

50 100

52 31.8 25.4 38.0





#7

Chloroethane

Concen: 0.597 ppbv

RT: 3.57 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 29 Nov 2021 17:30

Tot Ion:

Ion Ratio

64 100

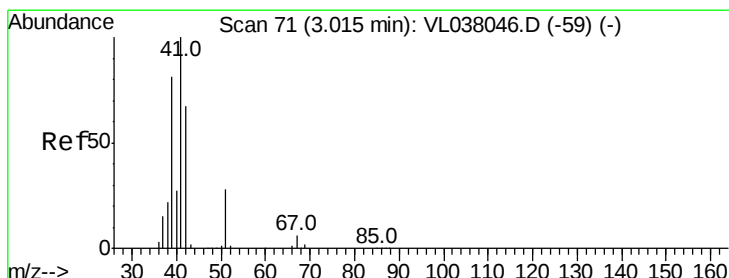
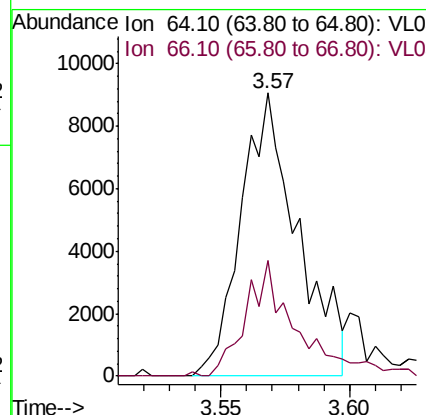
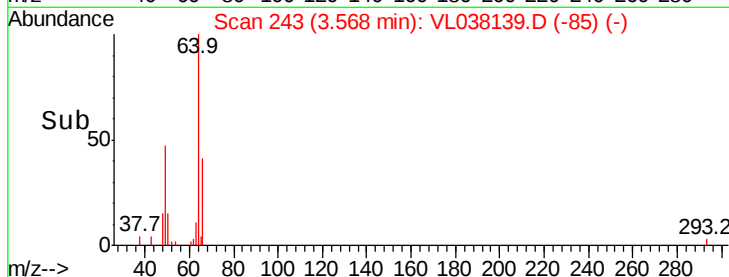
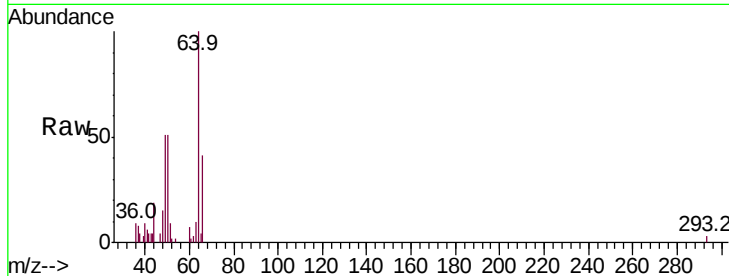
66 40.

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#9

Propene

Concen: 4.571 ppbv m

RT: 3.03 min Scan# 77

Delta R.T. 0.02 min

Lab File: VL038139.D

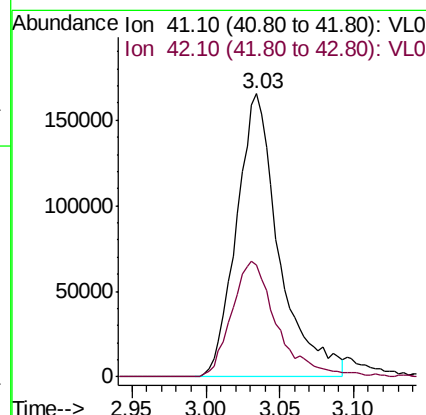
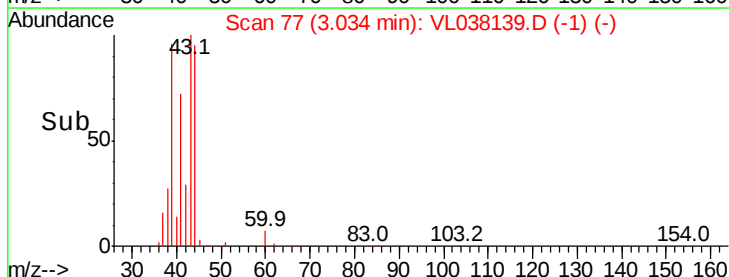
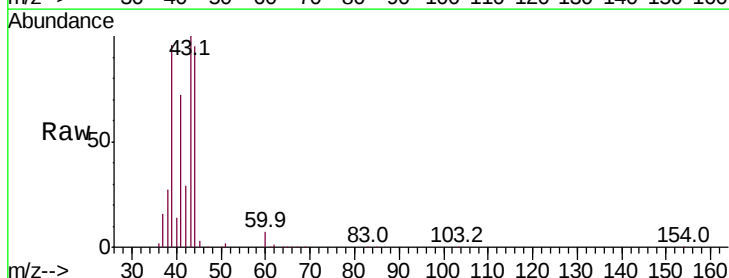
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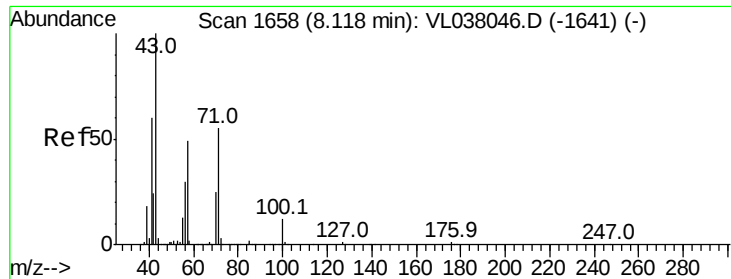
Tgt Ion: 41 Resp: 330760

Ion Ratio Lower Upper

41 100

42 46.5 53.8 80.8#





#10

Heptane

Concen: 0.205 ppbv m

RT: 8.12

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 29 Nov 2021 17:30

Tot Ion:

Ion Ratio

43 100

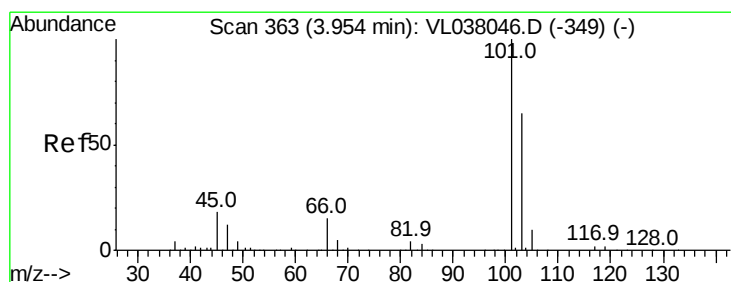
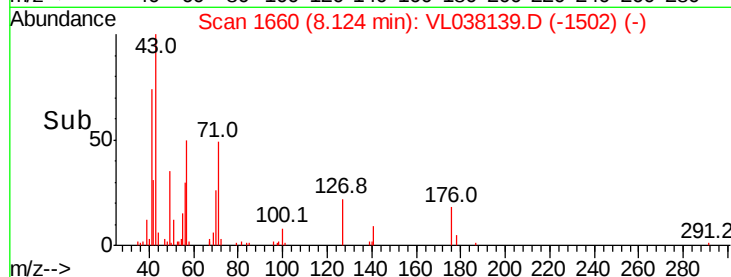
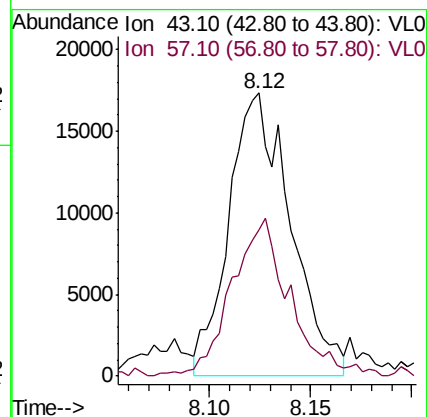
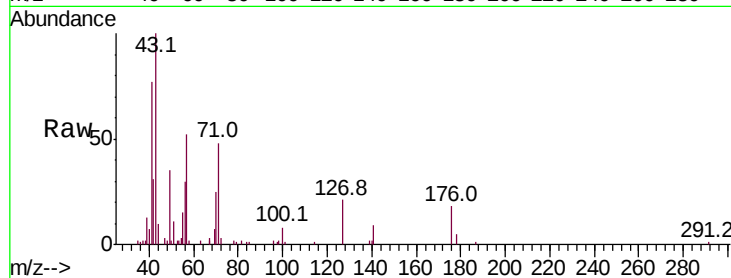
57 52.

Manual Integrations

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Supervised By :Mahesh Dadoda 12/01/2021



#11

Trichlorofluoromethane

Concen: 0.222 ppbv m

RT: 3.96 min Scan# 364

Delta R.T. 0.00 min

Lab File: VL038139.D

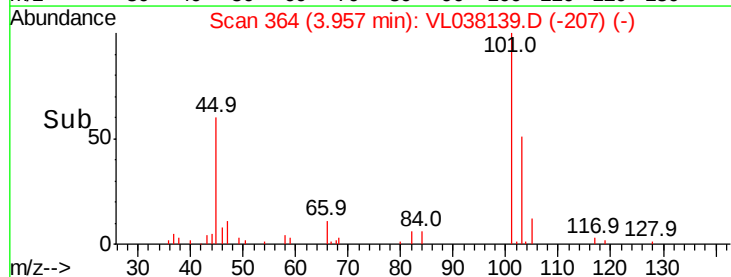
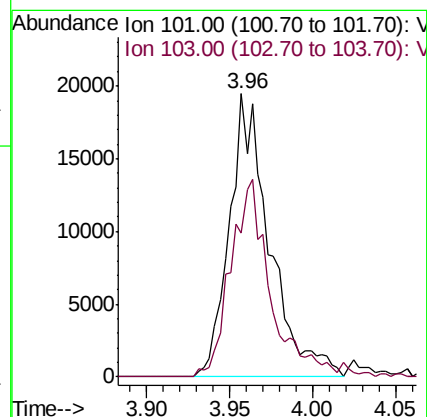
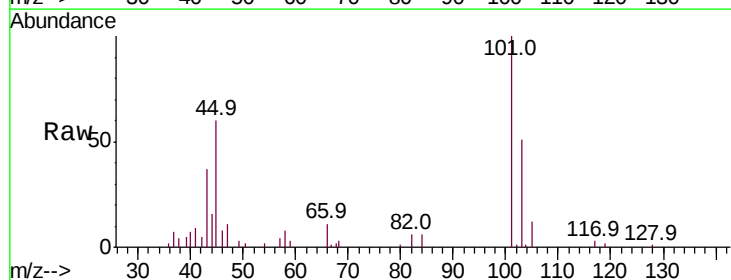
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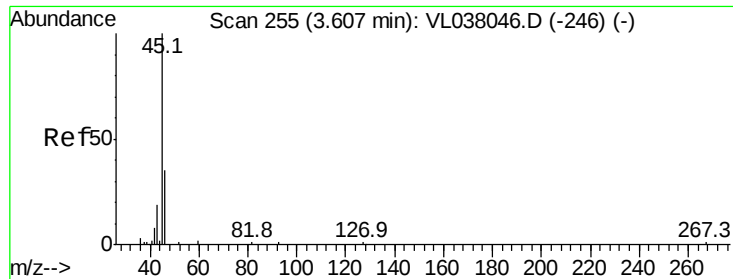
Tgt Ion:101 Resp: 32561

Ion Ratio Lower Upper

101 100

103 51.0 51.8 77.6#



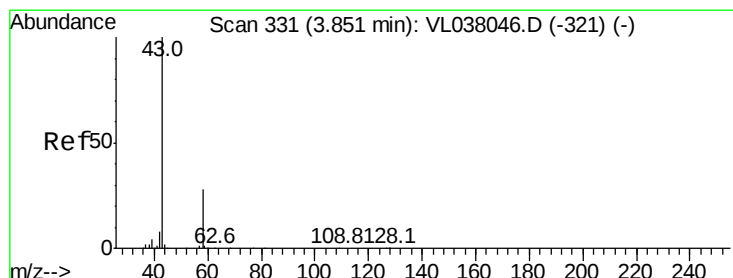
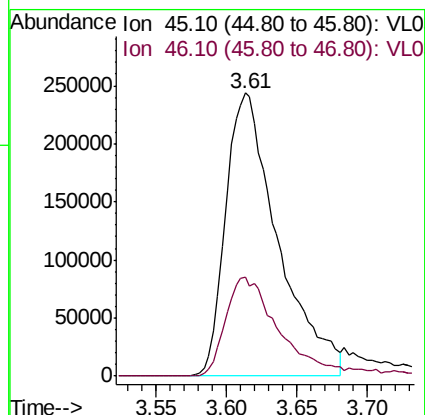
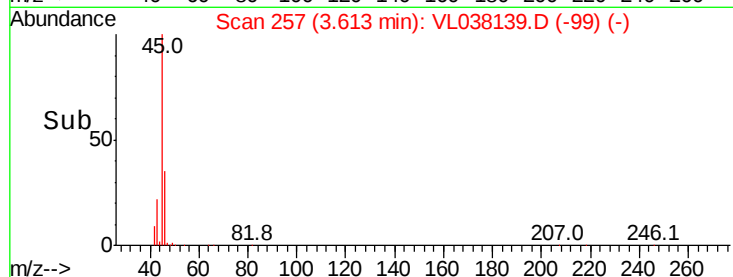
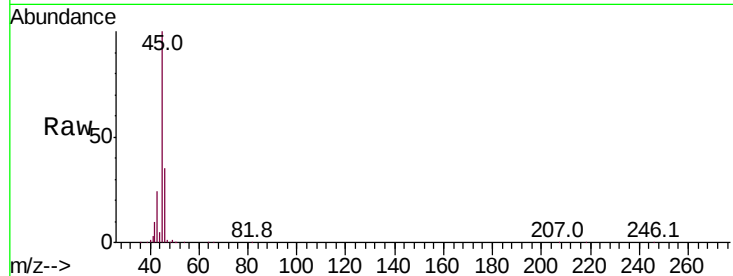


#13
Ethanol
Concen: 89.973 ppbv
RT: 3.61
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 29 Nov 2021 17:30

Tot Ion:
Ion Rati
45 100
46 39.

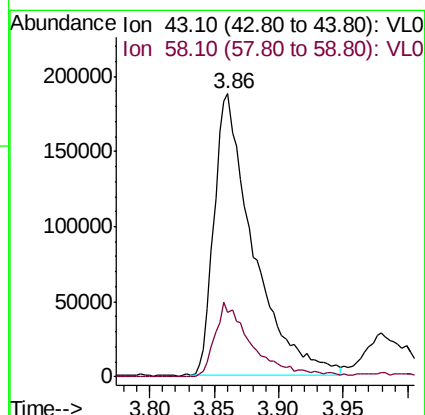
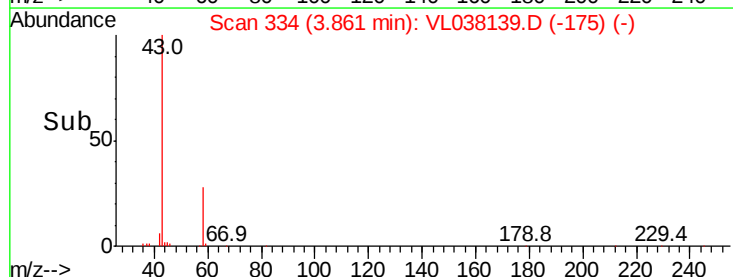
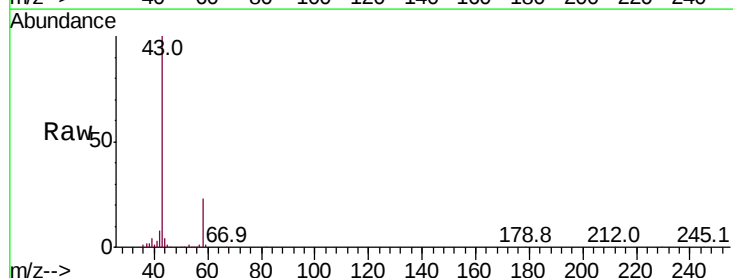
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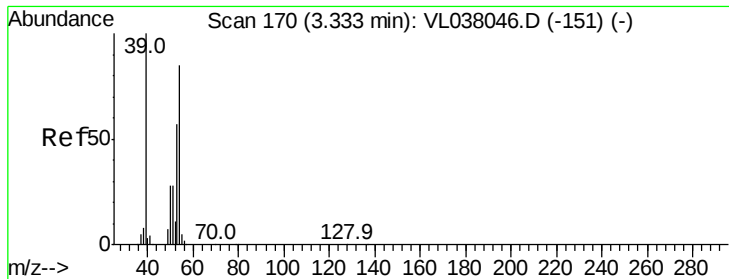
Reviewed By :Semsettin Yesilyurt 11/30/2021
Supervised By :Mahesh Dadoda 12/01/2021



#15
Acetone
Concen: 4.865 ppbv
RT: 3.86 min Scan# 334
Delta R.T. 0.01 min
Lab File: VL038139.D
Acq: 29 Nov 2021 17:36

Tgt Ion: 43 Resp: 394687
Ion Ratio Lower Upper
43 100
58 25.4 22.4 33.6



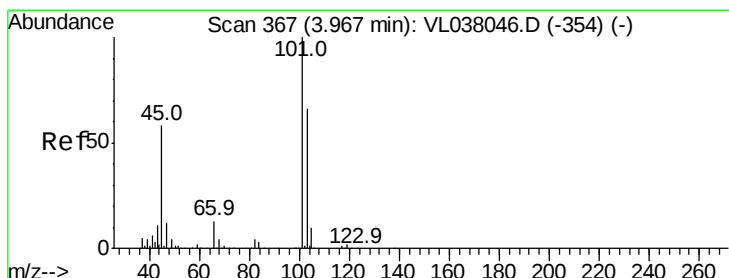
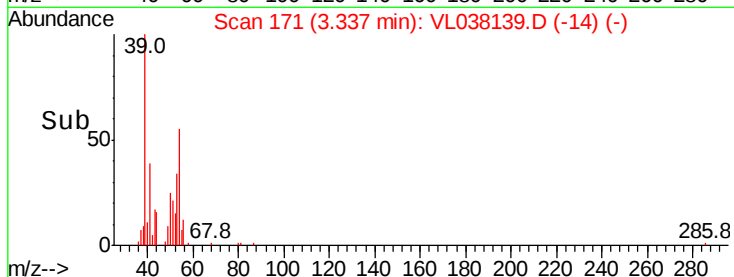
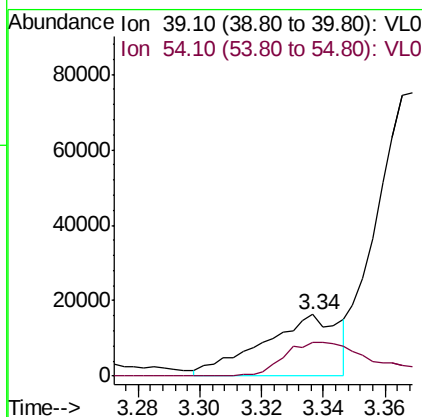
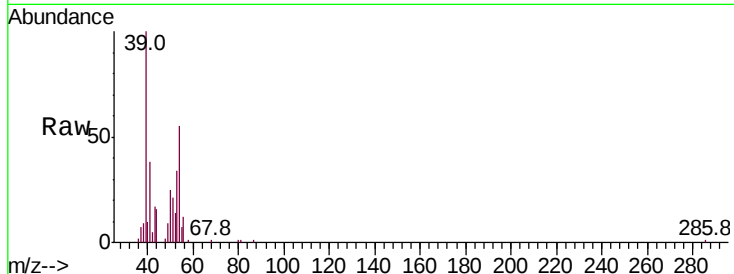


#16
 1,3-Butadiene
 Concen: 0.443 ppbv m
 RT: 3.34
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId :
 Acq: 29 Nov 2021 17:30

Tot Ion:
 Ion Ratio
 39 100
 54 70.

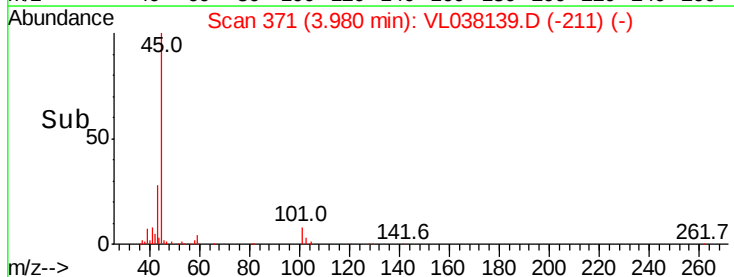
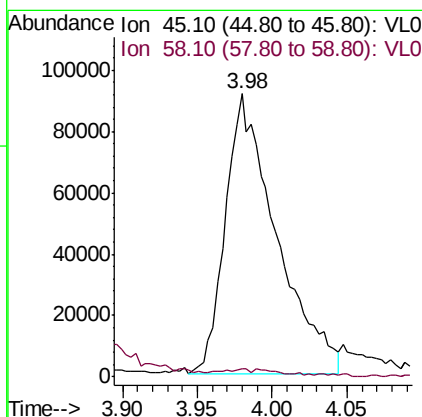
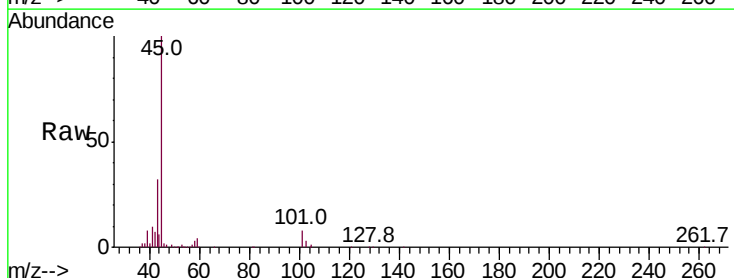
Manual Integrations
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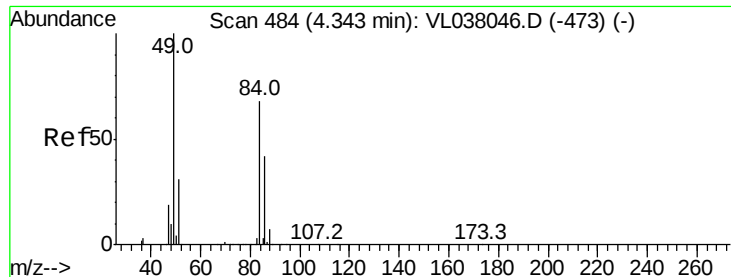
Reviewed By :Semsettin Yesilyurt 11/30/2021
 Supervised By :Mahesh Dadoda 12/01/2021



#19
 Isopropyl Alcohol
 Concen: 3.685 ppbv
 RT: 3.98 min Scan# 371
 Delta R.T. 0.01 min
 Lab File: VL038139.D
 Acq: 29 Nov 2021 17:36

Tgt Ion: 45 Resp: 216030
 Ion Ratio Lower Upper
 45 100
 58 3.3 1.4 2.0#



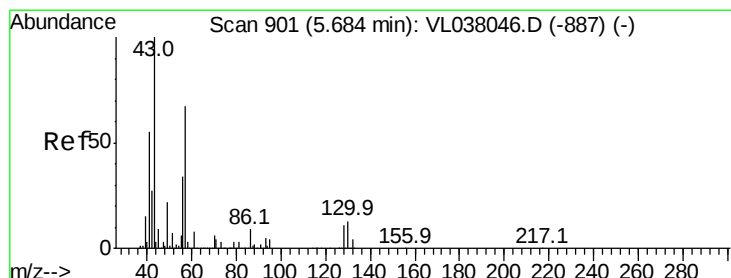
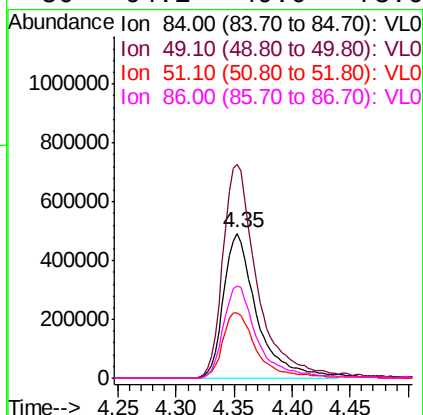
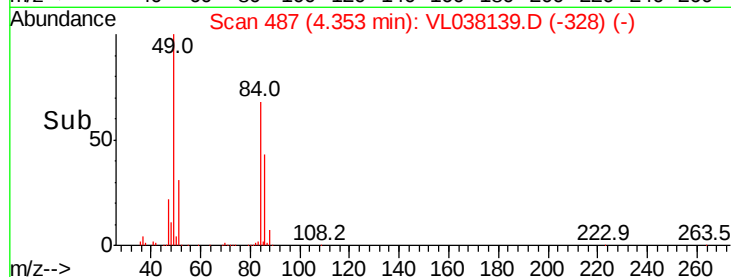
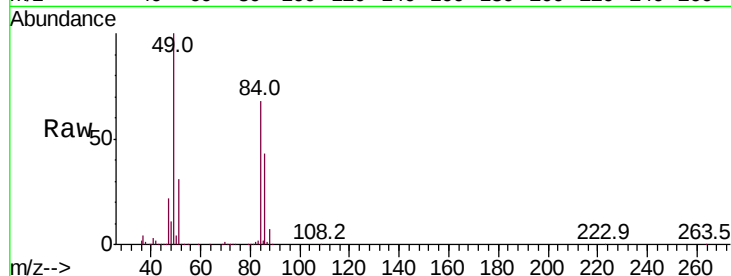


#20
Methvlene Chloride
Concen: 21.575 ppbv
RT: 4.35
Instrument : MSVOA_1
Delta R.T.
Lab File: ClientSampleId :
Acq: 29 Nov 2021 17:30

Tot Ion:
Ion Ratio
84 100
49 147.
51 45.
86 64.1 49.0 73.6

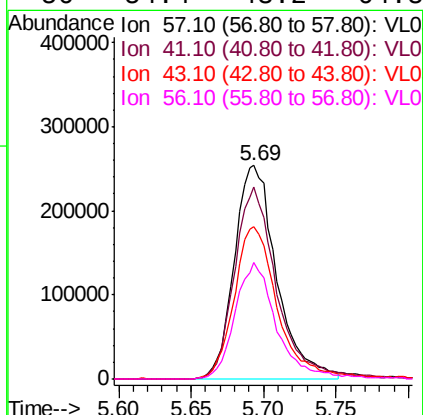
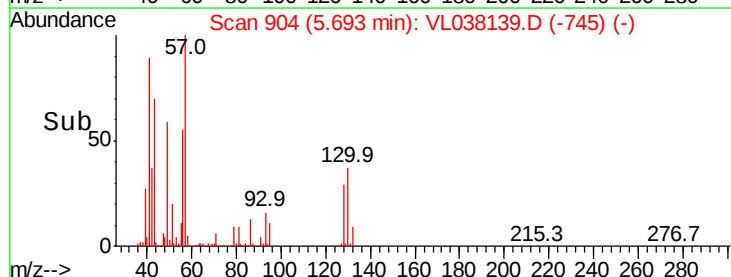
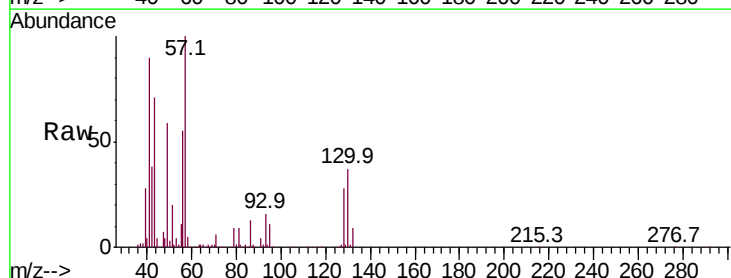
Manual Integrations
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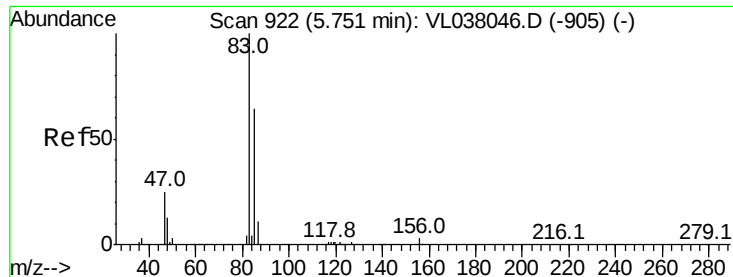
Reviewed By :Semsettin Yesilyurt 11/30/2021
Supervised By :Mahesh Dadoda 12/01/2021



#26
Hexane
Concen: 3.961 ppbv
RT: 5.69 min Scan# 904
Delta R.T. 0.01 min
Lab File: VL038139.D
Acq: 29 Nov 2021 17:36

Tgt Ion: 57 Resp: 514773
Ion Ratio Lower Upper
57 100
41 90.8 71.4 107.2
43 74.5 174.6 261.8#
56 54.4 43.2 64.8



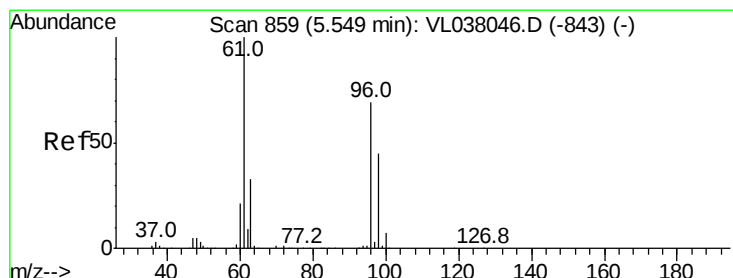
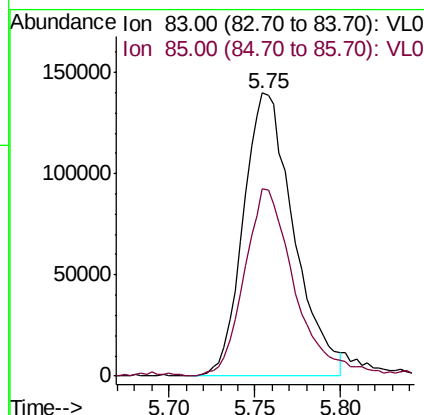
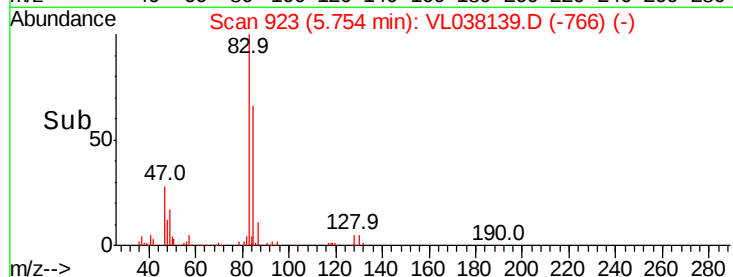
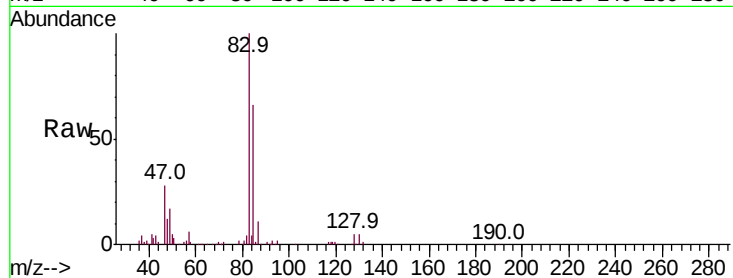


#29
Chloroform
Concen: 1.486 ppbv
RT: 5.75
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 29 Nov 2021 17:30

Tot Ion:
Ion Rati
83 100
85 65.

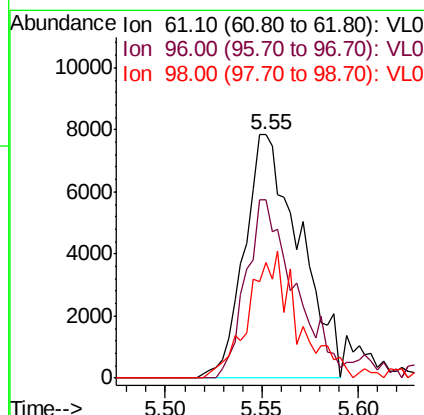
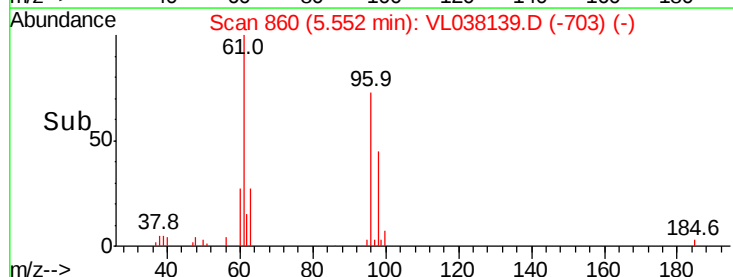
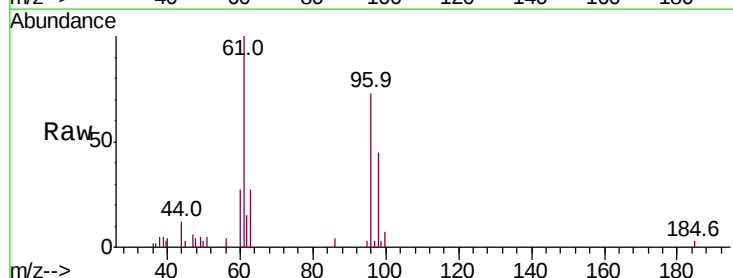
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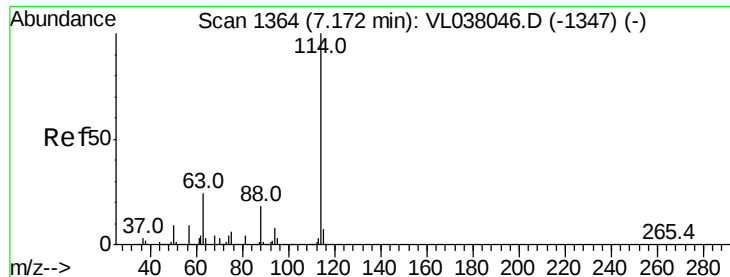
Reviewed By :Semsettin Yesilyurt 11/30/2021
Supervised By :Mahesh Dadoda 12/01/2021



#31
cis-1,2-Dichloroethene
Concen: 0.126 ppbv m
RT: 5.55 min Scan# 860
Delta R.T. 0.00 min
Lab File: VL038139.D
Acq: 29 Nov 2021 17:36

Tgt Ion: 61 Resp: 15561
Ion Ratio Lower Upper
61 100
96 73.0 55.4 83.2
98 44.7 35.7 53.5





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.18

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 29 Nov 2021 17:30

Tot Ion:1

Ion Rati

114 100

63 26.

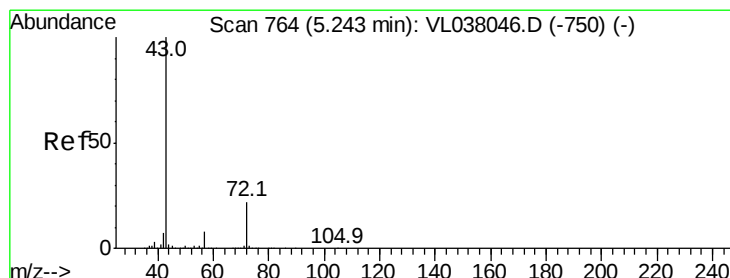
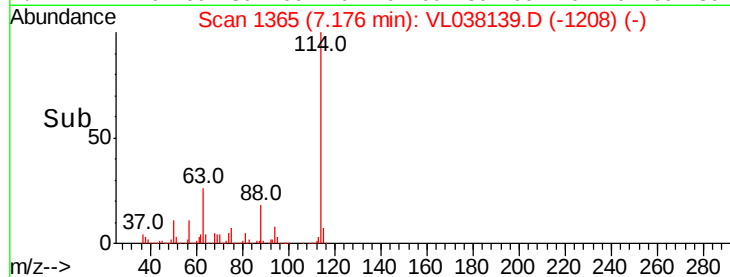
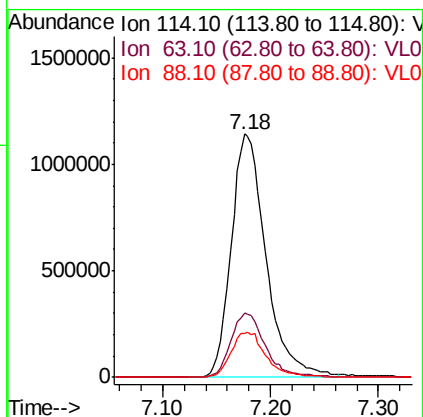
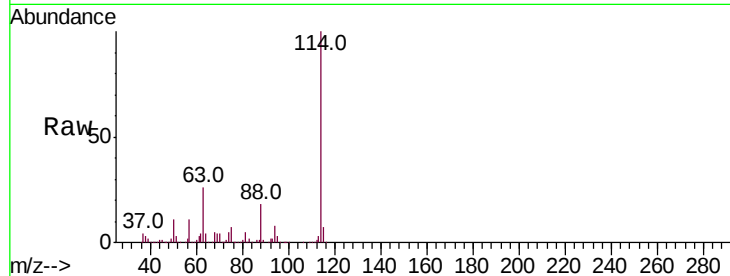
88 18.

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Reviewed By :Semsettin Yesilyurt 11/30/2021

Supervised By :Mahesh Dadoda 12/01/2021



#34

2-Butanone

Concen: 0.245 ppbv m

RT: 5.26 min Scan# 769

Delta R.T. 0.02 min

Lab File: VL038139.D

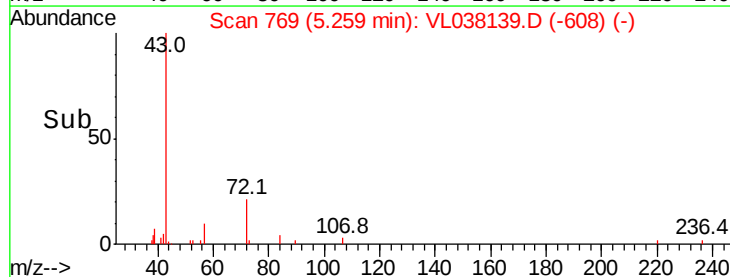
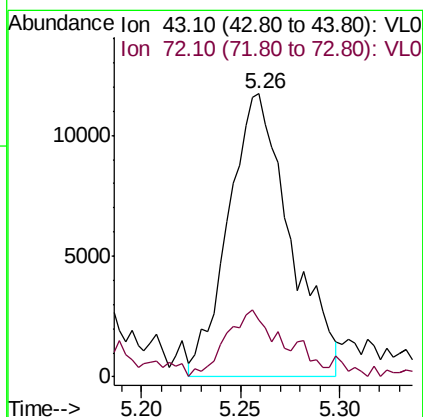
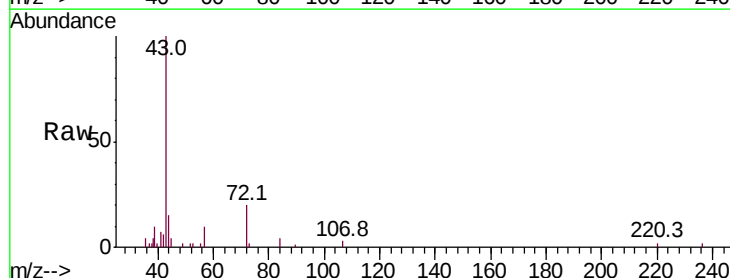
Acq: 29 Nov 2021 17:36

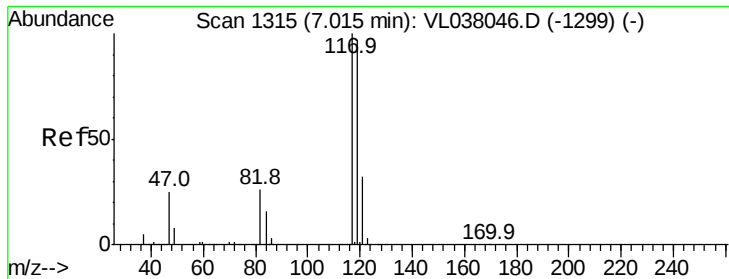
Tgt Ion: 43 Resp: 25323

Ion Ratio Lower Upper

43 100

72 23.9 18.8 28.2





#35

Carbon Tetrachloride

Concen: 0.064 ppbv m

RT: 7.02 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 29 Nov 2021 17:30

Tot Ion:1

Ion Rati

117 100

119 93.

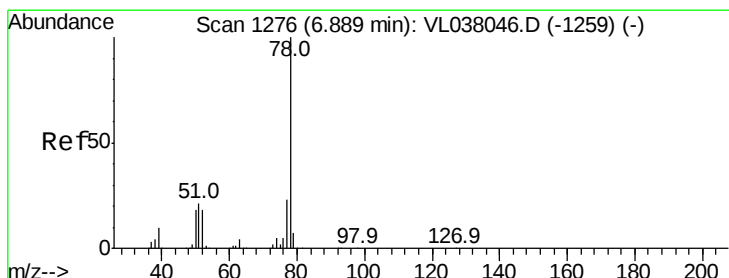
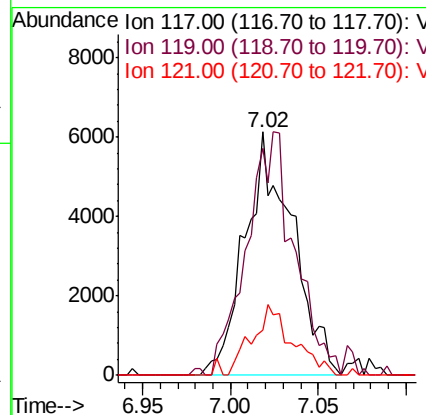
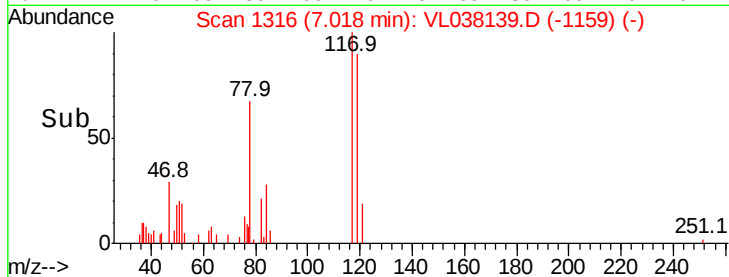
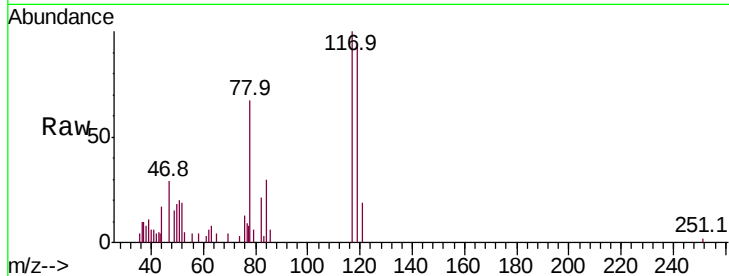
121 18.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 11/30/2021

Supervised By :Mahesh Dadoda 12/01/2021



#36

Benzene

Concen: 11.311 ppbv

RT: 6.89 min Scan# 1277

Delta R.T. 0.00 min

Lab File: VL038139.D

Acq: 29 Nov 2021 17:36

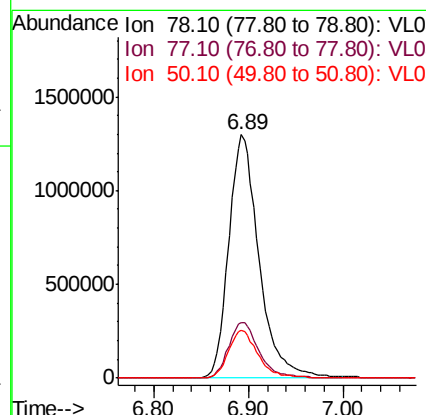
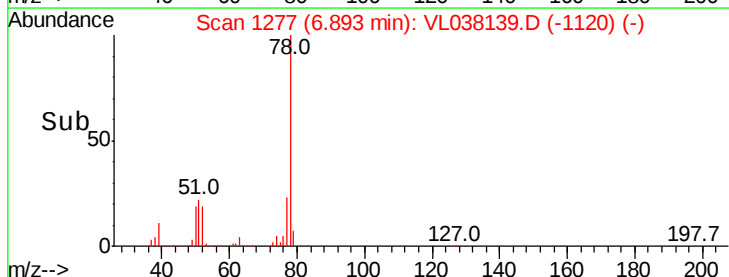
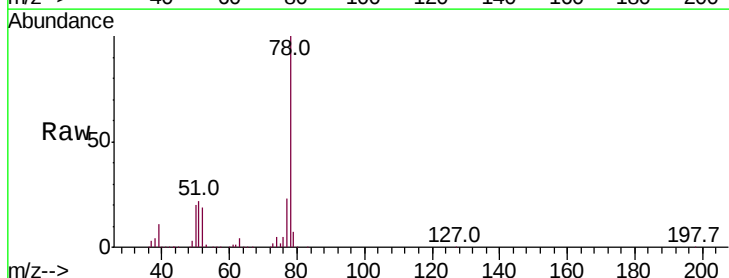
Tgt Ion: 78 Resp: 2892206

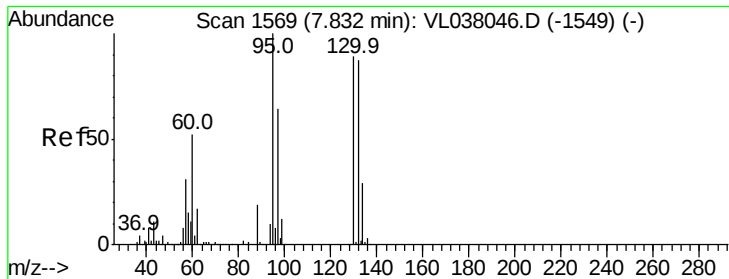
Ion Ratio Lower Upper

78 100

77 22.6 18.2 27.4

50 19.5 14.7 22.1



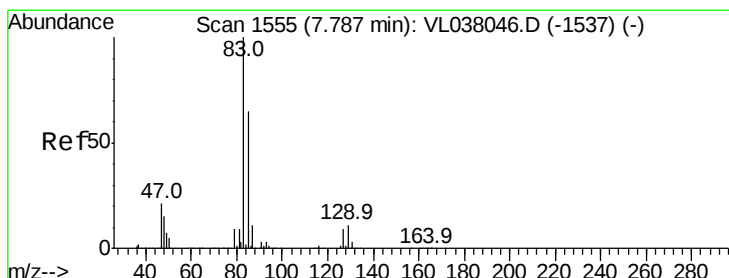
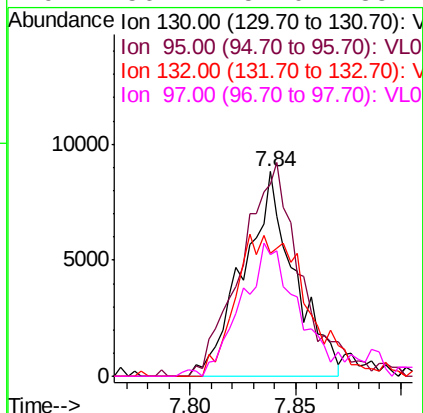
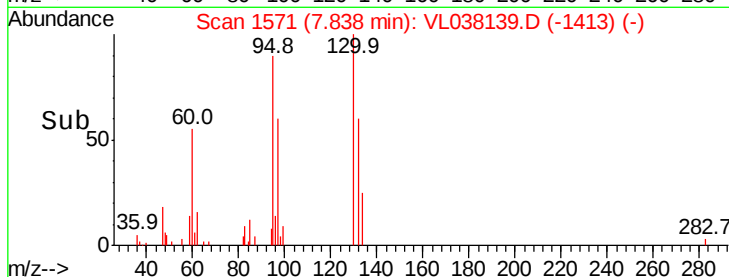
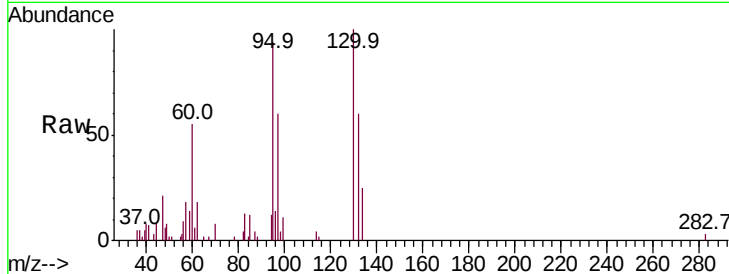


#38
 Trichloroethene
 Concen: 0.155 ppbv
 RT: 7.84
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId :
 Acq: 29 Nov 2021 17:30

Tot Ion: 1
 Ion Ratio
 130 100
 95 93.
 132 60.
 97 56.7 57.0 85.4#

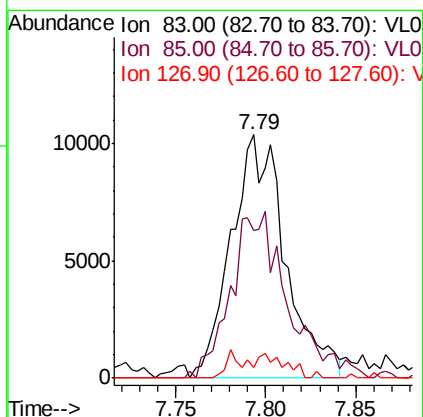
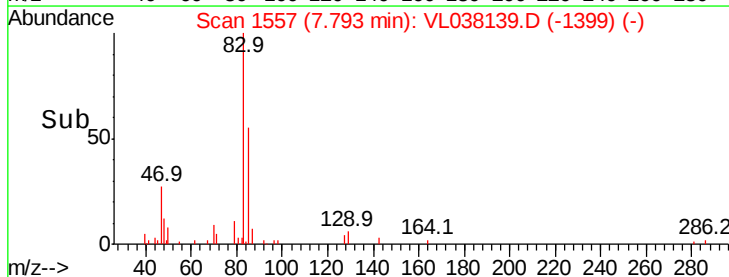
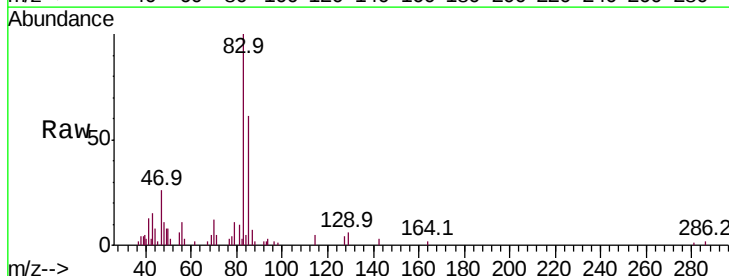
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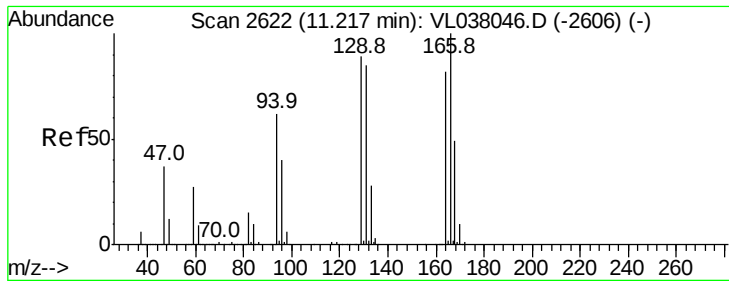
Reviewed By : Semsettin Yesilyurt 11/30/2021
 Supervised By : Mahesh Dadoda 12/01/2021



#42
 Bromodichloromethane
 Concen: 0.116 ppbv m
 RT: 7.79 min Scan# 1557
 Delta R.T.: 0.01 min
 Lab File: VL038139.D
 Acq: 29 Nov 2021 17:36

Tgt Ion: 83 Resp: 21867
 Ion Ratio Lower Upper
 83 100
 85 60.8 51.9 77.9
 127 4.4 6.8 10.2#





#52

Tetrachloroethene

Concen: 342.933 ppbv

RT: 11.30

Delta R.T. MSVOA_L

Lab File:

ClientSampleId :

Acq: 29 Nov 2021 17:30

Tot Ion:1

Ion Ratio

164 100

166 107.

129 92.

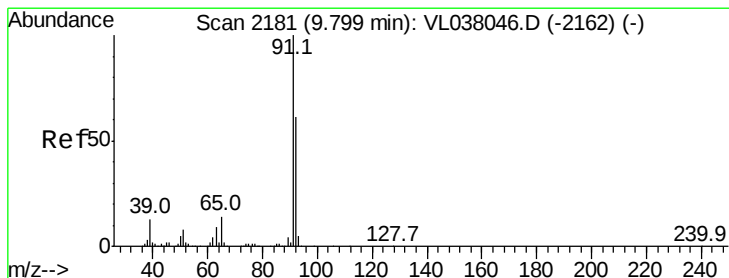
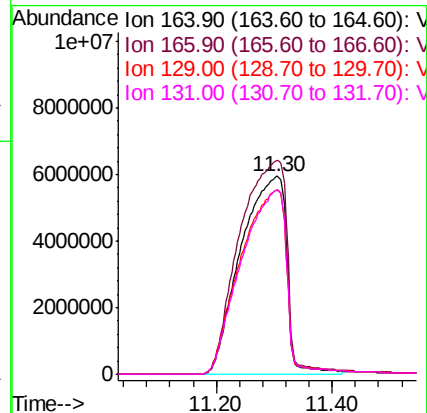
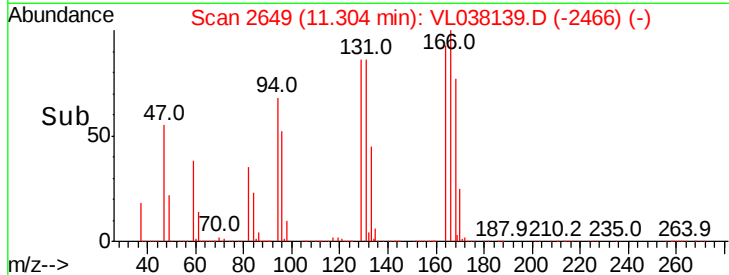
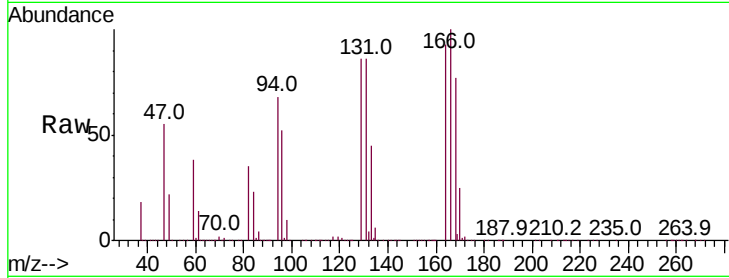
131 92.8

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Reviewed By :Semsettin Yesilyurt 11/30/2021

Supervised By :Mahesh Dadoda 12/01/2021



#53

Toluene

Concen: 0.402 ppbv

RT: 9.81 min Scan# 2183

Delta R.T. 0.01 min

Lab File: VL038139.D

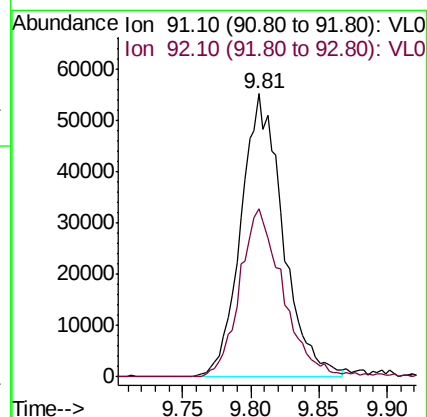
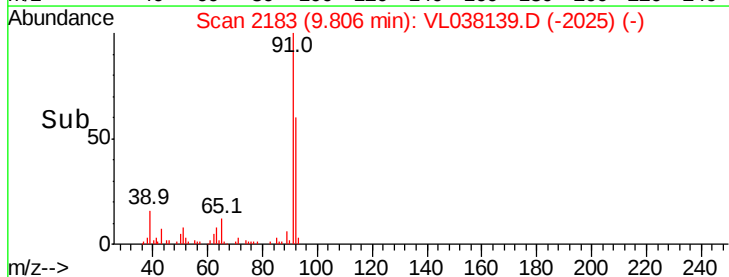
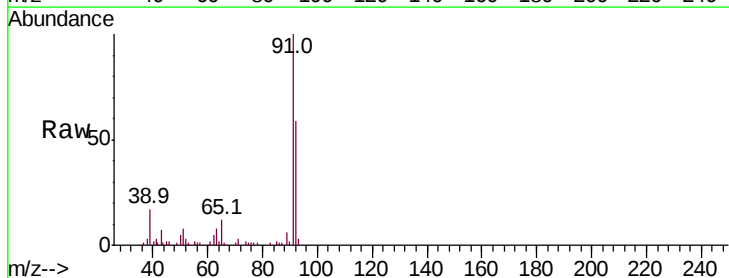
Acq: 29 Nov 2021 17:36

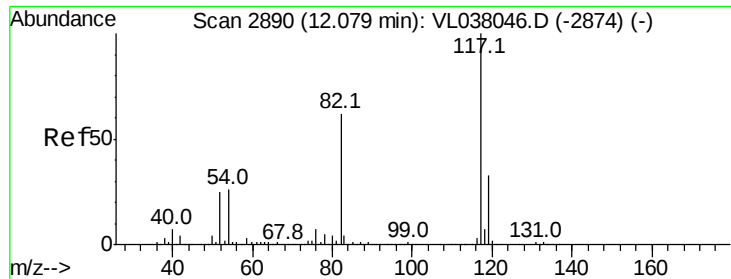
Tgt Ion: 91 Resp: 118330

Ion Ratio Lower Upper

91 100

92 61.6 49.7 74.5



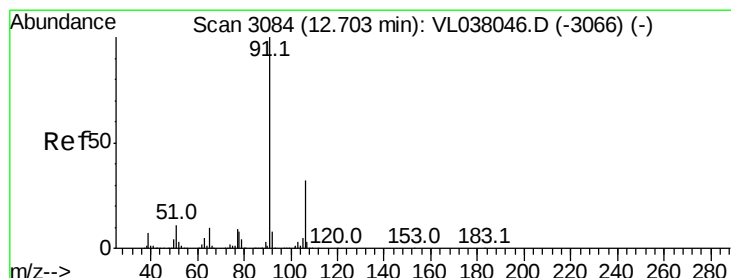
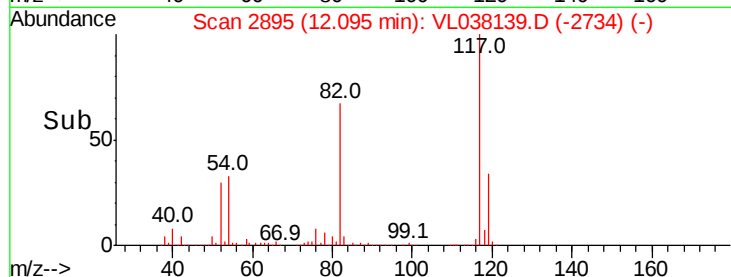
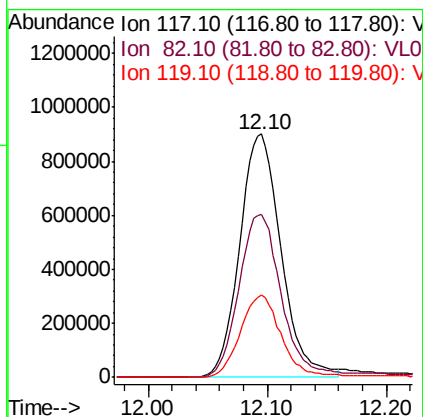
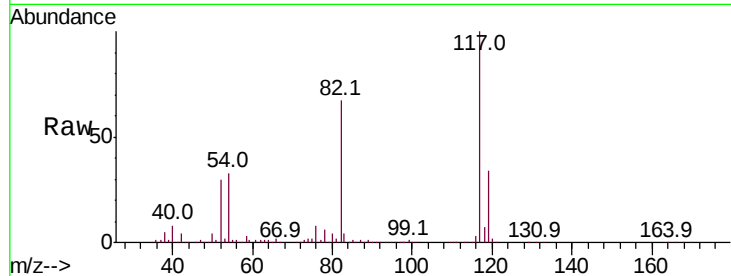


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.10 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
Acq: 29 Nov 2021 17:36

Tot Ion: 1
Ion Ratio
117 100
82 71.
119 34.

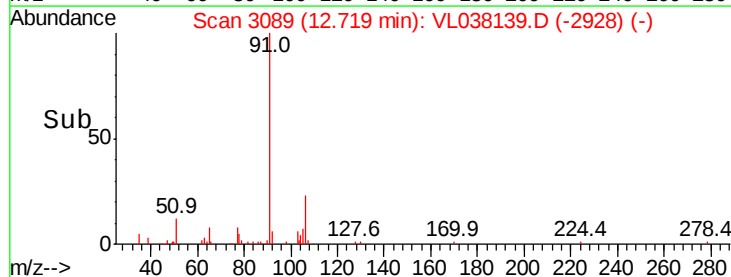
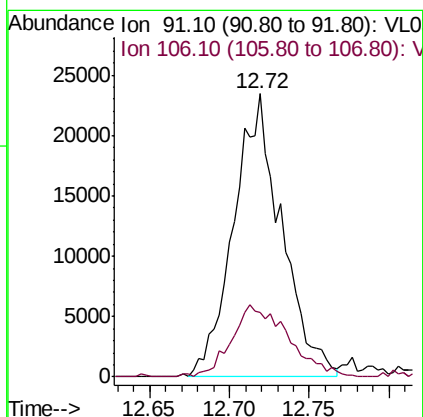
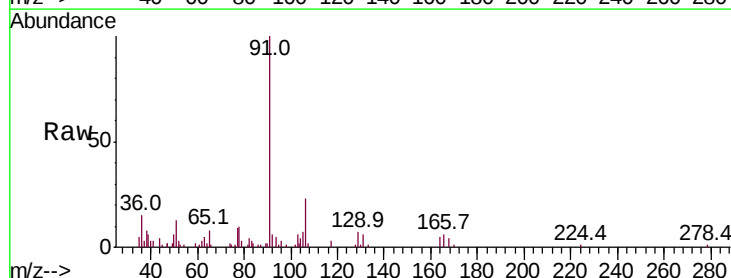
Manual Integrations
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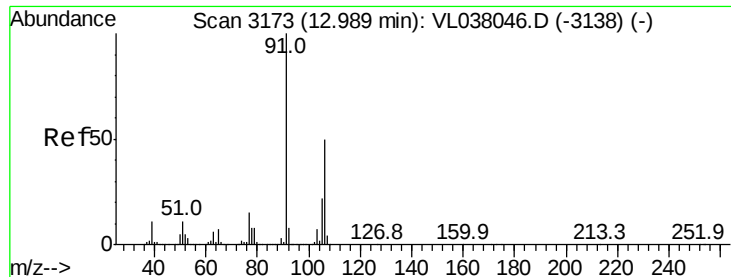
Reviewed By : Semsettin Yesilyurt 11/30/2021
Supervised By : Mahesh Dadoda 12/01/2021



#58
Ethyl Benzene
Concen: 0.137 ppbv m
RT: 12.72 min Scan# 3089
Delta R.T. 0.02 min
Lab File: VL038139.D
Acq: 29 Nov 2021 17:36

Tgt Ion: 91 Resp: 49128
Ion Ratio Lower Upper
91 100
106 22.6 25.8 38.6#





#59

m/p-Xylene

Concen: 0.500 ppbv m

RT: 12.98

Delta R.T. MSVOA_L

Lab File: ClientSampled :

Acq: 29 Nov 2021 17:30

Tot Ion:

Ion Ratio

91 100

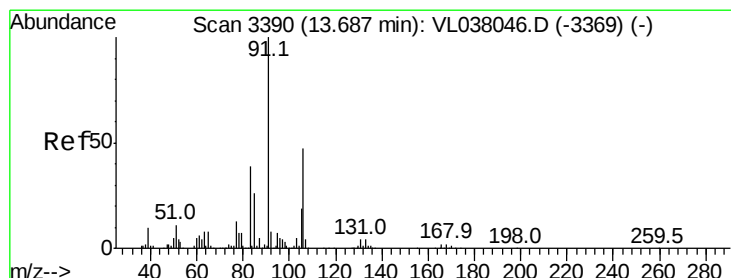
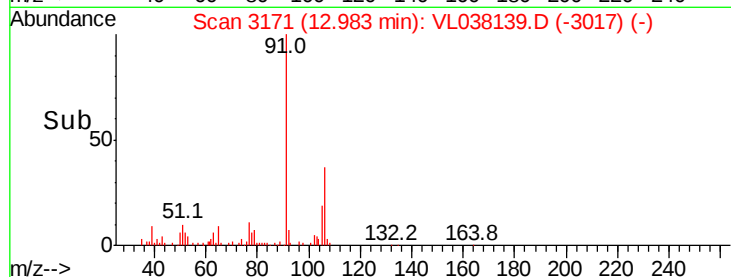
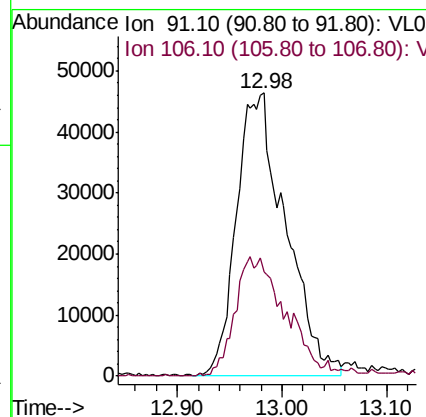
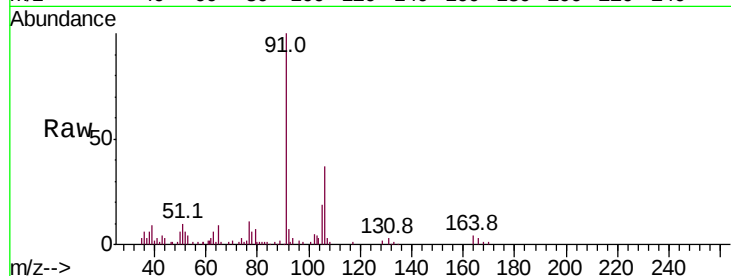
106 0.

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 11/30/2021

Supervised By :Mahesh Dadoda 12/01/2021



#60

o-Xylene

Concen: 0.221 ppbv

RT: 13.69 min Scan# 3392

Delta R.T. 0.01 min

Lab File: VL038139.D

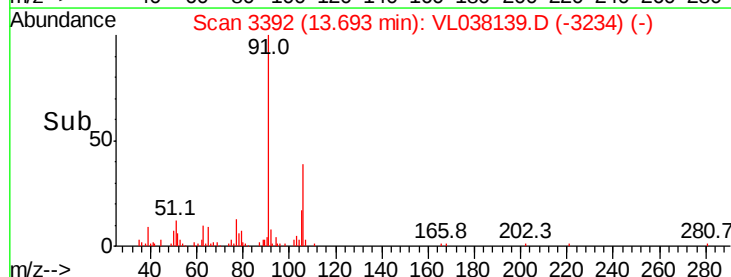
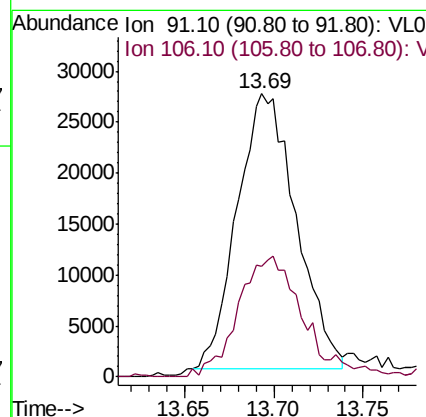
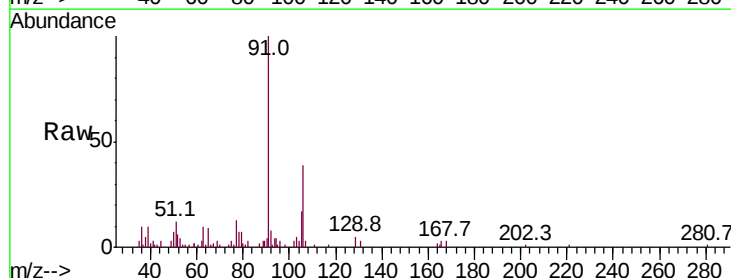
Acq: 29 Nov 2021 17:36

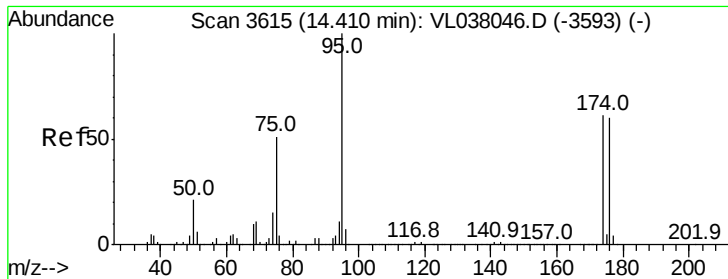
Tgt Ion: 91 Resp: 62002

Ion Ratio Lower Upper

91 100

106 49.2 24.2 72.6





#68

1-Bromo-4-Fluorobenzene

Concen: 11.126 ppbv

RT: 14.42

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 29 Nov 2021 17:30

Tot Ion:

Ion Ratio

95 100

174 61.

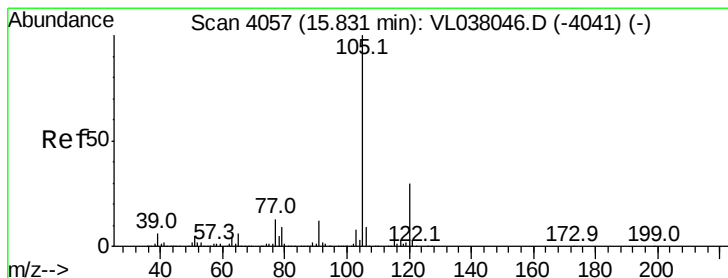
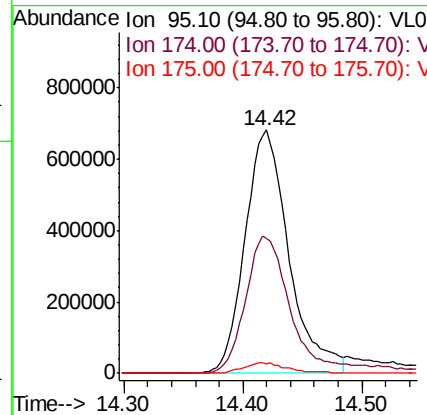
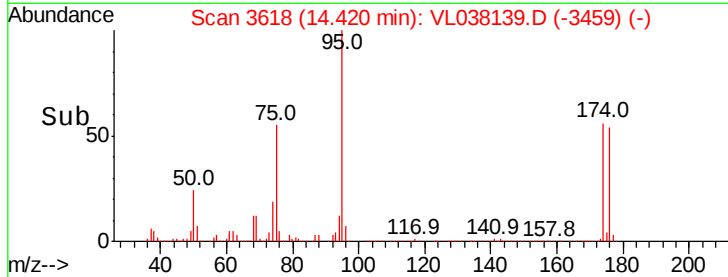
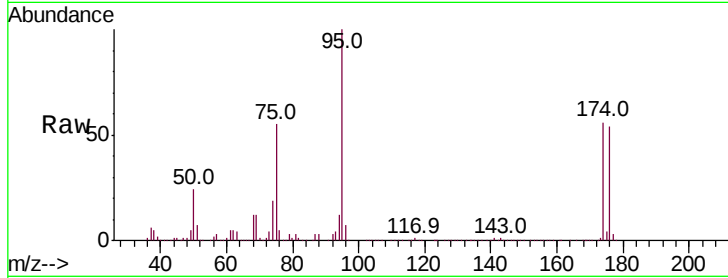
175 4.

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 11/30/2021

Supervised By :Mahesh Dadoda 12/01/2021



#72

4-Ethyltoluene

Concen: 0.163 ppbv m

RT: 15.85 min Scan# 4062

Delta R.T. 0.02 min

Lab File: VL038139.D

Acq: 29 Nov 2021 17:36

Tgt Ion:105 Resp: 52902

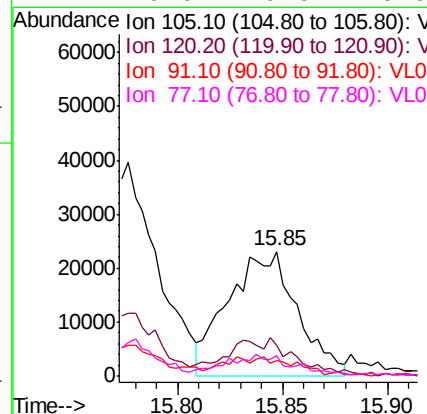
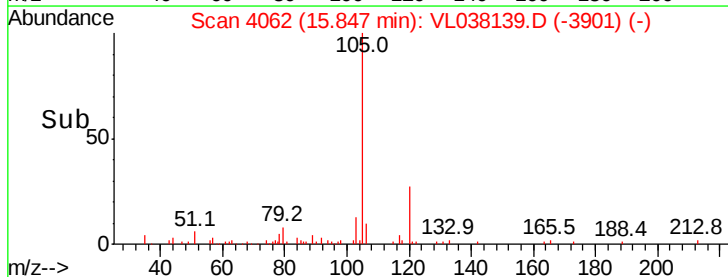
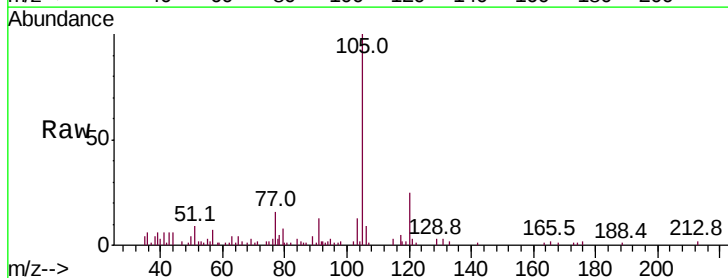
Ion Ratio Lower Upper

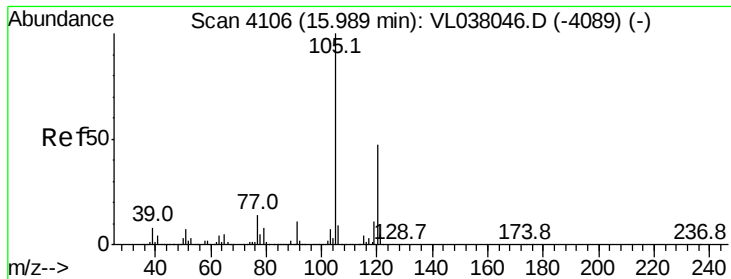
105 100

120 31.1 25.1 37.7

91 0.0 9.7 14.5#

77 0.0 10.6 16.0#





#73

1,3,5-Trimethylbenzene

Concen: 0.141 ppbv

RT: 16.00

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 29 Nov 2021 17:30

Tot Ion:1

Ion Rati

105 100

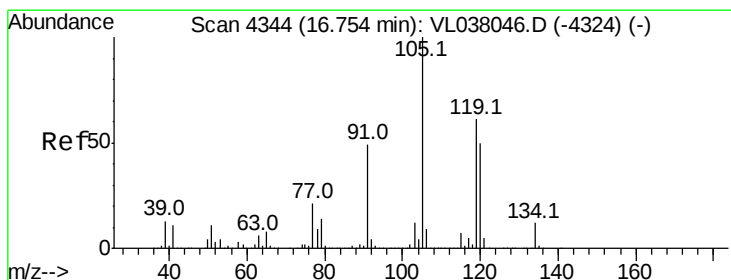
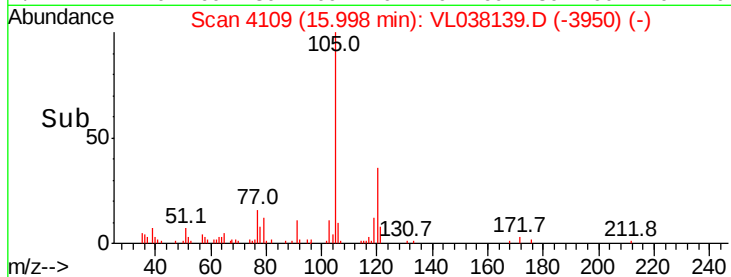
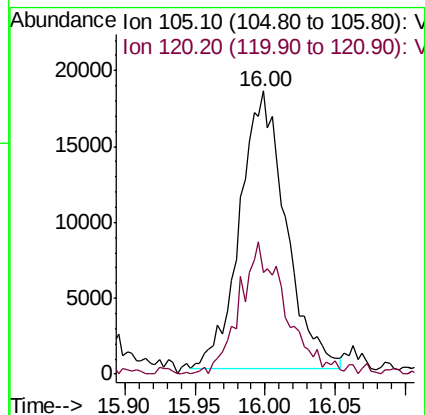
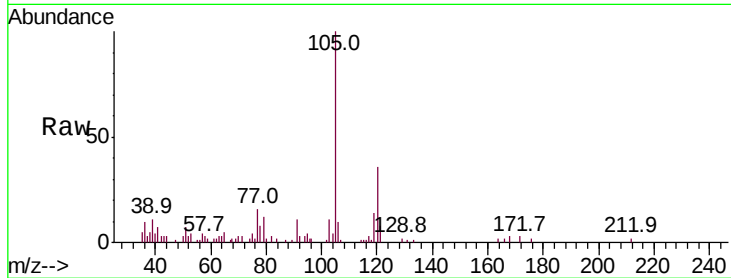
120 36.

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 11/30/2021

Supervised By :Mahesh Dadoda 12/01/2021



#74

1,2,4-Trimethylbenzene

Concen: 0.399 ppbv

RT: 16.76 min Scan# 4347

Delta R.T. 0.01 min

Lab File: VL038139.D

Acq: 29 Nov 2021 17:36

Tgt Ion:105 Resp: 121901

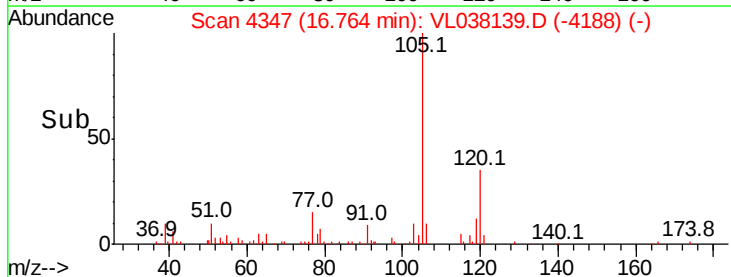
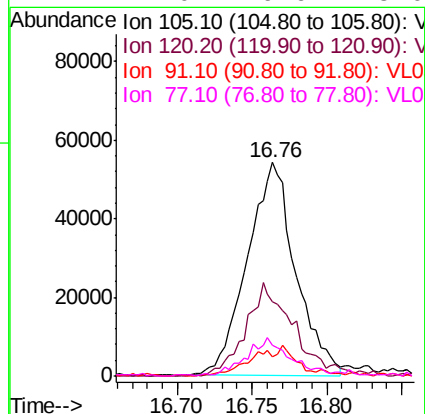
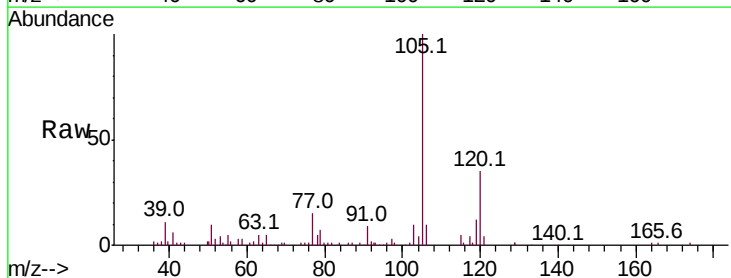
Ion Ratio Lower Upper

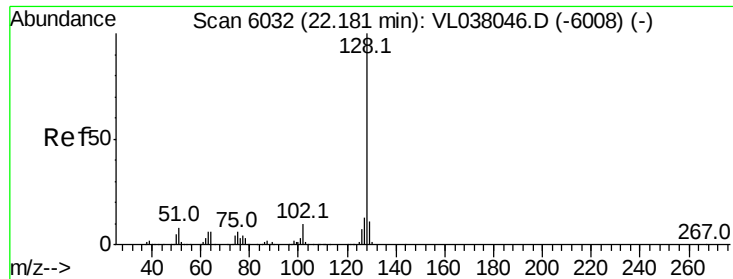
105 100

120 34.7 40.1 60.1#

91 9.3 39.8 59.8#

77 14.0 16.6 25.0#





#79

Naphthalene

Concen: 1.439 ppbv

RT: 22.19

Delta R.T: MSVOA_L

Lab File: ClientSampleId :

Acq: 29 Nov 2021 17:30

Tot Ion:1

Ion Rati

128 100

127 11.

129 11.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 11/30/2021

Supervised By :Mahesh Dadoda 12/01/2021

