

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL120721\
 Data File : VL038152.D
 Acq On : 7 Dec 2021 16:07
 Operator : SY/AP
 Sample : M4897-03
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA L
 ClientSampleId :
 IA-1

Manual Integrations
 APPROVED

Reviewed By :Amit Patel 12/08/2021
 Supervised By :Semsettin Yesilyurt 12/08/2021

Quant Time: Dec 08 15:42:18 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	5.66	49	883230	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.16	114	2282193	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.07	117	2047175	10.00	ppbv	-0.01

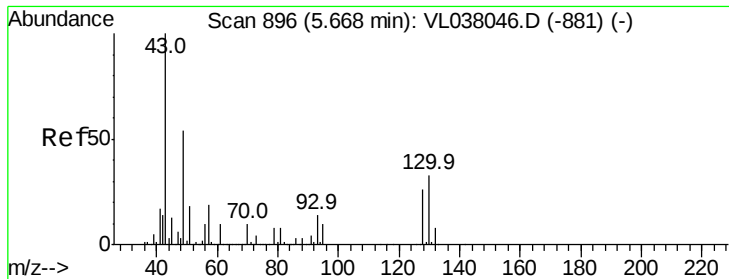
System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.39	95	1638088	11.09	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	110.90%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.05	85	44392m	0.304	ppbv	
4) Chloromethane	3.14	50	47420m	0.751	ppbv	
9) Propene	3.02	41	128003	1.874	ppbv #	73
11) Trichlorofluoromethane	3.95	101	63566	0.458	ppbv	90
13) Ethanol	3.60	45	3356113	508.401	ppbv	90
15) Acetone	3.84	43	1617561	21.123	ppbv	100
19) Isopropyl Alcohol	3.96	45	4001243	72.316	ppbv	100
20) Methylene Chloride	4.34	84	245132	5.715	ppbv	98
25) Ethyl Acetate	5.66	43	355794	1.398	ppbv #	97
26) Hexane	5.68	57	138651	1.130	ppbv #	79
29) Chloroform	5.74	83	43506m	0.241	ppbv	
34) 2-Butanone	5.24	43	135581	1.473	ppbv	95
35) Carbon Tetrachloride	7.01	117	11242m	0.070	ppbv	
36) Benzene	6.88	78	59417	0.261	ppbv	97
52) Tetrachloroethene	11.21	164	6567m	0.078	ppbv	
53) Toluene	9.79	91	349256	1.333	ppbv	99
58) Ethyl Benzene	12.69	91	80371	0.238	ppbv	94
59) m/p-Xylene	12.95	91	328518	1.153	ppbv	97
60) o-Xylene	13.67	91	151481	0.573	ppbv	95
74) 1,2,4-Trimethylbenzene	16.74	105	95078m	0.330	ppbv	

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: LA-1

Acq: 7 Dec 2021 16:07

Tot Ion:

Ion Ratio

49 100

128 46.

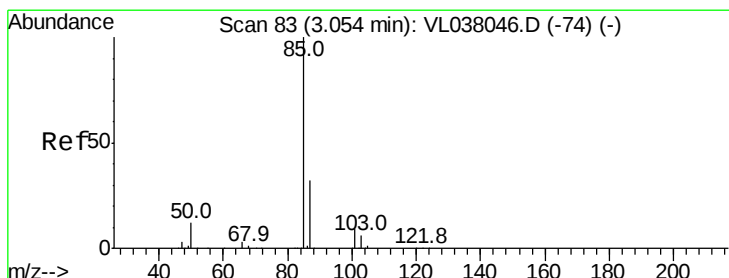
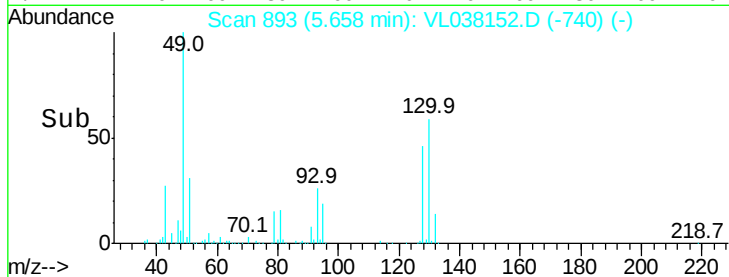
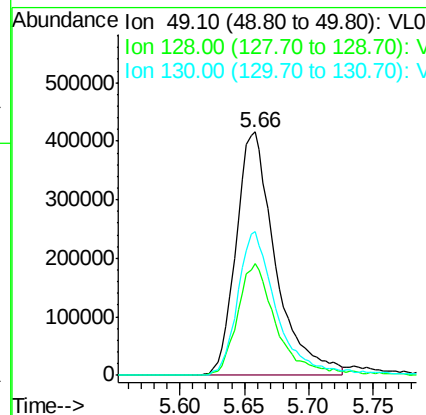
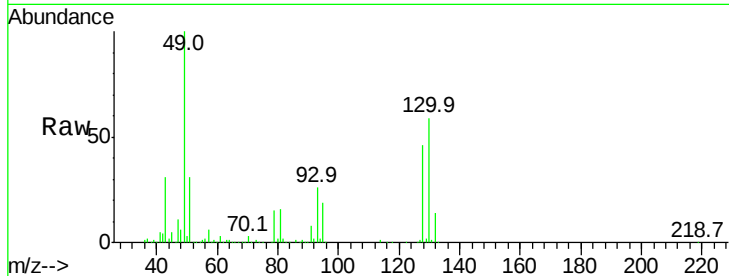
130 59.

Manual Integrations

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Reviewed By :Amit Patel 12/08/2021

Supervised By :Semsettin Yesilyurt 12/08/2021



#2

Dichlorodifluoromethane

Concen: 0.304 ppbv m

RT: 3.05 min Scan# 82

Delta R.T. -0.00 min

Lab File: VL038152.D

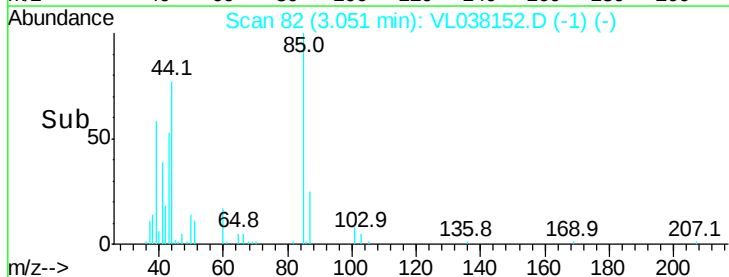
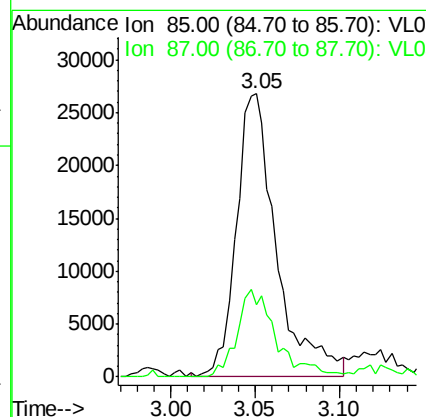
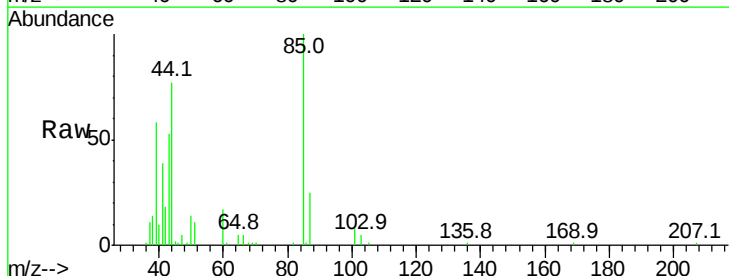
Acq: 7 Dec 2021 16:07

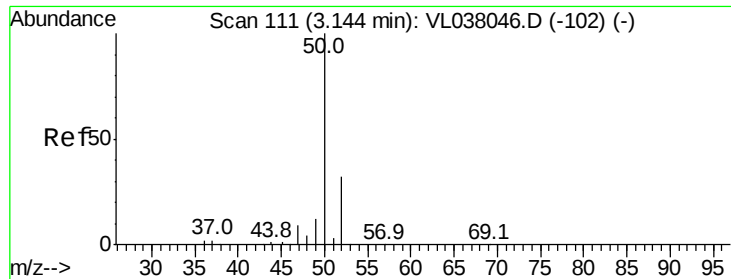
Tgt Ion: 85 Resp: 44392

Ion Ratio Lower Upper

85 100

87 25.4 25.8 38.6#





#4

Chloromethane

Concen: 0.751 ppbv m

RT: 3.14 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

Acq: 7 Dec 2021 16:07

Tot Ion:

Ion Ratio

50 100

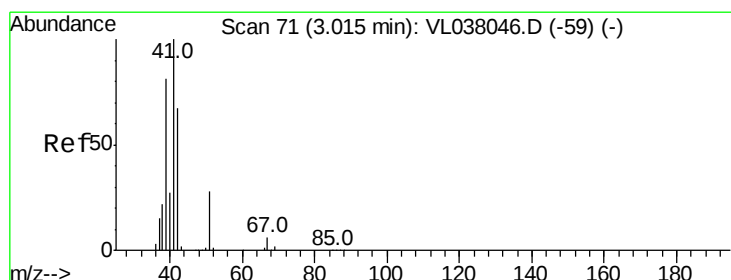
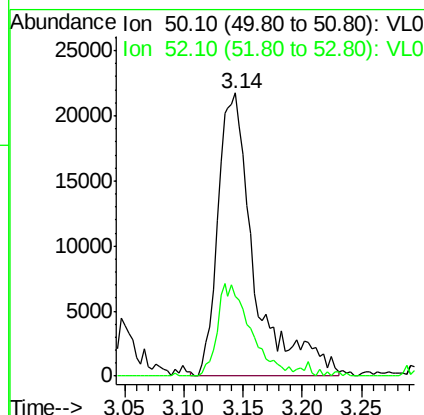
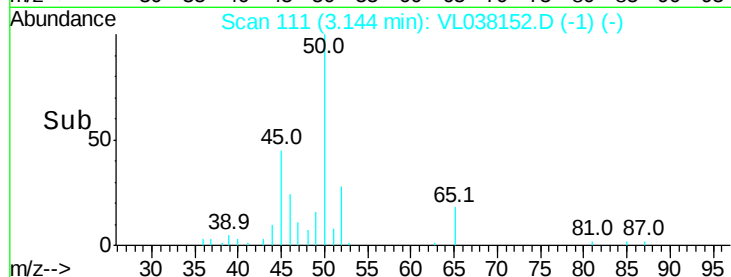
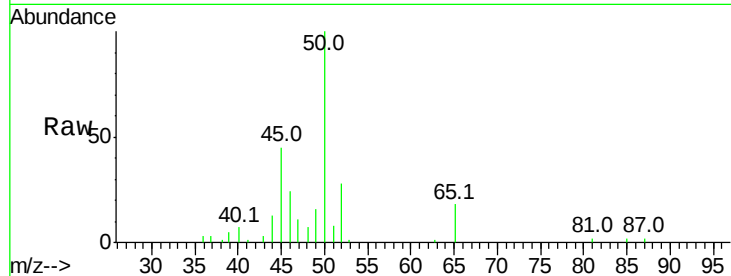
52 28.

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#9

Propene

Concen: 1.874 ppbv

RT: 3.02 min Scan# 74

Delta R.T. 0.01 min

Lab File: VL038152.D

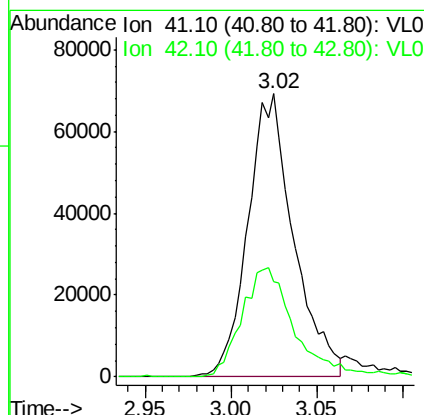
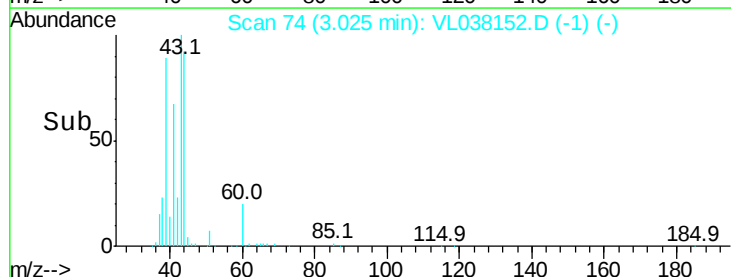
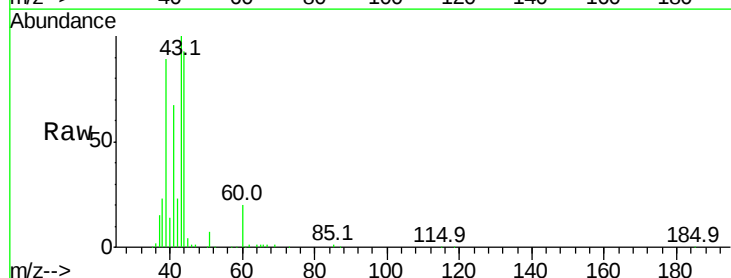
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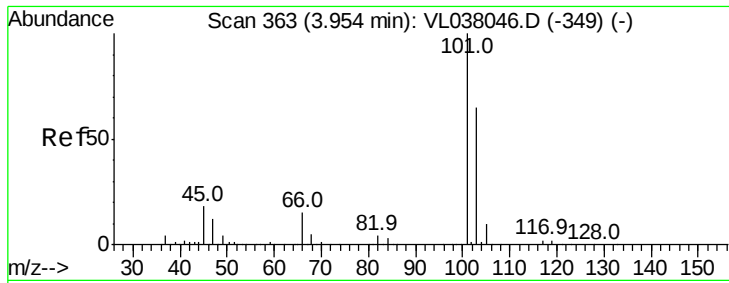
Tgt Ion: 41 Resp: 128003

Ion Ratio Lower Upper

41 100

42 45.2 53.8 80.8#



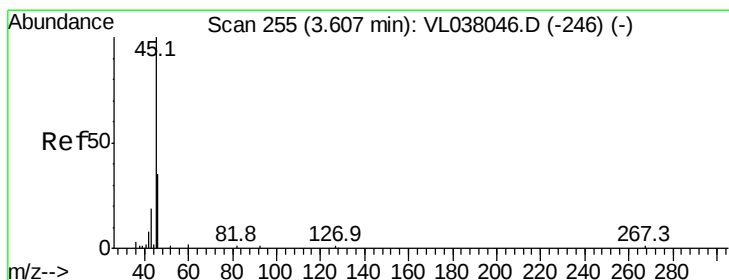
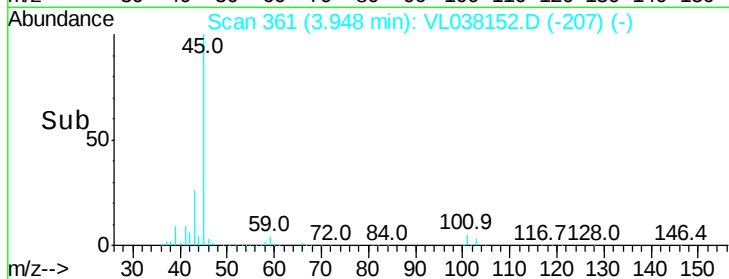
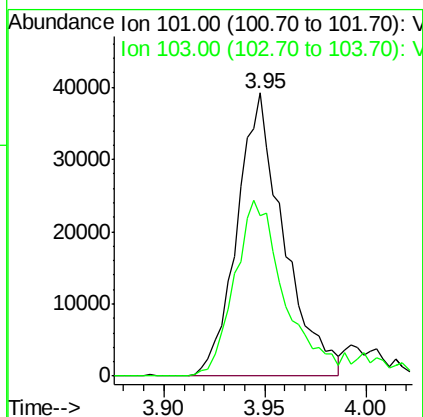
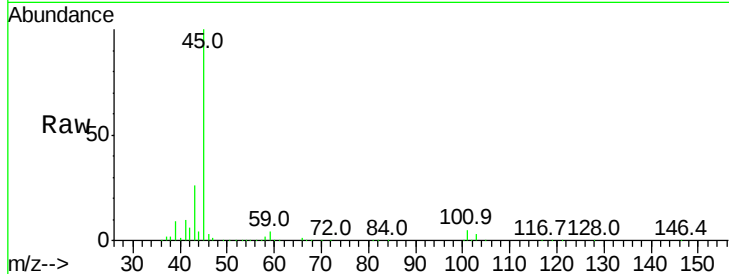


#11
Trichlorofluoromethane
Concen: 0.458 ppbv
RT: 3.95
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 7 Dec 2021 16:07

Tot Ion:1
Ion Rati
101 100
103 56.

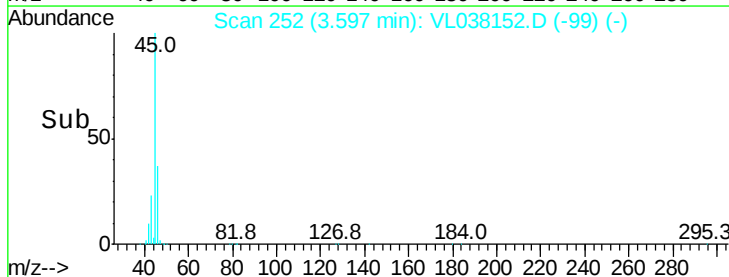
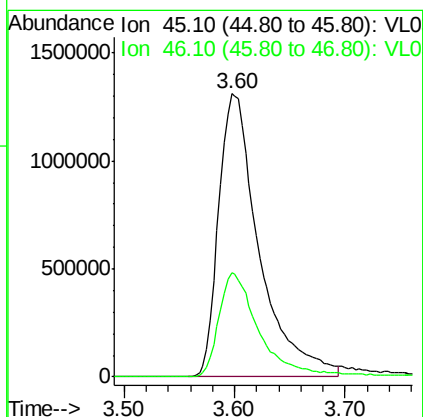
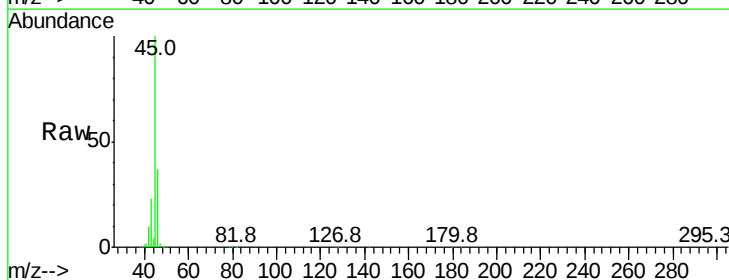
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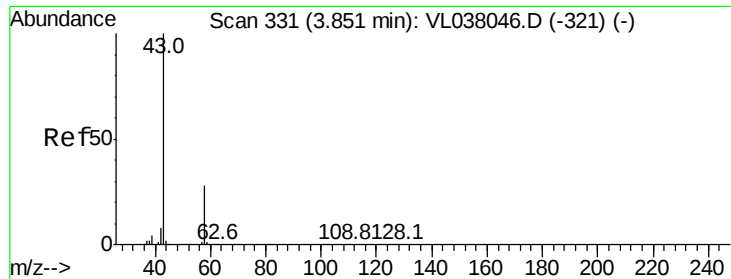
Reviewed By :Amit Patel 12/08/2021
Supervised By :Semsettin Yesilyurt 12/08/2021



#13
Ethanol
Concen: 508.401 ppbv
RT: 3.60 min Scan# 252
Delta R.T. -0.01 min
Lab File: VL038152.D
Acq: 7 Dec 2021 16:07

Tgt Ion: 45 Resp: 3356113
Ion Ratio Lower Upper
45 100
46 37.6 17.6 70.2



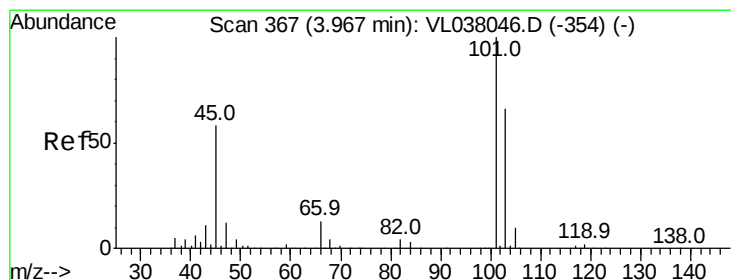
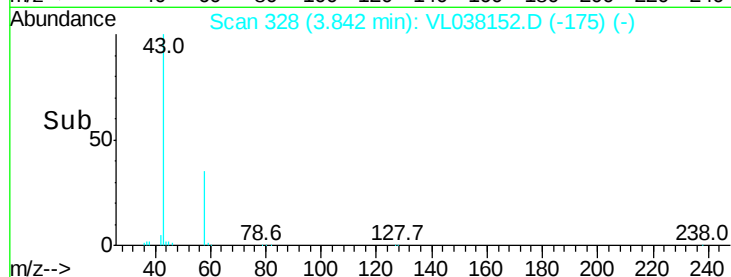
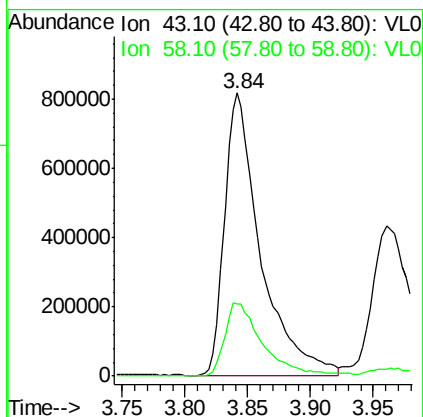
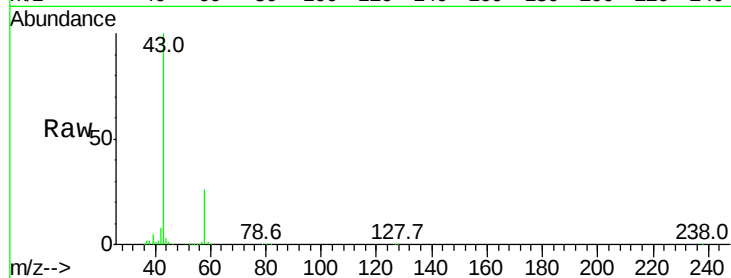


#15
Acetone
Concen: 21.123 ppbv
RT: 3.84
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 7 Dec 2021 16:07

Tot Ion:
Ion Ratio
43 100
58 27.

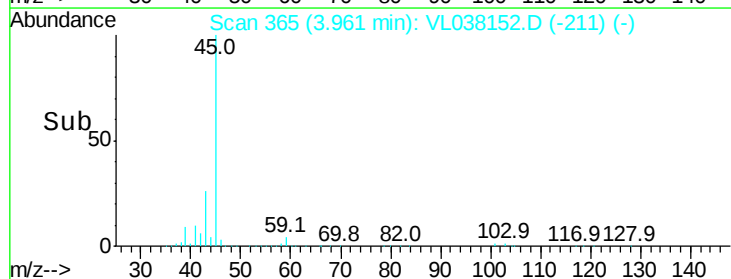
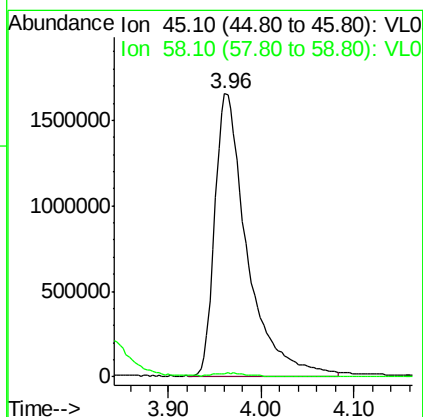
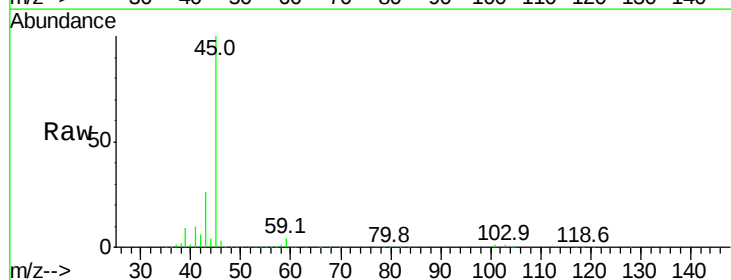
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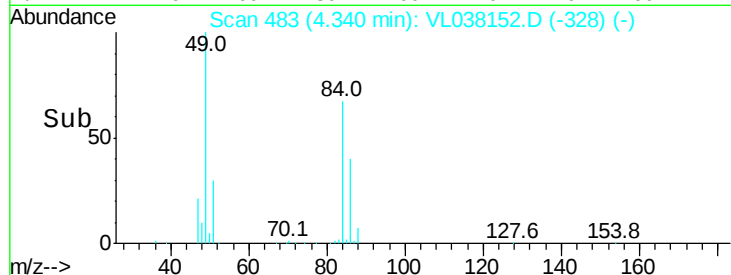
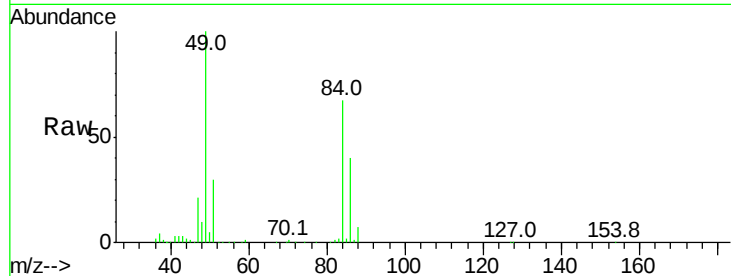
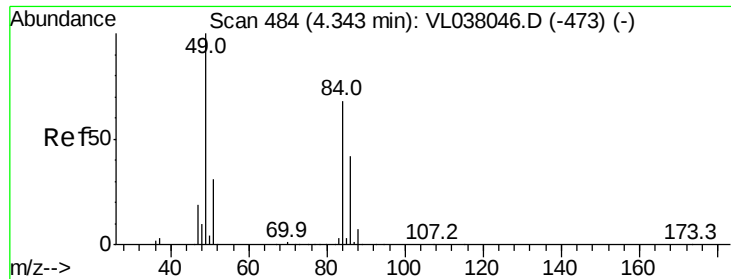
Reviewed By :Amit Patel 12/08/2021
Supervised By :Semsettin Yesilyurt 12/08/2021



#19
Isopropyl Alcohol
Concen: 72.316 ppbv
RT: 3.96 min Scan# 365
Delta R.T. -0.01 min
Lab File: VL038152.D
Acq: 7 Dec 2021 16:07

Tgt Ion: 45 Resp: 4001243
Ion Ratio Lower Upper
45 100
58 1.7 1.4 2.0



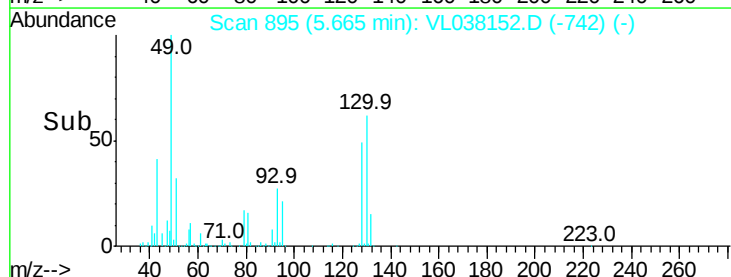
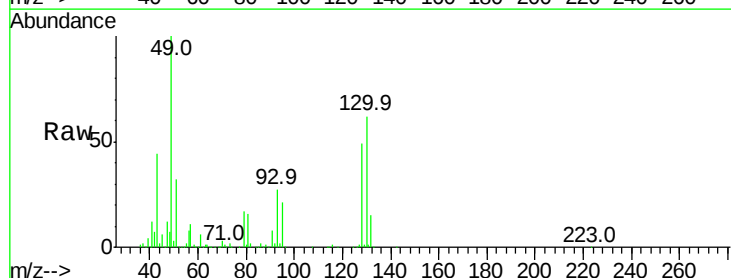
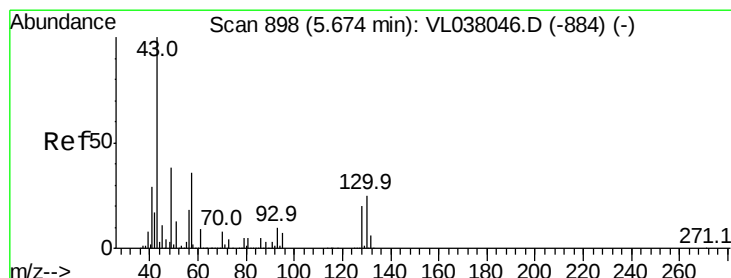
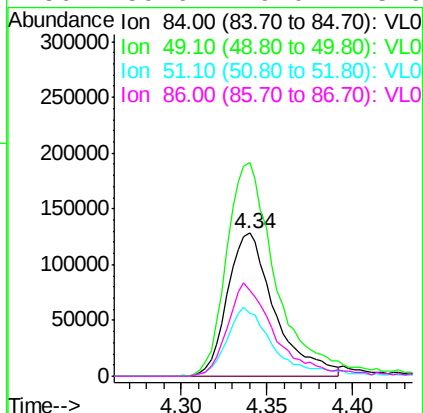


#20
Methvlene Chloride
Concen: 5.715 ppbv
RT: 4.34
Instrument : MSVOA_1
Delta R.T. :
Lab File: ClientSampleId :
Acq: 7 Dec 2021 16:07

Tot Ion:
Ion Ratio
84 100
49 149.
51 43.
86 59.6 49.0 73.6

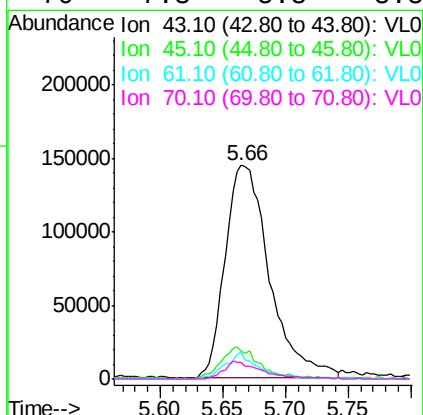
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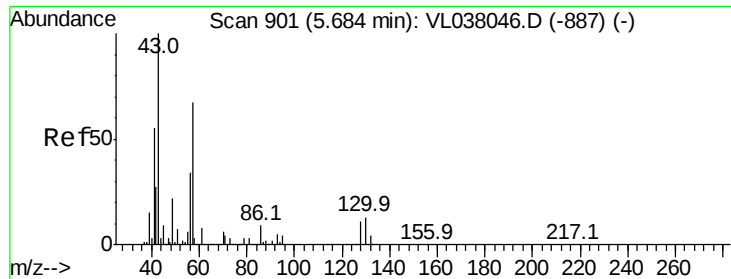
Reviewed By :Amit Patel 12/08/2021
Supervised By :Semsettin Yesilyurt 12/08/2021



#25
Ethyl Acetate
Concen: 1.398 ppbv
RT: 5.66 min Scan# 895
Delta R.T. -0.01 min
Lab File: VL038152.D
Acq: 7 Dec 2021 16:07

Tgt Ion: 43 Resp: 355794
Ion Ratio Lower Upper
43 100
45 12.9 7.9 11.9#
61 9.7 7.8 11.6
70 7.3 5.8 8.8



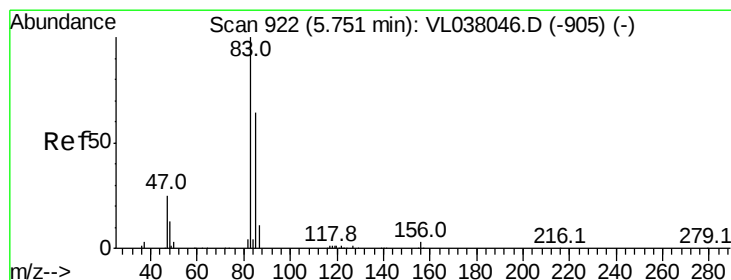
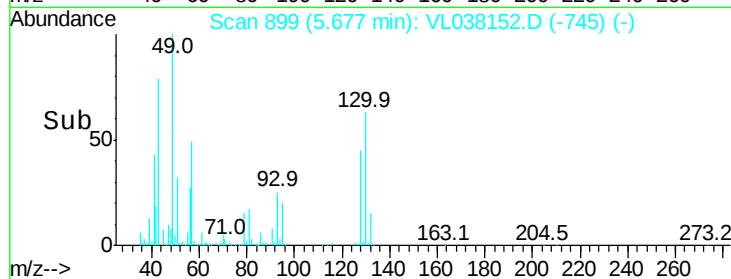
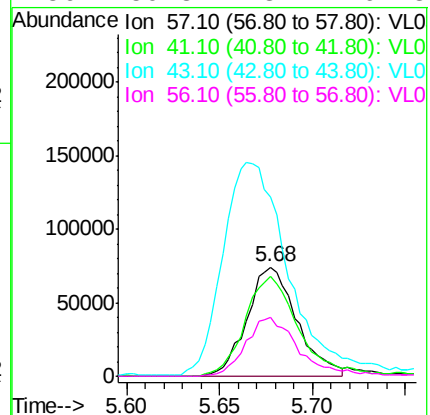
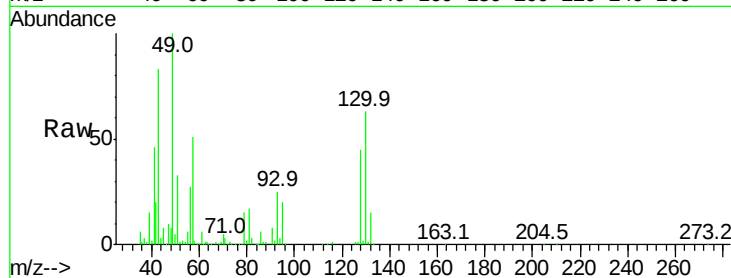


#26
Hexane
Concen: 1.130 ppbv
RT: 5.68
Delta R.T.: MSVOA_1
Lab File: ClientSampleId :
Acq: 7 Dec 2021 16:07

Tot Ion:
Ion Ratio
57 100
41 101.
43 263.
56 59.3 43.2 64.8

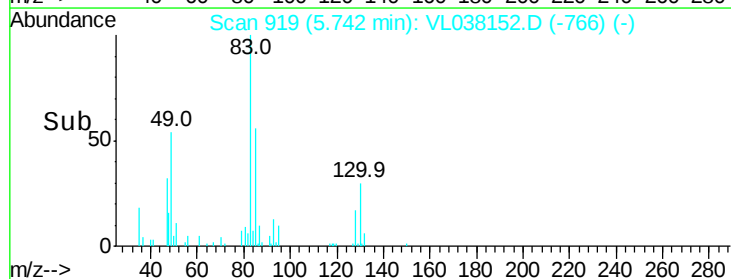
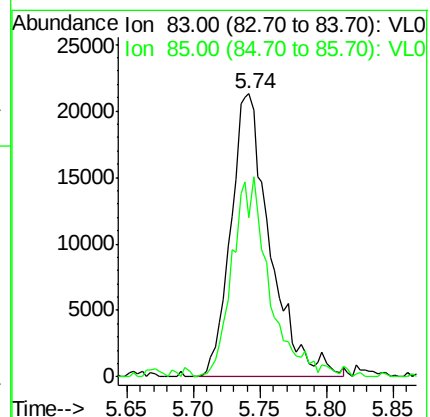
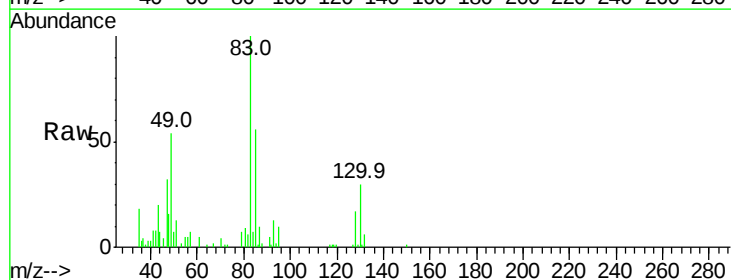
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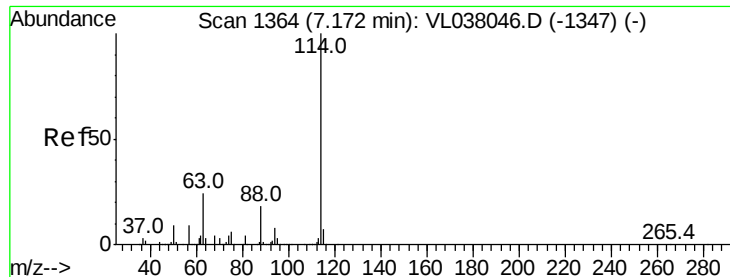
Reviewed By :Amit Patel 12/08/2021
Supervised By :Semsettin Yesilyurt 12/08/2021



#29
Chloroform
Concen: 0.241 ppbv m
RT: 5.74 min Scan# 919
Delta R.T. -0.01 min
Lab File: VL038152.D
Acq: 7 Dec 2021 16:07

Tgt Ion: 83 Resp: 43506
Ion Ratio Lower Upper
83 100
85 56.2 51.0 76.6





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.16

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 7 Dec 2021 16:07

Tot Ion:1

Ion Ratio

114 100

63 27.

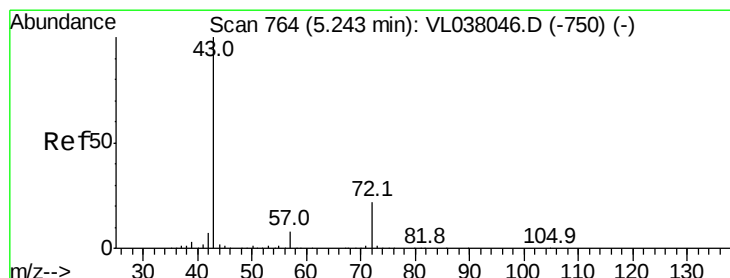
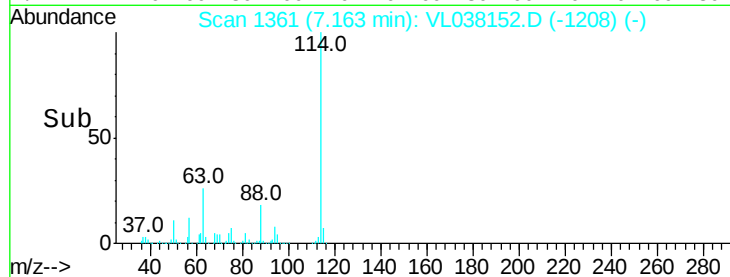
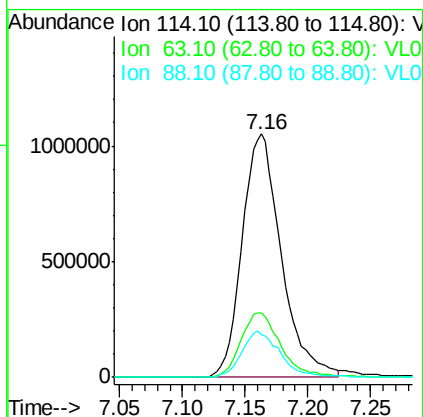
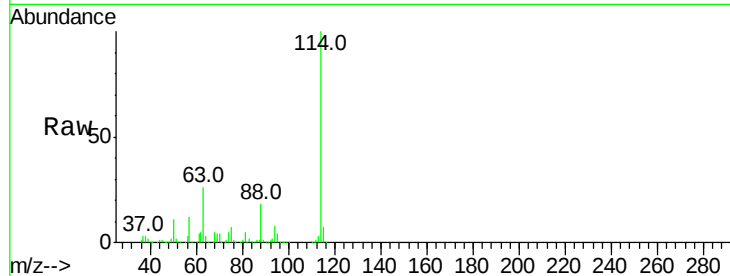
88 19.

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#34

2-Butanone

Concen: 1.473 ppbv

RT: 5.24 min Scan# 762

Delta R.T. -0.01 min

Lab File: VL038152.D

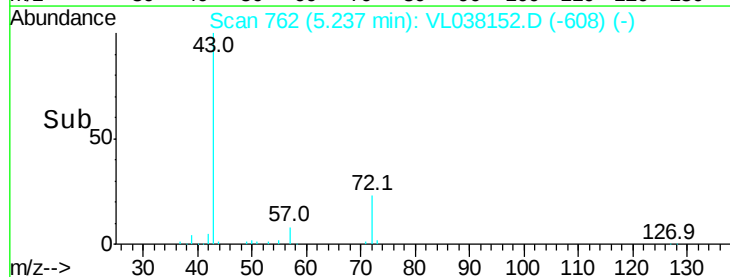
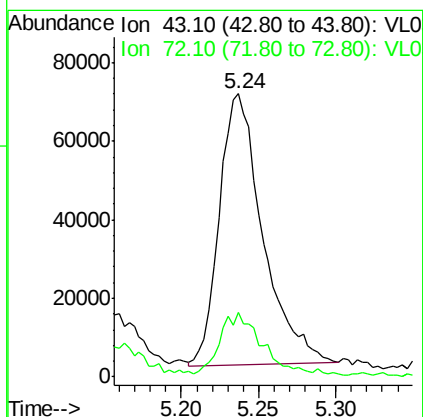
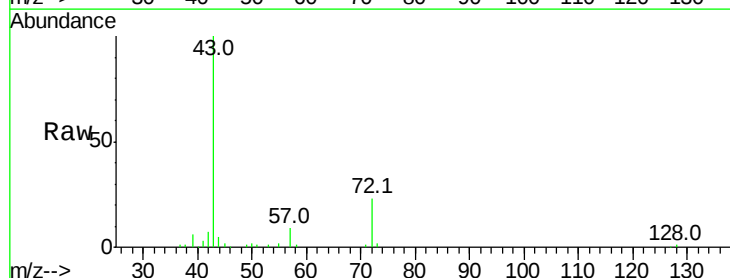
Acq: 7 Dec 2021 16:07

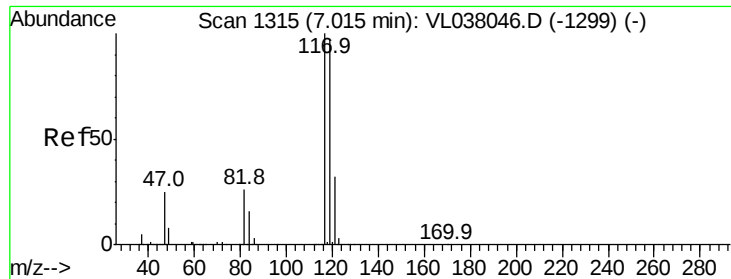
Tgt Ion: 43 Resp: 135581

Ion Ratio Lower Upper

43 100

72 26.1 18.8 28.2





#35

Carbon Tetrachloride

Concen: 0.070 ppbv m

RT: 7.01 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 7 Dec 2021 16:07

Tot Ion:1

Ion Ratio

117 100

119 83.

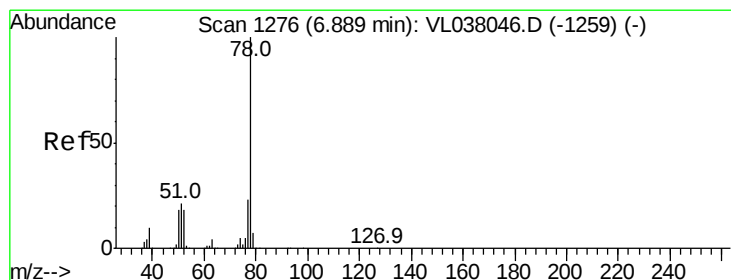
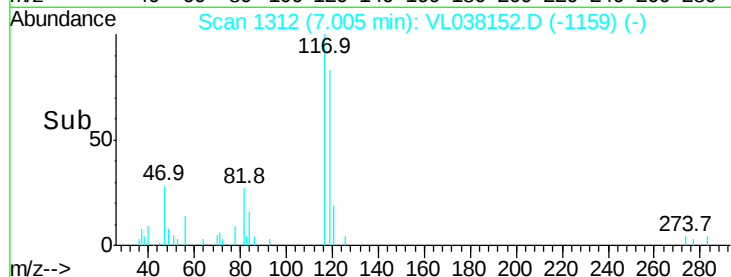
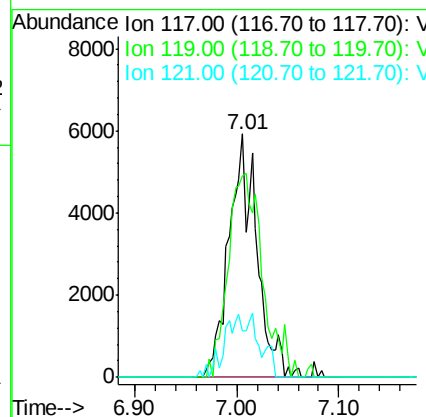
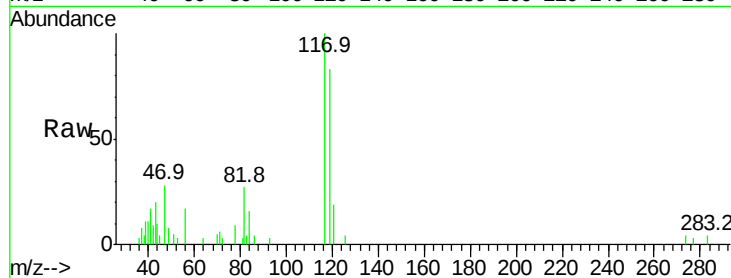
121 19.

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Supervised By :Semsettin Yesilyurt 12/08/2021



#36

Benzene

Concen: 0.261 ppbv

RT: 6.88 min Scan# 1273

Delta R.T. -0.01 min

Lab File: VL038152.D

Acq: 7 Dec 2021 16:07

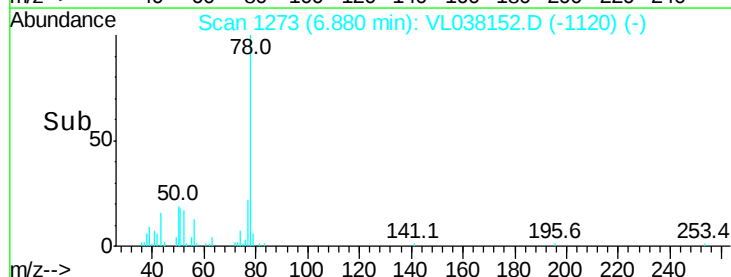
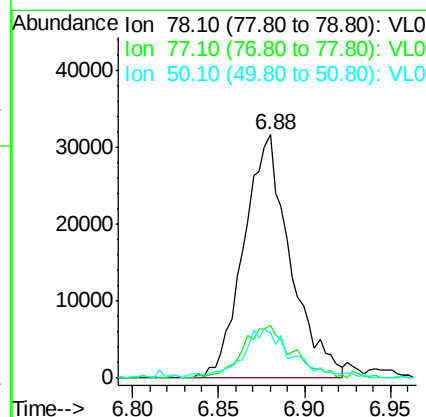
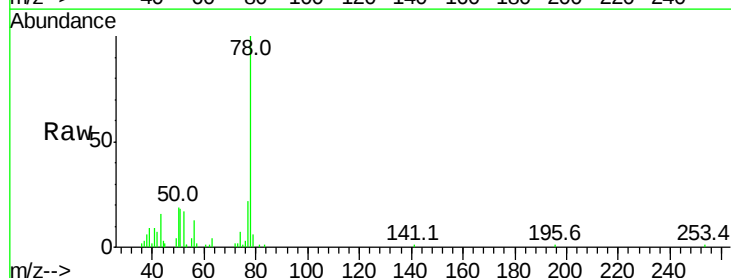
Tgt Ion: 78 Resp: 59417

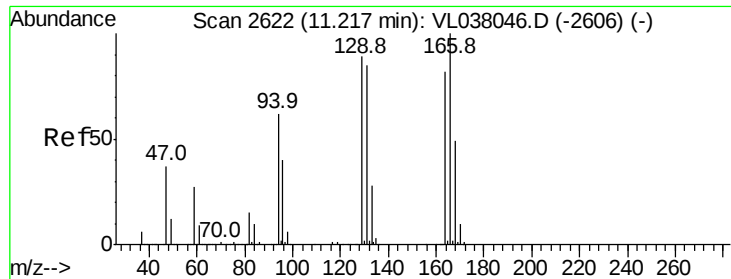
Ion Ratio Lower Upper

78 100

77 21.5 18.2 27.4

50 16.8 14.7 22.1





#52

Tetrachloroethene

Concen: 0.078 ppbv m

RT: 11.21

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 7 Dec 2021 16:07

Tot Ion:1

Ion Ratio

164 100

166 83.

129 113.

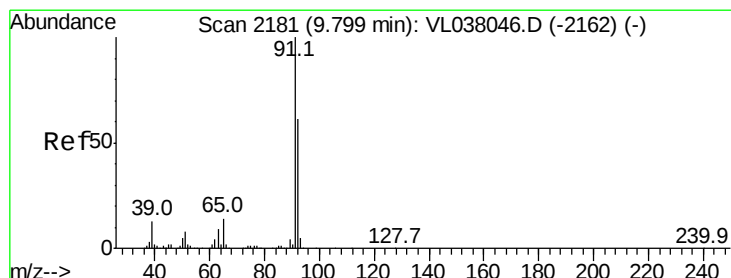
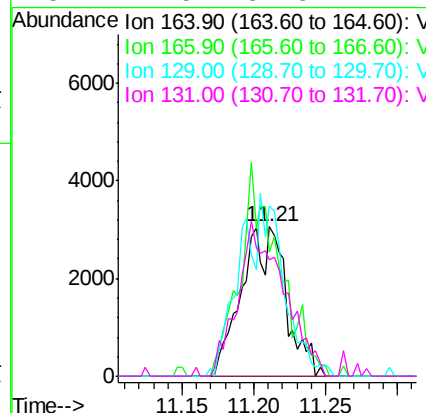
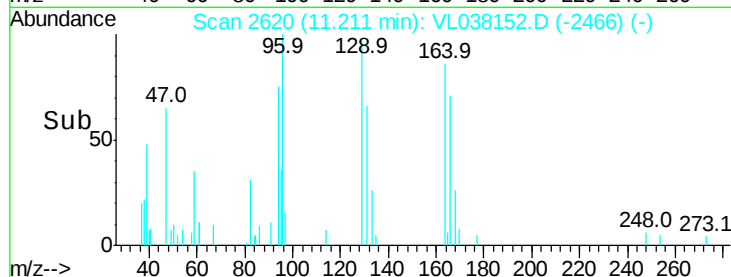
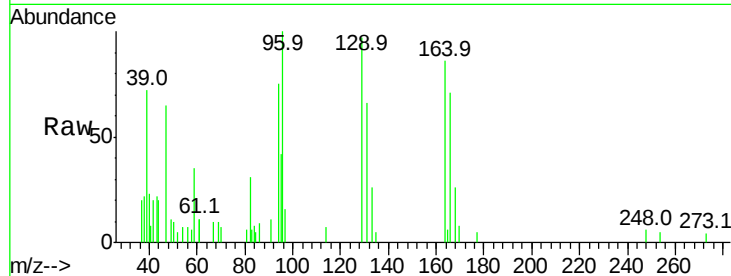
131 77.5 82.8 124.2#

Manual Integrations

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Reviewed By :Amit Patel 12/08/2021

Supervised By :Semsettin Yesilyurt 12/08/2021



#53

Toluene

Concen: 1.333 ppbv

RT: 9.79 min Scan# 2177

Delta R.T. -0.01 min

Lab File: VL038152.D

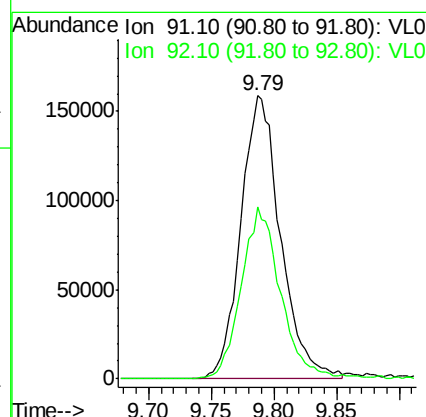
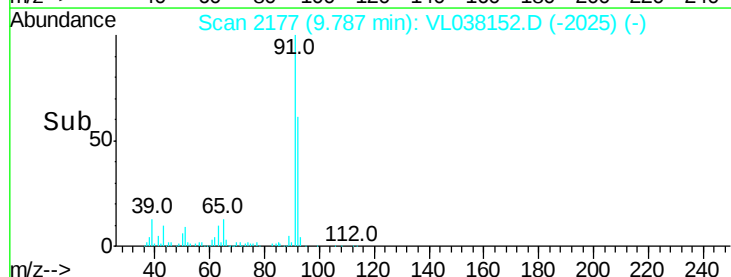
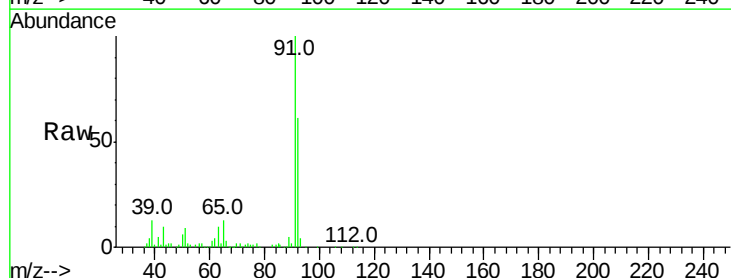
Acq: 7 Dec 2021 16:07

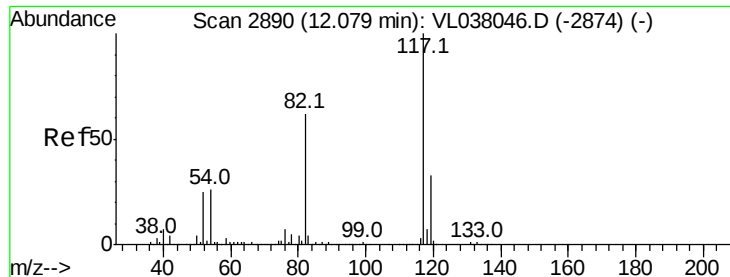
Tgt Ion: 91 Resp: 349256

Ion Ratio Lower Upper

91 100

92 61.1 49.7 74.5





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.07

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 7 Dec 2021 16:07

Tot Ion:1

Ion Ratio

117 100

82 71.

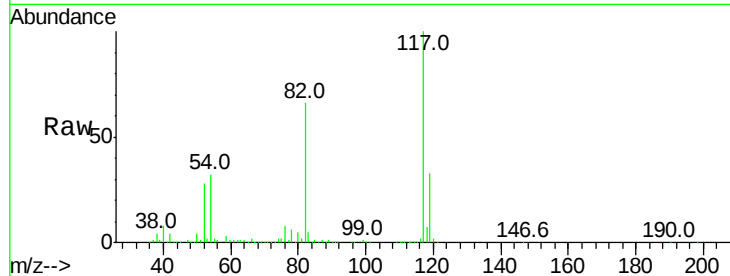
119 33.

Manual Integrations

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Reviewed By :Amit Patel 12/08/2021

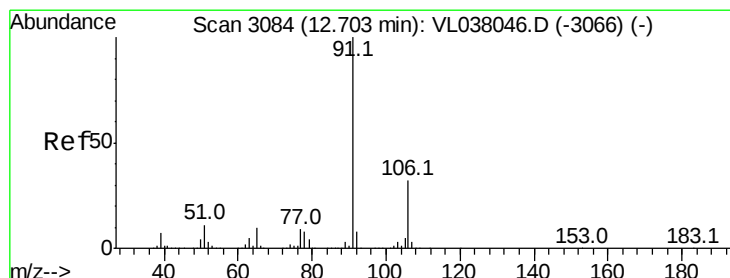
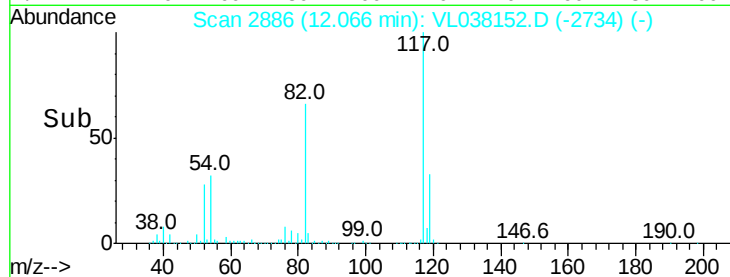
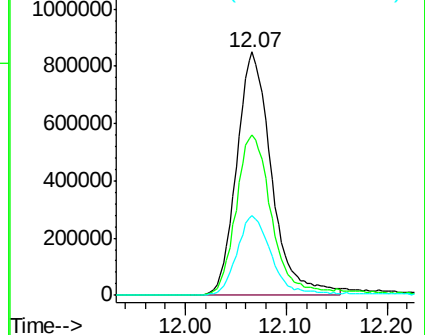
Supervised By :Semsettin Yesilyurt 12/08/2021



Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V



#58

Ethyl Benzene

Concen: 0.238 ppbv

RT: 12.69 min Scan# 3080

Delta R.T. -0.01 min

Lab File: VL038152.D

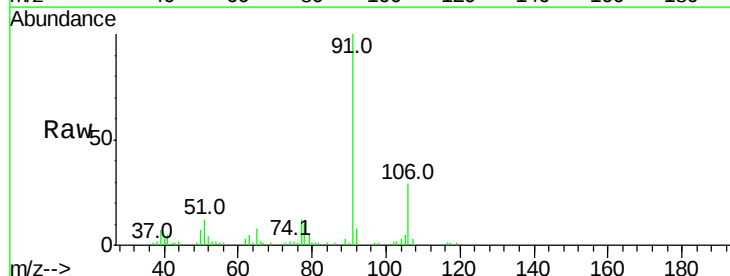
Acq: 7 Dec 2021 16:07

Tgt Ion: 91 Resp: 80371

Ion Ratio Lower Upper

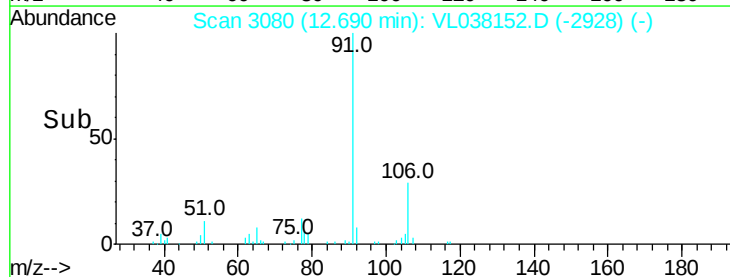
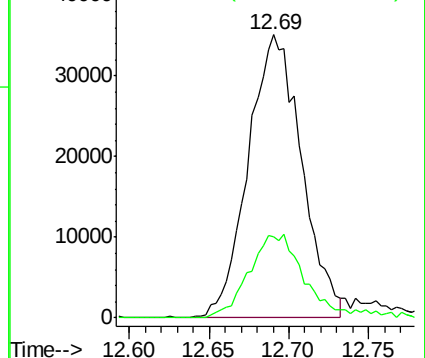
91 100

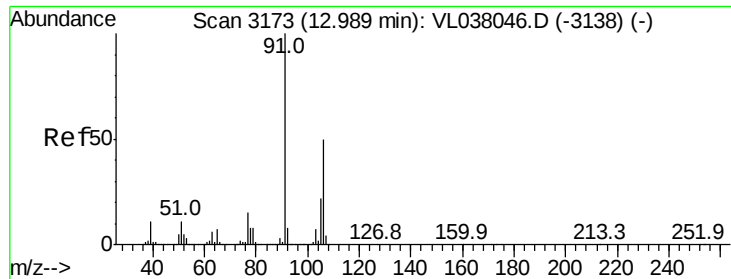
106 28.7 25.8 38.6



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



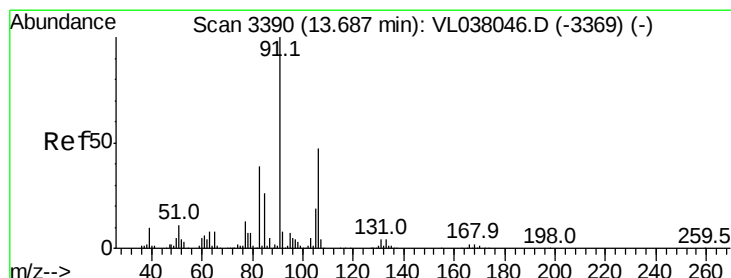
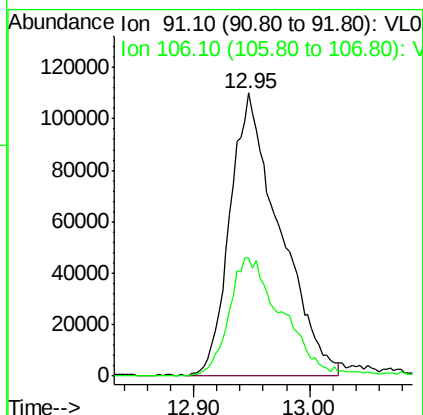
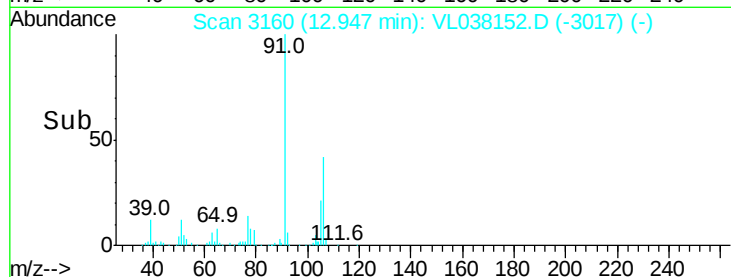
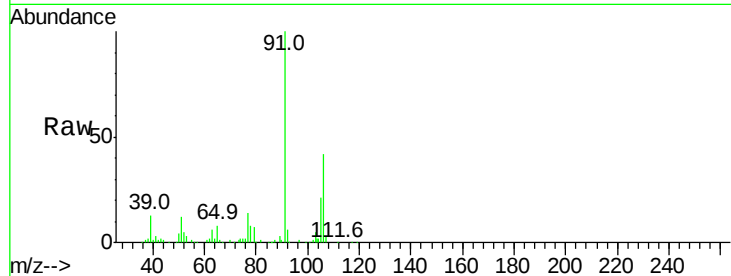


#59
m/p-Xylene
Concen: 1.153 ppbv
RT: 12.95
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 7 Dec 2021 16:07

Tot Ion:
Ion Ratio
91 100
106 45.

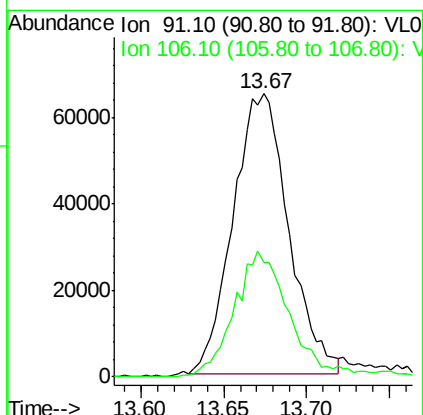
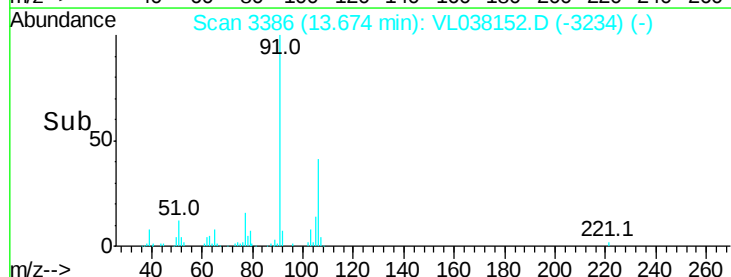
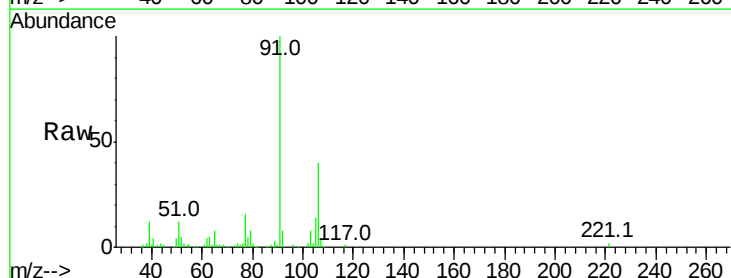
Manual Integrations
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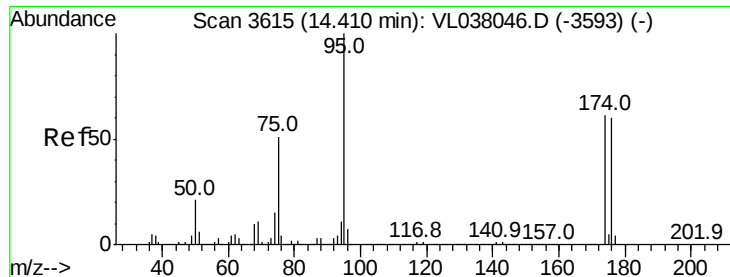
Reviewed By :Amit Patel 12/08/2021
Supervised By :Semsettin Yesilyurt 12/08/2021



#60
o-Xylene
Concen: 0.573 ppbv
RT: 13.67 min Scan# 3386
Delta R.T. -0.01 min
Lab File: VL038152.D
Acq: 7 Dec 2021 16:07

Tgt Ion: 91 Resp: 151481
Ion Ratio Lower Upper
91 100
106 45.3 24.2 72.6





#68

1-Bromo-4-Fluorobenzene

Concen: 11.093 ppbv

RT: 14.39

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 7 Dec 2021 16:07

Tot Ion:

Ion Ratio

95 100

174 61.

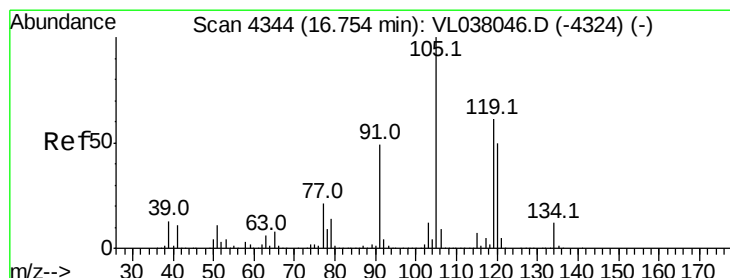
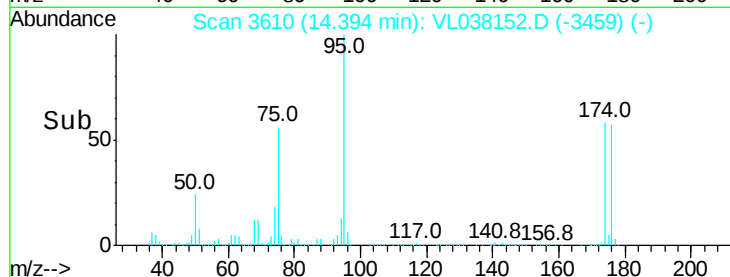
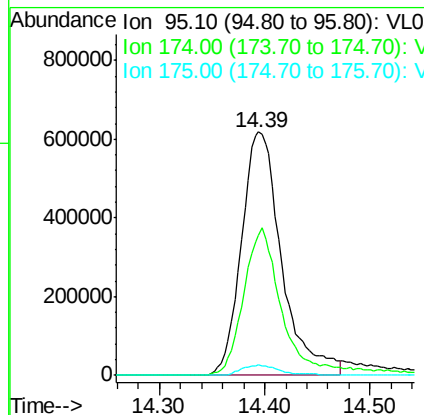
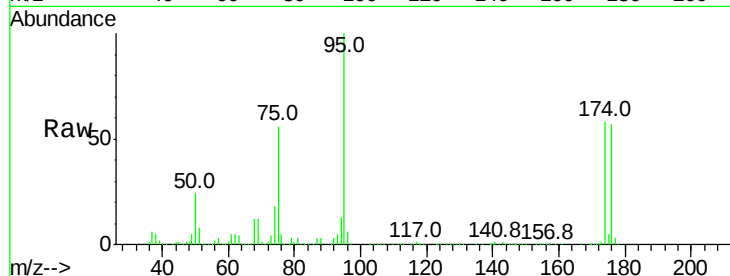
175 4.

Manual Integrations

APPROVED

Reviewed By :Amit Patel 12/08/2021

Supervised By :Semsettin Yesilyurt 12/08/2021



#74

1,2,4-Trimethylbenzene

Concen: 0.330 ppbv m

RT: 16.74 min Scan# 4339

Delta R.T. -0.02 min

Lab File: VL038152.D

Acq: 7 Dec 2021 16:07

Tgt Ion:105 Resp: 95078

Ion Ratio Lower Upper

105 100

120 37.4 40.1 60.1#

91 10.6 39.8 59.8#

77 12.0 16.6 25.0#

