

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL033022\
 Data File : VL038805.D
 Acq On : 30 Mar 2022 22:01
 Operator : SY/AP
 Sample : N2169-03DL 4X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA L
 ClientSampleId :
 SV3DL

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 04/02/2022
 Supervised By :Mahesh Dadoda 04/04/2022

Quant Time: Mar 31 05:20:59 2022

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032122A

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument:

QLast Update : Mon Mar 21 17:09:26 2022

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	853646	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	2571527	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.08	117	2297072	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.41	95	1649311	9.37	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	93.70%

Target Compounds

						Ovalue
2) Dichlorodifluoromethane	3.05	85	103731	0.904	ppbv	97
4) Chloromethane	3.14	50	7152m	0.144	ppbv	
7) Chloroethane	3.56	64	1922m	0.115	ppbv	
9) Propene	3.02	41	119717	2.750	ppbv	93
10) Heptane	8.12	43	76260	0.733	ppbv	99
13) Ethanol	3.61	45	65817	13.708	ppbv	95
15) Acetone	3.85	43	403316	5.475	ppbv #	87
16) 1,3-Butadiene	3.31	39	90571	2.167	ppbv #	36
17) tert-Butyl alcohol	4.30	59	43813	0.681	ppbv	96
19) Isopropyl Alcohol	3.97	45	13739m	0.336	ppbv	
20) Methylene Chloride	4.34	84	25951	0.836	ppbv	94
26) Hexane	5.69	57	572906	6.901	ppbv #	26
27) Carbon Disulfide	4.55	76	73881	0.907	ppbv #	93
28) Methyl tert-Butyl Ether	5.04	73	20840m	0.337	ppbv	
30) Cyclohexane	7.13	84	8508m	0.118	ppbv	
32) 1,1,1-Trichloroethane	6.51	97	9208	0.072	ppbv	95
34) 2-Butanone	5.25	43	432339	4.248	ppbv	98
36) Benzene	6.89	78	99371	0.501	ppbv	96
51) 2-Hexanone	10.13	43	174919m	1.287	ppbv	
52) Tetrachloroethene	11.22	164	122791	1.691	ppbv	91
53) Toluene	9.80	91	315337	1.479	ppbv	98
58) Ethyl Benzene	12.70	91	83280	0.310	ppbv	96
59) m/p-Xylene	12.96	91	261232	1.112	ppbv	93
60) o-Xylene	13.69	91	126113	0.565	ppbv	99
62) Isopropylbenzene	14.66	105	50512	0.151	ppbv	96
74) 1,2,4-Trimethylbenzene	16.75	105	33782m	0.129	ppbv	

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

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL033022\
Data File : VL038805.D
Acq On : 30 Mar 2022 22:01
Operator : SY/AP
Sample : N2169-03DL 4X
Misc : 400mL/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SV3DL

Manual Integrations
APPROVED

Quant Time: Mar 31 05:20:59 2022

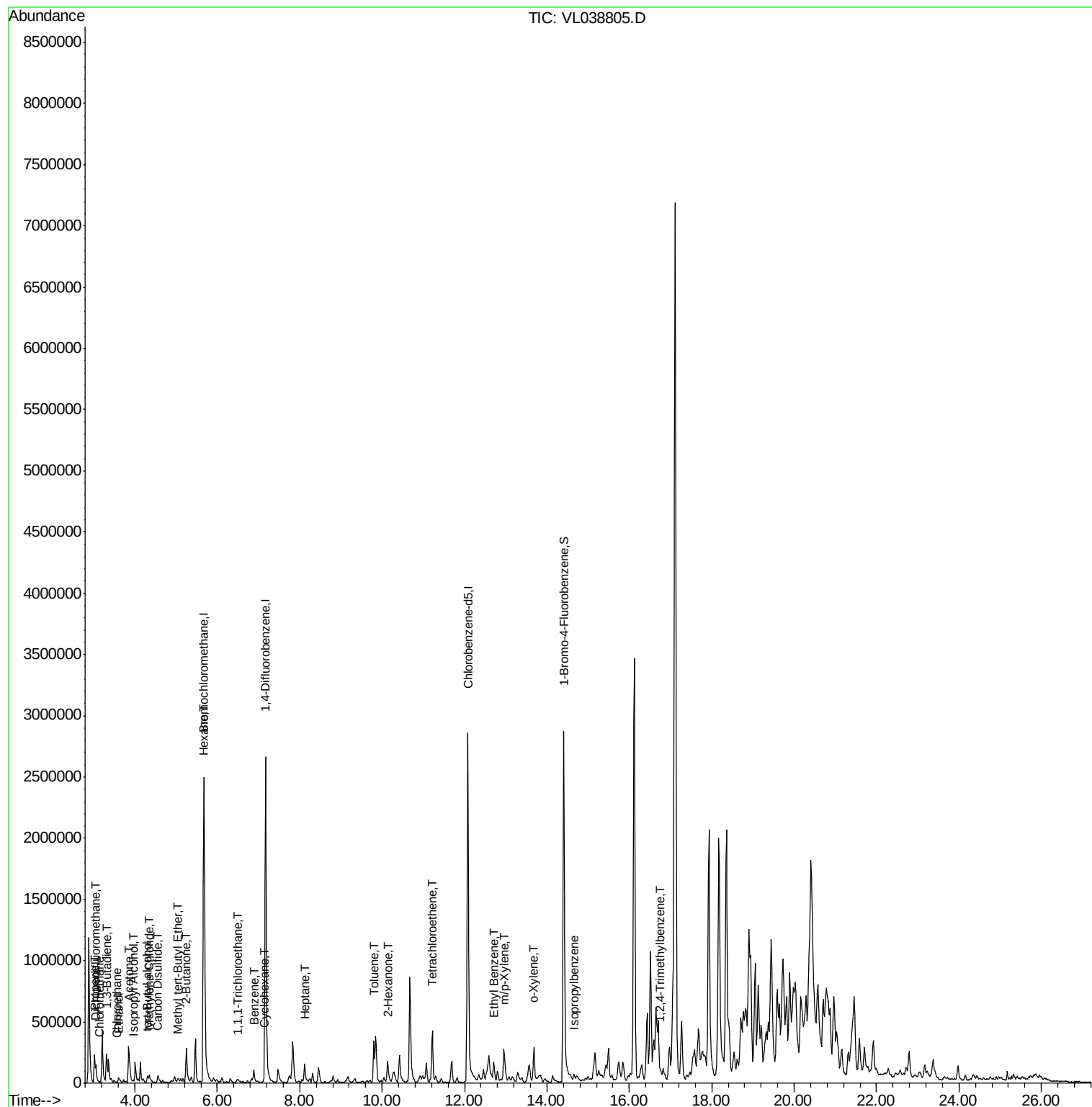
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL032122

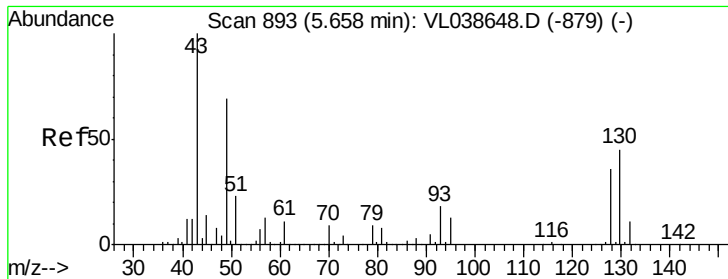
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument:

QLast Update : Mon Mar 21 17:09:26 2022

Response via : Initial Calibration

Reviewed By :Semsettin Yesilyurt 04/02/2022
Supervised By :Mahesh Dadoda 04/04/2022





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 30 Mar 2022 22:01 SV3DL

Tot Ion:

Ion Ratio

49 100

128 58.

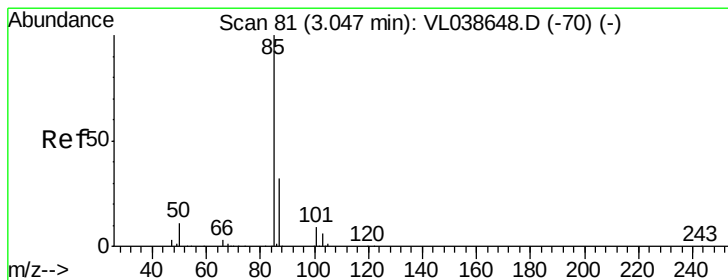
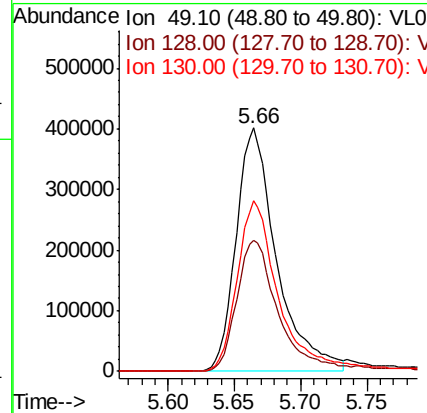
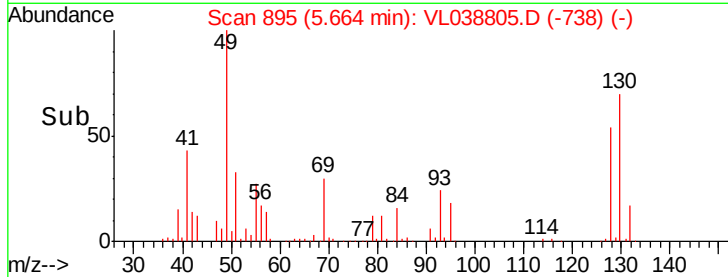
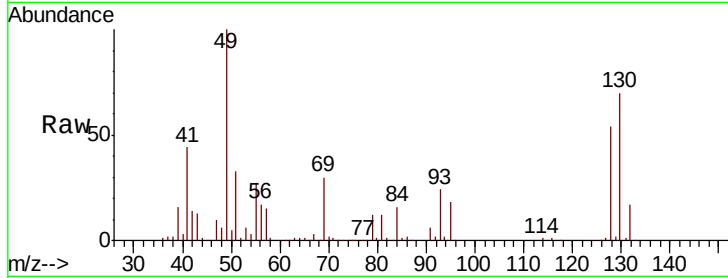
130 73.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 04/02/2022

Supervised By :Mahesh Dadoda 04/04/2022



#2

Dichlorodifluoromethane

Concen: 0.904 ppbv

RT: 3.05 min Scan# 83

Delta R.T. 0.01 min

Lab File: VL038805.D

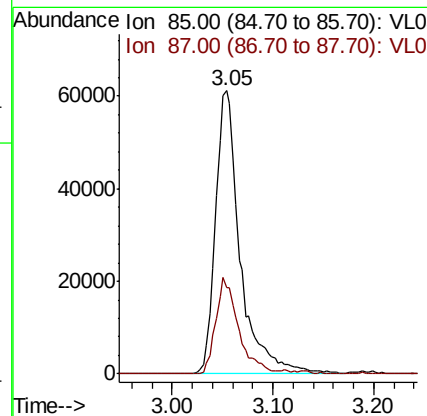
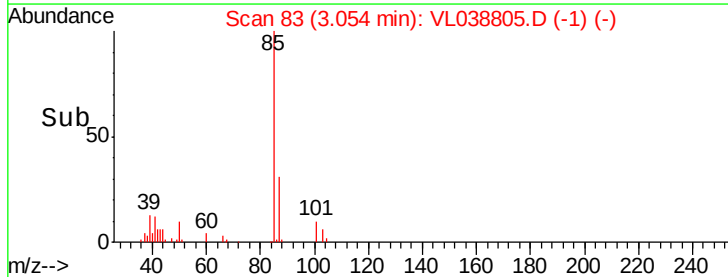
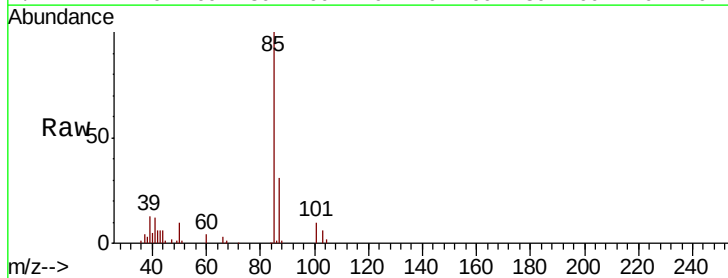
Acq: 30 Mar 2022 22:01

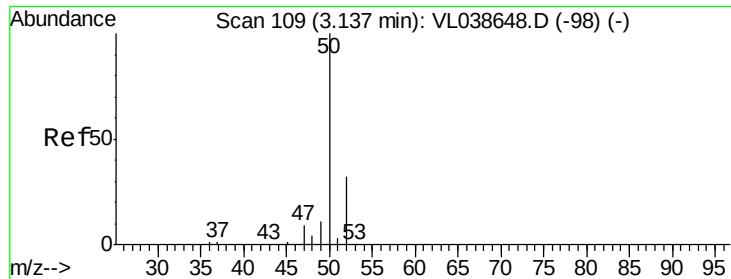
Tgt Ion: 85 Resp: 103731

Ion Ratio Lower Upper

85 100

87 30.6 26.0 39.0





#4

Chloromethane

Concen: 0.144 ppbv m

RT: 3.14 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 30 Mar 2022 22:01 SV3DL

Tot Ion:

Ion Ratio

50 100

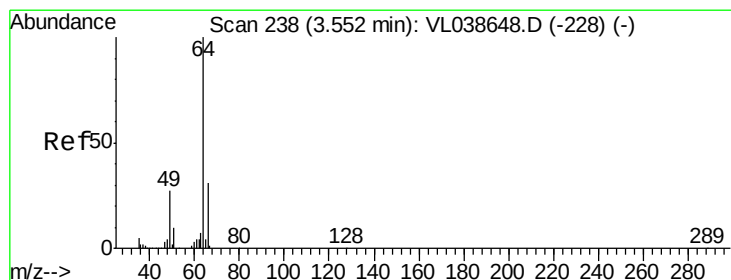
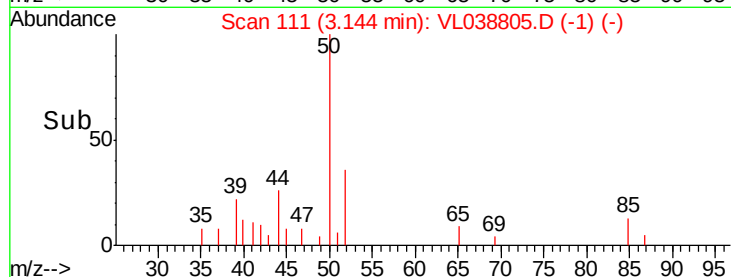
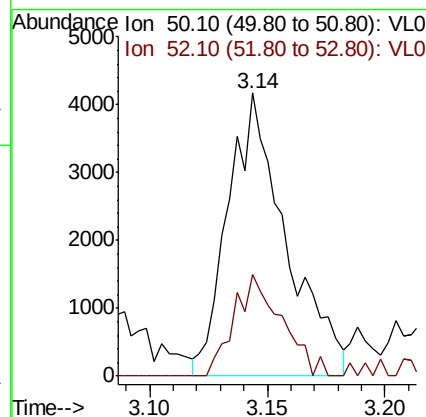
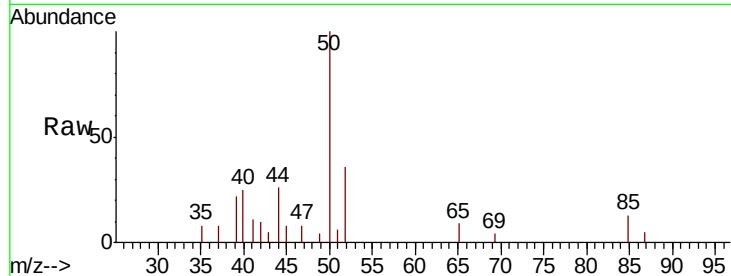
52 36.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 04/02/2022

Supervised By :Mahesh Dadoda 04/04/2022



#7

Chloroethane

Concen: 0.115 ppbv m

RT: 3.56 min Scan# 241

Delta R.T. 0.01 min

Lab File: VL038805.D

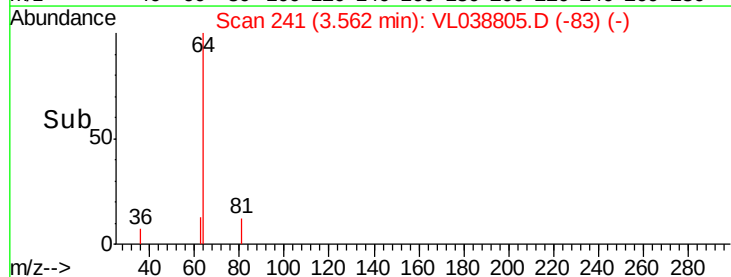
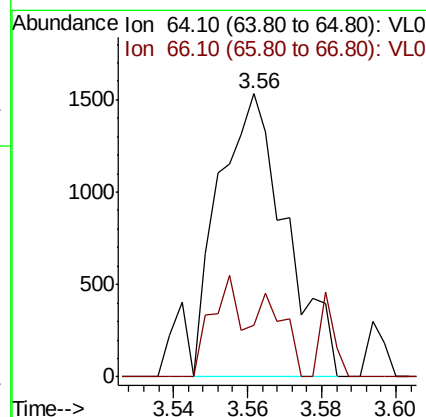
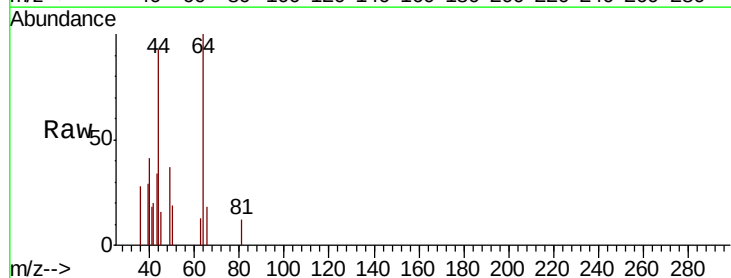
Acq: 30 Mar 2022 22:01

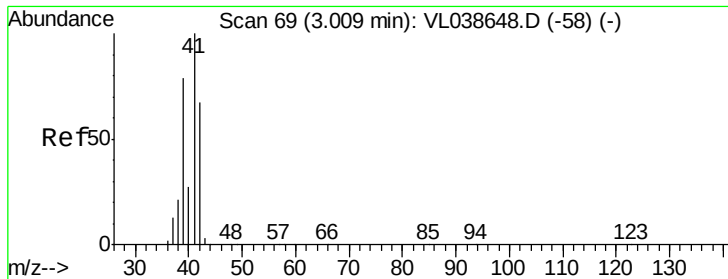
Tgt Ion: 64 Resp: 1922

Ion Ratio Lower Upper

64 100

66 18.4 25.0 37.6#





#9

Propene

Concen: 2.750 ppbv

RT: 3.02

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 30 Mar 2022 22:01

Tot Ion:

Ion Ratio

41 100

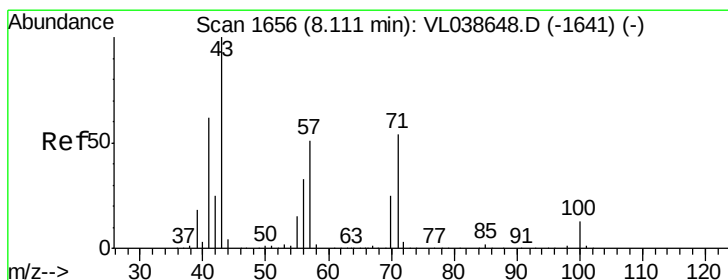
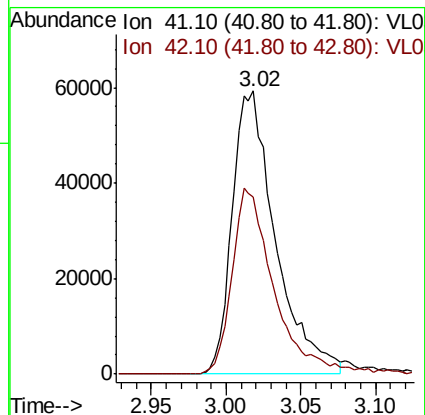
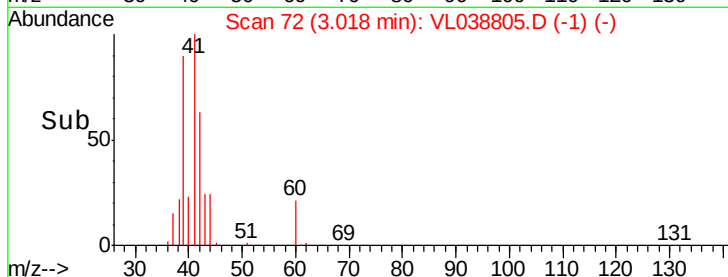
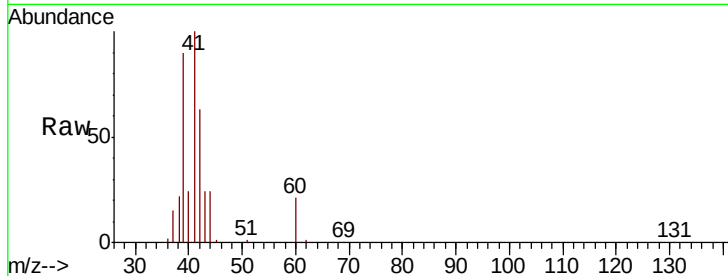
42 64.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 04/02/2022

Supervised By :Mahesh Dadoda 04/04/2022



#10

Heptane

Concen: 0.733 ppbv

RT: 8.12 min Scan# 1658

Delta R.T. 0.01 min

Lab File: VL038805.D

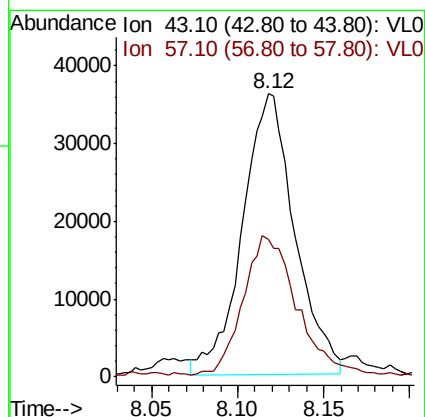
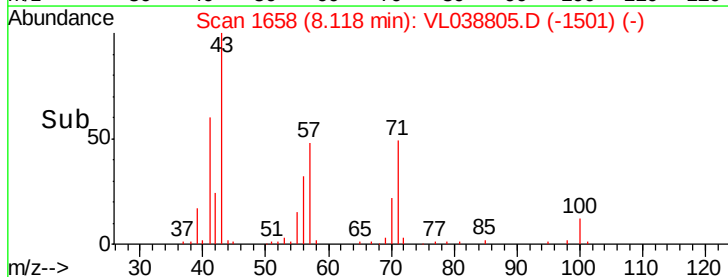
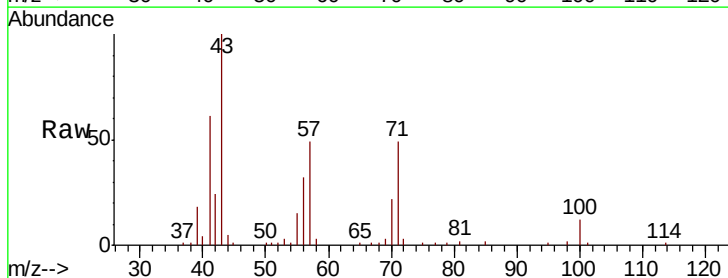
Acq: 30 Mar 2022 22:01

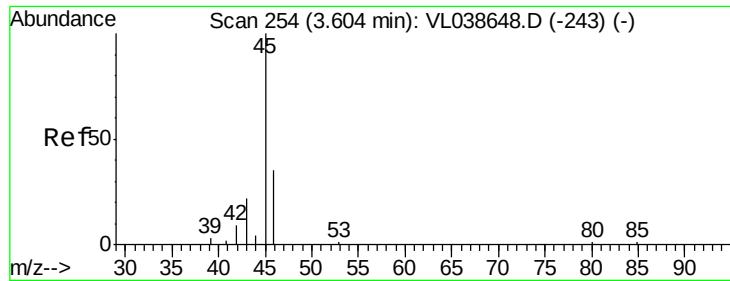
Tgt Ion: 43 Resp: 76260

Ion Ratio Lower Upper

43 100

57 51.3 41.4 62.2



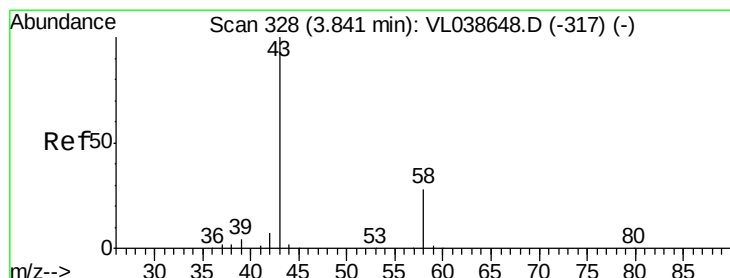
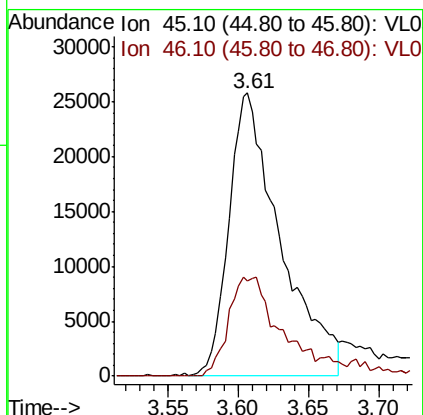
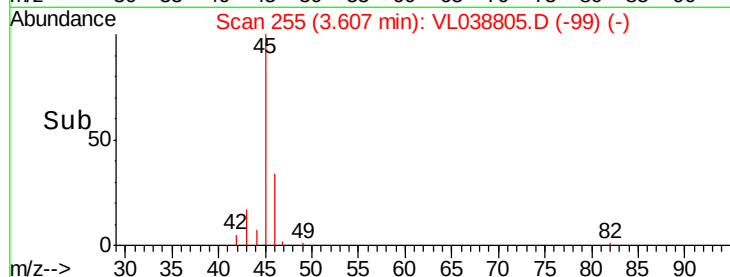
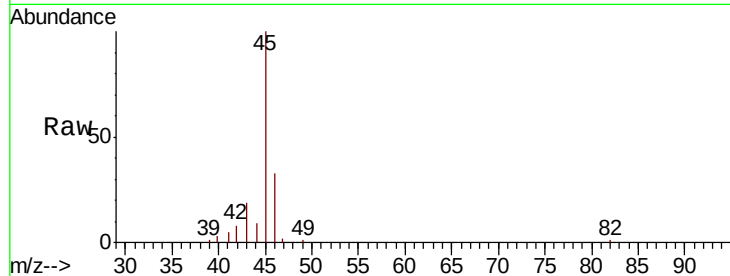


#13
Ethanol
Concen: 13.708 ppbv
RT: 3.61
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
SV3DL
Acq: 30 Mar 2022 22:01

Tot Ion:
Ion Ratio
45 100
46 40.

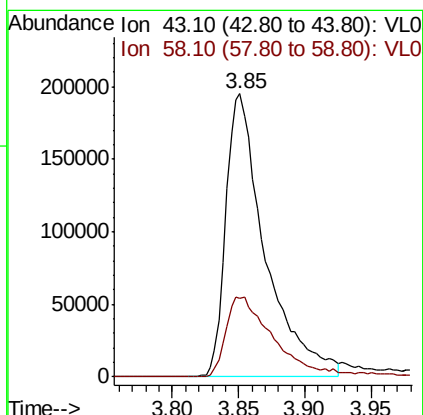
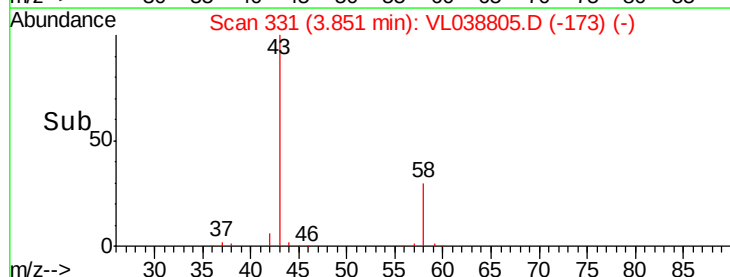
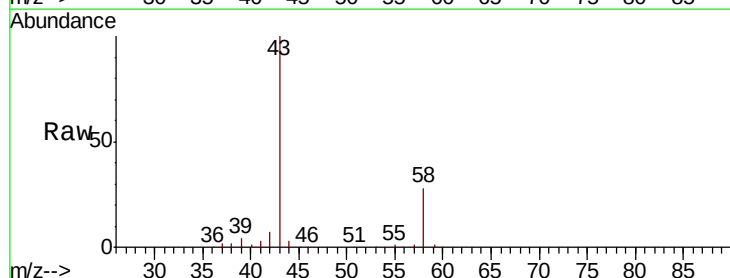
Manual Integrations
APPROVED

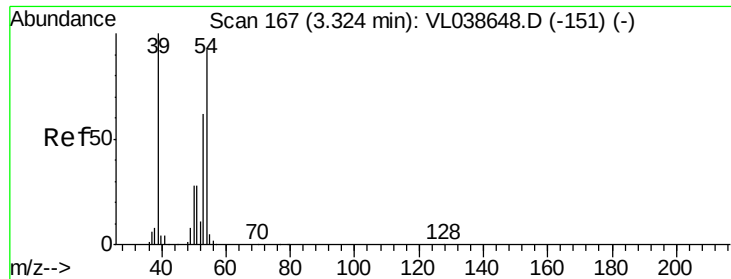
Reviewed By :Semsettin Yesilyurt 04/02/2022
Supervised By :Mahesh Dadoda 04/04/2022



#15
Acetone
Concen: 5.475 ppbv
RT: 3.85 min Scan# 331
Delta R.T. 0.01 min
Lab File: VL038805.D
Acq: 30 Mar 2022 22:01

Tgt Ion: 43 Resp: 403316
Ion Ratio Lower Upper
43 100
58 35.9 23.3 34.9#



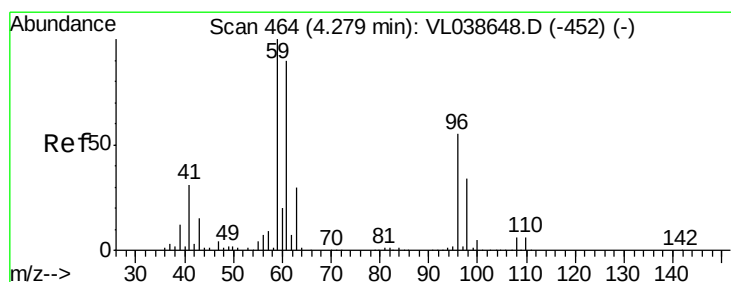
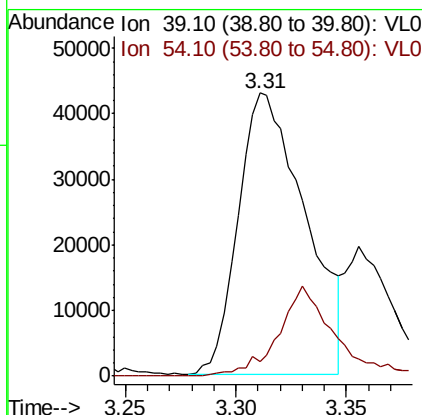
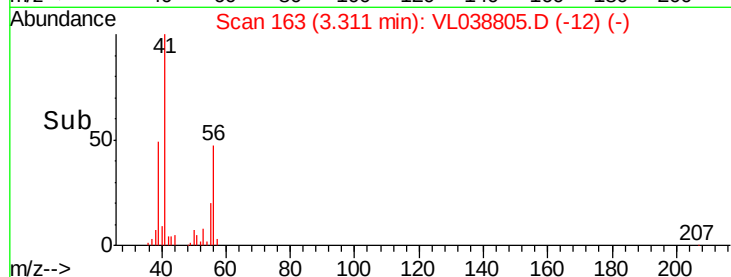
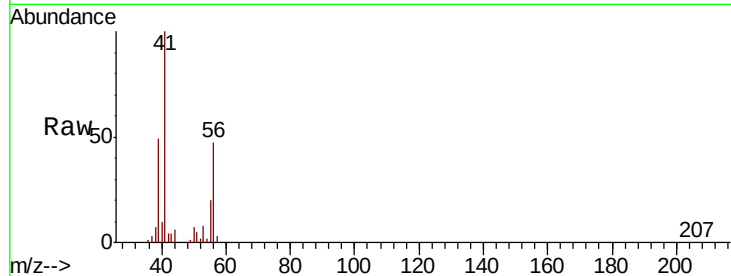


#16
 1,3-Butadiene
 Concen: 2.167 ppbv
 RT: 3.31
 Instrument: MSVOA_L
 Delta R.T.:
 Lab File: ClientSampleId:
 SV3DL
 Acq: 30 Mar 2022 22:01

Tot Ion:
 Ion Ratio
 39 100
 54 27.

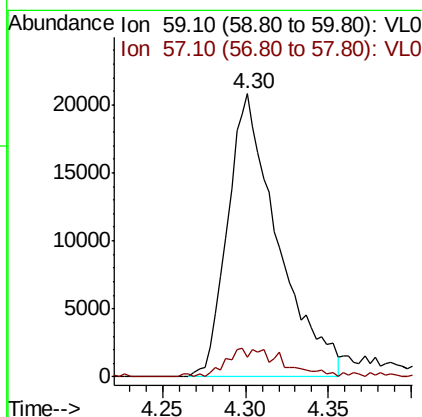
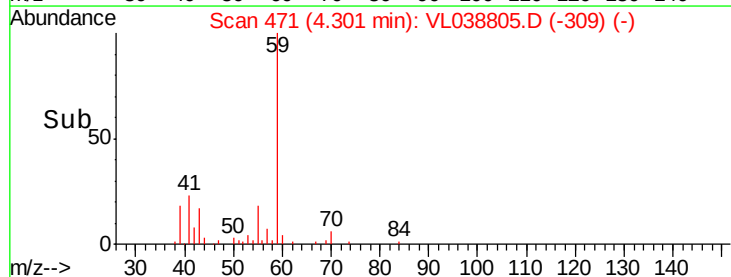
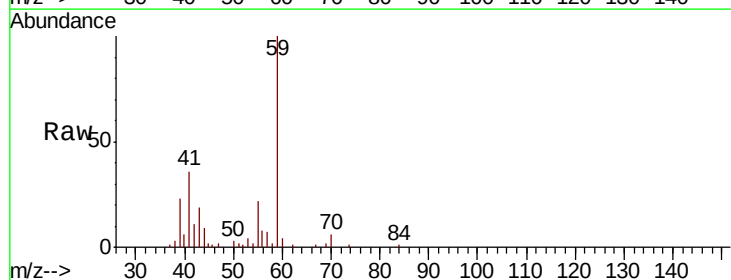
Manual Integrations
 APPROVED

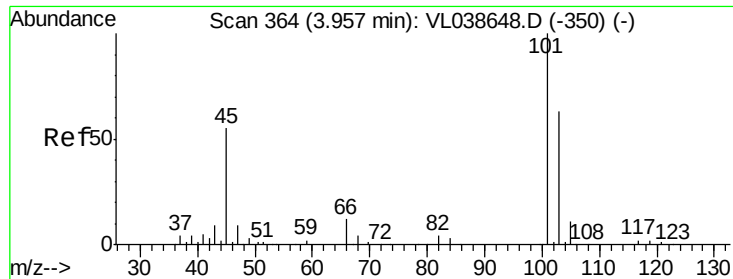
Reviewed By :Semsettin Yesilyurt 04/02/2022
 Supervised By :Mahesh Dadoda 04/04/2022



#17
 tert-Butyl alcohol
 Concen: 0.681 ppbv
 RT: 4.30 min Scan# 471
 Delta R.T. 0.02 min
 Lab File: VL038805.D
 Acq: 30 Mar 2022 22:01

Tgt Ion: 59 Resp: 43813
 Ion Ratio Lower Upper
 59 100
 57 11.7 8.2 12.2





#19

Isopropyl Alcohol

Concen: 0.336 ppbv m

RT: 3.97

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 30 Mar 2022 22:01

Tot Ion:

Ion Ratio

45 100

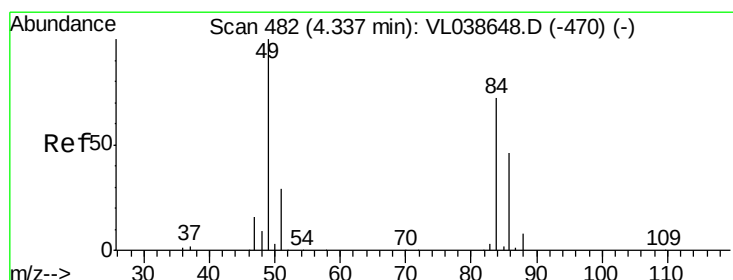
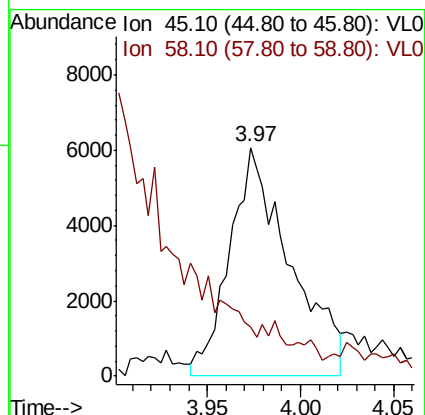
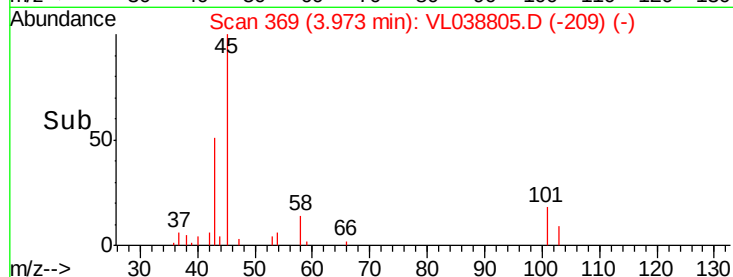
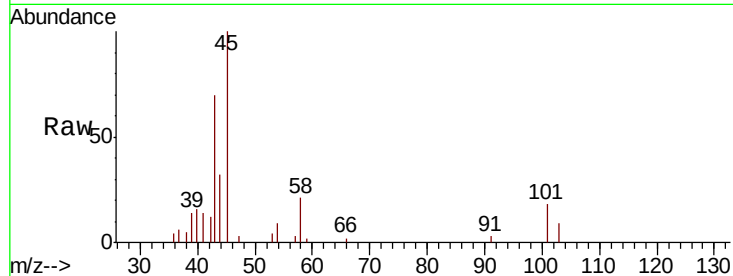
58 1053

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 04/02/2022

Supervised By :Mahesh Dadoda 04/04/2022



#20

Methylene Chloride

Concen: 0.836 ppbv

RT: 4.34 min Scan# 484

Delta R.T. 0.01 min

Lab File: VL038805.D

Acq: 30 Mar 2022 22:01

Tgt Ion: 84 Resp: 25951

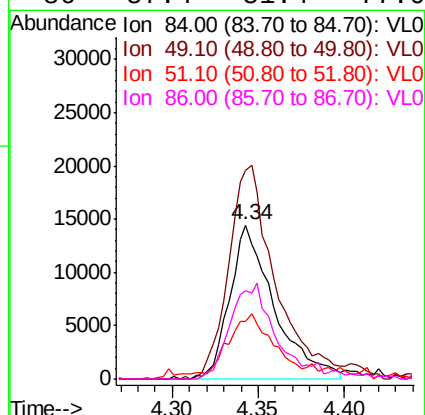
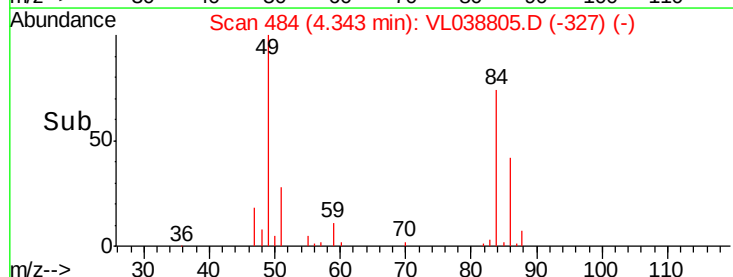
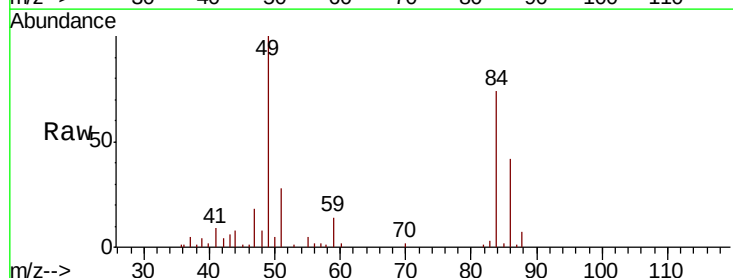
Ion Ratio Lower Upper

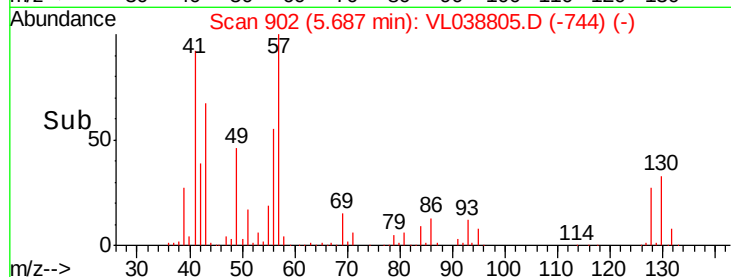
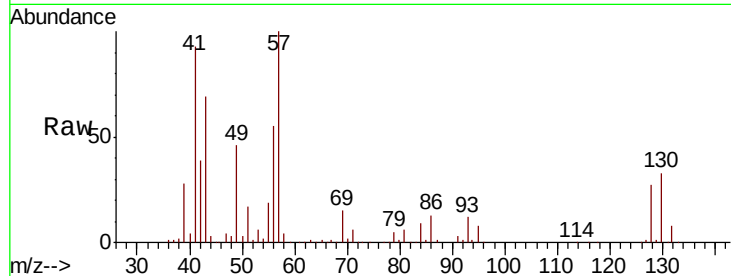
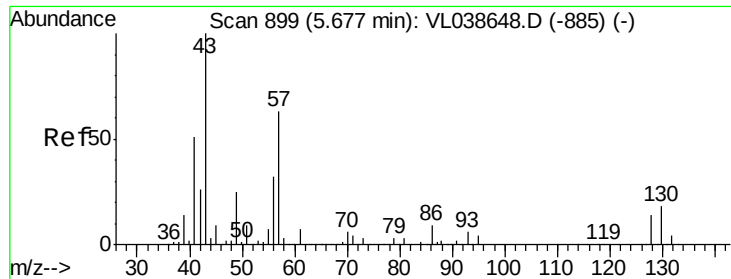
84 100

49 135.8 111.2 166.8

51 34.2 32.8 49.2

86 57.4 51.4 77.0



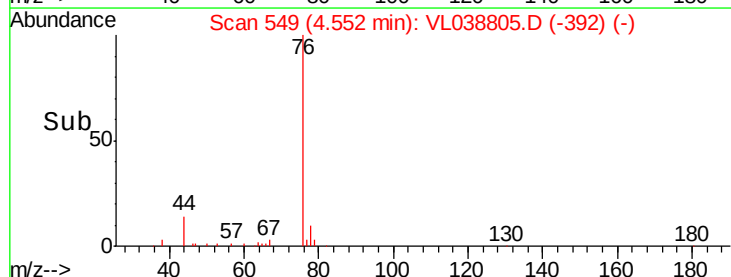
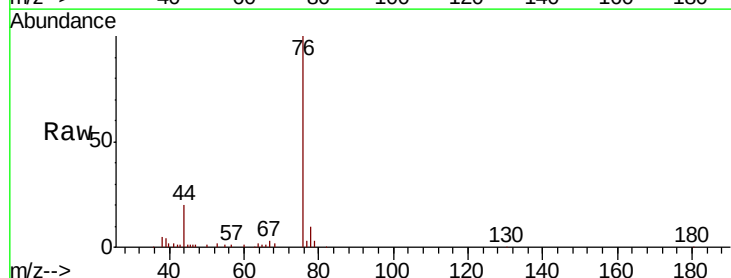
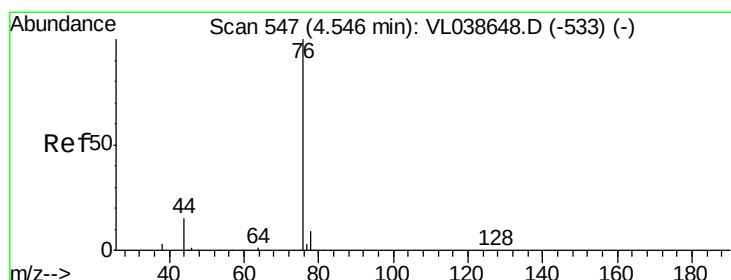
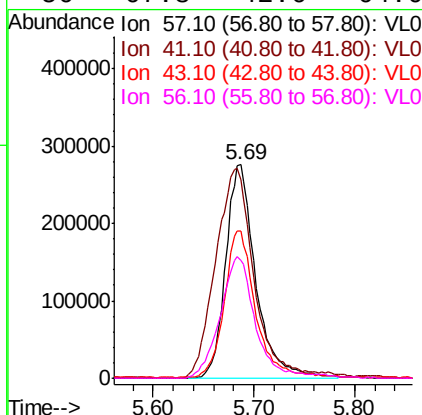


#26
Hexane
Concen: 6.901 ppbv
RT: 5.69
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 30 Mar 2022 22:01 SV3DL

Tot Ion:
Ion Ratio
57 100
41 127.
43 72.
56 67.8 42.6 64.0#

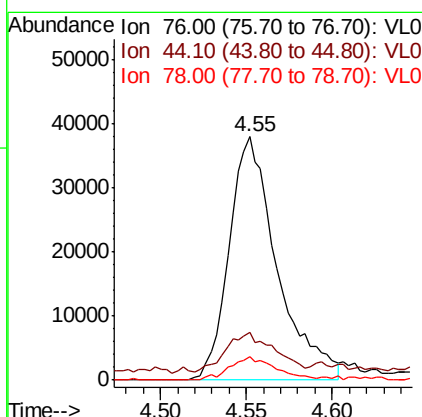
Manual Integrations
APPROVED

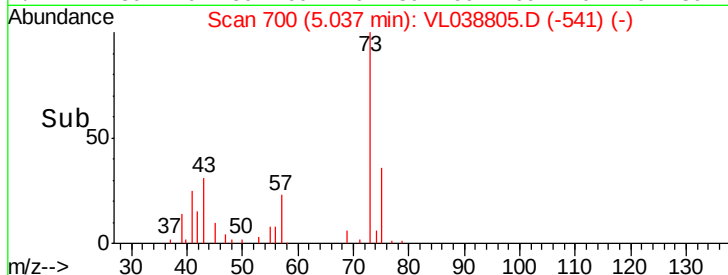
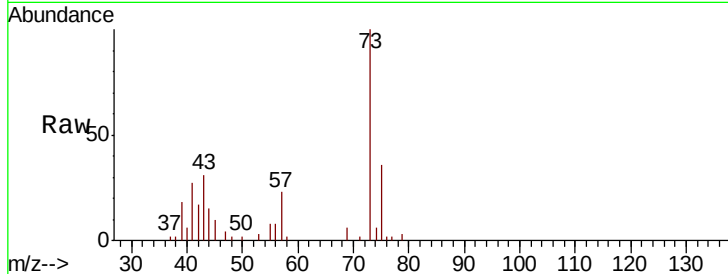
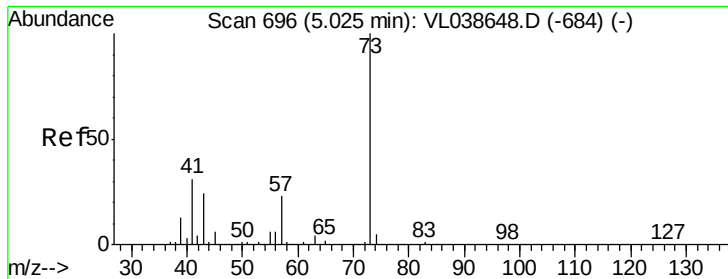
Reviewed By :Semsettin Yesilyurt 04/02/2022
Supervised By :Mahesh Dadoda 04/04/2022



#27
Carbon Disulfide
Concen: 0.907 ppbv
RT: 4.55 min Scan# 549
Delta R.T. 0.01 min
Lab File: VL038805.D
Acq: 30 Mar 2022 22:01

Tgt Ion: 76 Resp: 73881
Ion Ratio Lower Upper
76 100
44 20.2 12.4 18.6#
78 9.4 7.8 11.8



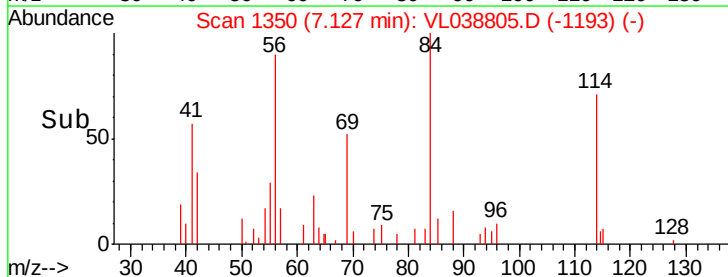
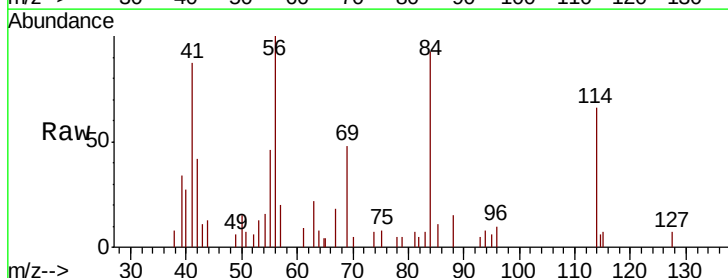
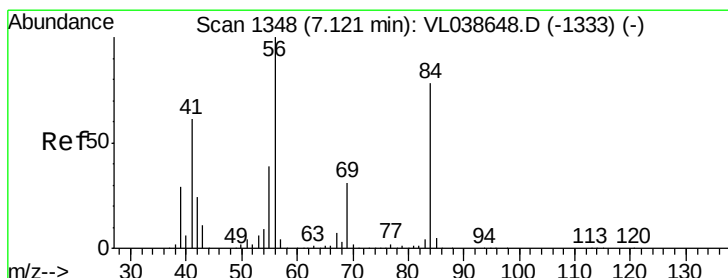
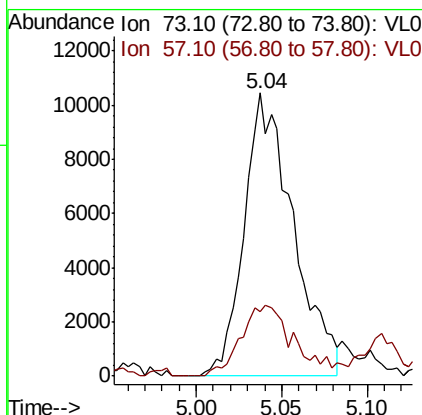


#28
Methyl tert-Butyl Ether
Concen: 0.337 ppbv m
RT: 5.04
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
SV3DL
Acq: 30 Mar 2022 22:01

Tot Ion:
Ion Ratio
73 100
57 0.

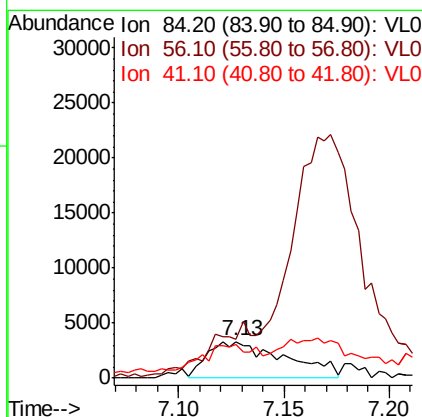
Manual Integrations
APPROVED

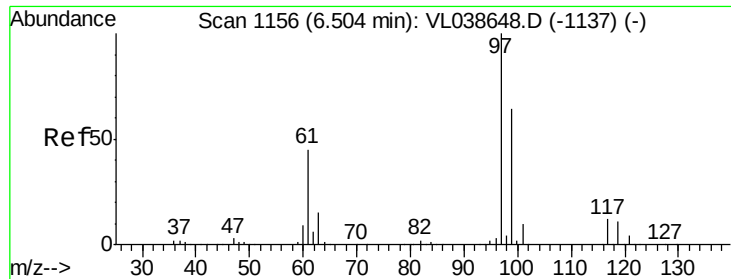
Reviewed By :Semsettin Yesilyurt 04/02/2022
Supervised By :Mahesh Dadoda 04/04/2022



#30
Cyclohexane
Concen: 0.118 ppbv m
RT: 7.13 min Scan# 1350
Delta R.T. 0.01 min
Lab File: VL038805.D
Acq: 30 Mar 2022 22:01

Tgt Ion: 84 Resp: 8508
Ion Ratio Lower Upper
84 100
56 0.0 108.2 162.4#
41 78.8 61.8 92.6





#32

1,1,1-Trichloroethane

Concen: 0.072 ppbv

RT: 6.51 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 30 Mar 2022 22:01 SV3DL

Tot Ion:

Ion Ratio

97 100

99 70.

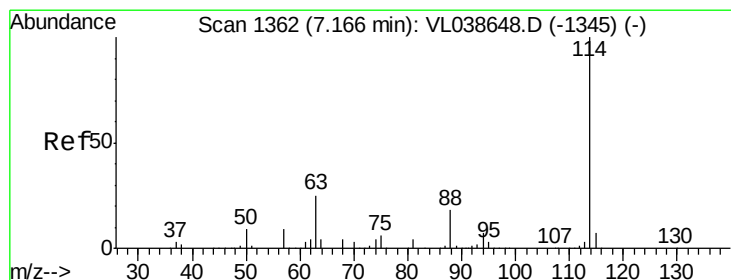
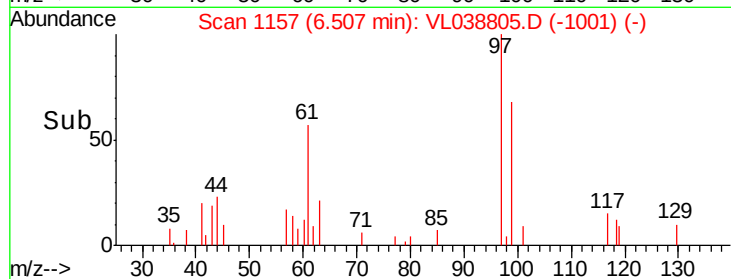
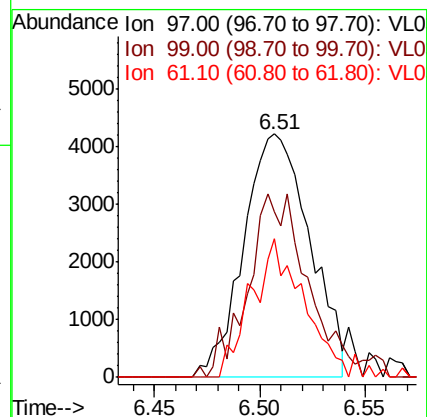
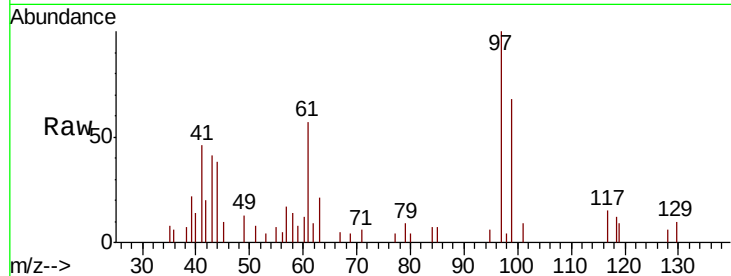
61 47.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 04/02/2022

Supervised By :Mahesh Dadoda 04/04/2022



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.17 min Scan# 1363

Delta R.T. 0.00 min

Lab File: VL038805.D

Acq: 30 Mar 2022 22:01

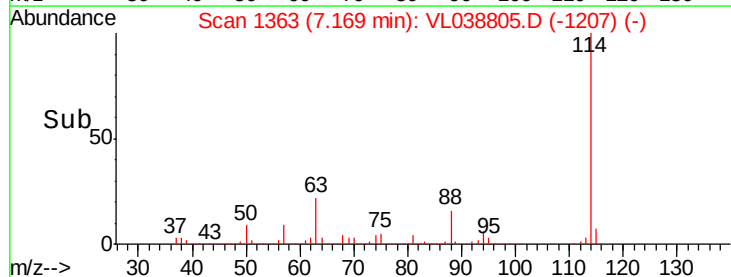
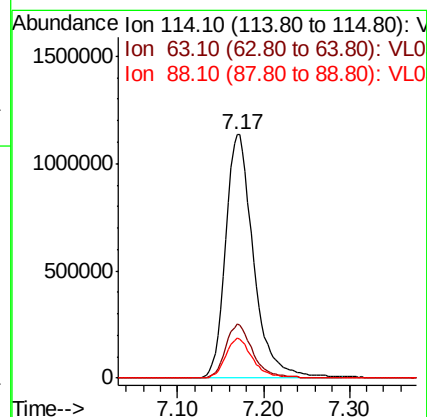
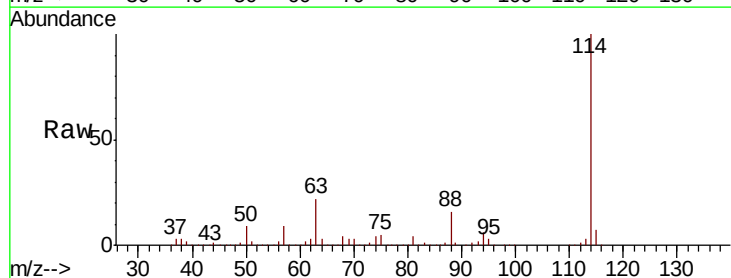
Tgt Ion:114 Resp: 2571527

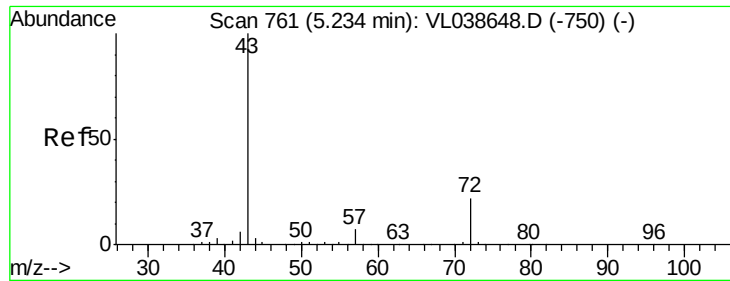
Ion Ratio Lower Upper

114 100

63 21.7 19.4 29.0

88 16.1 13.9 20.9



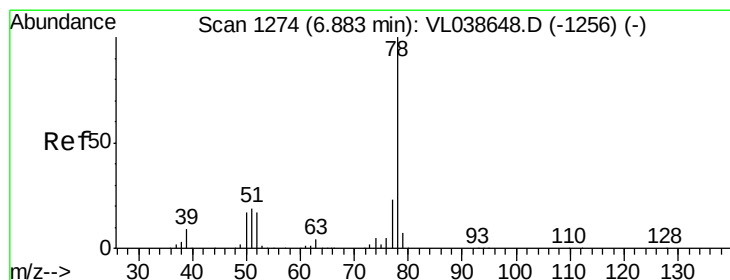
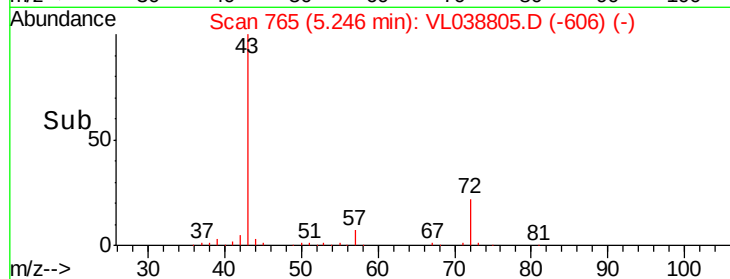
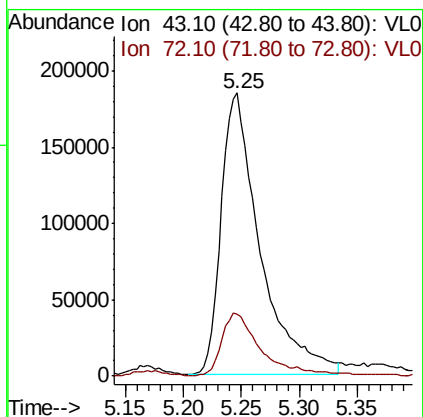
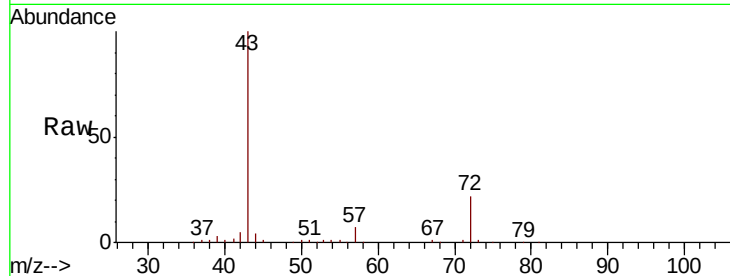


#34
2-Butanone
Concen: 4.248 ppbv
RT: 5.25
Instrument: MSVOA_L
Delta R.T.:
Lab File: ClientSampleId:
SV3DL
Acq: 30 Mar 2022 22:01

Tot Ion:
Ion Ratio
43 100
72 23.

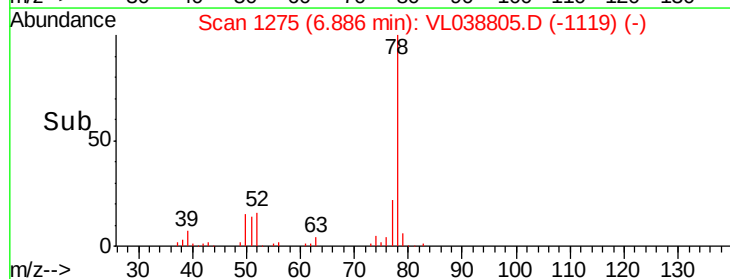
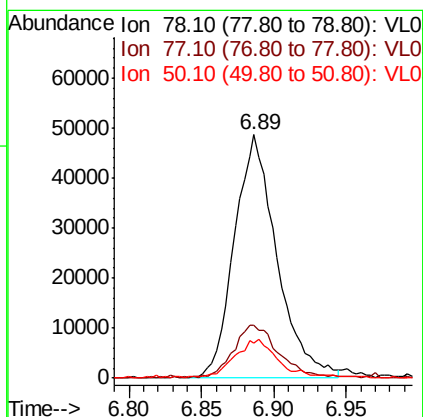
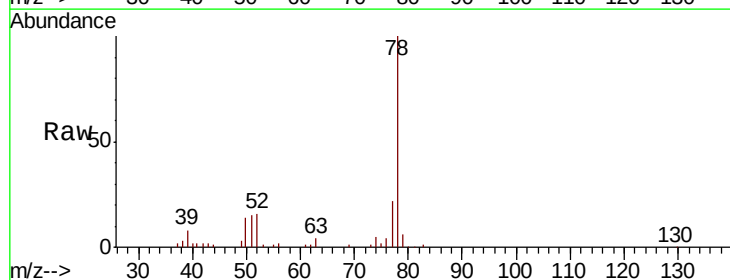
Manual Integrations
APPROVED

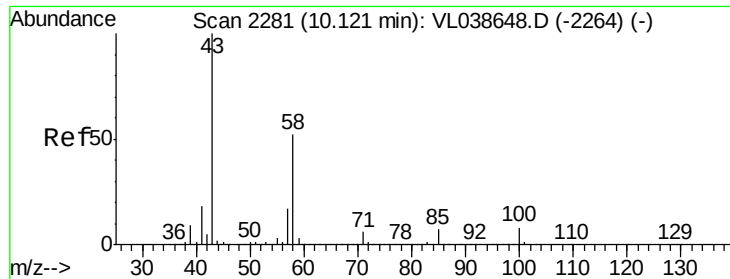
Reviewed By :Semsettin Yesilyurt 04/02/2022
Supervised By :Mahesh Dadoda 04/04/2022



#36
Benzene
Concen: 0.501 ppbv
RT: 6.89 min Scan# 1275
Delta R.T. 0.00 min
Lab File: VL038805.D
Acq: 30 Mar 2022 22:01

Tgt Ion: 78 Resp: 99371
Ion Ratio Lower Upper
78 100
77 21.7 18.1 27.1
50 14.1 13.6 20.4





#51

2-Hexanone

Concen: 1.287 ppbv m

RT: 10.13

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 30 Mar 2022 22:01

Tot Ion:

Ion Ratio

43 100

58 52.

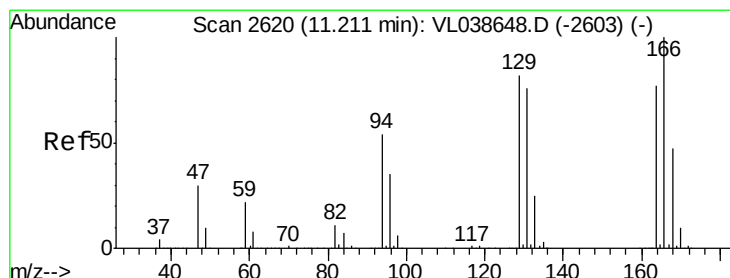
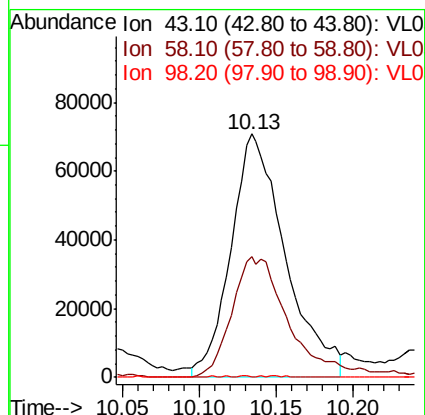
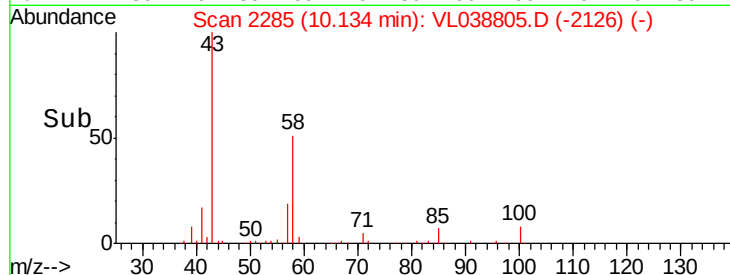
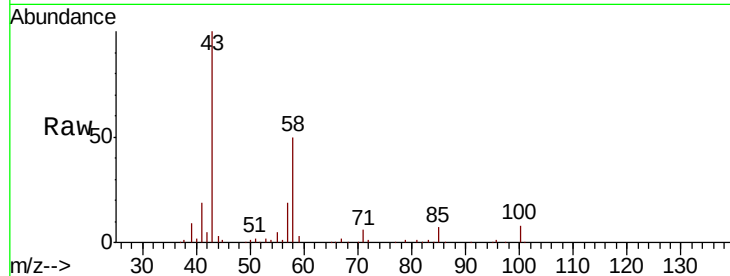
98 0.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 04/02/2022

Supervised By :Mahesh Dadoda 04/04/2022



#52

Tetrachloroethene

Concen: 1.691 ppbv

RT: 11.22 min Scan# 2623

Delta R.T. 0.01 min

Lab File: VL038805.D

Acq: 30 Mar 2022 22:01

Tgt Ion:164 Resp: 122791

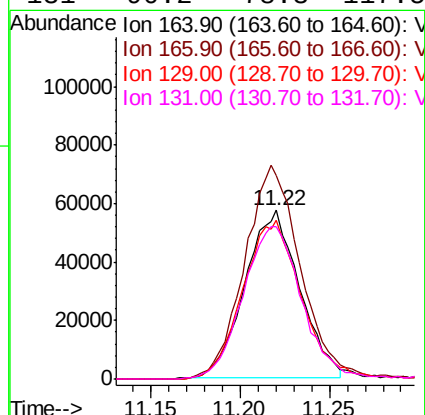
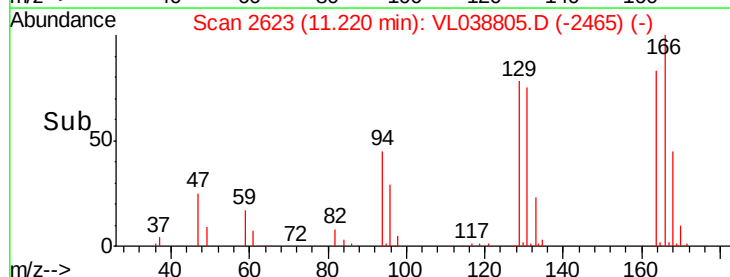
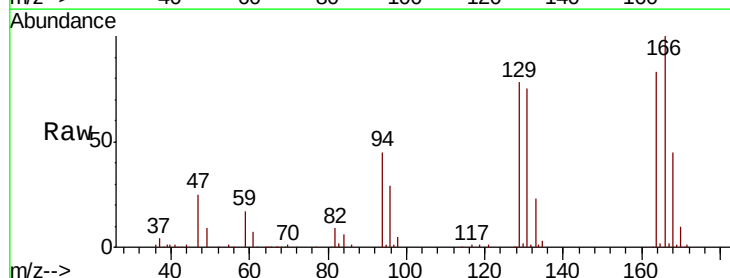
Ion Ratio Lower Upper

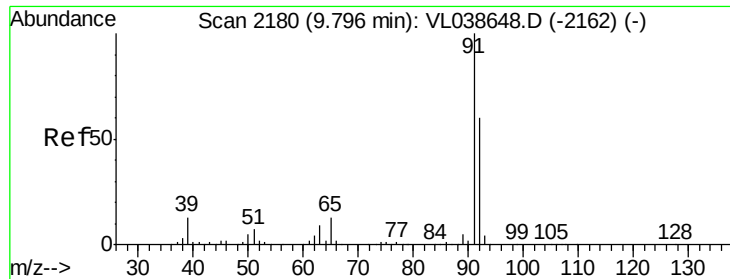
164 100

166 120.3 103.3 154.9

129 93.3 85.2 127.8

131 90.2 78.3 117.5





#53

Toluene

Concen: 1.479 ppbv

RT: 9.80

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 30 Mar 2022 22:01

Tot Ion:

Ion Ratio

91 100

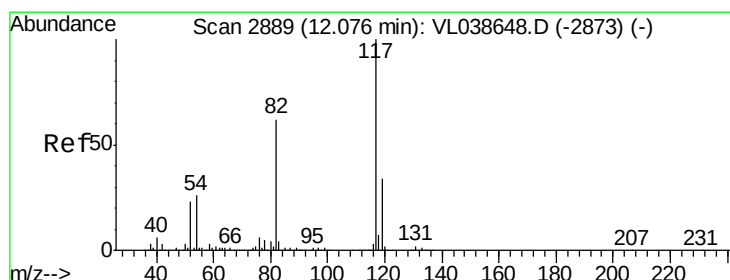
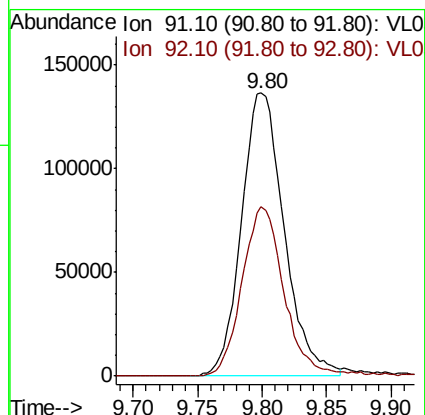
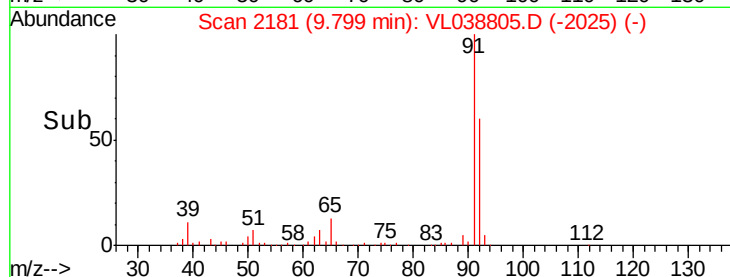
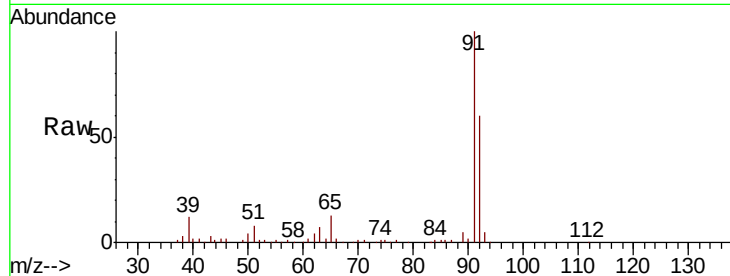
92 59.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 04/02/2022

Supervised By :Mahesh Dadoda 04/04/2022



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.08 min Scan# 2890

Delta R.T. 0.00 min

Lab File: VL038805.D

Acq: 30 Mar 2022 22:01

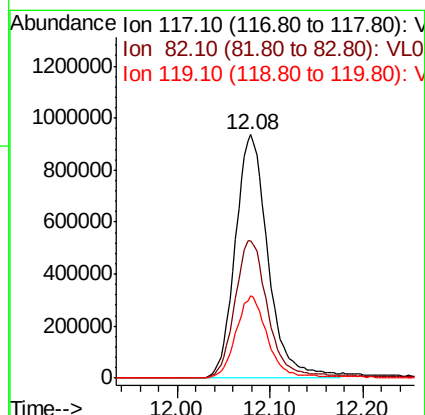
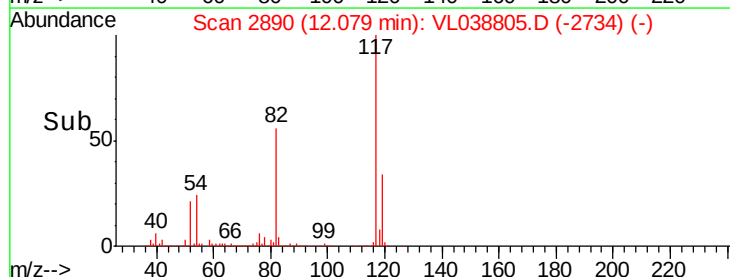
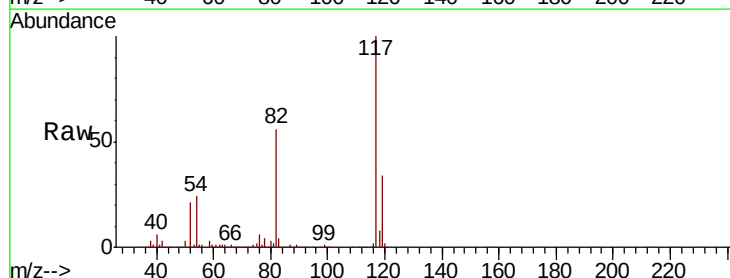
Tgt Ion:117 Resp: 2297072

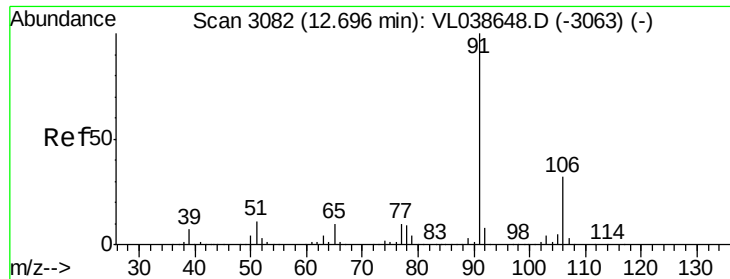
Ion Ratio Lower Upper

117 100

82 59.9 51.6 77.4

119 33.8 26.9 40.3



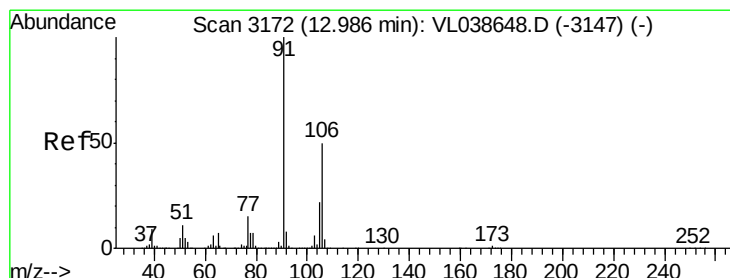
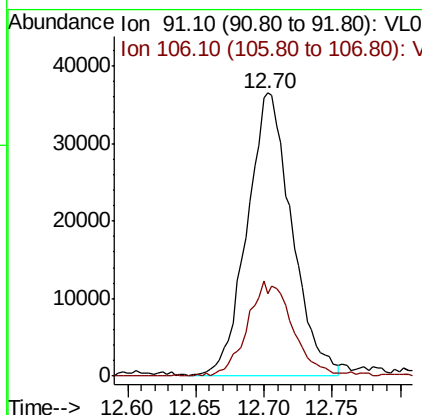
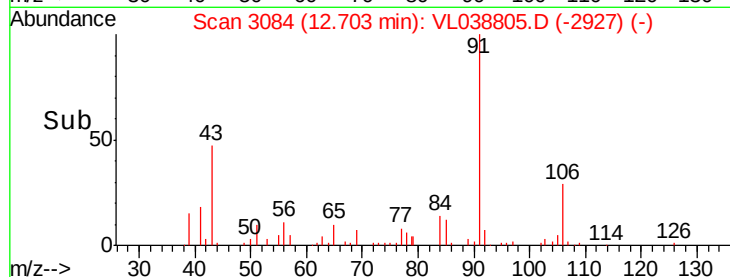
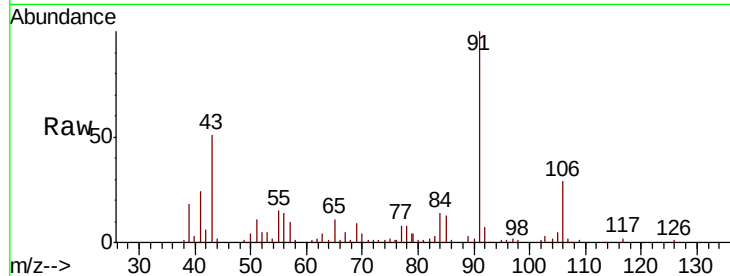


#58
Ethyl Benzene
Concen: 0.310 ppbv
RT: 12.70 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
SV3DL
Acq: 30 Mar 2022 22:01

Tot Ion:
Ion Ratio
91 100
106 29.

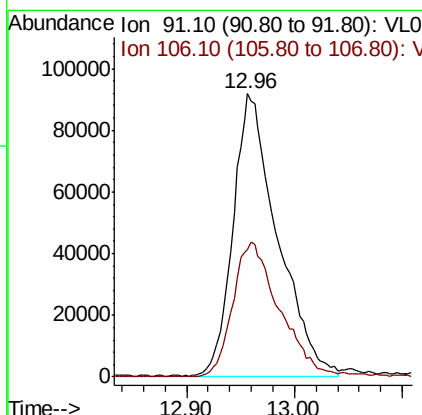
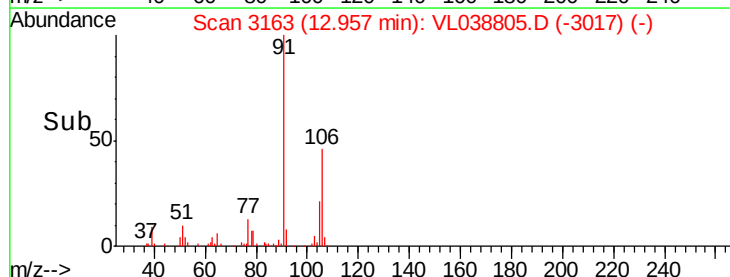
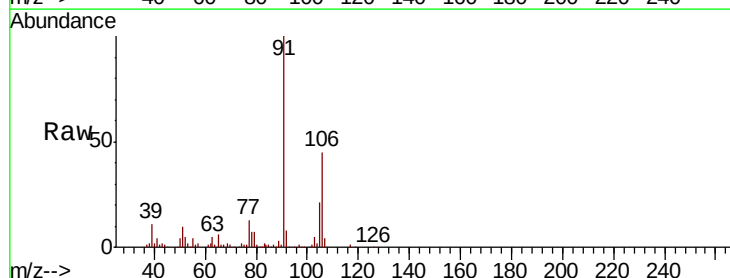
Manual Integrations
APPROVED

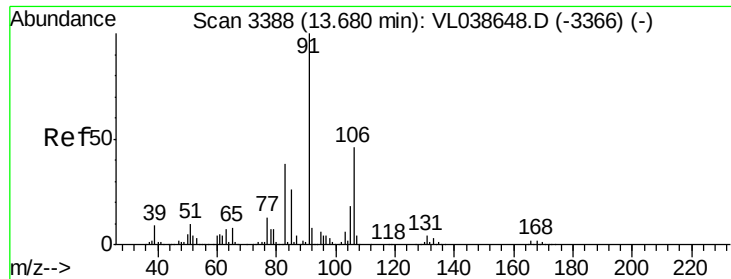
Reviewed By :Semsettin Yesilyurt 04/02/2022
Supervised By :Mahesh Dadoda 04/04/2022



#59
m/p-Xylene
Concen: 1.112 ppbv
RT: 12.96 min Scan# 3163
Delta R.T. -0.03 min
Lab File: VL038805.D
Acq: 30 Mar 2022 22:01

Tgt Ion: 91 Resp: 261232
Ion Ratio Lower Upper
91 100
106 51.0 37.2 55.8





#60

o-Xylene

Concen: 0.565 ppbv

RT: 13.69

Delta R.T.

Lab File:

Acq: 30 Mar 2022 22:01

Instrument :

MSVOA_L

ClientSampleId :

SV3DL

Tot Ion:

Ion Ratio

91 100

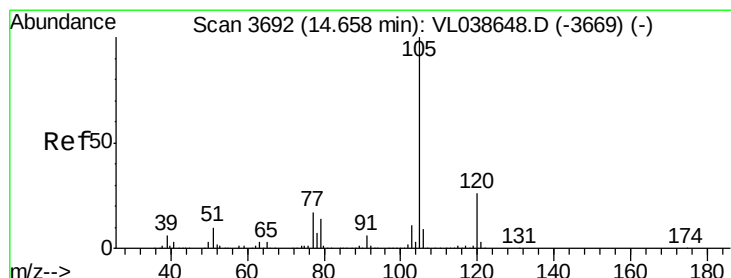
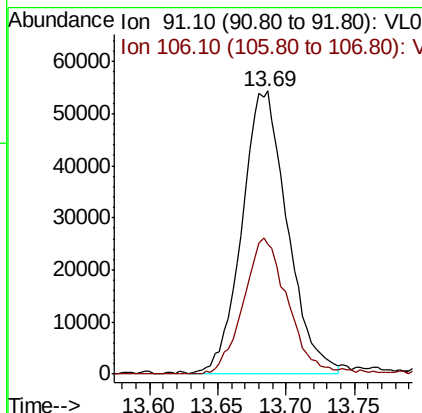
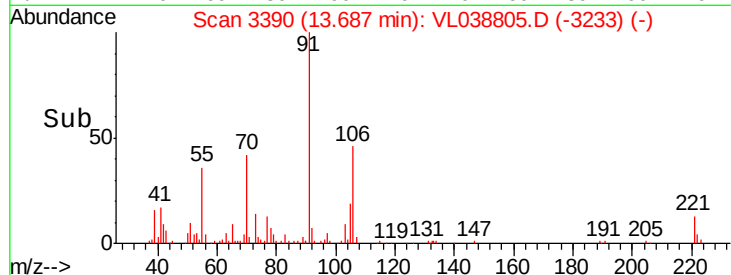
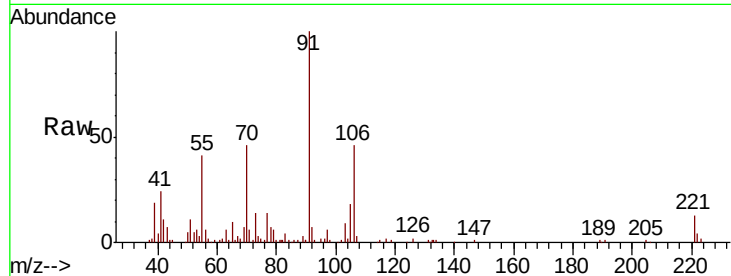
106 47.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 04/02/2022

Supervised By :Mahesh Dadoda 04/04/2022



#62

Isopropylbenzene

Concen: 0.151 ppbv

RT: 14.66 min Scan# 3693

Delta R.T. 0.00 min

Lab File: VL038805.D

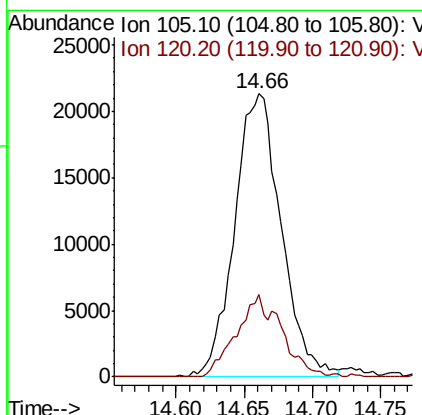
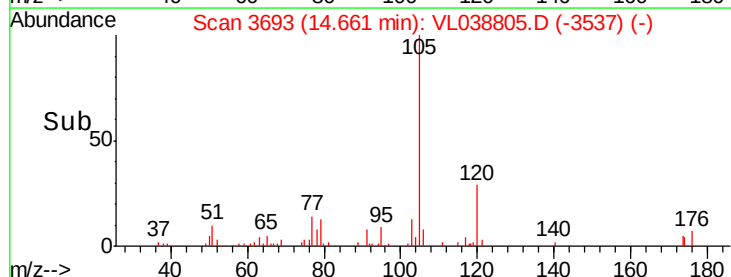
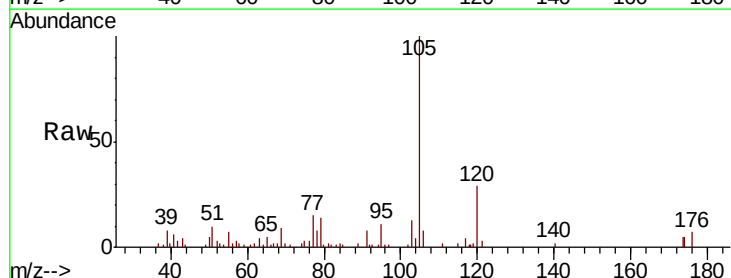
Acq: 30 Mar 2022 22:01

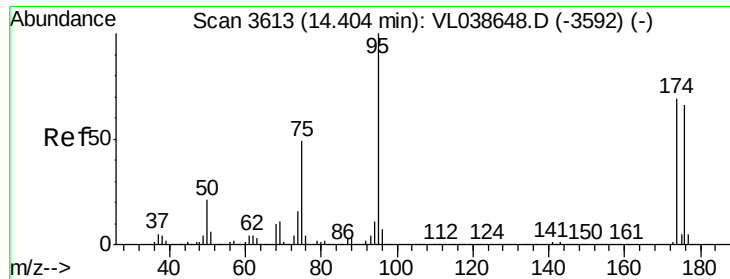
Tgt Ion:105 Resp: 50512

Ion Ratio Lower Upper

105 100

120 28.4 21.2 31.8



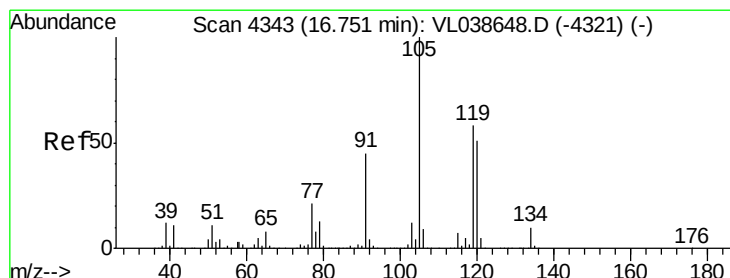
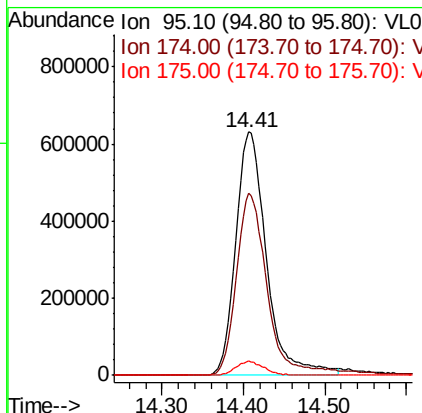
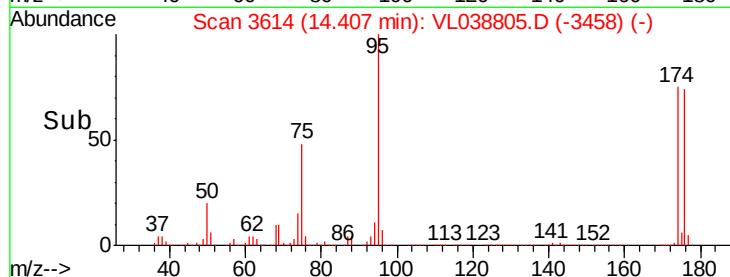
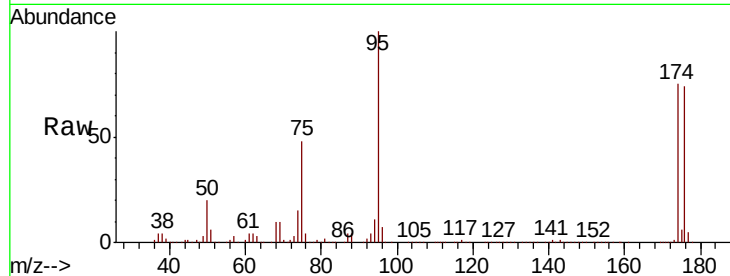


#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.365 ppbv
 RT: 14.41 min
 Delta R.T.: MSVOA_L
 Lab File: ClientSampleId : SV3DL
 Acq: 30 Mar 2022 22:01

Tot Ion:
 Ion Ratio
 95 100
 174 77.
 175 5.

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 04/02/2022
 Supervised By :Mahesh Dadoda 04/04/2022



#74
 1,2,4-Trimethylbenzene
 Concen: 0.129 ppbv m
 RT: 16.75 min Scan# 4342
 Delta R.T.: -0.00 min
 Lab File: VL038805.D
 Acq: 30 Mar 2022 22:01

Tgt Ion:105 Resp: 33782
 Ion Ratio Lower Upper
 105 100
 120 40.0 40.5 60.7#
 91 12.7 35.9 53.9#
 77 13.6 16.6 25.0#

