

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL102721\
 Data File : VL037915.D
 Acq On : 27 Oct 2021 14:19
 Operator : SY/AP
 Sample : M4377-02
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA L
 ClientSampleId :
 VMP-5-IMPLANT

Manual Integrations
 APPROVED

Reviewed By : Semsettin Yesilyurt 10/28/2021
 Supervised By : Mahesh Dadoda 10/29/2021

Quant Time: Oct 28 12:48:10 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL100421A
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument:
 QLast Update : Mon Oct 04 17:43:54 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.69	49	1387164	10.00	ppbv	0.02
33) 1,4-Difluorobenzene	7.20	114	4103001	10.00	ppbv	0.02
55) Chlorobenzene-d5	12.11	117	3360781	10.00	ppbv	0.02

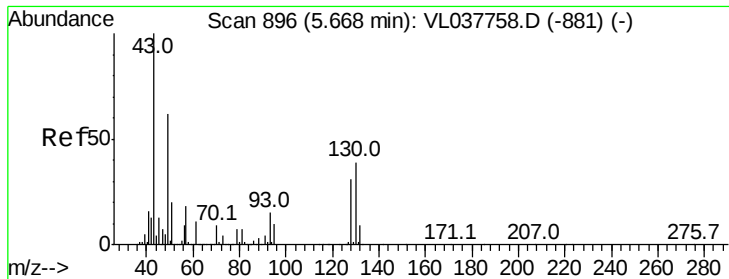
System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.43	95	2435998	10.37	ppbv	0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.70%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.06	85	48482	0.219	ppbv	99
9) Propene	3.04	41	243453m	2.482	ppbv	
10) Heptane	8.14	43	60587m	0.272	ppbv	
11) Trichlorofluoromethane	3.96	101	41040m	0.208	ppbv	
13) Ethanol	3.62	45	3388725	422.521	ppbv	79
15) Acetone	3.86	43	2395243	19.235	ppbv	97
17) tert-Butyl alcohol	4.32	59	108054m	0.843	ppbv	
19) Isopropyl Alcohol	3.99	45	2432295	31.396	ppbv #	98
20) Methylene Chloride	4.36	84	314200	4.994	ppbv	97
26) Hexane	5.71	57	297166	1.727	ppbv #	49
29) Chloroform	5.77	83	28724m	0.117	ppbv	
30) Cyclohexane	7.15	84	50389m	0.345	ppbv	
34) 2-Butanone	5.27	43	213282	1.288	ppbv	99
35) Carbon Tetrachloride	7.03	117	15113m	0.065	ppbv	
36) Benzene	6.91	78	64643m	0.184	ppbv	
41) Tetrahydrofuran	6.08	42	48435m	0.597	ppbv	
44) 2,2,4-Trimethylpentane	7.89	57	98290	0.167	ppbv #	35
52) Tetrachloroethene	11.25	164	9980m	0.073	ppbv	
53) Toluene	9.83	91	334594	0.862	ppbv	99
58) Ethyl Benzene	12.73	91	65628m	0.145	ppbv	
59) m/p-Xylene	12.99	91	287983m	0.743	ppbv	
60) o-Xylene	13.71	91	106993	0.288	ppbv	98
61) Styrene	13.55	104	83482	0.465	ppbv	96
74) 1,2,4-Trimethylbenzene	16.78	105	116244	0.289	ppbv #	70
79) Naphthalene	22.21	128	36524m	0.148	ppbv	

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.69

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 27 Oct 2021 14:19

Tot Ion:

Ion Ratio

49 100

128 53.

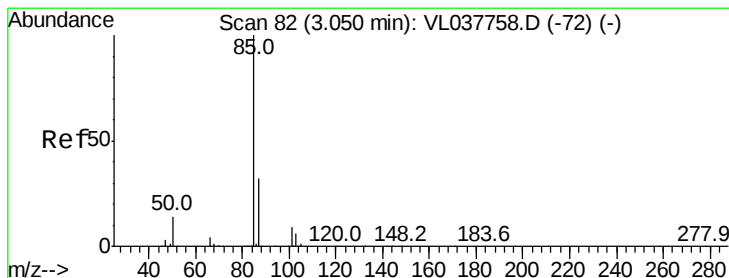
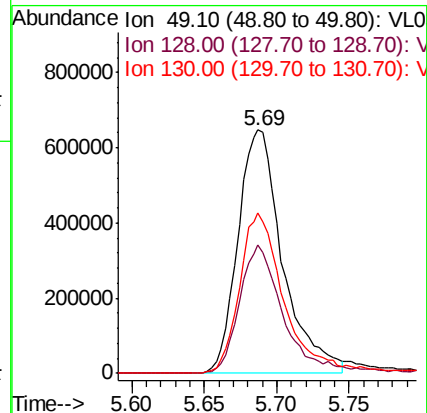
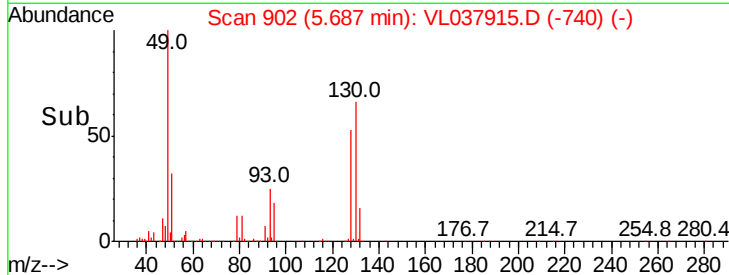
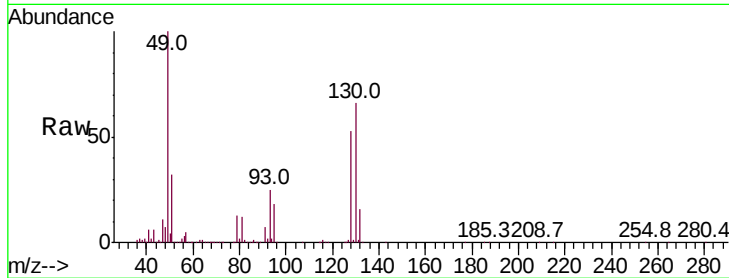
130 67.

Manual Integrations

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Supervised By :Mahesh Dadoda 10/29/2021



#2

Dichlorodifluoromethane

Concen: 0.219 ppbv

RT: 3.06 min Scan# 86

Delta R.T. 0.01 min

Lab File: VL037915.D

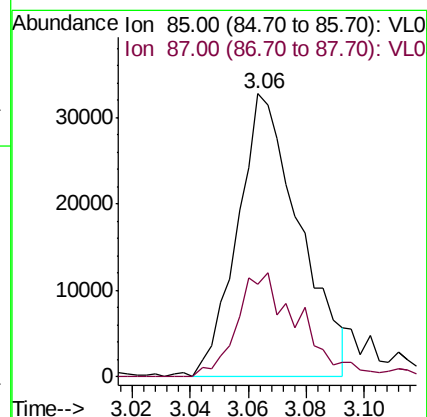
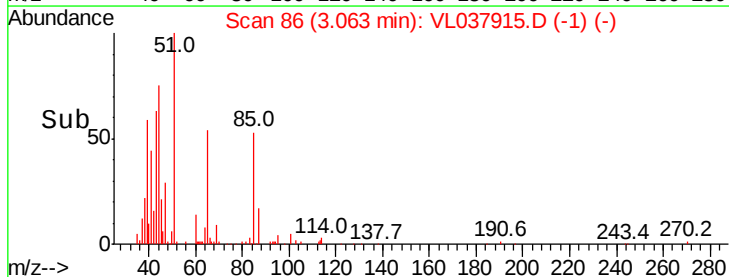
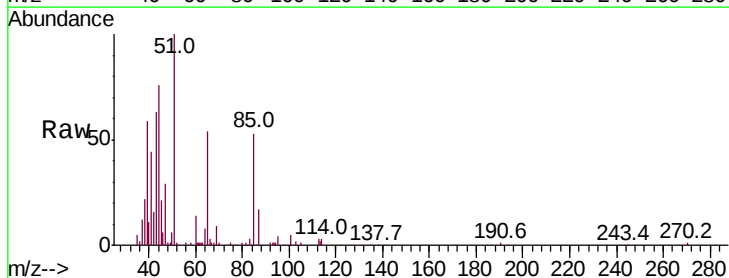
Acq: 27 Oct 2021 14:19

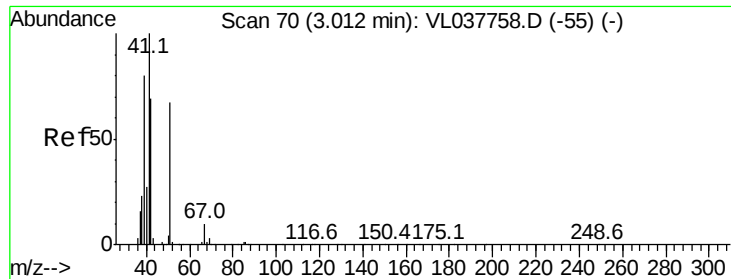
Tgt Ion: 85 Resp: 48482

Ion Ratio Lower Upper

85 100

87 32.6 25.7 38.5





#9

Propene

Concen: 2.482 ppbv m

RT: 3.04

Delta R.T.

Lab File:

Acq: 27 Oct 2021

Instrument :

MSVOA_1

ClientSampleId :

VMP-5-IMPLANT

Manual Integrations

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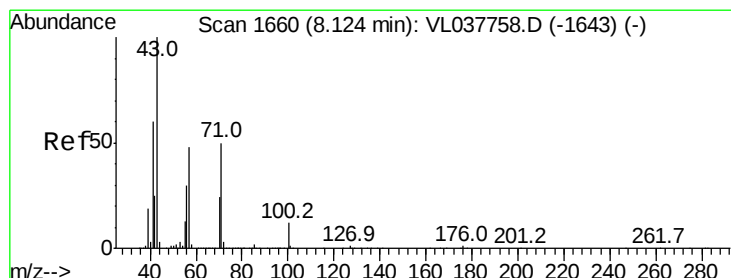
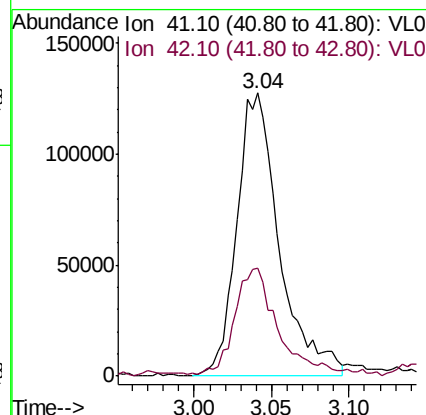
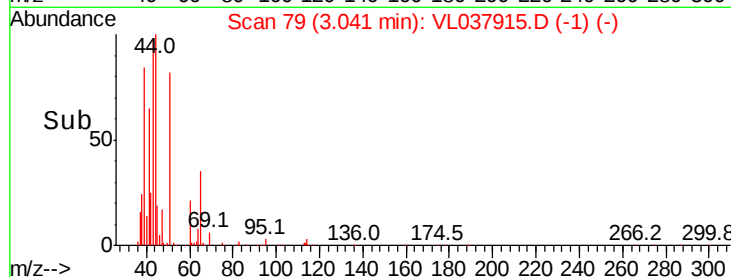
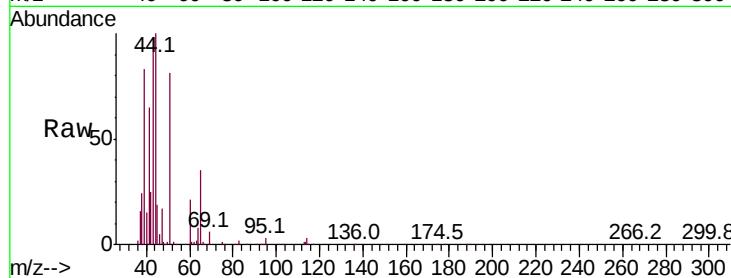
Supervised By :Mahesh Dadoda 10/29/2021

Tot Ion:

Ion Ratio

41 100

42 920.



#10

Heptane

Concen: 0.272 ppbv m

RT: 8.14 min Scan# 1666

Delta R.T. 0.02 min

Lab File: VL037915.D

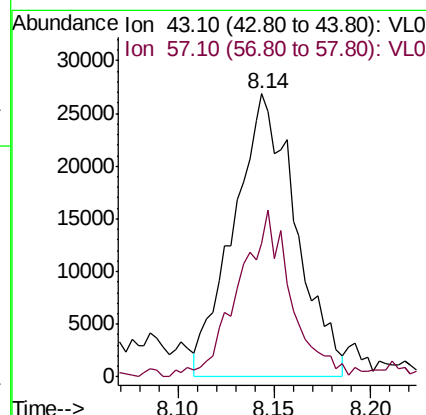
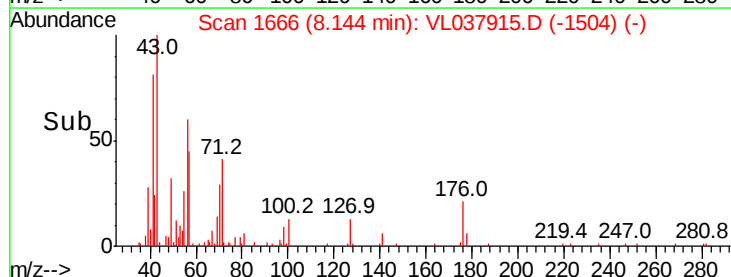
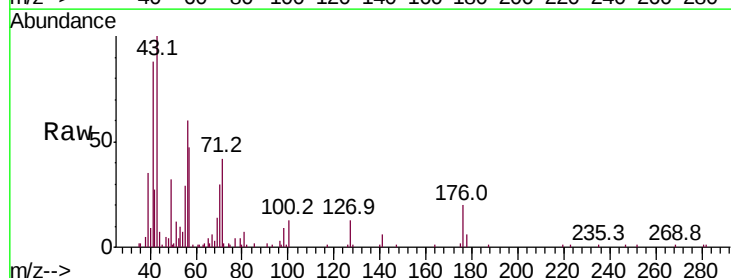
Acq: 27 Oct 2021 14:19

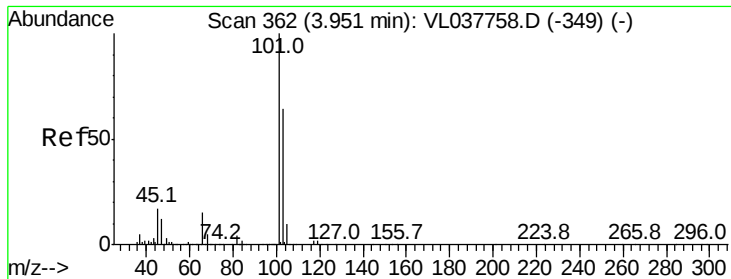
Tgt Ion: 43 Resp: 60587

Ion Ratio Lower Upper

43 100

57 0.0 40.0 60.0#



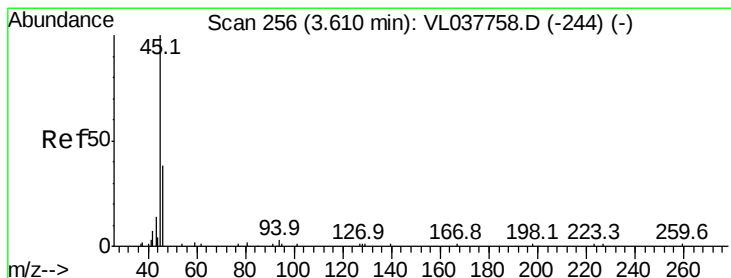
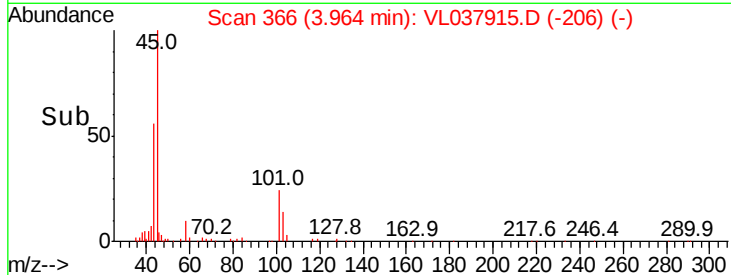
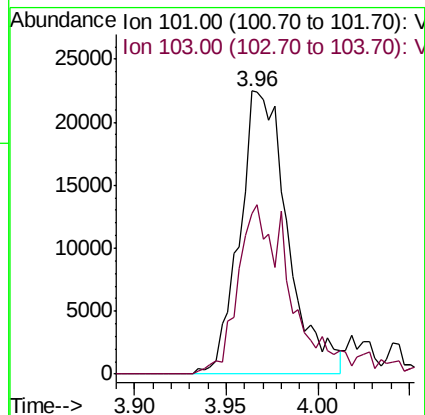
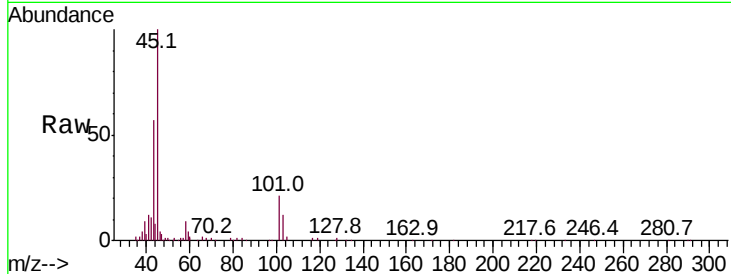


#11
Trichlorofluoromethane
Concen: 0.208 ppbv m
RT: 3.96
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
VMP-5-IMPLANT
Acq: 27 Oct 2021 14:19

Tot Ion:1
Ion Rati
101 100
103 56.

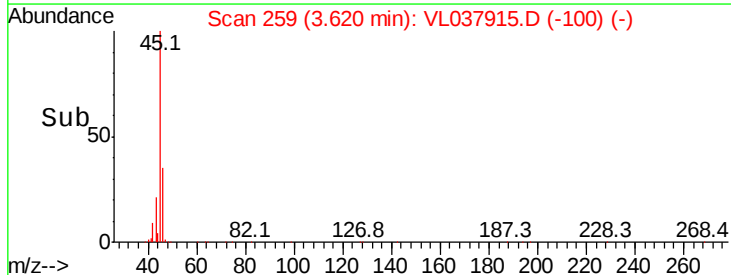
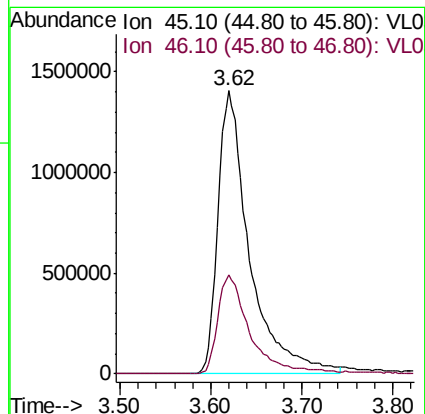
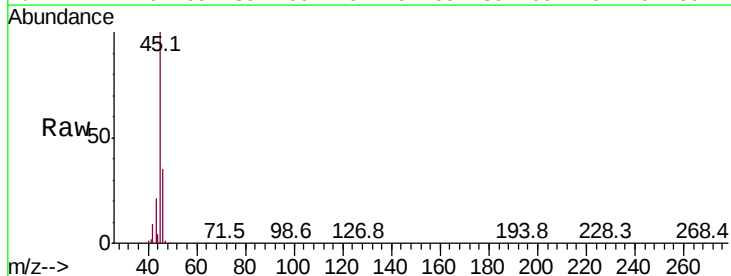
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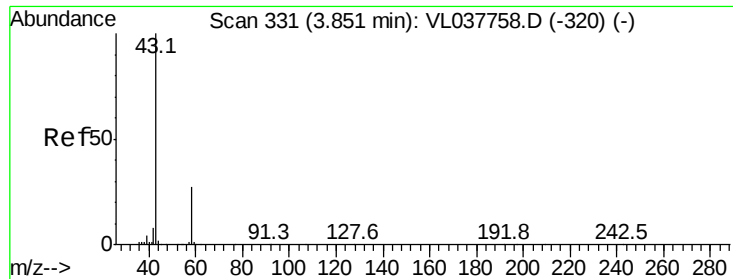
Reviewed By :Semsettin Yesilyurt 10/28/2021
Supervised By :Mahesh Dadoda 10/29/2021



#13
Ethanol
Concen: 422.521 ppbv
RT: 3.62 min Scan# 259
Delta R.T. 0.01 min
Lab File: VL037915.D
Acq: 27 Oct 2021 14:19

Tgt Ion: 45 Resp: 3388725
Ion Ratio Lower Upper
45 100
46 36.2 20.2 81.0



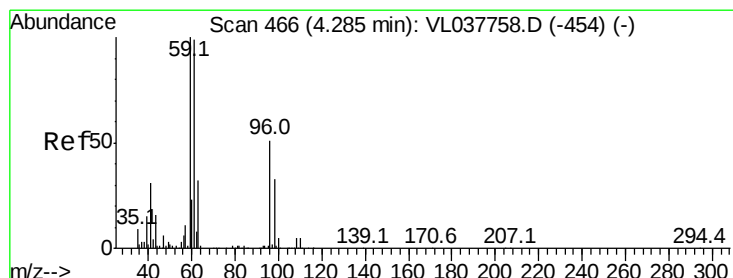
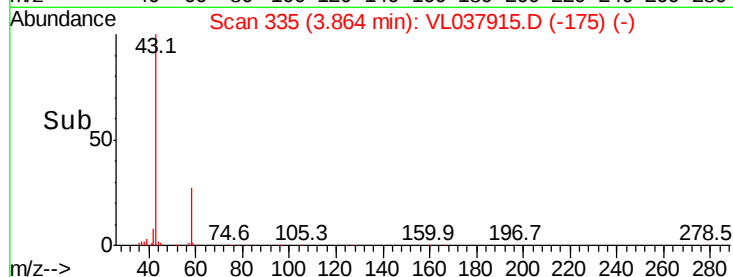
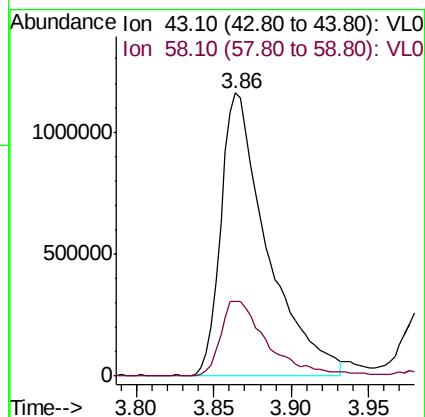
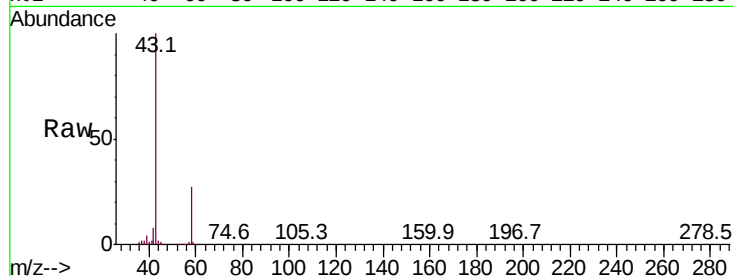


#15
Acetone
Concen: 19.235 ppbv
RT: 3.86
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 27 Oct 2021 14:19

Tot Ion:
Ion Ratio
43 100
58 27.

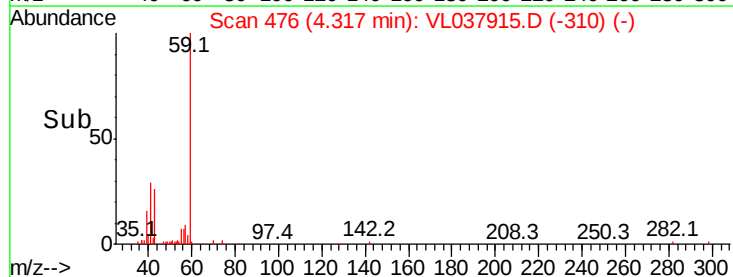
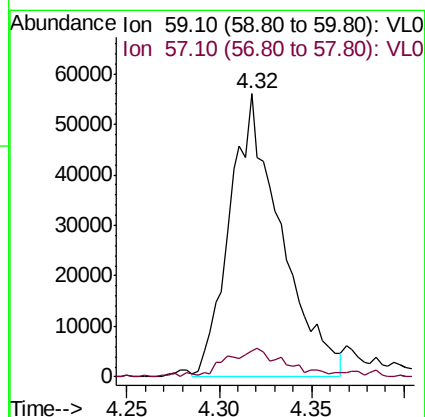
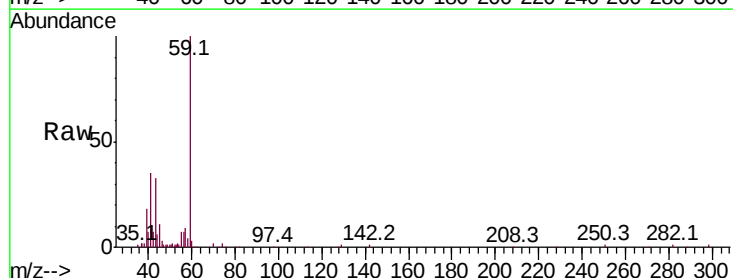
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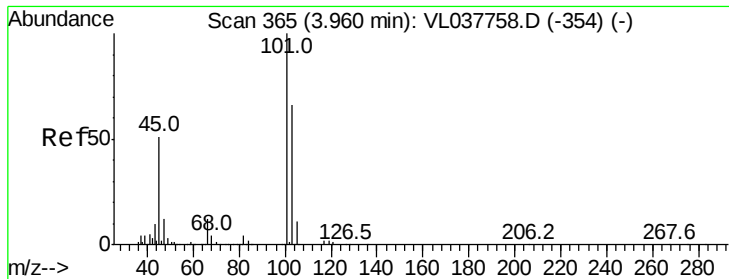
Reviewed By :Semsettin Yesilyurt 10/28/2021
Supervised By :Mahesh Dadoda 10/29/2021



#17
tert-Butyl alcohol
Concen: 0.843 ppbv m
RT: 4.32 min Scan# 476
Delta R.T. 0.03 min
Lab File: VL037915.D
Acq: 27 Oct 2021 14:19

Tgt Ion: 59 Resp: 108054
Ion Ratio Lower Upper
59 100
57 8.9 8.6 13.0





#19

Isopropyl Alcohol

Concen: 31.396 ppbv

RT: 3.99

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 27 Oct 2021 14:19

Tot Ion:

Ion Ratio

45 100

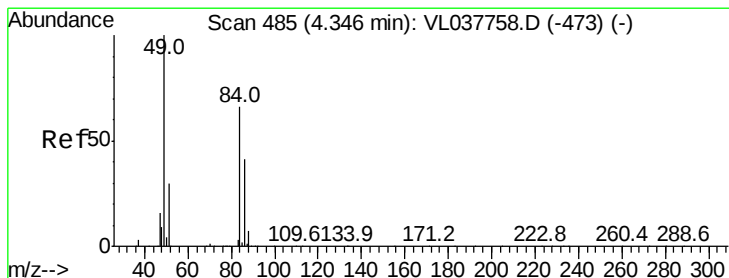
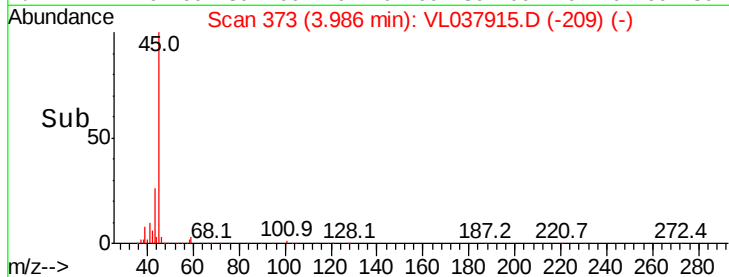
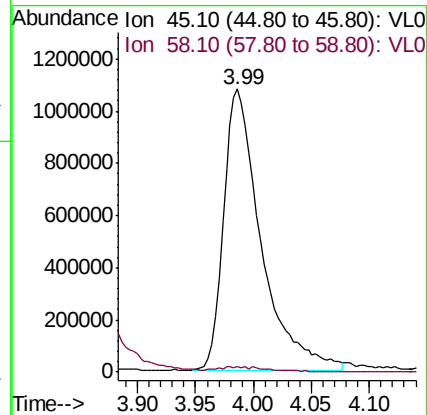
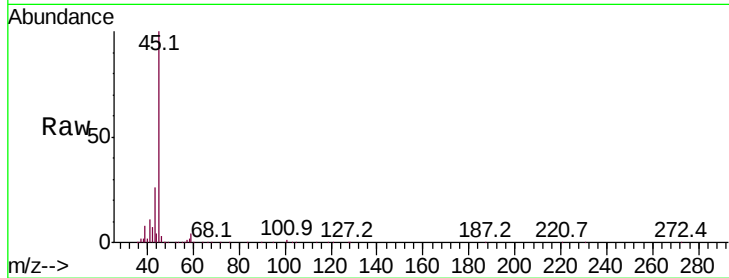
58 2.

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Supervised By :Mahesh Dadoda 10/29/2021



#20

Methylene Chloride

Concen: 4.994 ppbv

RT: 4.36 min Scan# 489

Delta R.T. 0.01 min

Lab File: VL037915.D

Acq: 27 Oct 2021 14:19

Tgt Ion: 84 Resp: 314200

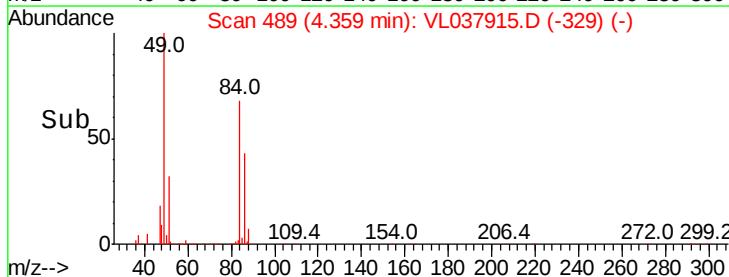
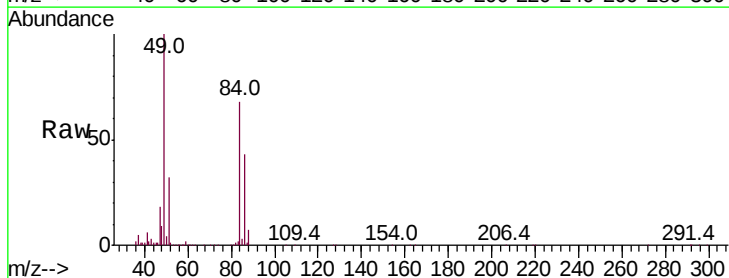
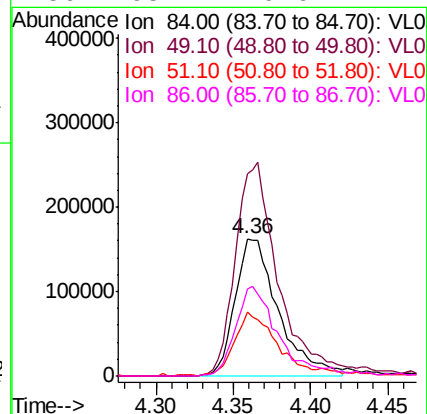
Ion Ratio Lower Upper

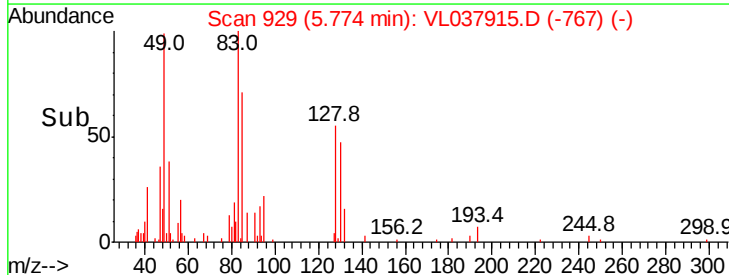
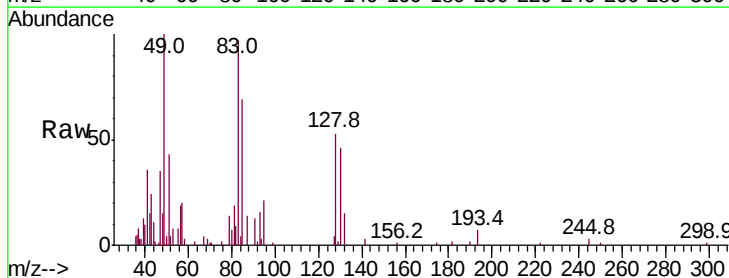
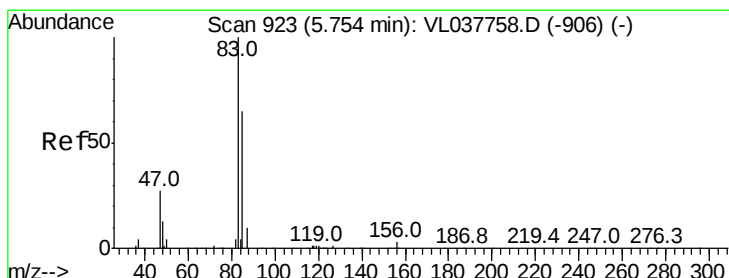
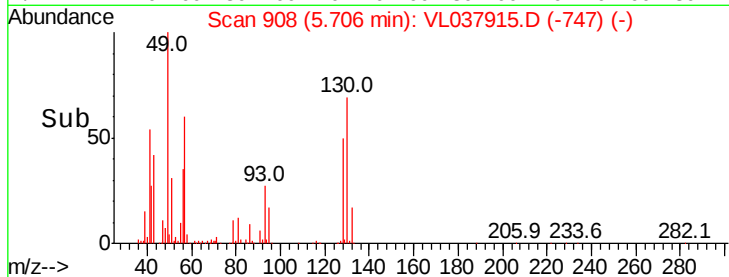
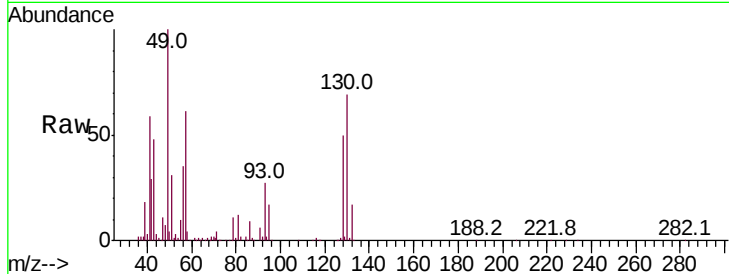
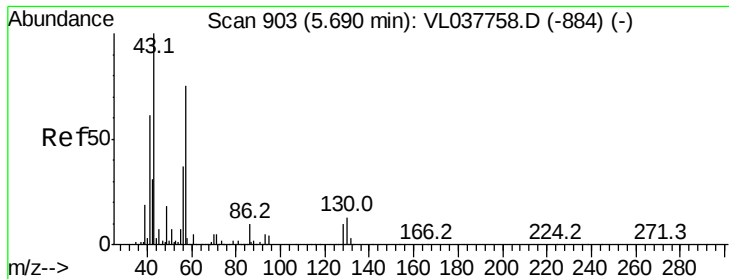
84 100

49 146.3 120.7 181.1

51 46.2 36.2 54.4

86 63.1 49.6 74.4





#26

Hexane

Concen: 1.727 ppbv

RT: 5.71 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 27 Oct 2021 14:19 VMP-5-IMPLANT

Tot Ion:

Ion Ratio

57 100

41 97.

43 91.

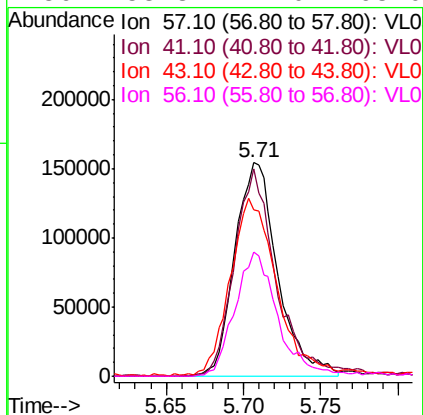
56 58.3 42.0 63.0

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 10/28/2021

Supervised By :Mahesh Dadoda 10/29/2021



#29

Chloroform

Concen: 0.117 ppbv m

RT: 5.77 min Scan# 929

Delta R.T. 0.02 min

Lab File: VL037915.D

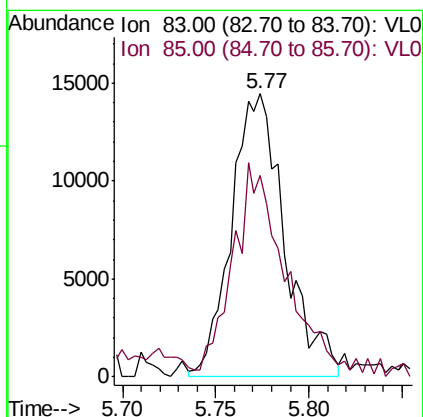
Acq: 27 Oct 2021 14:19

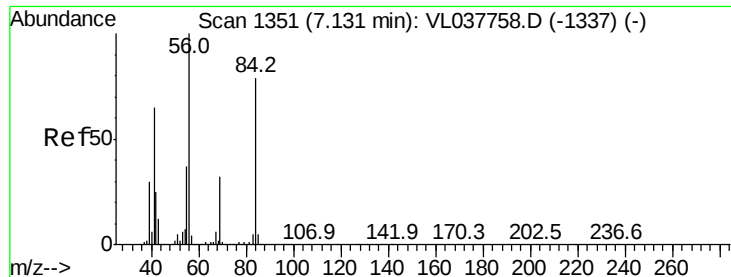
Tgt Ion: 83 Resp: 28724

Ion Ratio Lower Upper

83 100

85 71.4 51.8 77.8



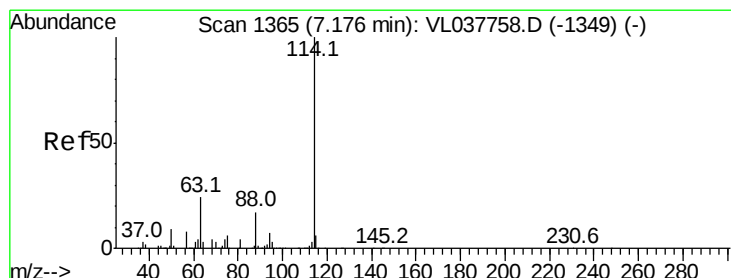
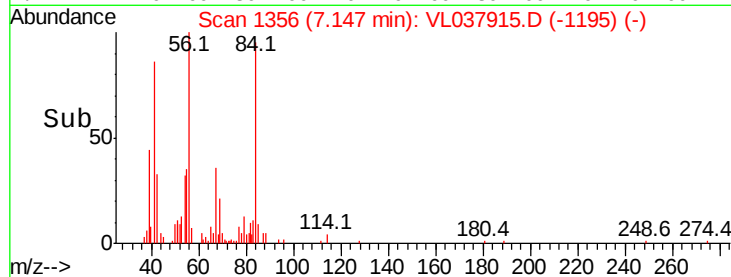
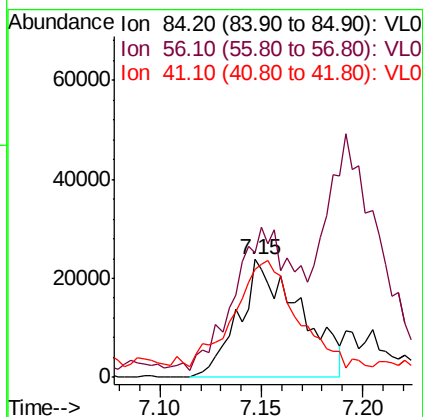
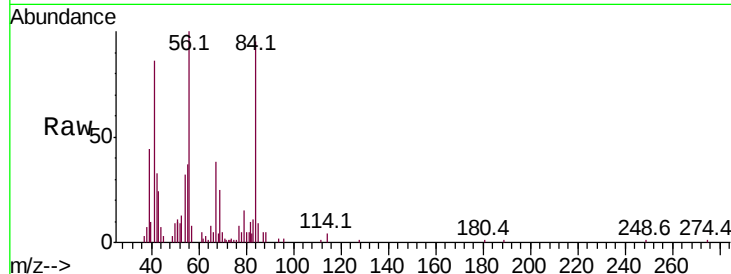


#30
Cvclohexane
Concen: 0.345 ppbv m
RT: 7.15
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
VMP-5-IMPLANT
Acq: 27 Oct 2021 14:19

Tot Ion:
Ion Ratio
84 100
56 0.
41 0.

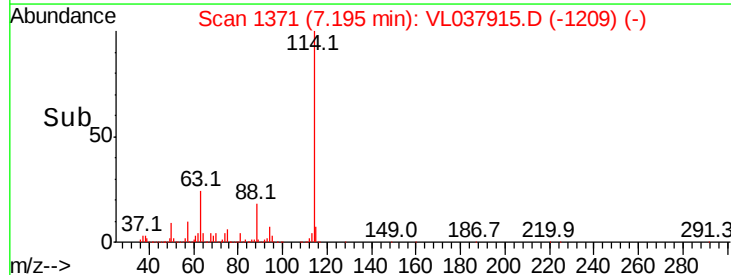
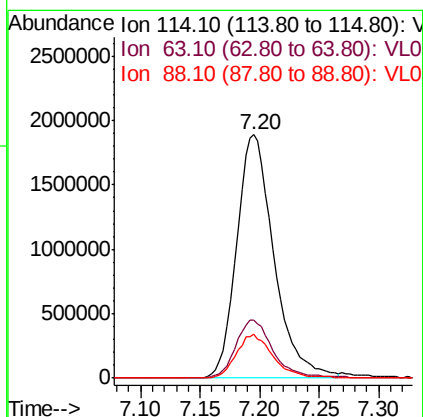
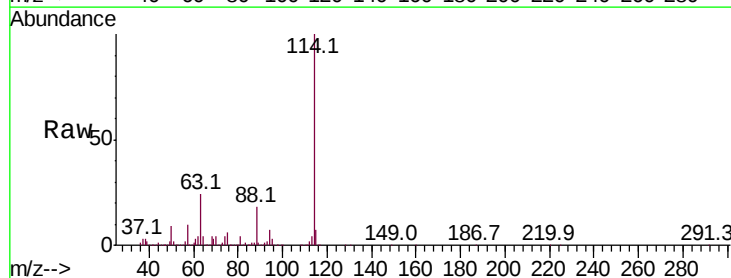
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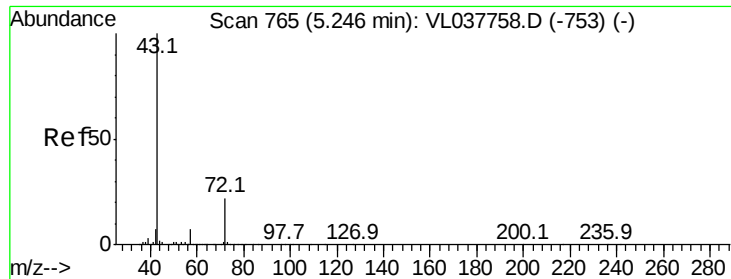
Reviewed By :Semsettin Yesilyurt 10/28/2021
Supervised By :Mahesh Dadoda 10/29/2021



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.20 min Scan# 1371
Delta R.T. 0.02 min
Lab File: VL037915.D
Acq: 27 Oct 2021 14:19

Tgt Ion:114 Resp: 4103001
Ion Ratio Lower Upper
114 100
63 24.1 19.4 29.2
88 17.9 14.4 21.6





#34

2-Butanone

Concen: 1.288 ppbv

RT: 5.27

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 27 Oct 2021 14:19

Tot Ion:

Ion Ratio

43 100

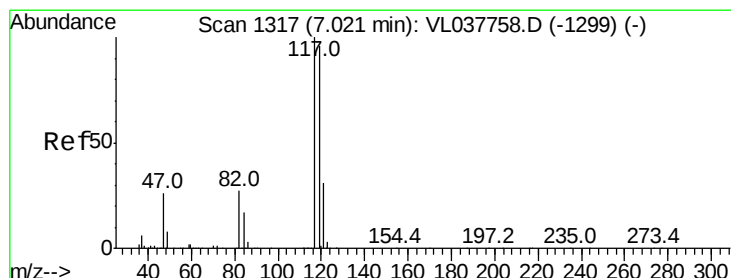
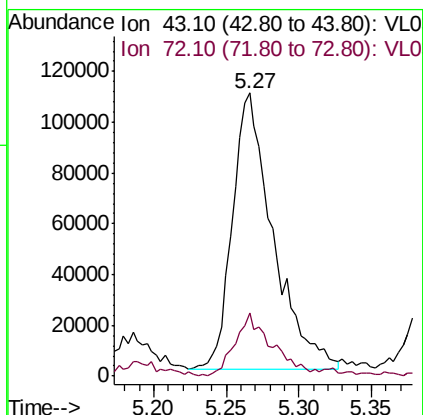
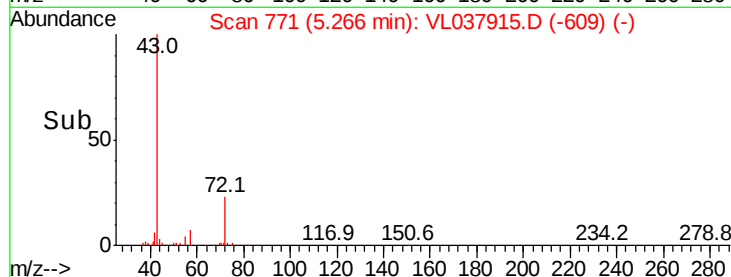
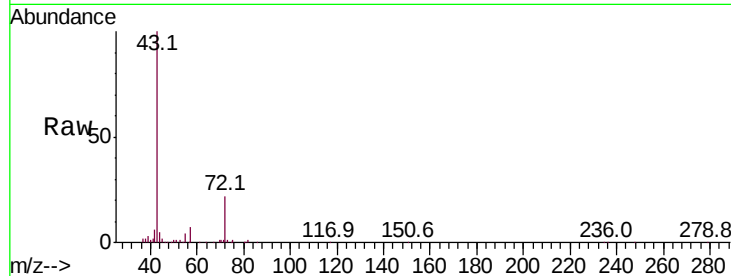
72 22.

Manual Integrations

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Supervised By :Mahesh Dadoda 10/29/2021



#35

Carbon Tetrachloride

Concen: 0.065 ppbv m

RT: 7.03 min Scan# 1321

Delta R.T. 0.01 min

Lab File: VL037915.D

Acq: 27 Oct 2021 14:19

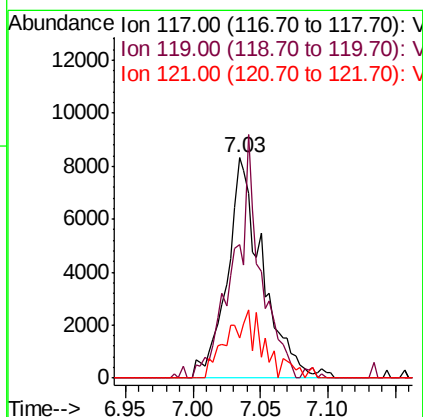
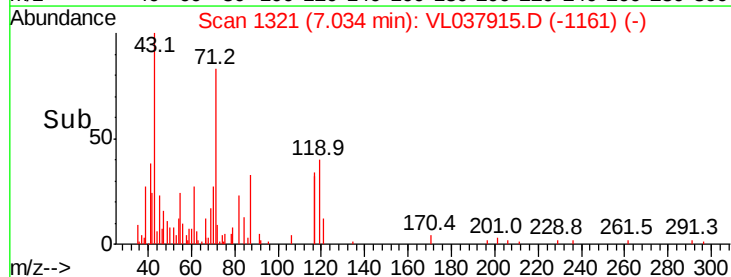
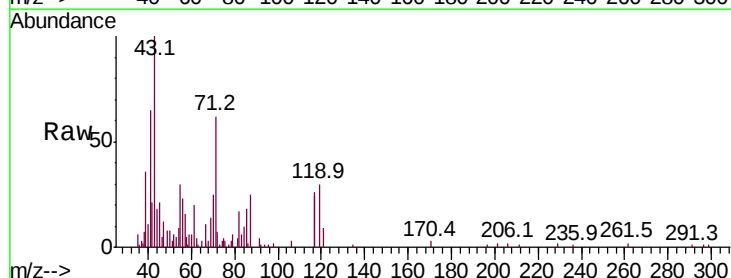
Tgt Ion:117 Resp: 15113

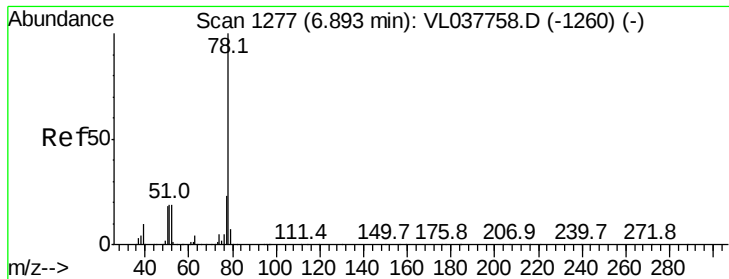
Ion Ratio Lower Upper

117 100

119 116.8 76.5 114.7#

121 35.3 24.9 37.3





#36

Benzene

Concen: 0.184 ppbv m

RT: 6.91 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 27 Oct 2021 14:19 VMP-5-IMPLANT

Tot Ion:

Ion Ratio

78 100

77 24.

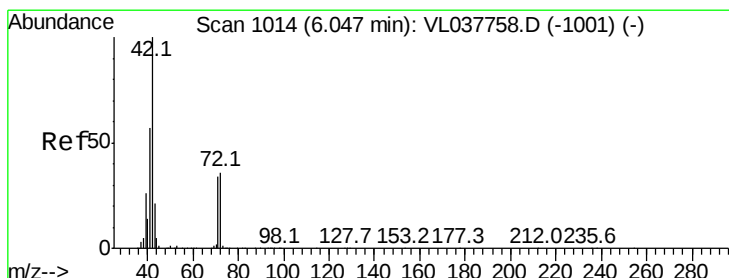
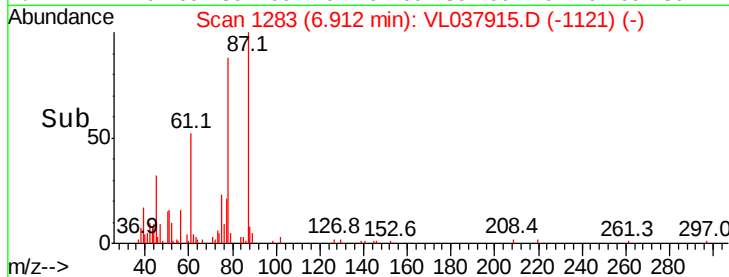
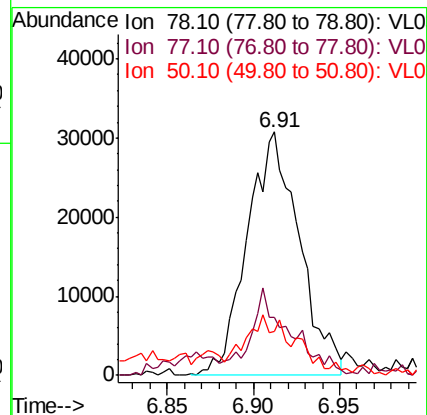
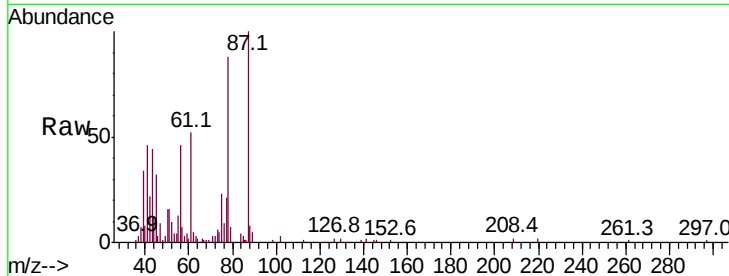
50 17.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 10/28/2021

Supervised By :Mahesh Dadoda 10/29/2021



#41

Tetrahydrofuran

Concen: 0.597 ppbv m

RT: 6.08 min Scan# 1025

Delta R.T. 0.04 min

Lab File: VL037915.D

Acq: 27 Oct 2021 14:19

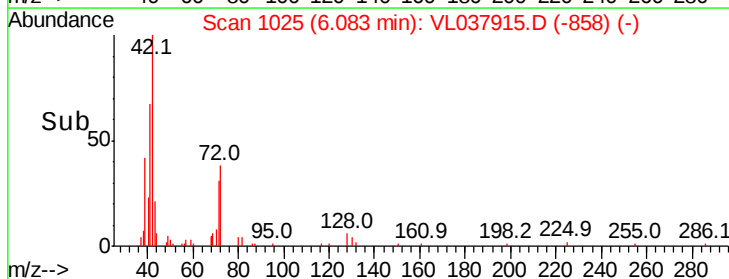
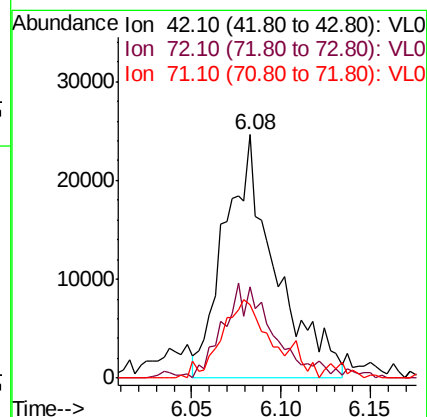
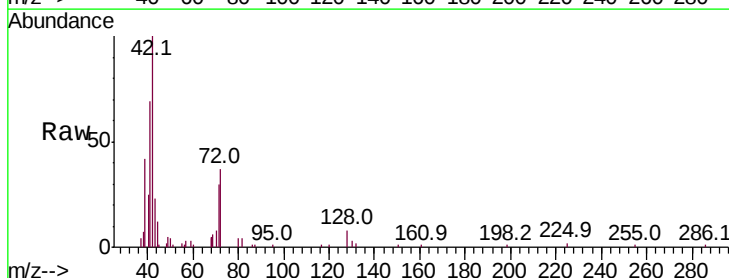
Tgt Ion: 42 Resp: 48435

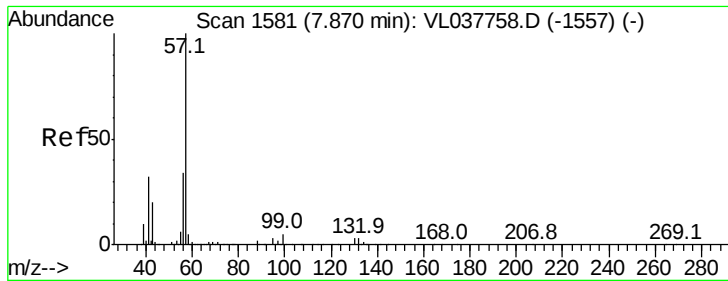
Ion Ratio Lower Upper

42 100

72 40.7 31.9 47.9

71 0.0 30.3 45.5#





#44

2,2,4-Trimethylpentane

Concen: 0.167 ppbv

RT: 7.89 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 27 Oct 2021 14:19 VMP-5-IMPLANT

Tot Ion:

Ion Ratio

57 100

41 44.

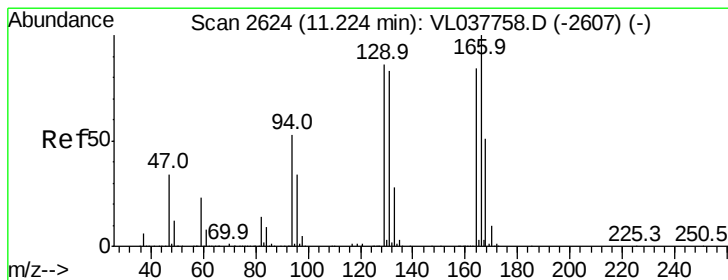
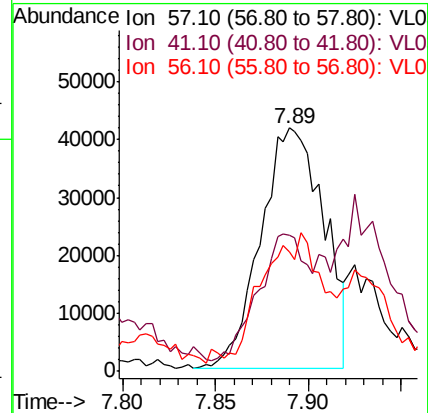
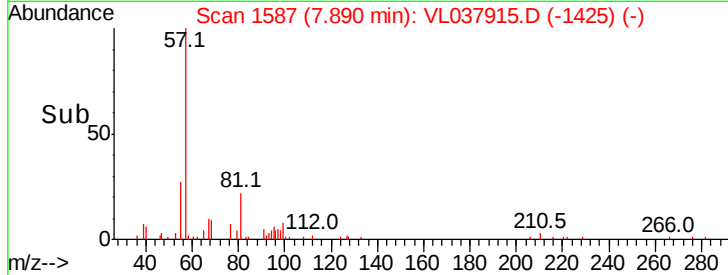
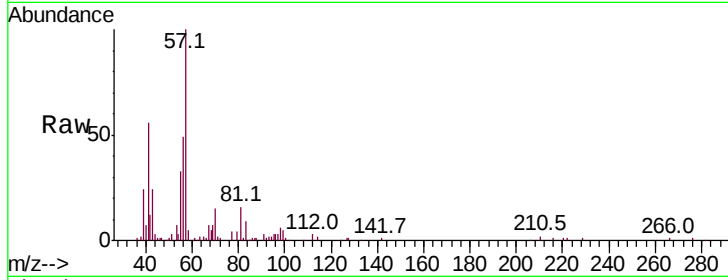
56 91.

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 10/28/2021

Supervised By :Mahesh Dadoda 10/29/2021



#52

Tetrachloroethene

Concen: 0.073 ppbv m

RT: 11.25 min Scan# 2631

Delta R.T. 0.02 min

Lab File: VL037915.D

Acq: 27 Oct 2021 14:19

Tgt Ion:164 Resp: 9980

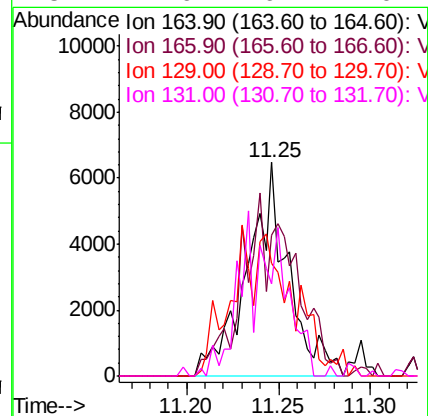
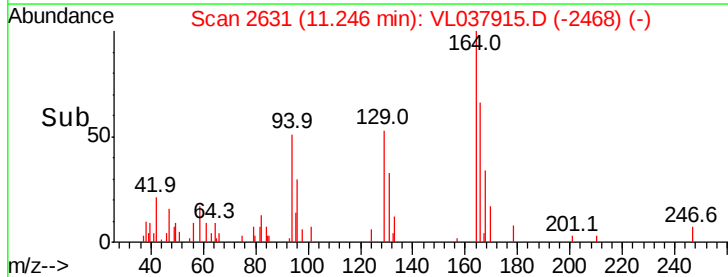
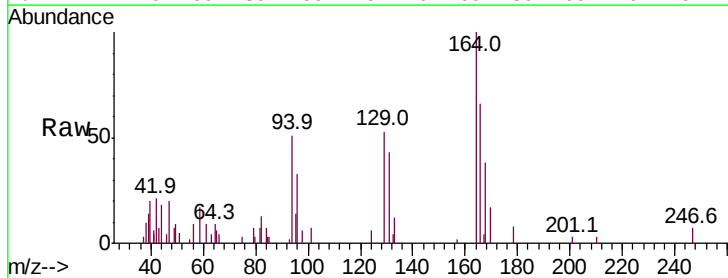
Ion Ratio Lower Upper

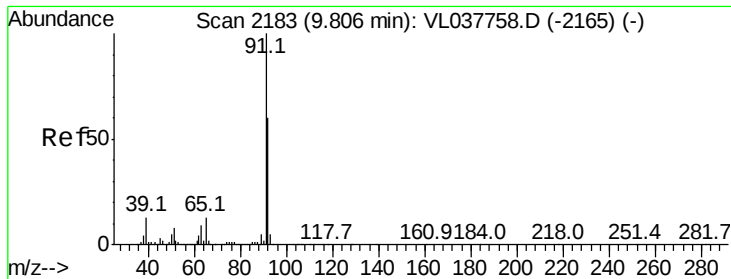
164 100

166 65.9 95.4 143.2#

129 52.9 82.2 123.4#

131 42.9 79.4 119.2#





#53

Toluene

Concen: 0.862 ppbv

RT: 9.83 Instrument: MSVOA_1

Delta R.T. 0.02 min

Lab File: ClientSampleId:

Acq: 27 Oct 2021 14:19 VMP-5-IMPLANT

Tot Ion:

Ion Ratio

91 100

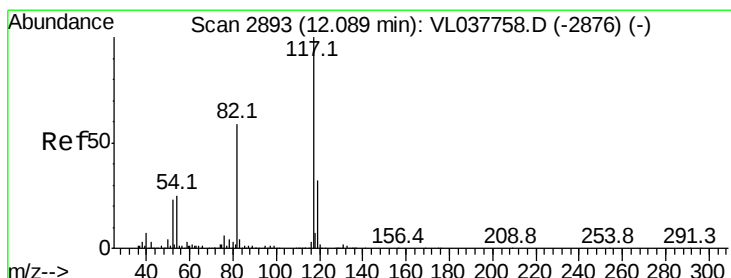
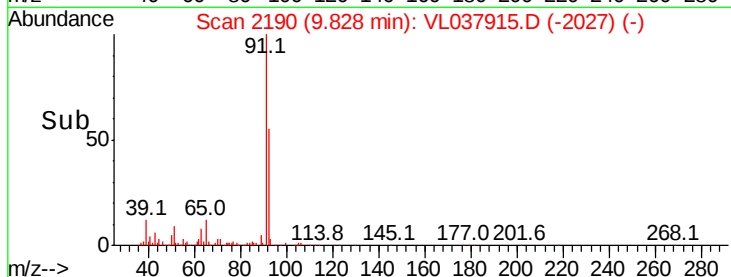
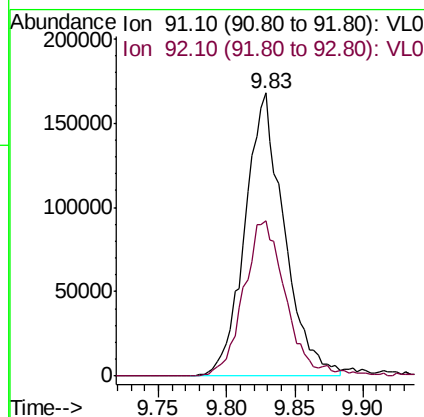
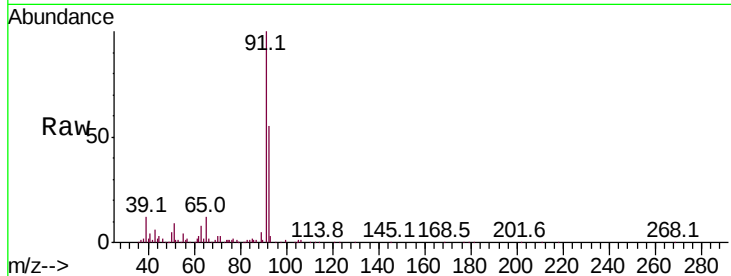
92 59.

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 10/28/2021

Supervised By :Mahesh Dadoda 10/29/2021



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.11 min Scan# 2899

Delta R.T. 0.02 min

Lab File: VL037915.D

Acq: 27 Oct 2021 14:19

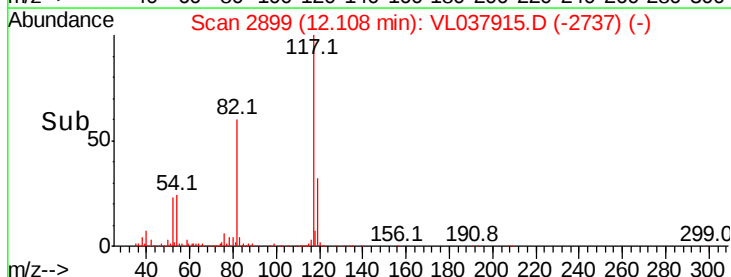
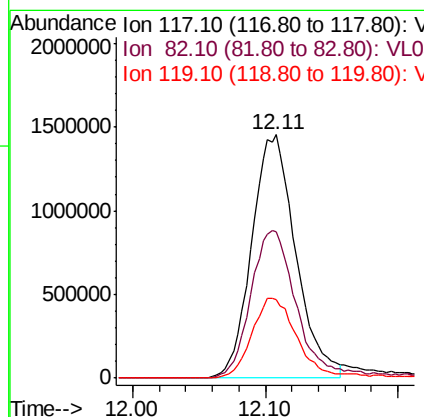
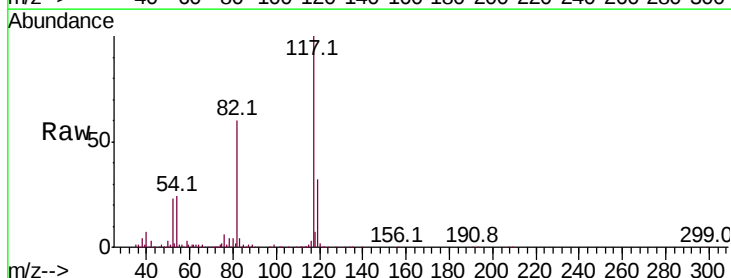
Tgt Ion:117 Resp: 3360781

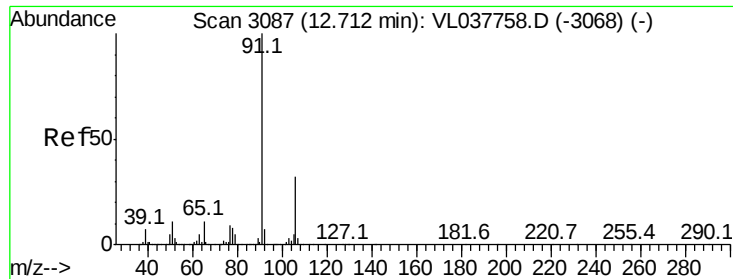
Ion Ratio Lower Upper

117 100

82 65.3 52.2 78.2

119 35.5 26.0 39.0





#58

Ethyl Benzene

Concen: 0.145 ppbv m

RT: 12.73

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 27 Oct 2021 14:19

Tot Ion:

Ion Ratio

91 100

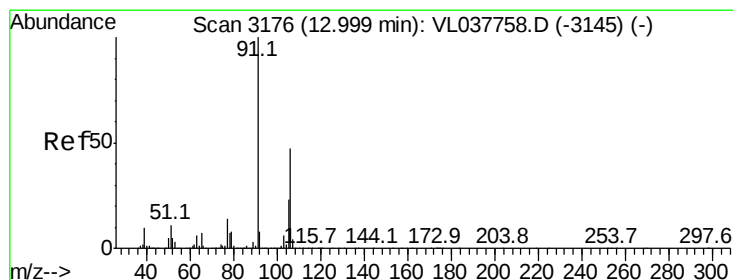
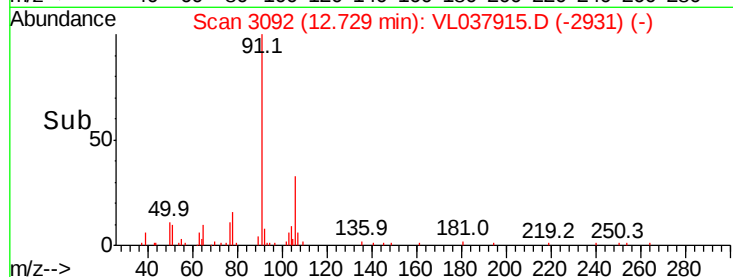
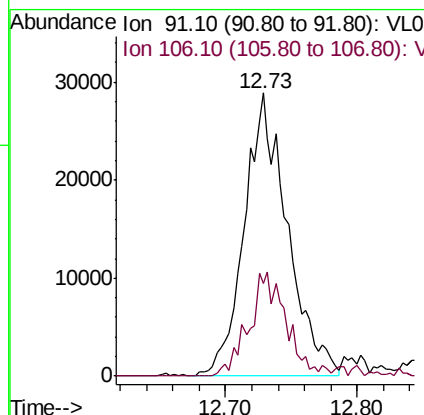
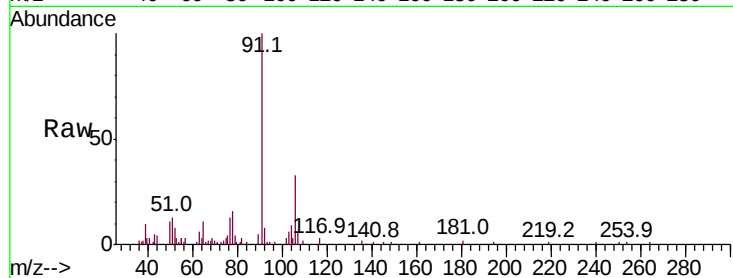
106 32.

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Reviewed By :Semsettin Yesilyurt 10/28/2021

Supervised By :Mahesh Dadoda 10/29/2021



#59

m/p-Xylene

Concen: 0.743 ppbv m

RT: 12.99 min Scan# 3172

Delta R.T. -0.01 min

Lab File: VL037915.D

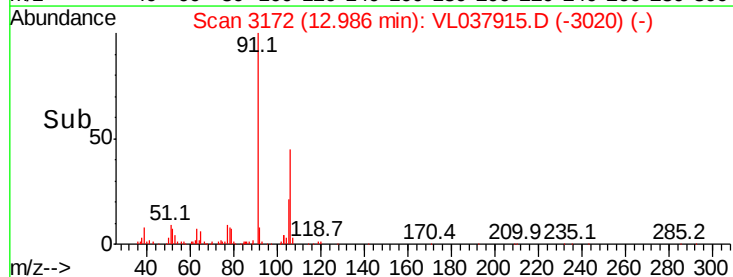
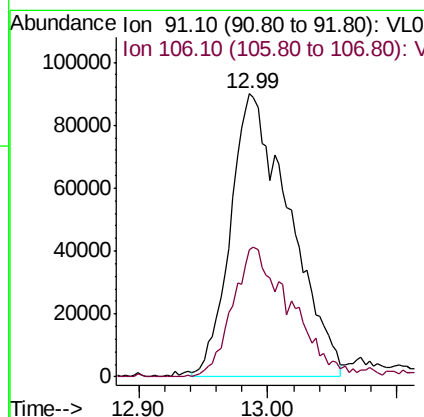
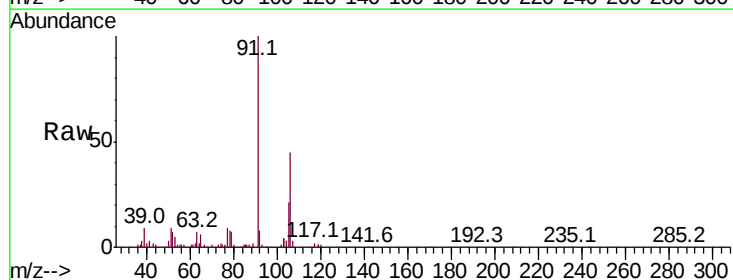
Acq: 27 Oct 2021 14:19

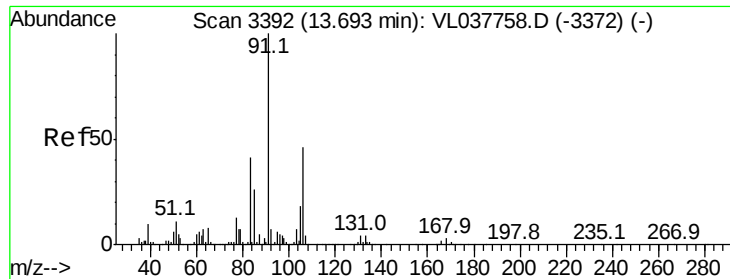
Tgt Ion: 91 Resp: 287983

Ion Ratio Lower Upper

91 100

106 0.0 36.7 55.1#



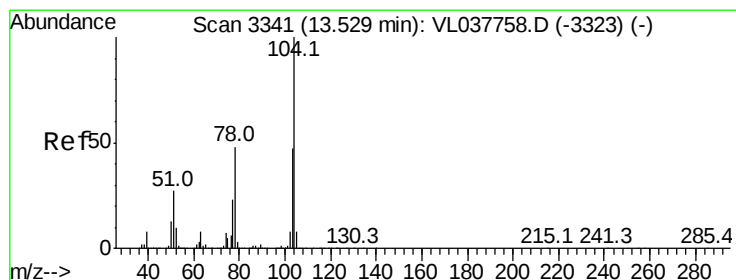
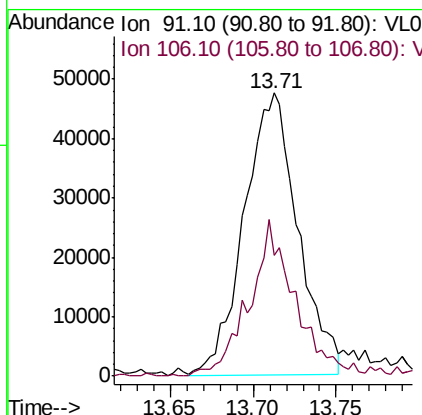
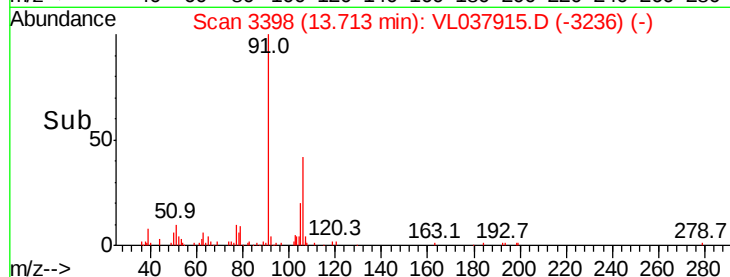
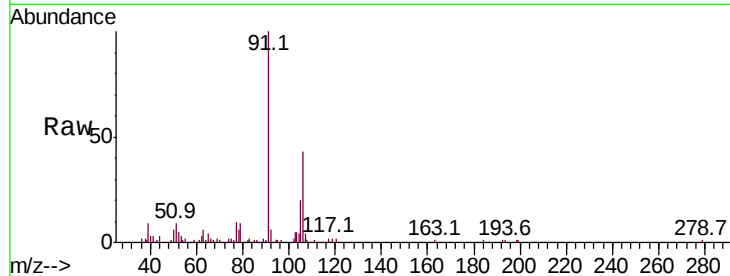


#60
o-Xylene
Concen: 0.288 ppbv
RT: 13.71 min
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 27 Oct 2021 14:19

Tot Ion:
Ion Ratio
91 100
106 48.

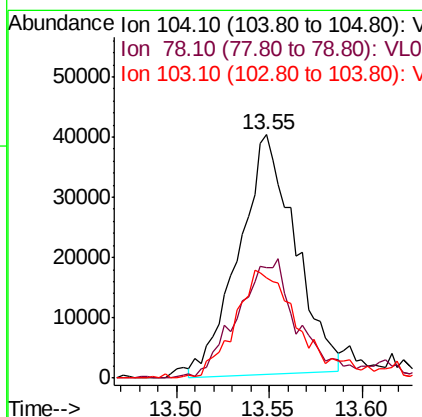
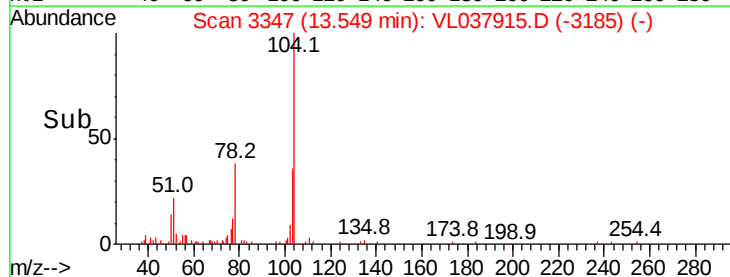
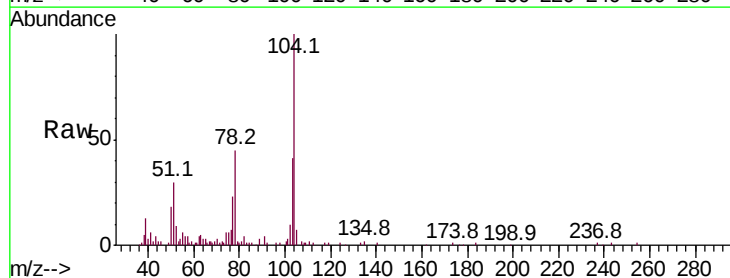
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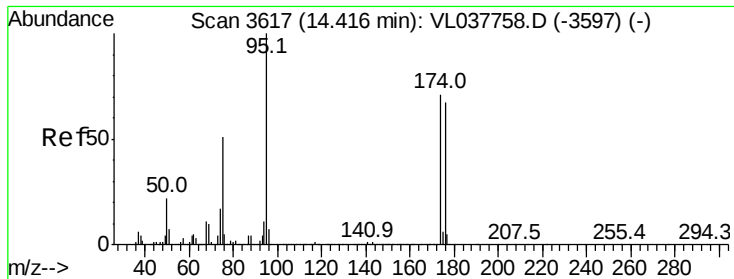
Reviewed By :Semsettin Yesilyurt 10/28/2021
Supervised By :Mahesh Dadoda 10/29/2021



#61
Styrene
Concen: 0.465 ppbv
RT: 13.55 min Scan# 3347
Delta R.T. 0.02 min
Lab File: VL037915.D
Acq: 27 Oct 2021 14:19

Tgt Ion:104 Resp: 83482
Ion Ratio Lower Upper
104 100
78 54.2 40.6 61.0
103 52.1 39.6 59.4



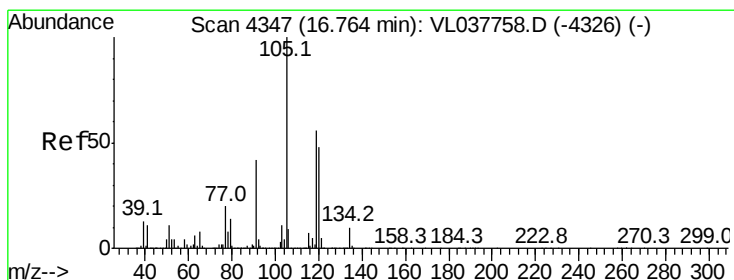
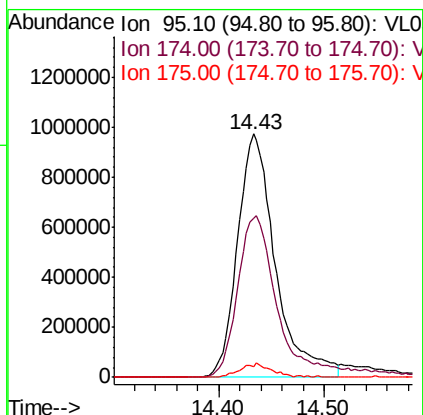
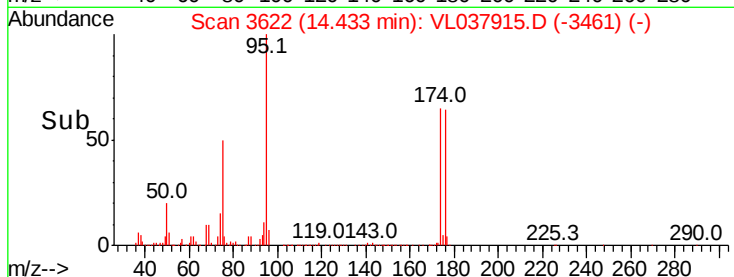
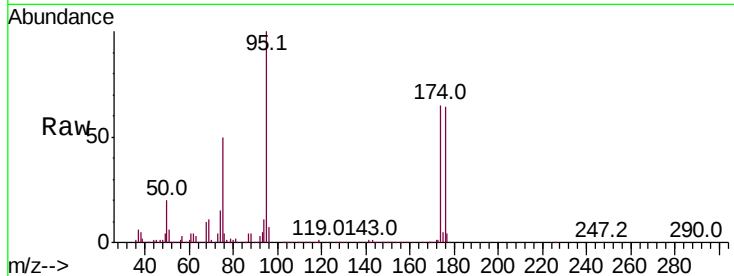


#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.365 ppbv
 RT: 14.43 min
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 Acq: 27 Oct 2021 14:19

Tot Ion:
 Ion Ratio
 95 100
 174 73.1
 175 5.1

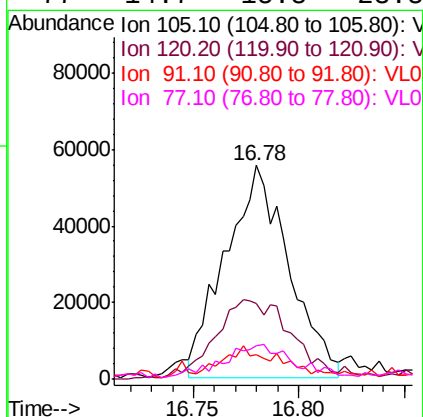
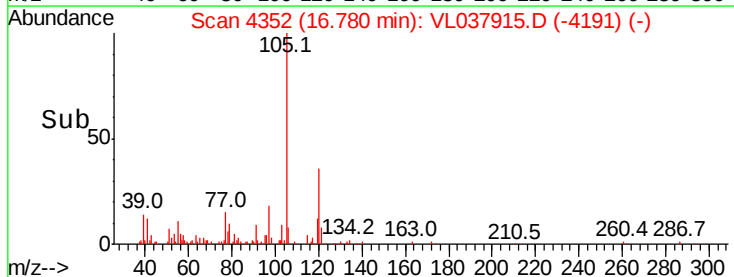
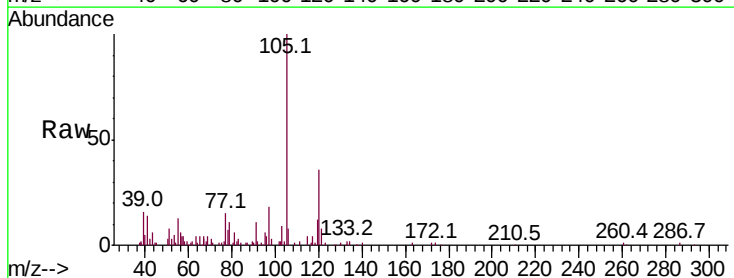
Manual Integrations
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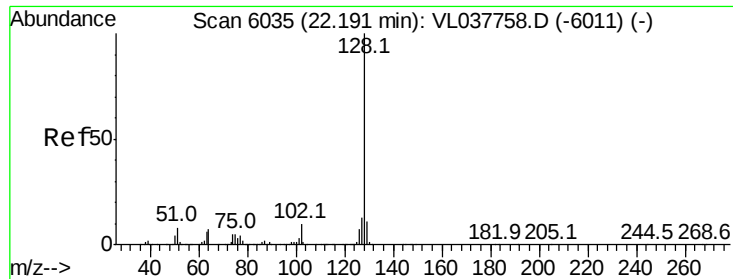
Reviewed By :Semsettin Yesilyurt 10/28/2021
 Supervised By :Mahesh Dadoda 10/29/2021



#74
 1,2,4-Trimethylbenzene
 Concen: 0.289 ppbv
 RT: 16.78 min Scan# 4352
 Delta R.T. 0.02 min
 Lab File: VL037915.D
 Acq: 27 Oct 2021 14:19

Tgt Ion:105 Resp: 116244
 Ion Ratio Lower Upper
 105 100
 120 35.1 38.4 57.6#
 91 9.6 34.2 51.2#
 77 14.7 15.8 23.8#





#79

Naphthalene

Concen: 0.148 ppbv m

RT: 22.21

Delta R.T

Lab File: ClientSampleId :

Acq: 27 Oct 2021 14:19

Tot Ion:1

Ion Rati

128 100

127 16.

129 6.

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 10/28/2021

Supervised By :Mahesh Dadoda 10/29/2021

