

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL032521\
 Data File : VL036480.D
 Acq On : 25 Mar 2021 10:50
 Operator : SY/AP
 Sample : M1801-04
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA L
 ClientSampleId :
 IA1

Manual Integrations
 APPROVED

Reviewed By : Semsettin Yesilyurt 03/28/2021
 Supervised By : Mahesh Dadoda 03/29/2021

Quant Time: Mar 28 23:01:53 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032521A
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument:
 QLast Update : Thu Mar 25 09:42:40 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1421729	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	3235917	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.08	117	2860918	10.00	ppbv	0.00

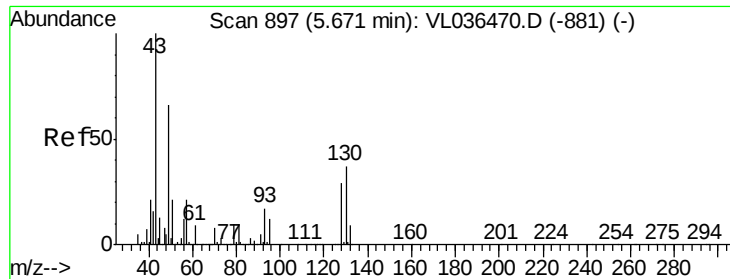
System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.41	95	2289569	10.04	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.40%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.04	85	36880	0.159	ppbv	89
3) Chlorodifluoromethane	2.98	51	307979m	1.159	ppbv	
4) Chloromethane	3.13	50	47535	0.507	ppbv #	87
9) Propene	3.01	41	124385m	1.469	ppbv	
10) Heptane	8.12	43	44427	0.206	ppbv	93
11) Trichlorofluoromethane	3.94	101	49352	0.209	ppbv	90
13) Ethanol	3.60	45	1637129	162.345	ppbv	92
15) Acetone	3.84	43	961822	6.874	ppbv	99
19) Isopropyl Alcohol	3.97	45	568444	7.385	ppbv	100
20) Methylene Chloride	4.34	84	259424	3.960	ppbv	97
26) Hexane	5.68	57	365365	2.367	ppbv #	52
29) Chloroform	5.74	83	41383	0.168	ppbv	98
30) Cyclohexane	7.12	84	36151m	0.289	ppbv	
31) cis-1,2-Dichloroethene	5.54	61	14372m	0.096	ppbv	
34) 2-Butanone	5.24	43	105555	0.668	ppbv	95
35) Carbon Tetrachloride	7.01	117	15824m	0.064	ppbv	
36) Benzene	6.88	78	77536	0.260	ppbv	95
38) Trichloroethene	7.83	130	8082m	0.070	ppbv	
44) 2,2,4-Trimethylpentane	7.86	57	221046	0.421	ppbv #	83
52) Tetrachloroethene	11.22	164	222671m	2.026	ppbv	
53) Toluene	9.80	91	805958	2.536	ppbv	98
58) Ethyl Benzene	12.70	91	124044m	0.298	ppbv	
59) m/p-Xylene	12.97	91	528835m	1.457	ppbv	
60) o-Xylene	13.69	91	155249m	0.442	ppbv	
74) 1,2,4-Trimethylbenzene	16.76	105	128495m	0.334	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: IA1

Acq: 25 Mar 2021 10:50

Tot Ion:

Ion Ratio

49 100

128 43.

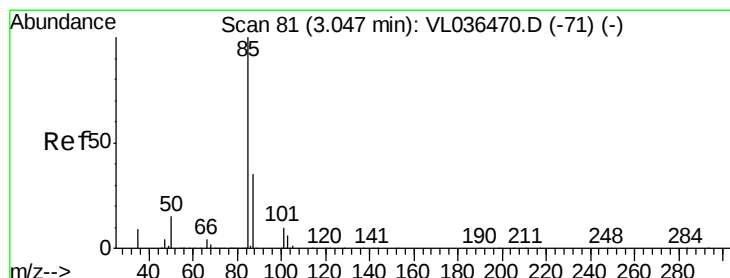
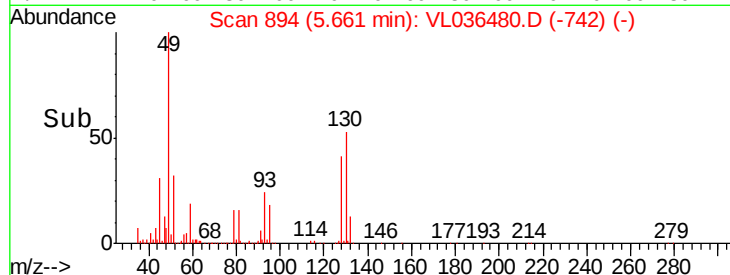
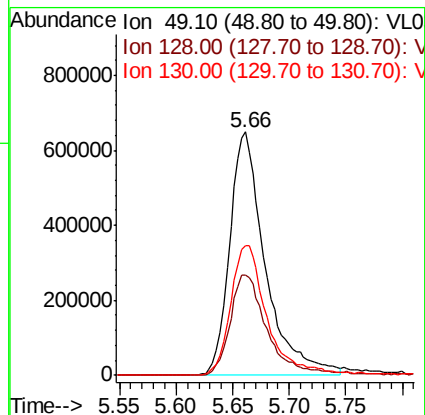
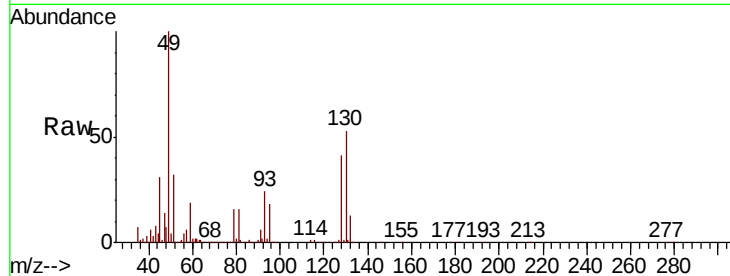
130 55.

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 03/28/2021

Supervised By :Mahesh Dadoda 03/29/2021



#2

Dichlorodifluoromethane

Concen: 0.159 ppbv

RT: 3.04 min Scan# 80

Delta R.T. -0.00 min

Lab File: VL036480.D

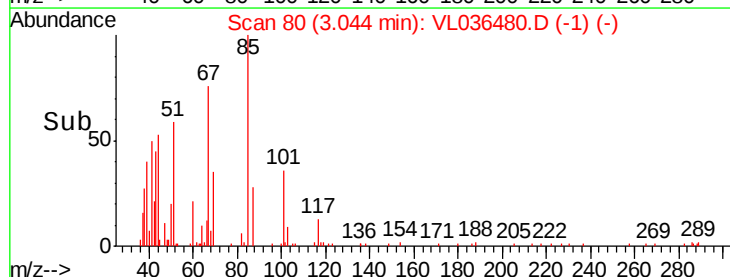
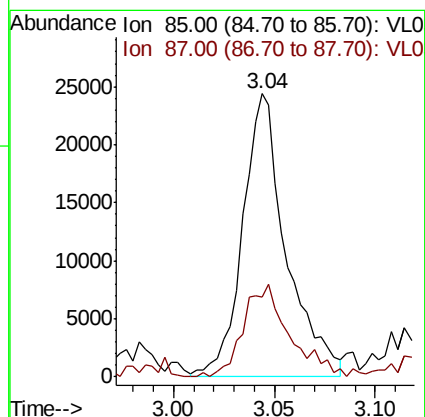
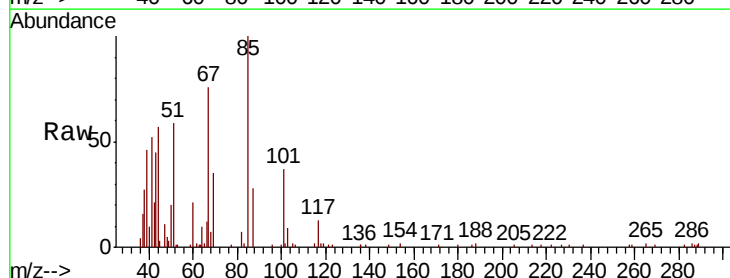
Acq: 25 Mar 2021 10:50

Tgt Ion: 85 Resp: 36880

Ion Ratio Lower Upper

85 100

87 28.7 27.8 41.8





#3

Chlorodifluoromethane

Concen: 1.159 ppbv m

RT: 2.98 Instrument: MSVOA_1

Delta R.T. -0.01 min

Lab File: ClientSampleId: A1

Acq: 25 Mar 2021 10:50

Tot Ion:

Ion Ratio

51 100

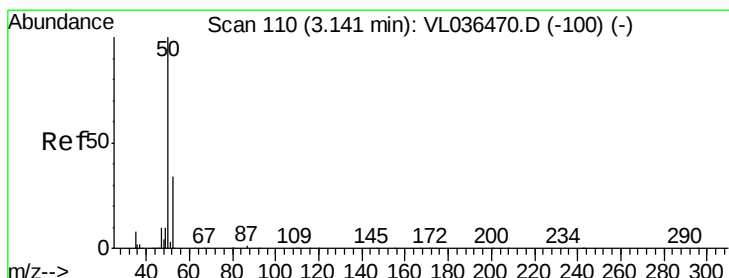
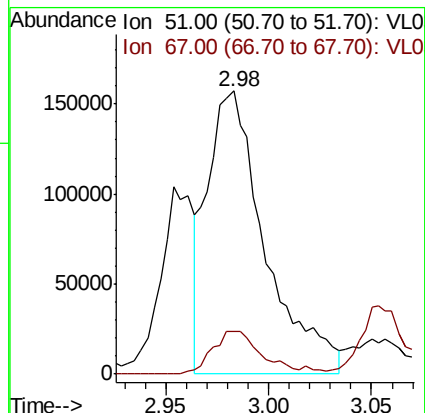
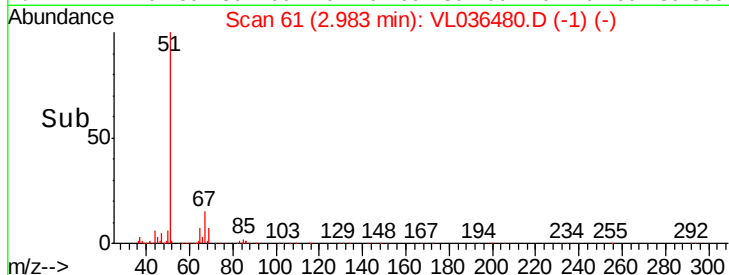
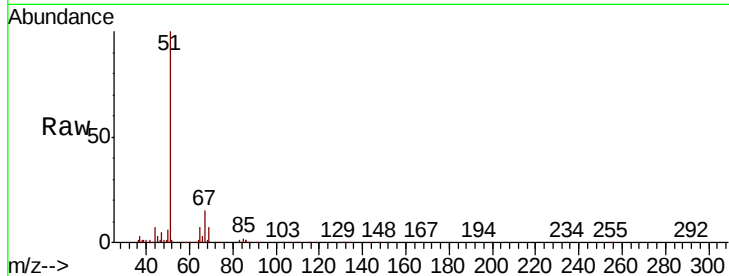
67 13.

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Supervised By :Mahesh Dadoda 03/29/2021



#4

Chloromethane

Concen: 0.507 ppbv

RT: 3.13 min Scan# 108

Delta R.T. -0.01 min

Lab File: VL036480.D

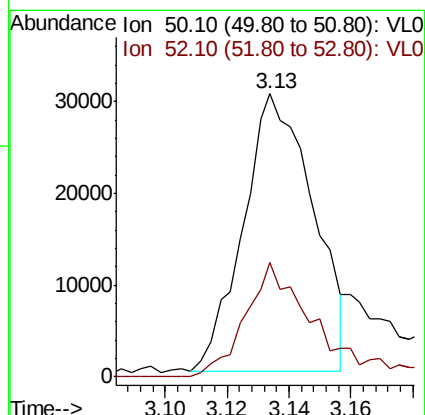
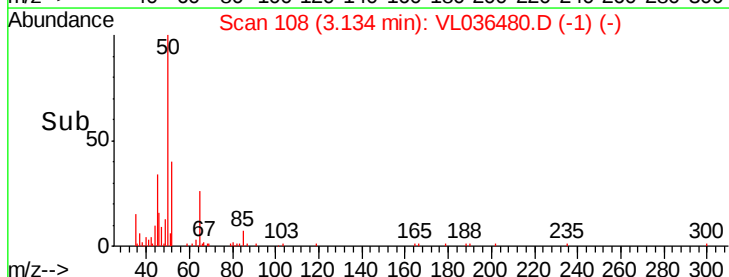
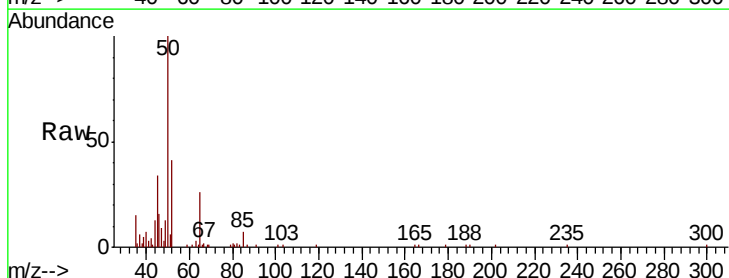
Acq: 25 Mar 2021 10:50

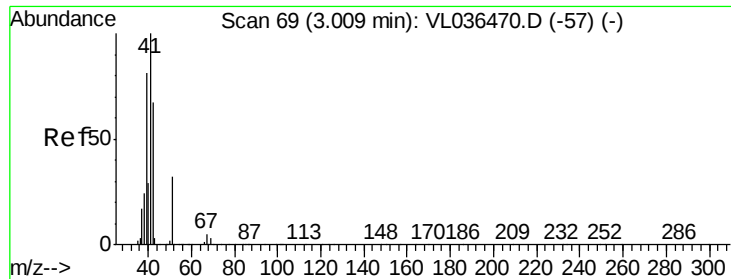
Tgt Ion: 50 Resp: 47535

Ion Ratio Lower Upper

50 100

52 41.4 27.0 40.6#





#9

Propene

Concen: 1.469 ppbv m

RT: 3.01

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 25 Mar 2021 10:50

Tot Ion:

Ion Ratio

41 100

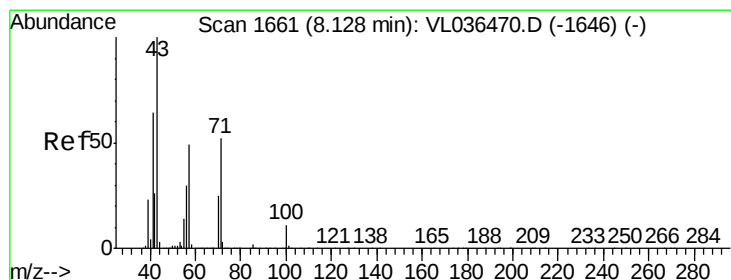
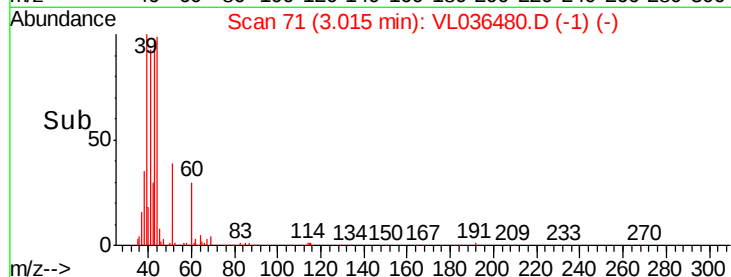
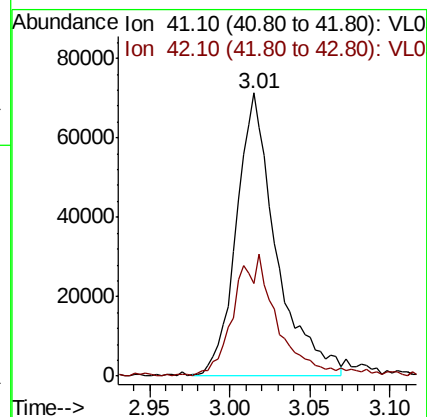
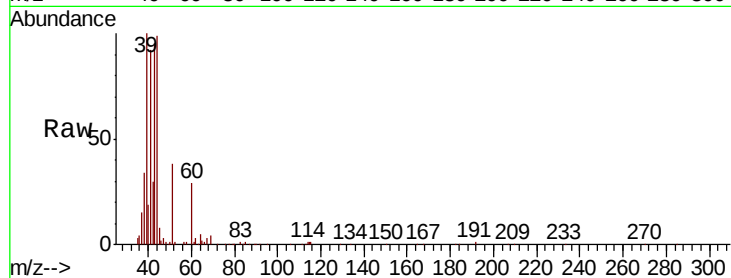
42 159.

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#10

Heptane

Concen: 0.206 ppbv

RT: 8.12 min Scan# 1658

Delta R.T. -0.01 min

Lab File: VL036480.D

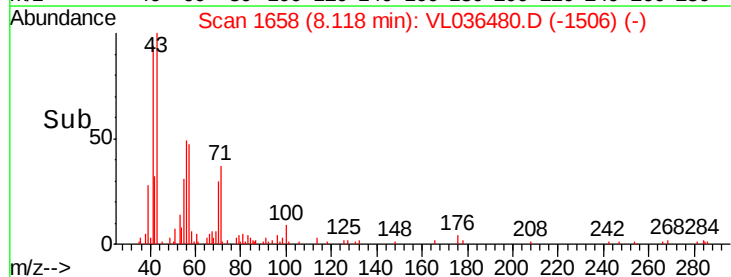
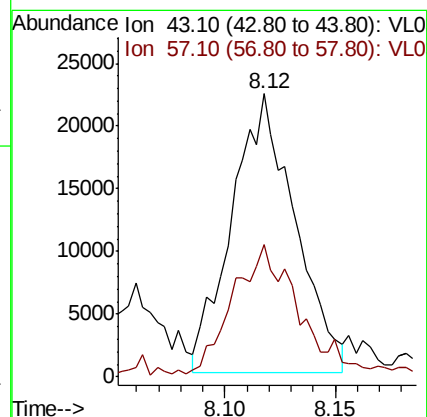
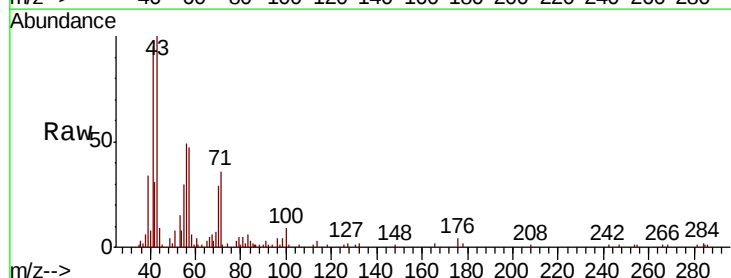
Acq: 25 Mar 2021 10:50

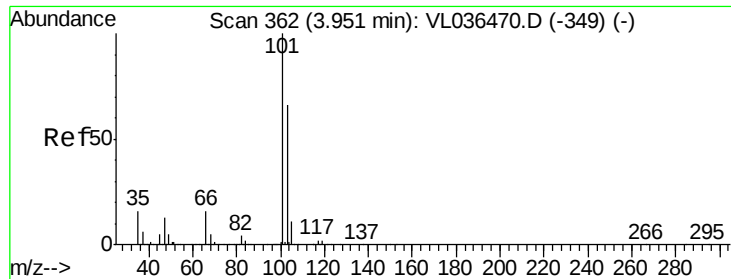
Tgt Ion: 43 Resp: 44427

Ion Ratio Lower Upper

43 100

57 53.4 39.0 58.6



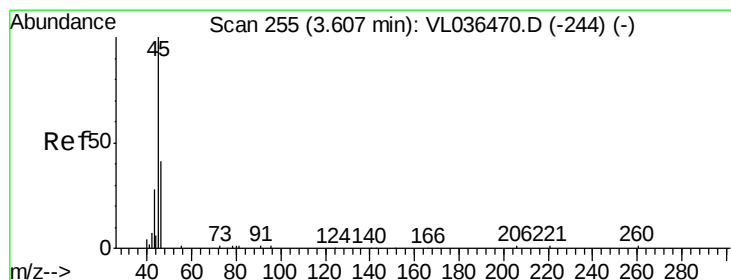
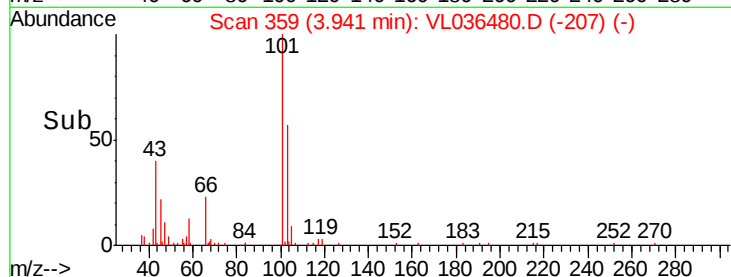
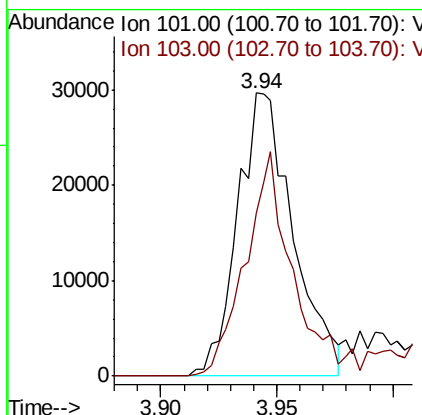
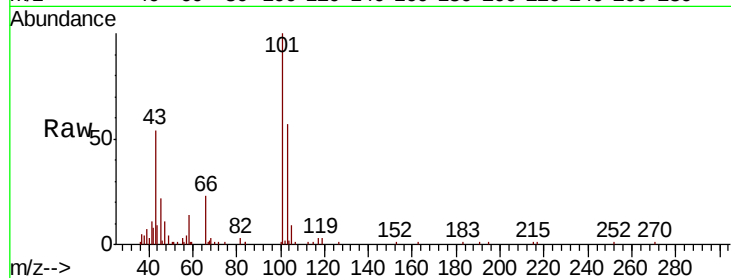


#11
 Trichlorofluoromethane
 Concen: 0.209 ppbv
 RT: 3.94
 Instrument: MSVOA_L
 Delta R.T.:
 Lab File: ClientSampleId :
 Acq: 25 Mar 2021 10:50

Tot Ion:1
 Ion Rati
 101 100
 103 57.

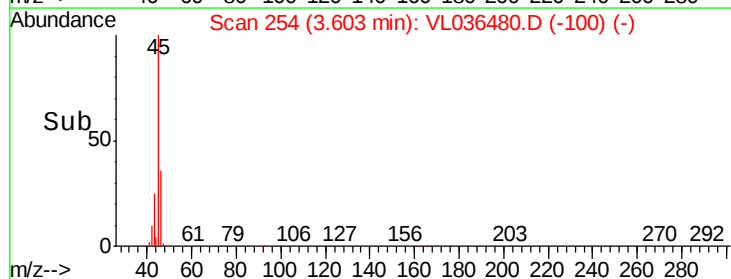
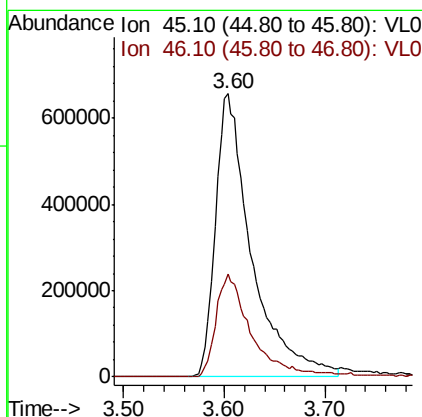
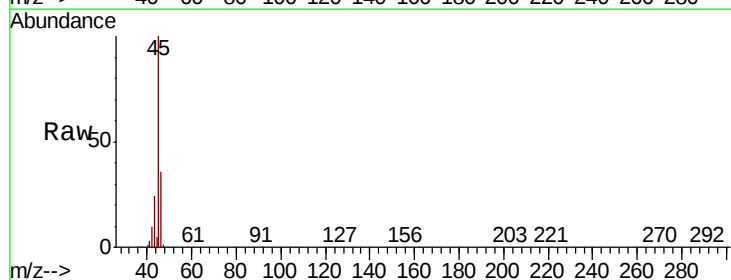
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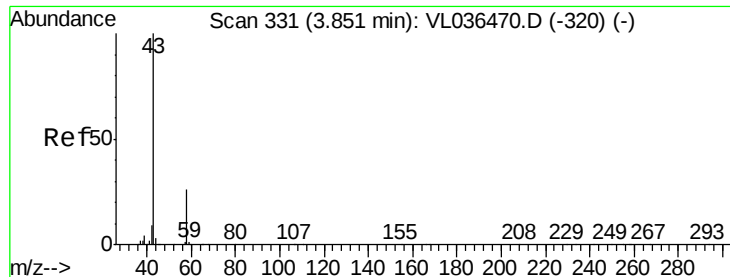
Reviewed By :Semsettin Yesilyurt 03/28/2021
 Supervised By :Mahesh Dadoda 03/29/2021



#13
 Ethanol
 Concen: 162.345 ppbv
 RT: 3.60 min Scan# 254
 Delta R.T. -0.00 min
 Lab File: VL036480.D
 Acq: 25 Mar 2021 10:50

Tgt Ion: 45 Resp: 1637129
 Ion Ratio Lower Upper
 45 100
 46 36.3 16.6 66.2



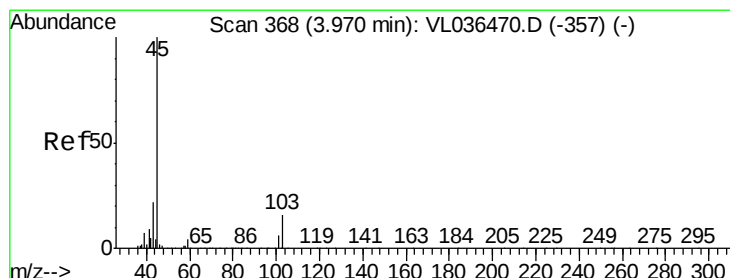
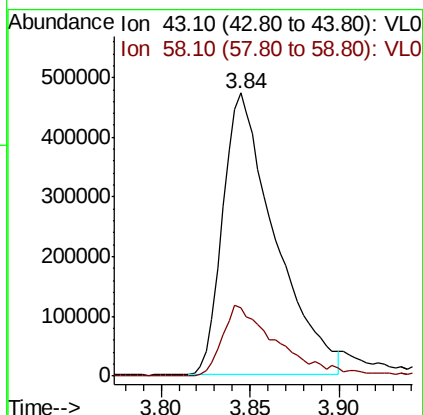
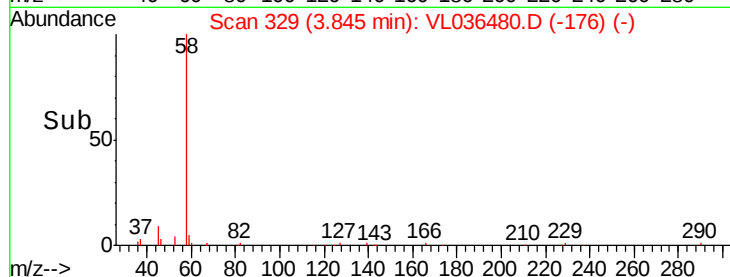
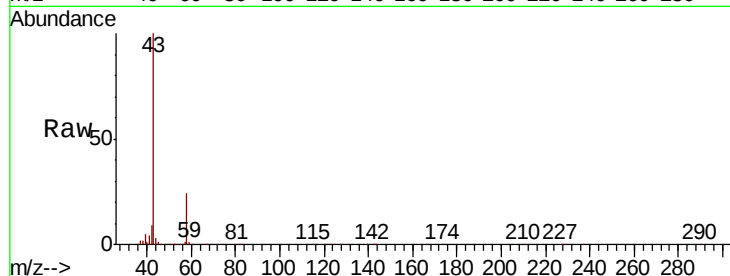


#15
Acetone
Concen: 6.874 ppbv
RT: 3.84
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 25 Mar 2021 10:50

Tot Ion:
Ion Rati
43 100
58 27.

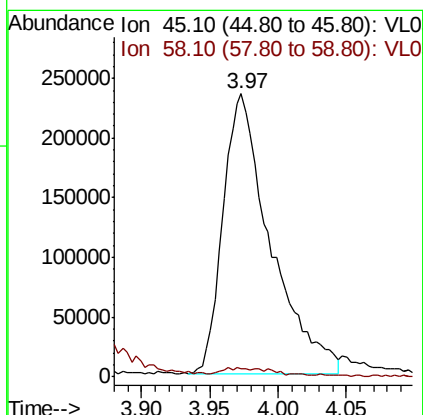
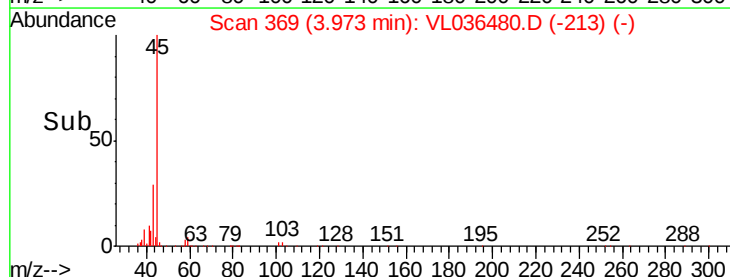
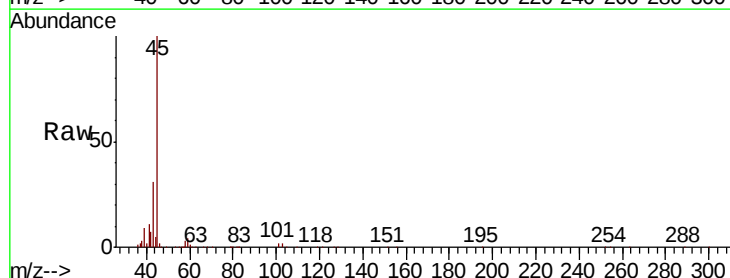
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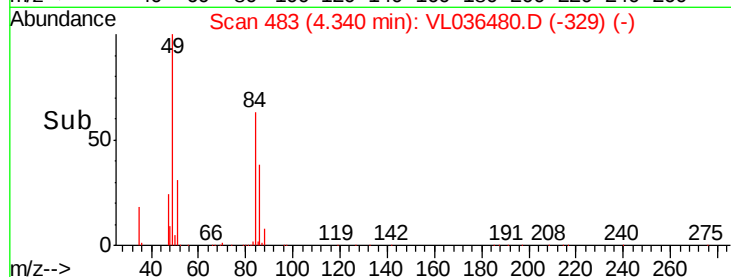
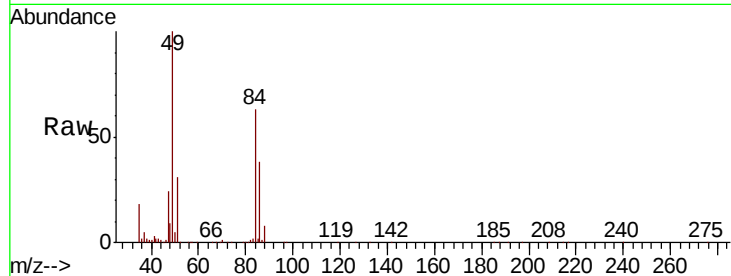
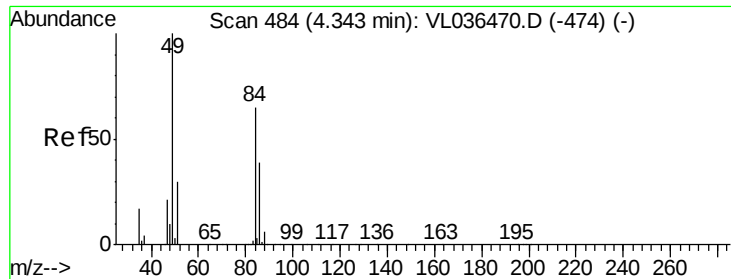
Reviewed By :Semsettin Yesilyurt 03/28/2021
Supervised By :Mahesh Dadoda 03/29/2021



#19
Isopropyl Alcohol
Concen: 7.385 ppbv
RT: 3.97 min Scan# 369
Delta R.T. 0.00 min
Lab File: VL036480.D
Acq: 25 Mar 2021 10:50

Tgt Ion: 45 Resp: 568444
Ion Ratio Lower Upper
45 100
58 3.5 2.9 4.3



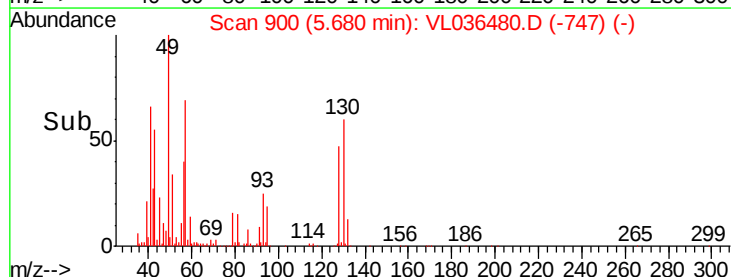
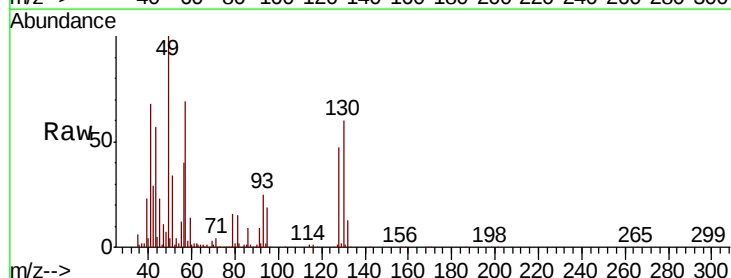
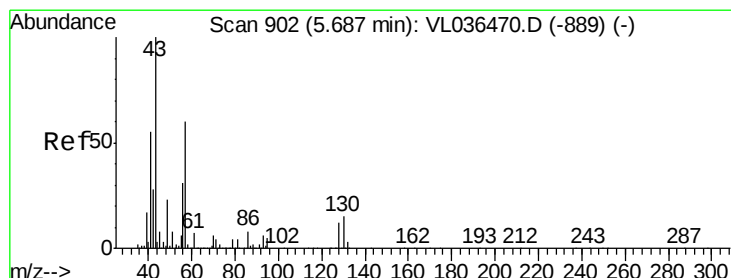
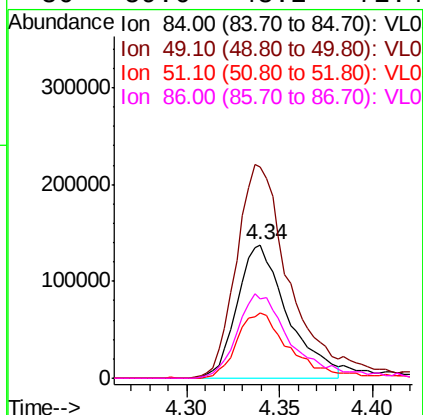


#20
Methvlene Chloride
Concen: 3.960 ppbv
RT: 4.34
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 25 Mar 2021 10:50

Tot Ion:
Ion Ratio
84 100
49 158.
51 48.
86 59.6 48.2 72.4

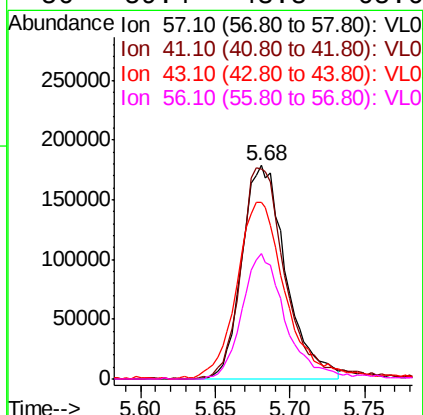
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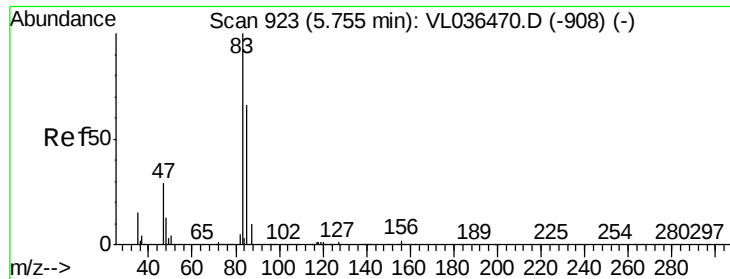
Reviewed By :Semsettin Yesilyurt 03/28/2021
Supervised By :Mahesh Dadoda 03/29/2021



#26
Hexane
Concen: 2.367 ppbv
RT: 5.68 min Scan# 900
Delta R.T. -0.01 min
Lab File: VL036480.D
Acq: 25 Mar 2021 10:50

Tgt Ion: 57 Resp: 365365
Ion Ratio Lower Upper
57 100
41 101.6 77.2 115.8
43 93.0 173.8 260.6#
56 59.4 43.8 65.6



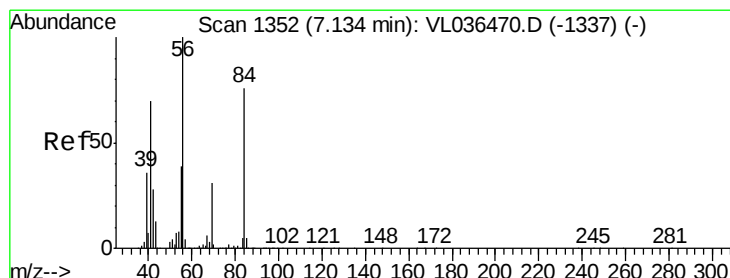
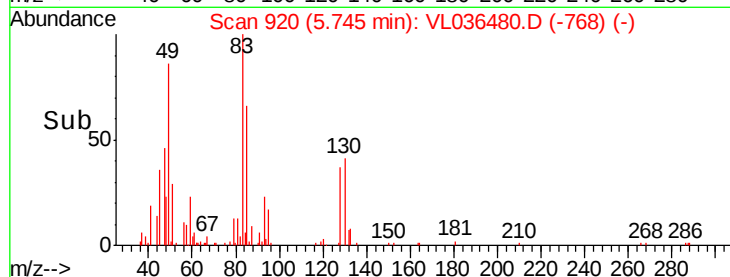
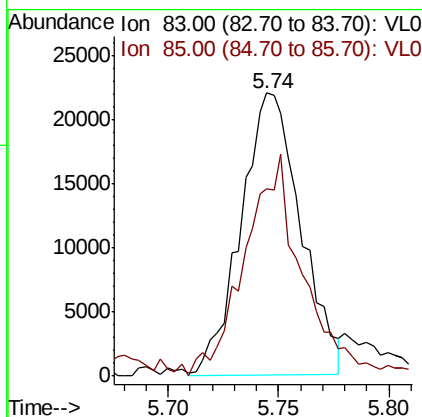
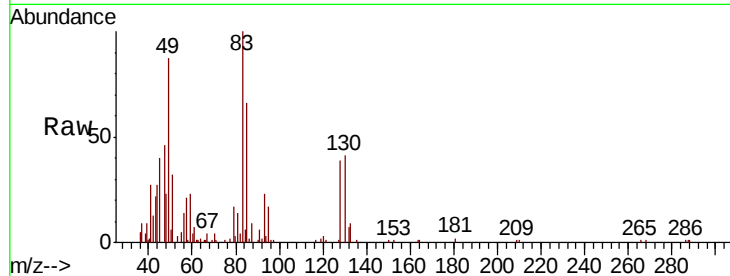


#29
Chloroform
Concen: 0.168 ppbv
RT: 5.74
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 25 Mar 2021 10:50

Tot Ion:
Ion Rati
83 100
85 66.

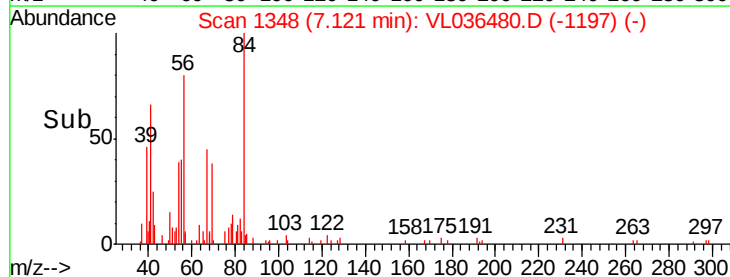
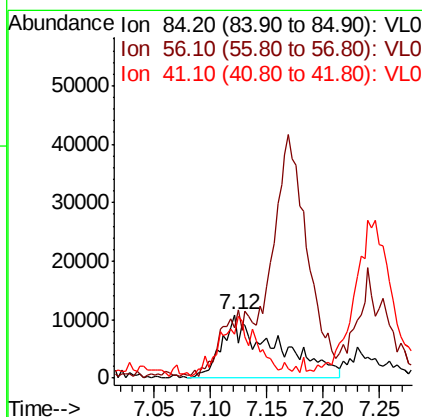
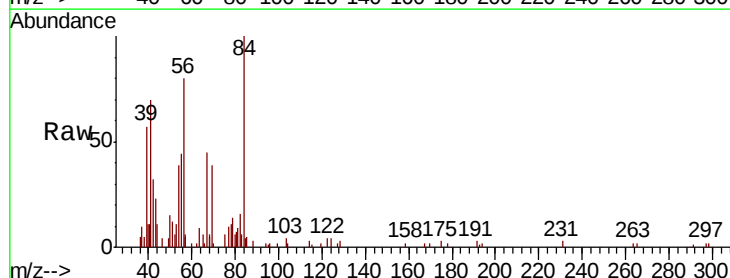
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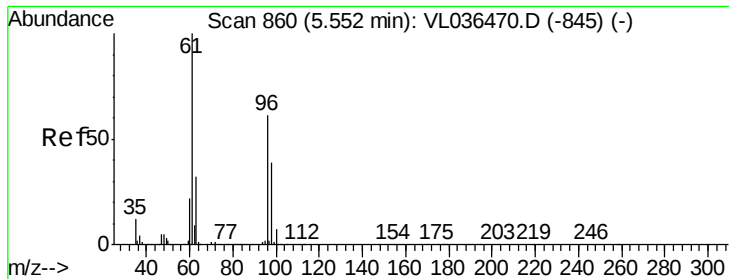
Reviewed By :Semsettin Yesilyurt 03/28/2021
Supervised By :Mahesh Dadoda 03/29/2021



#30
Cyclohexane
Concen: 0.289 ppbv m
RT: 7.12 min Scan# 1348
Delta R.T. -0.01 min
Lab File: VL036480.D
Acq: 25 Mar 2021 10:50

Tgt Ion: 84 Resp: 36151
Ion Ratio Lower Upper
84 100
56 0.0 114.6 171.8#
41 0.0 75.3 112.9#



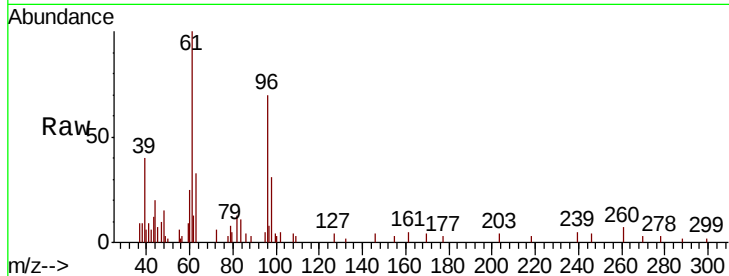


#31
 cis-1,2-Dichloroethene
 Concen: 0.096 ppbv m
 RT: 5.54
 Instrument: MSVOA_L
 Delta R.T.:
 Lab File: ClientSampleId:
 Acq: 25 Mar 2021 10:50

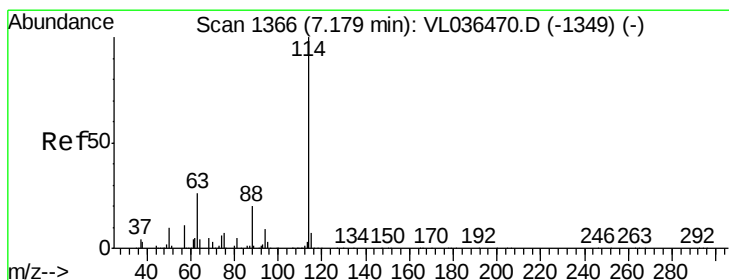
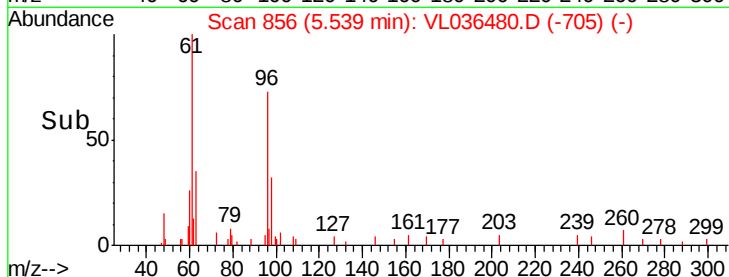
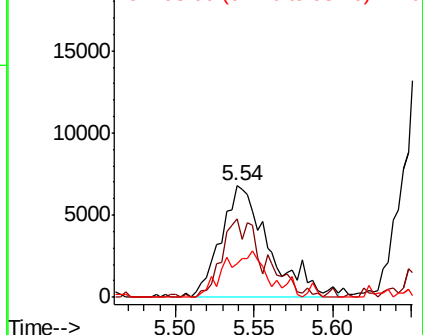
Tot Ion:
 Ion Ratio
 61 100
 96 70.
 98 30.

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 Supervised By :Mahesh Dadoda 03/29/2021

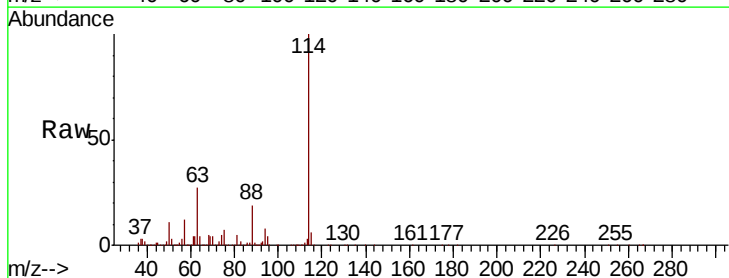


Abundance Ion 61.10 (60.80 to 61.80): VL0
 20000 Ion 96.00 (95.70 to 96.70): VL0
 15000 Ion 98.00 (97.70 to 98.70): VL0

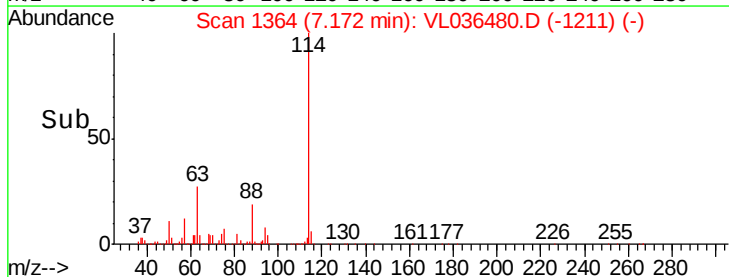
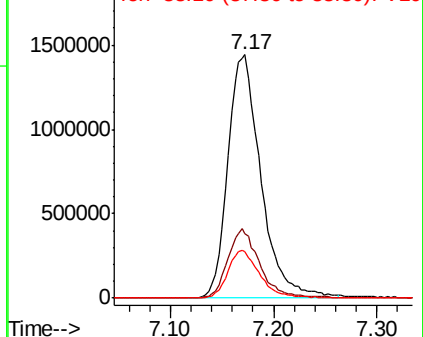


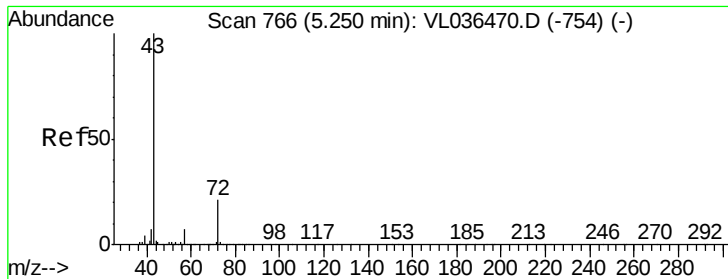
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.17 min Scan# 1364
 Delta R.T. -0.01 min
 Lab File: VL036480.D
 Acq: 25 Mar 2021 10:50

Tgt Ion:114 Resp: 3235917
 Ion Ratio Lower Upper
 114 100
 63 27.7 22.4 33.6
 88 19.0 15.4 23.0



Abundance Ion 114.10 (113.80 to 114.80): V
 2000000 Ion 63.10 (62.80 to 63.80): VL0
 1500000 Ion 88.10 (87.80 to 88.80): VL0





#34

2-Butanone

Concen: 0.668 ppbv

RT: 5.24 Instrument :

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 25 Mar 2021 10:50

Tot Ion:

Ion Ratio

43 100

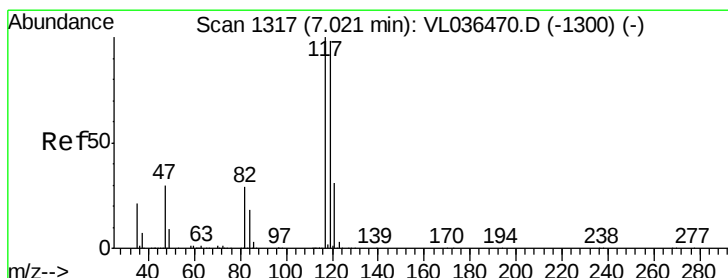
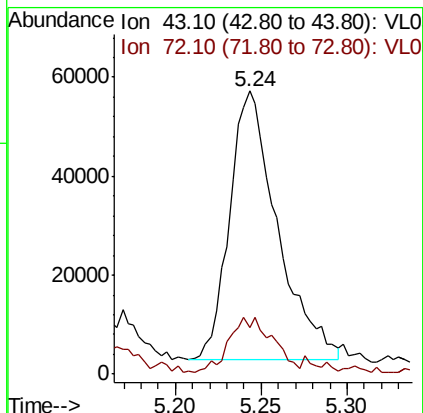
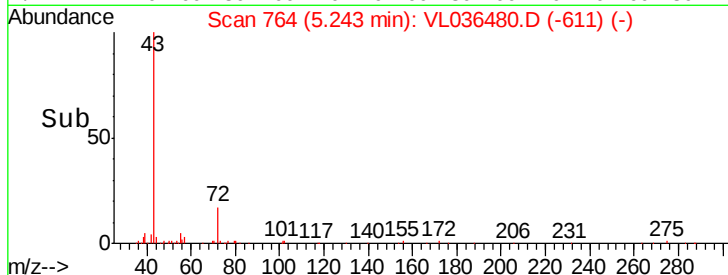
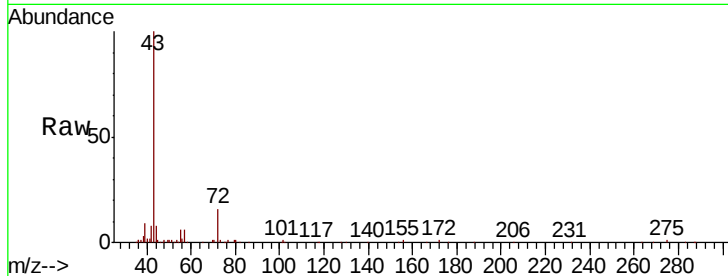
72 23.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 03/28/2021

Supervised By :Mahesh Dadoda 03/29/2021



#35

Carbon Tetrachloride

Concen: 0.064 ppbv m

RT: 7.01 min Scan# 1314

Delta R.T. -0.01 min

Lab File: VL036480.D

Acq: 25 Mar 2021 10:50

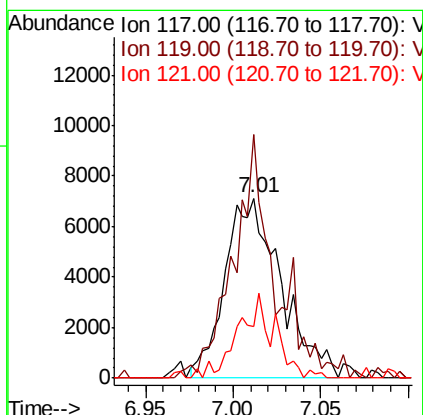
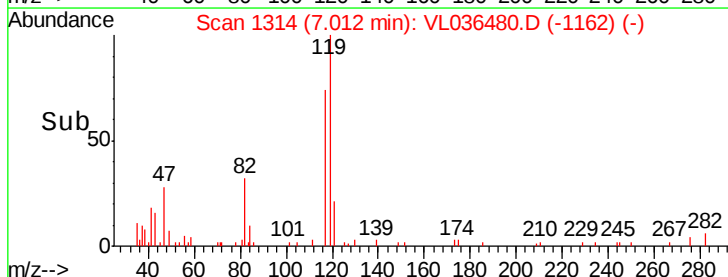
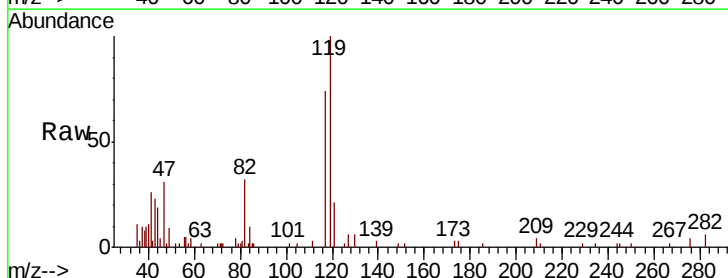
Tgt Ion:117 Resp: 15824

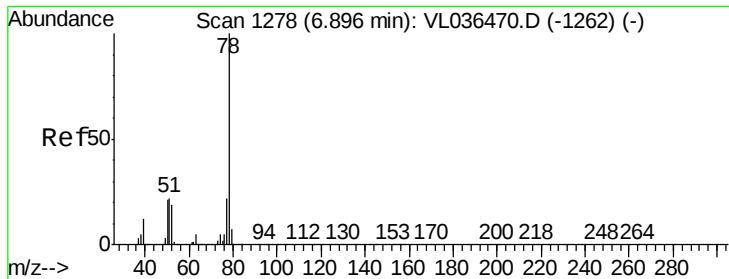
Ion Ratio Lower Upper

117 100

119 135.4 78.2 117.2#

121 28.5 24.5 36.7





#36

Benzene

Concen: 0.260 ppbv

RT: 6.88 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 25 Mar 2021 10:50

Tot Ion:

Ion Ratio

78 100

77 24.

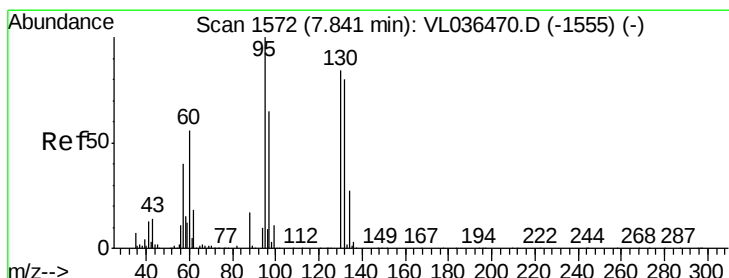
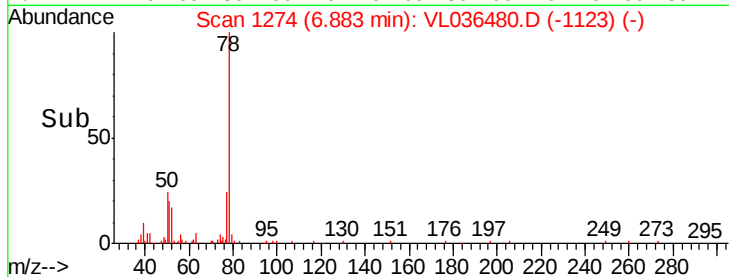
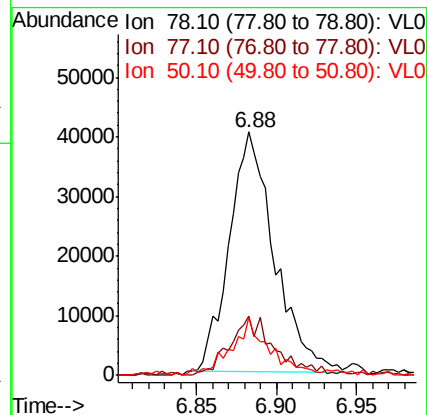
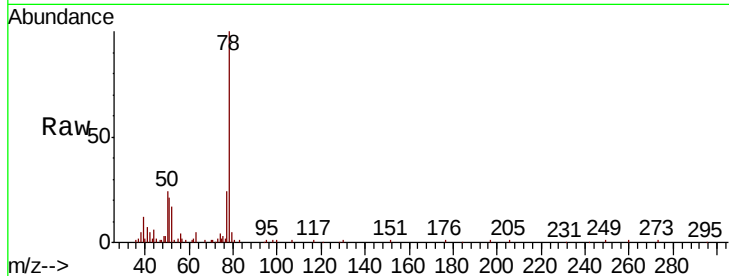
50 23.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 03/28/2021

Supervised By :Mahesh Dadoda 03/29/2021



#38

Trichloroethene

Concen: 0.070 ppbv m

RT: 7.83 min Scan# 1570

Delta R.T. -0.01 min

Lab File: VL036480.D

Acq: 25 Mar 2021 10:50

Tgt Ion:130 Resp: 8082

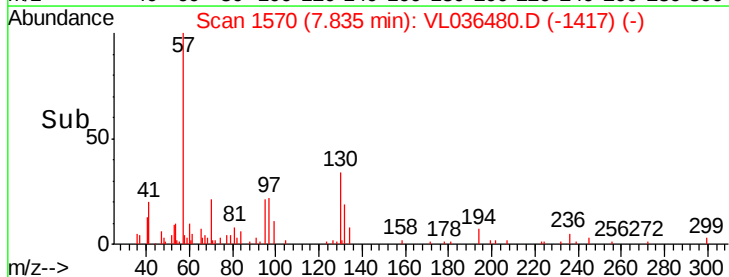
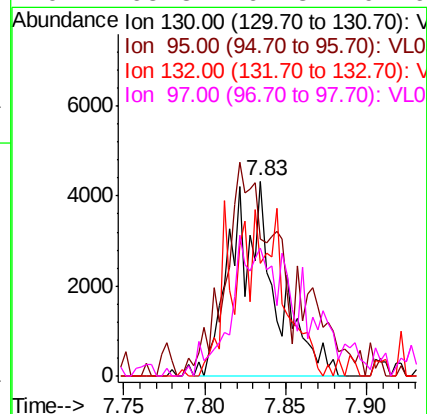
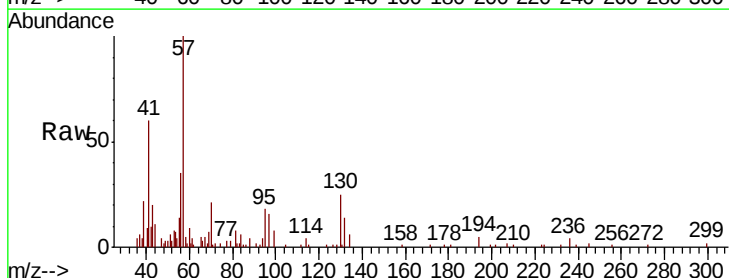
Ion Ratio Lower Upper

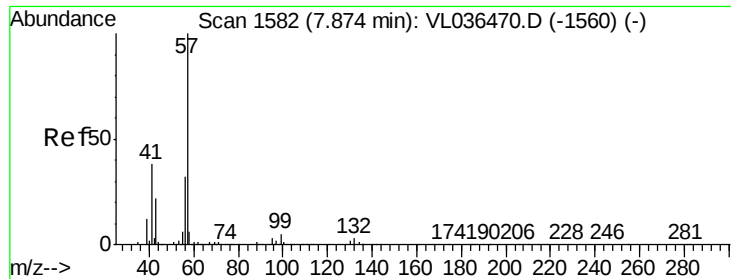
130 100

95 70.3 95.7 143.5#

132 57.4 76.2 114.4#

97 65.8 61.8 92.6





#44

2,2,4-Trimethylpentane

Concen: 0.421 ppbv

RT: 7.86 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 25 Mar 2021 10:50

Tot Ion:

Ion Ratio

57 100

41 43.

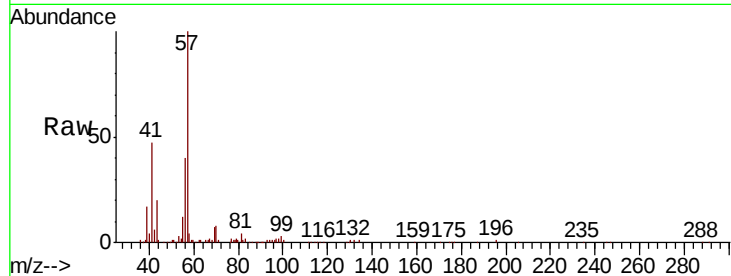
56 44.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 03/28/2021

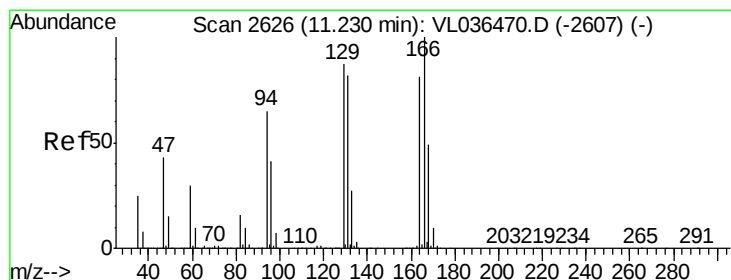
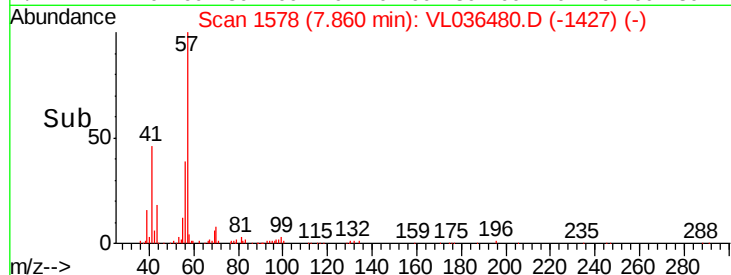
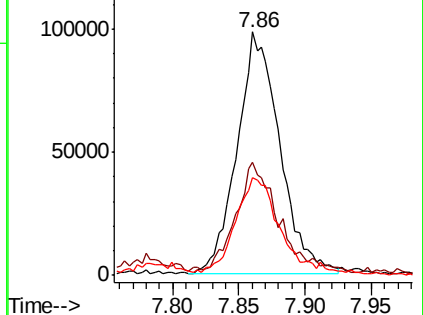
Supervised By :Mahesh Dadoda 03/29/2021



Abundance Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 56.10 (55.80 to 56.80): VL0



#52

Tetrachloroethene

Concen: 2.026 ppbv m

RT: 11.22 min Scan# 2622

Delta R.T. -0.01 min

Lab File: VL036480.D

Acq: 25 Mar 2021 10:50

Tgt Ion:164 Resp: 222671

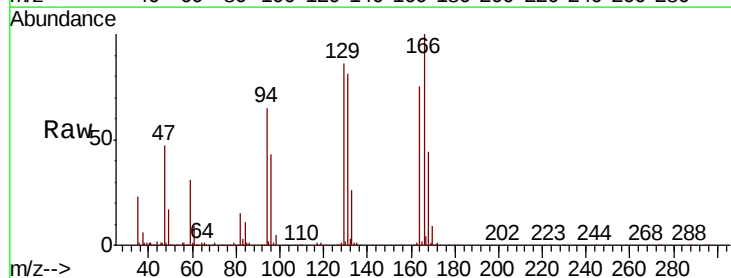
Ion Ratio Lower Upper

164 100

166 134.2 98.3 147.5

129 115.4 85.8 128.8

131 108.5 80.9 121.3

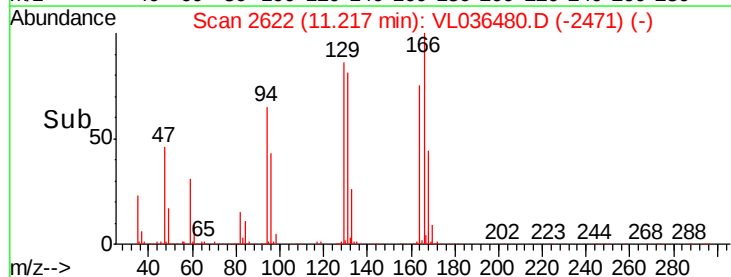
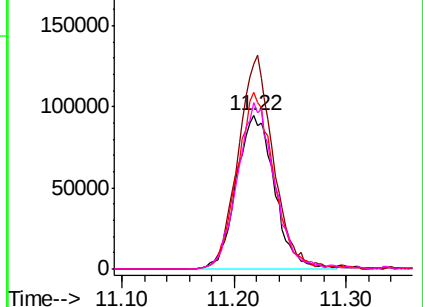


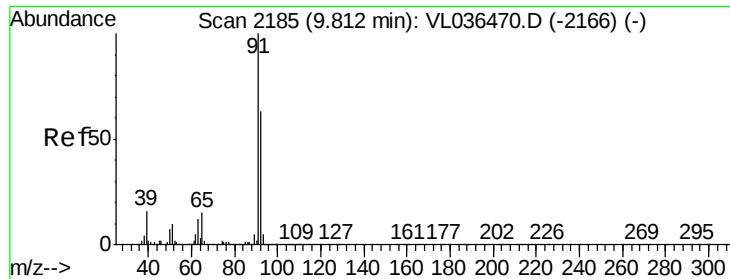
Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V





#53

Toluene

Concen: 2.536 ppbv

RT: 9.80

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 25 Mar 2021 10:50

Tot Ion:

Ion Ratio

91 100

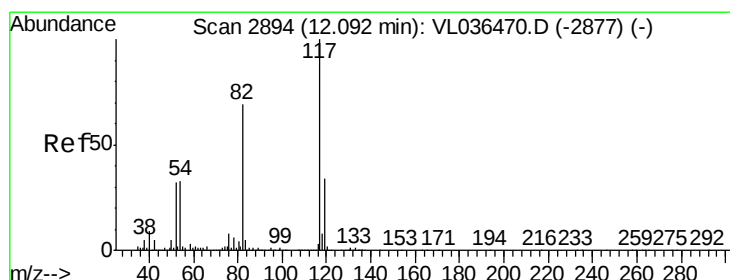
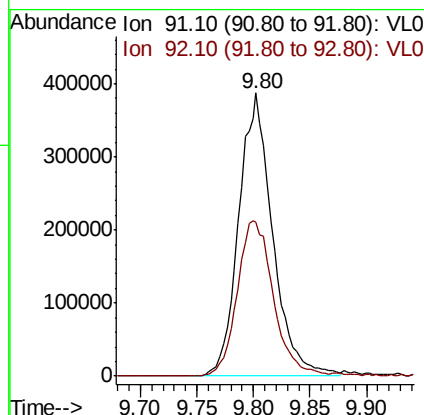
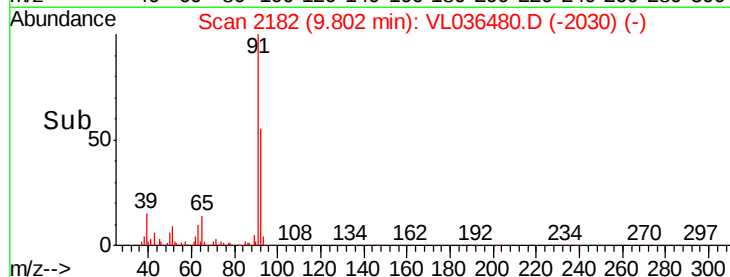
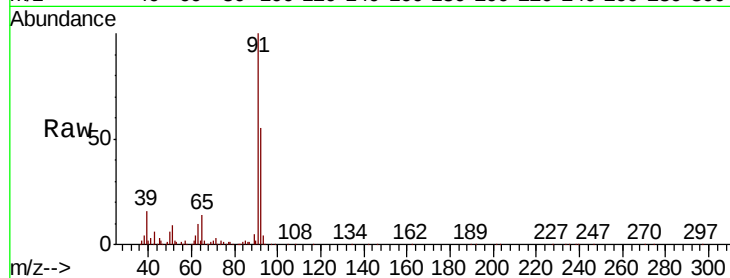
92 59.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 03/28/2021

Supervised By :Mahesh Dadoda 03/29/2021



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.08 min Scan# 2891

Delta R.T. -0.01 min

Lab File: VL036480.D

Acq: 25 Mar 2021 10:50

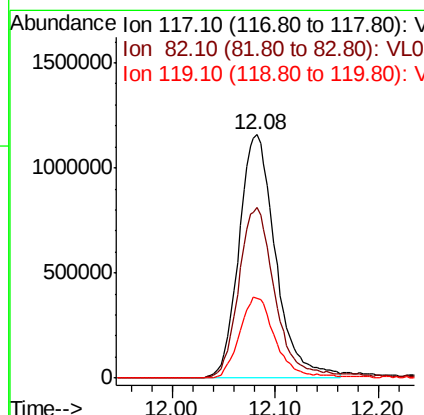
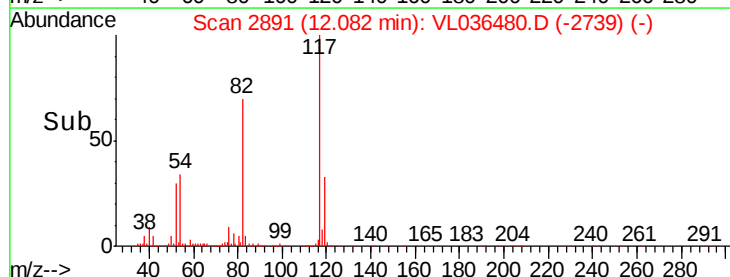
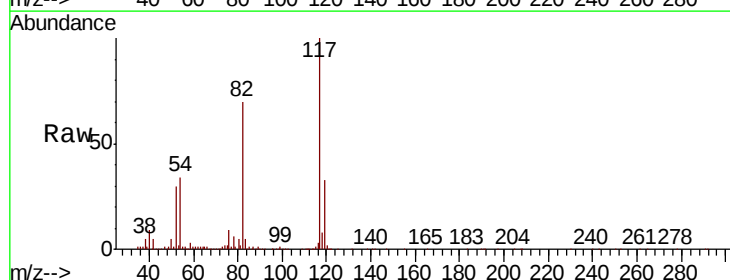
Tgt Ion:117 Resp: 2860918

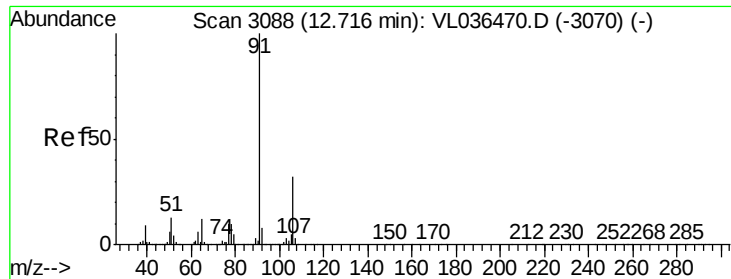
Ion Ratio Lower Upper

117 100

82 71.7 57.4 86.0

119 33.0 47.4 71.0#





#58

Ethyl Benzene

Concen: 0.298 ppbv m

RT: 12.70

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 25 Mar 2021 10:50

Tot Ion:

Ion Ratio

91 100

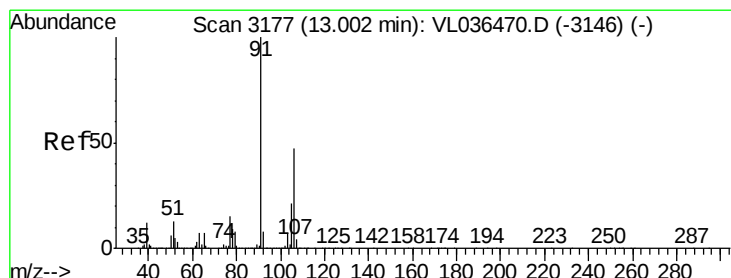
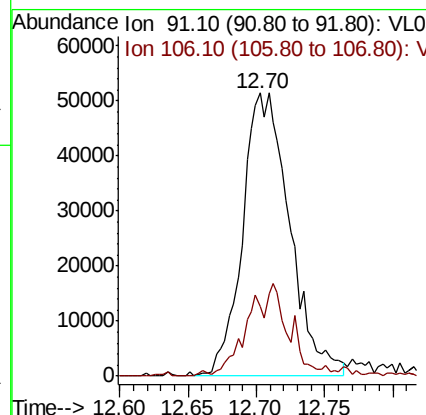
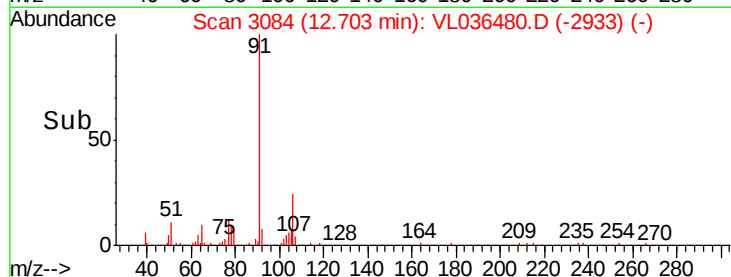
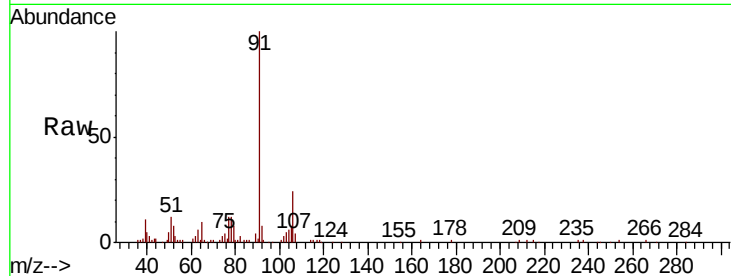
106 24.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 03/28/2021

Supervised By :Mahesh Dadoda 03/29/2021



#59

m/p-Xylene

Concen: 1.457 ppbv m

RT: 12.97 min Scan# 3166

Delta R.T. -0.04 min

Lab File: VL036480.D

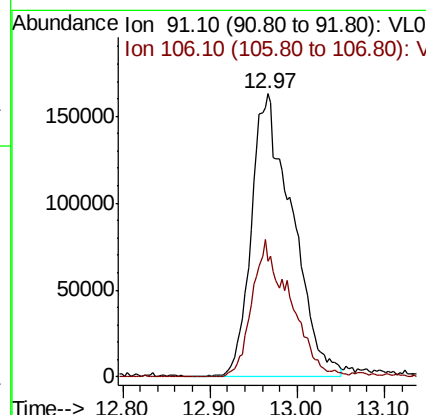
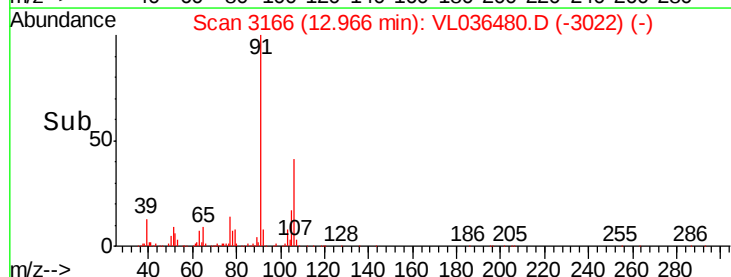
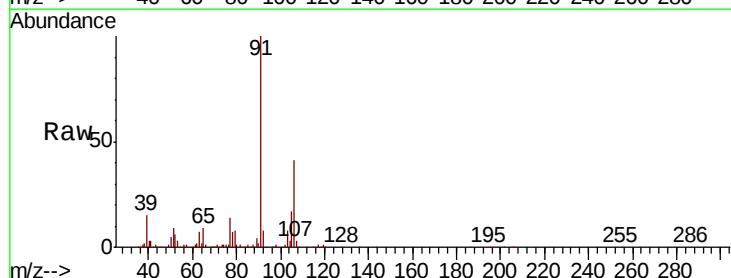
Acq: 25 Mar 2021 10:50

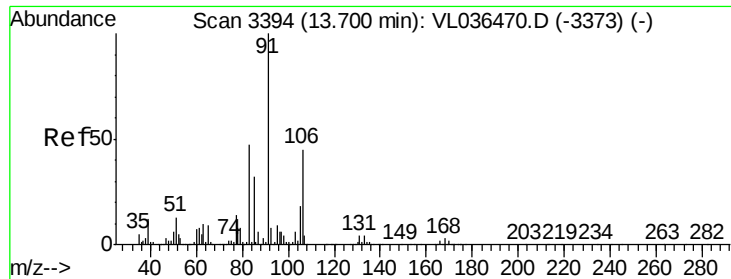
Tgt Ion: 91 Resp: 528835

Ion Ratio Lower Upper

91 100

106 0.0 35.3 52.9#



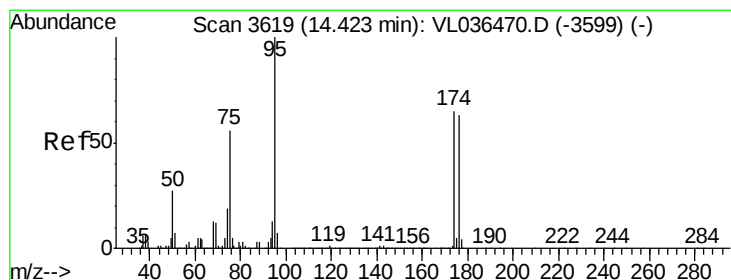
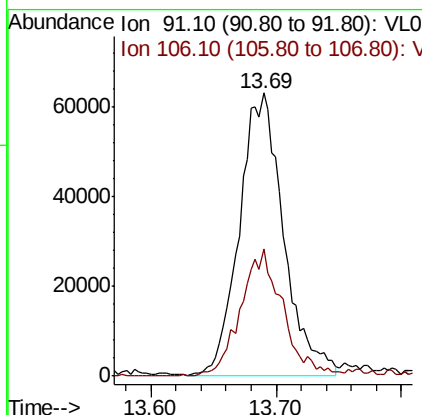
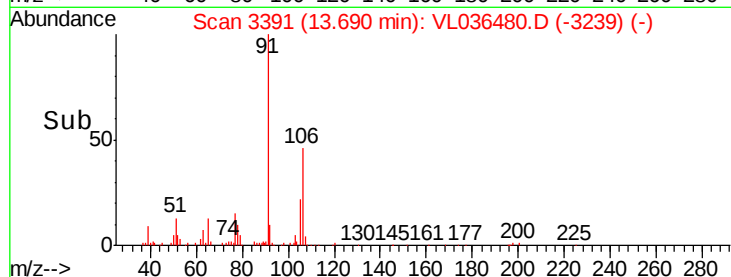
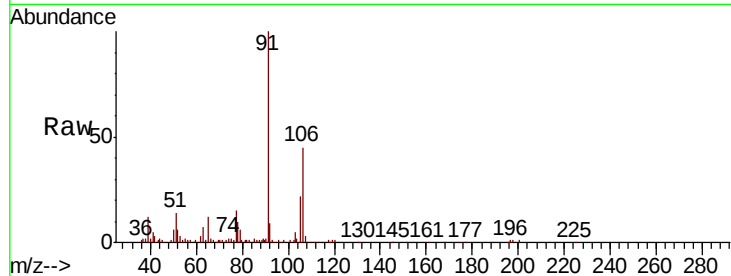


#60
o-Xylene
Concen: 0.442 ppbv m
RT: 13.69
Delta R.T. MSVOA_L
Lab File: ClientSampled :
Acq: 25 Mar 2021 10:50

Tot Ion:
Ion Ratio
91 100
106 42.

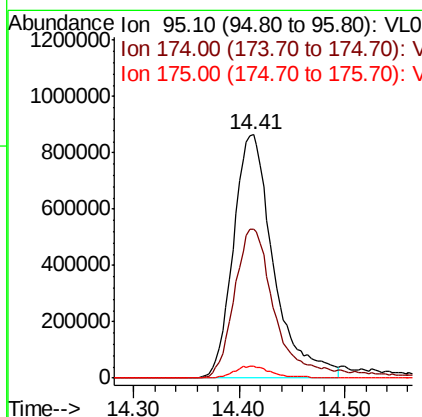
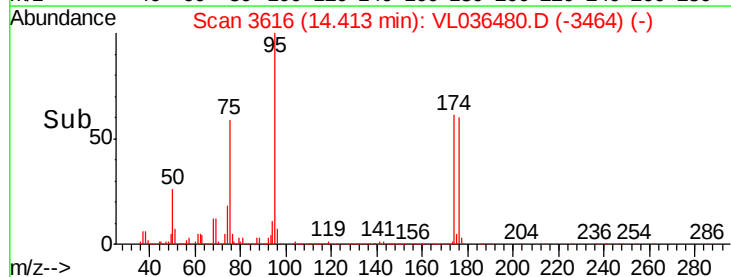
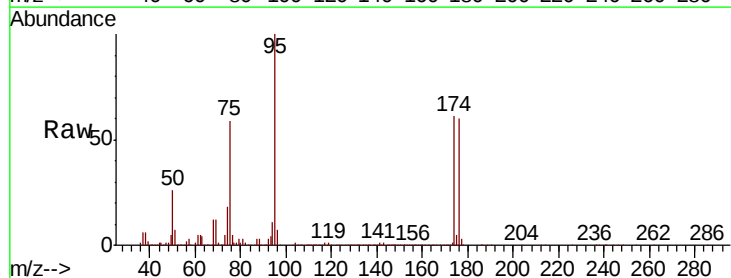
Manual Integrations
APPROVED

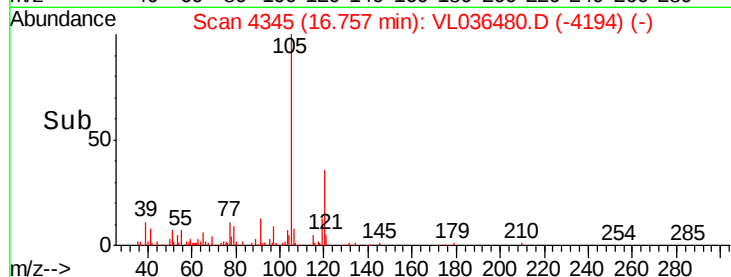
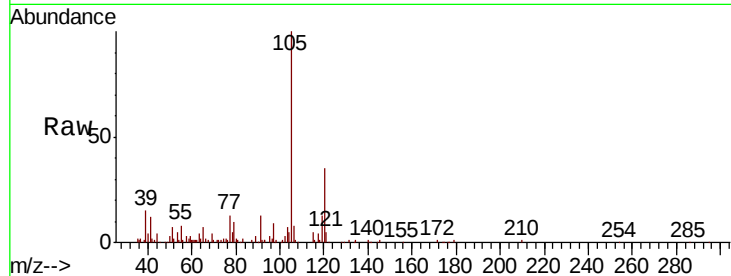
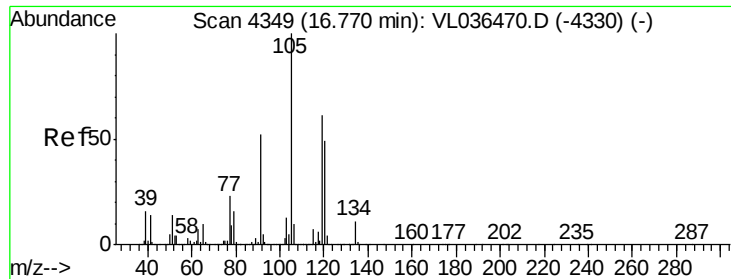
Reviewed By :Semsettin Yesilyurt 03/28/2021
Supervised By :Mahesh Dadoda 03/29/2021



#68
1-Bromo-4-Fluorobenzene
Concen: 10.041 ppbv
RT: 14.41 min Scan# 3616
Delta R.T. -0.01 min
Lab File: VL036480.D
Acq: 25 Mar 2021 10:50

Tgt Ion: 95 Resp: 2289569
Ion Ratio Lower Upper
95 100
174 65.1 51.0 76.6
175 4.9 3.9 5.9





#74
 1,2,4-Trimethylbenzene
 Concen: 0.334 ppbv m
 RT: 16.76
 Delta R.T
 Lab File:
 Acq: 25 Mar 2021 10:50

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/28/2021
 Supervised By :Mahesh Dadoda 03/29/2021

Tot Ion	Ion	Ratio
105	100	
120	35.	
91	12.	
77	12.6	18.6 28.0#

