

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL042721\
 Data File : VL036859.D
 Acq On : 27 Apr 2021 15:54
 Operator : SY/AP
 Sample : M2172-02
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA L
 ClientSampleId :
 OFFSITE-DDC-INTERMEDIATE-2

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 04/29/2021
 Supervised By :Mahesh Dadoda 04/29/2021

Quant Time: Apr 29 16:00:02 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL042721A
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument:
 QLast Update : Tue Apr 27 16:56:35 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1314435	10.00	ppbv	0.01
33) 1,4-Difluorobenzene	7.18	114	3168903	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	2788295	10.00	ppbv	0.00

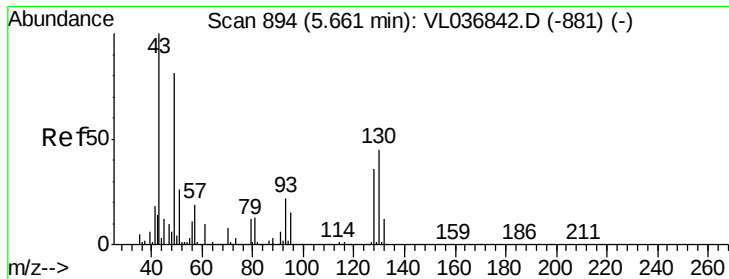
System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.42	95	2195916	9.81	ppbv	0.01
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.10%

Target Compounds

						Ovalue
2) Dichlorodifluoromethane	3.05	85	41069	0.198	ppbv	94
3) Chlorodifluoromethane	2.99	51	67781m	0.283	ppbv	
4) Chloromethane	3.15	50	36379	0.462	ppbv	95
5) Vinyl Chloride	3.26	62	12784m	0.161	ppbv	
9) Propene	3.02	41	74462	1.021	ppbv	89
10) Heptane	8.13	43	19842m	0.108	ppbv	
11) Trichlorofluoromethane	3.96	101	49099	0.266	ppbv	86
13) Ethanol	3.62	45	66320	7.128	ppbv	82
15) Acetone	3.86	43	660046	5.328	ppbv	99
18) 1,1-Dichloroethene	4.30	96	6874m	0.128	ppbv	
19) Isopropyl Alcohol	3.99	45	98002m	1.597	ppbv	
20) Methylene Chloride	4.35	84	435777	7.356	ppbv	97
22) trans-1,2-Dichloroethene	4.89	96	11762m	0.218	ppbv	
26) Hexane	5.69	57	462986	3.270	ppbv #	44
29) Chloroform	5.75	83	109773	0.497	ppbv	89
30) Cyclohexane	7.17	84	37181m	0.331	ppbv	
31) cis-1,2-Dichloroethene	5.55	61	1168916	9.198	ppbv	98
34) 2-Butanone	5.25	43	635431	4.578	ppbv	98
35) Carbon Tetrachloride	7.02	117	17643m	0.082	ppbv	
36) Benzene	6.90	78	77411m	0.290	ppbv	
38) Trichloroethene	7.84	130	3641m	0.038	ppbv	
41) Tetrahydrofuran	6.07	42	42037m	0.692	ppbv	
44) 2,2,4-Trimethylpentane	7.87	57	72158	0.158	ppbv #	66
52) Tetrachloroethene	11.22	164	35422m	0.390	ppbv	
53) Toluene	9.82	91	241063	0.863	ppbv	96
59) m/p-Xylene	12.97	91	83533m	0.264	ppbv	
60) o-Xylene	13.70	91	38280m	0.125	ppbv	

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: OFFSITE-DDC-INTERMEDIATE-2

Acq: 27 Apr 2021 15:54

Tot Ion:

Ion Ratio

49 100

128 47.

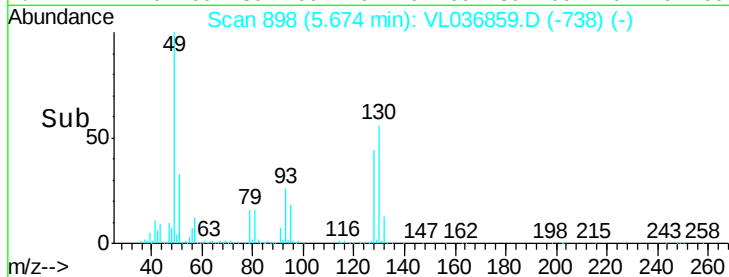
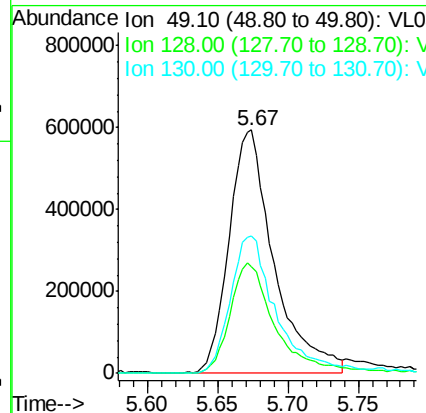
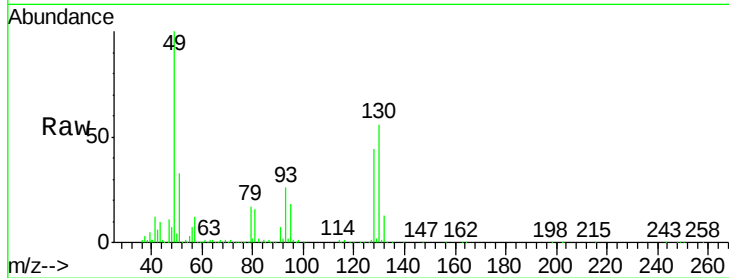
130 60.

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 04/29/2021

Supervised By :Mahesh Dadoda 04/29/2021



#2

Dichlorodifluoromethane

Concen: 0.198 ppbv

RT: 3.05 min Scan# 82

Delta R.T. 0.01 min

Lab File: VL036859.D

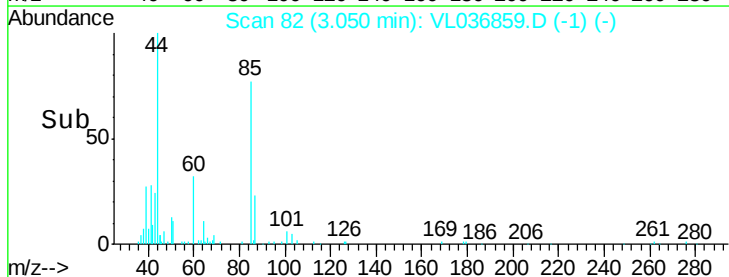
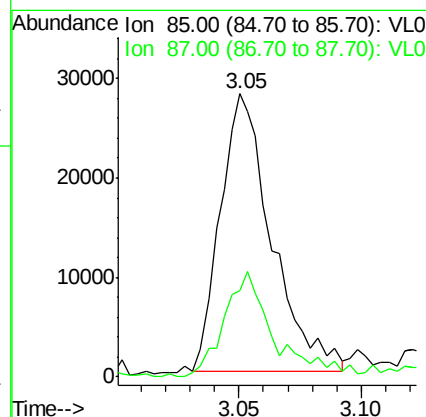
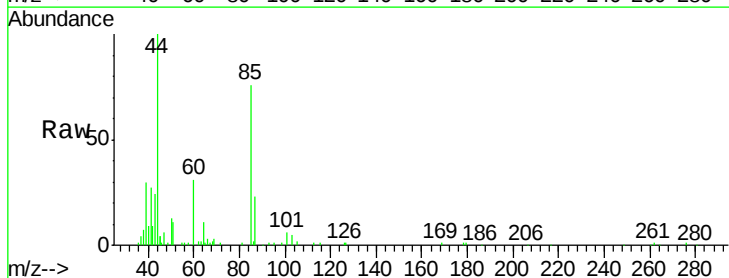
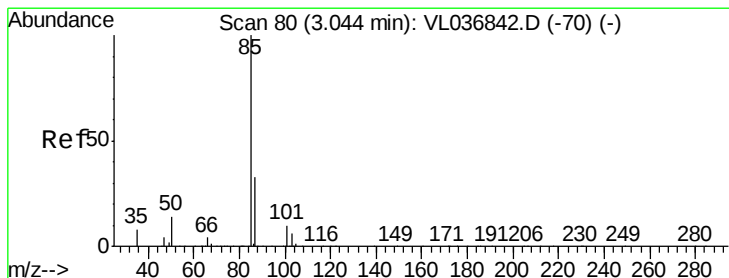
Acq: 27 Apr 2021 15:54

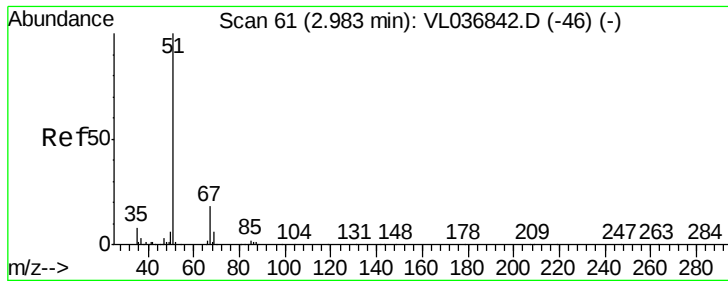
Tgt Ion: 85 Resp: 41069

Ion Ratio Lower Upper

85 100

87 29.6 26.2 39.2





#3

Chlorodifluoromethane

Concen: 0.283 ppbv m

RT: 2.99 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 27 Apr 2021 15:54 OFFSITE-DDC-INTERMEDIATE-2

Tot Ion:

Ion Ratio

51 100

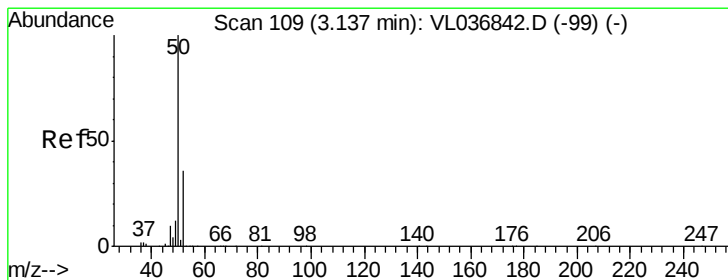
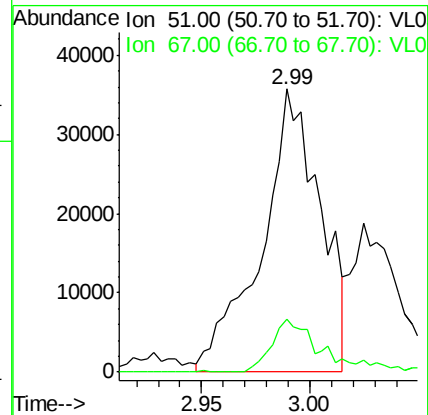
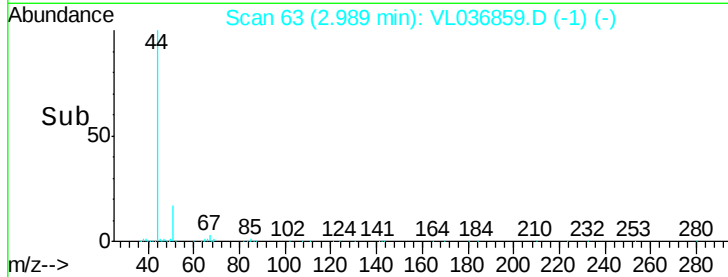
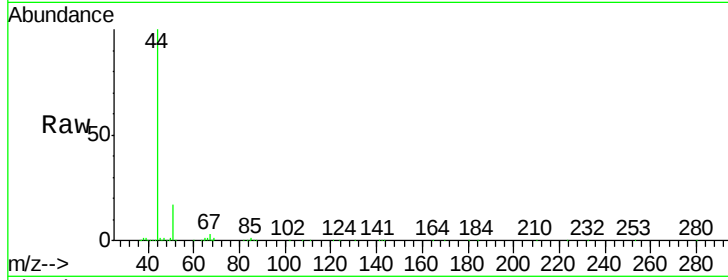
67 16.

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 04/29/2021

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#4

Chloromethane

Concen: 0.462 ppbv

RT: 3.15 min Scan# 112

Delta R.T. 0.01 min

Lab File: VL036859.D

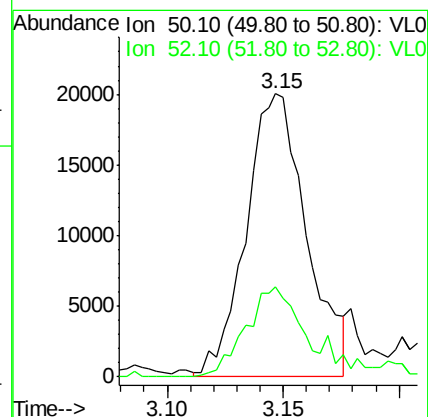
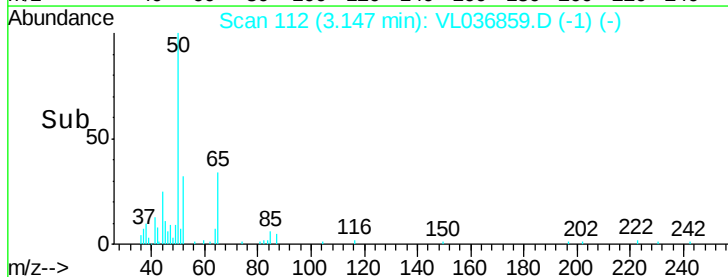
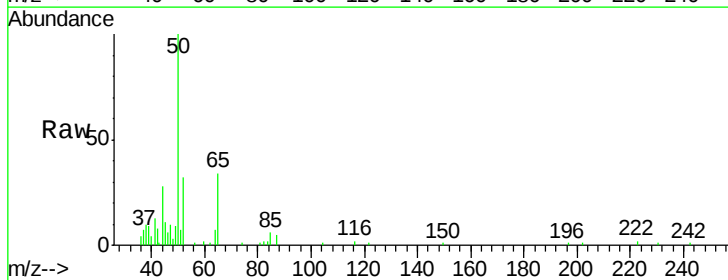
Acq: 27 Apr 2021 15:54

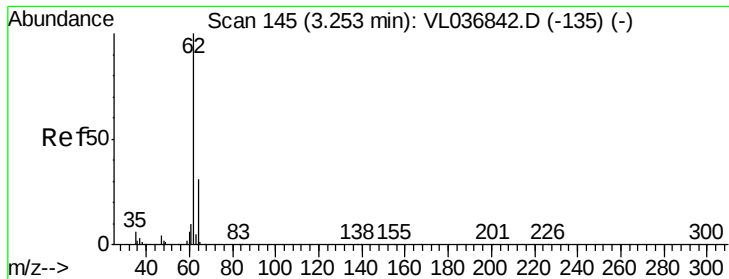
Tgt Ion: 50 Resp: 36379

Ion Ratio Lower Upper

50 100

52 32.5 28.5 42.7





#5

Vinyl Chloride

Concen: 0.161 ppbv m

RT: 3.26 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 27 Apr 2021 15:54 OFFSITE-DDC-INTERMEDIATE-2

Tot Ion:

Ion Ratio

62 100

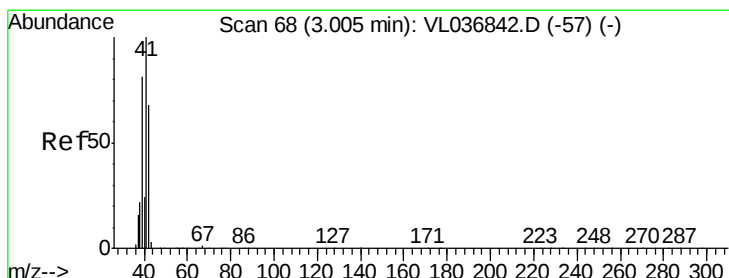
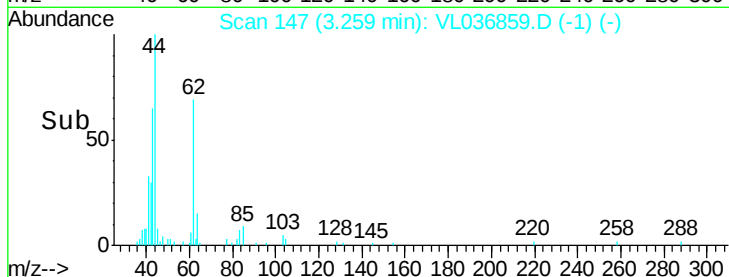
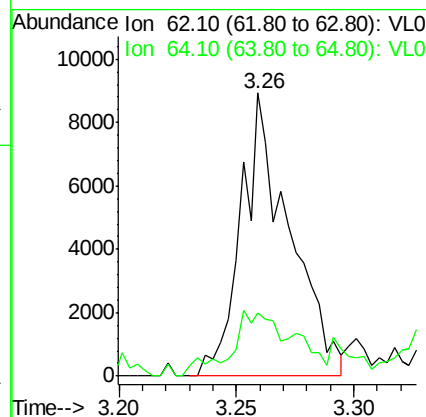
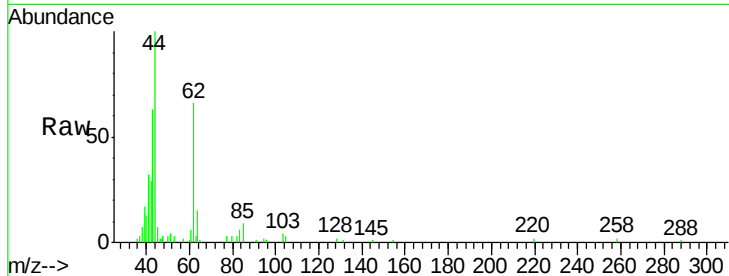
64 22.

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 04/29/2021

Supervised By :Mahesh Dadoda 04/29/2021



#9

Propene

Concen: 1.021 ppbv

RT: 3.02 min Scan# 74

Delta R.T. 0.02 min

Lab File: VL036859.D

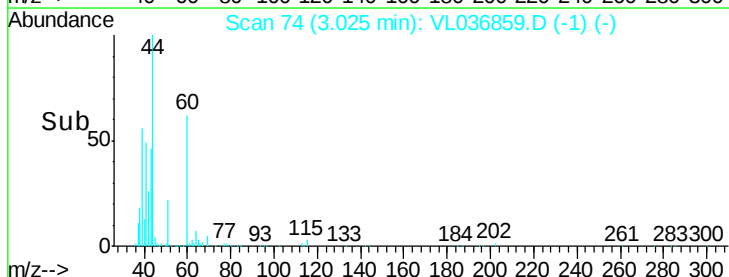
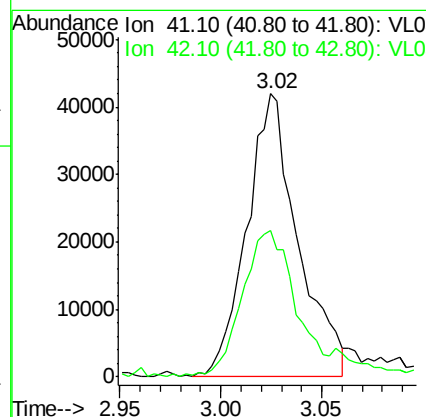
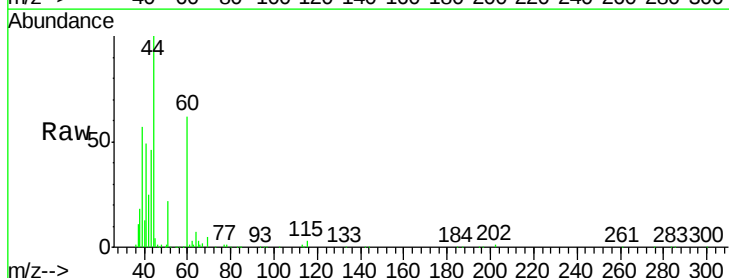
Acq: 27 Apr 2021 15:54

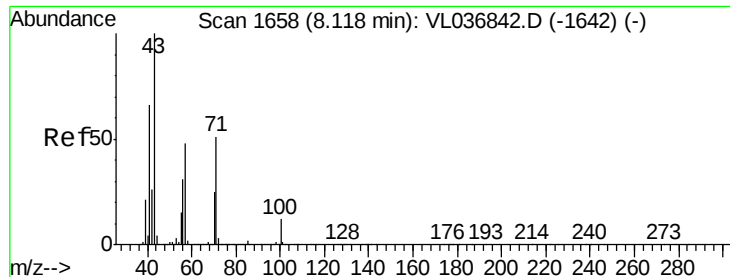
Tgt Ion: 41 Resp: 74462

Ion Ratio Lower Upper

41 100

42 61.2 56.0 84.0





#10

Heptane

Concen: 0.108 ppbv m

RT: 8.13 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 27 Apr 2021 15:54 OFFSITE-DDC-INTERMEDIATE-2

Tot Ion:

Ion Ratio

43 100

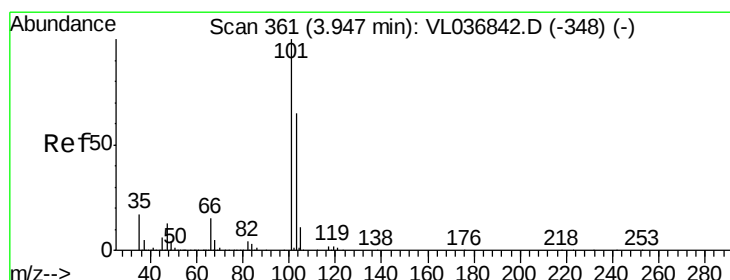
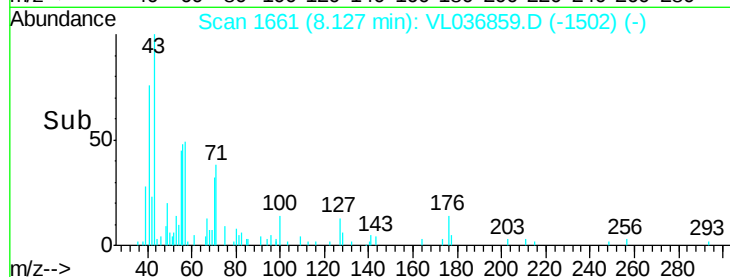
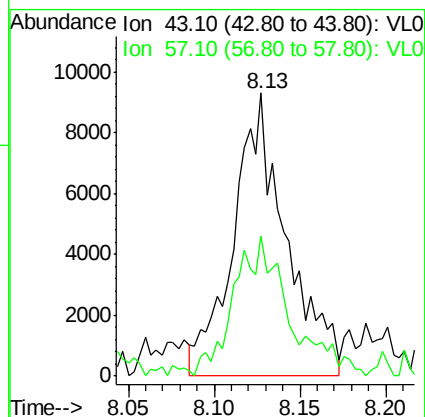
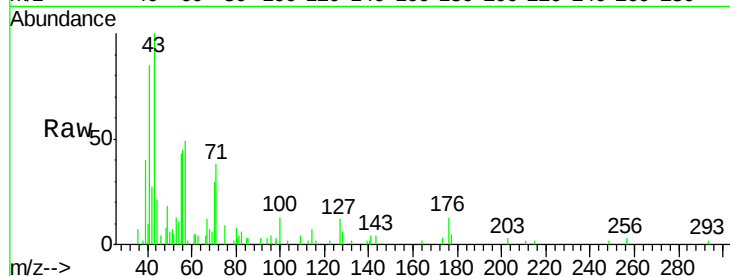
57 0.

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 04/29/2021

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#11

Trichlorofluoromethane

Concen: 0.266 ppbv

RT: 3.96 min Scan# 364

Delta R.T. 0.01 min

Lab File: VL036859.D

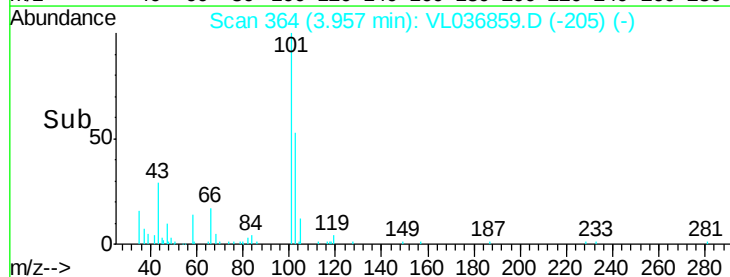
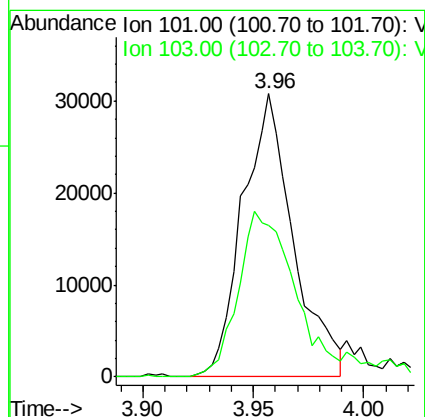
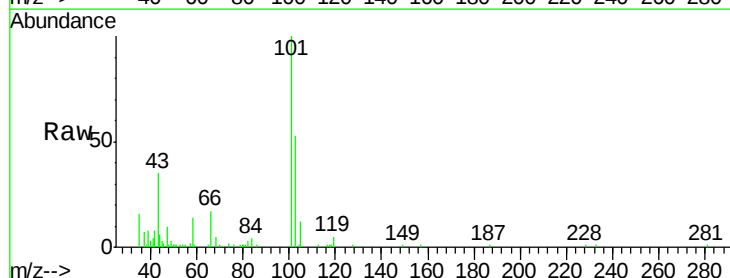
Acq: 27 Apr 2021 15:54

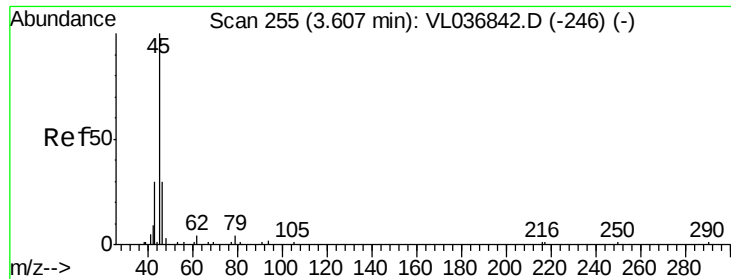
Tgt Ion:101 Resp: 49099

Ion Ratio Lower Upper

101 100

103 53.3 51.6 77.4





#13

Ethanol

Concen: 7.128 ppbv

RT: 3.62

Delta R.T. MSVOA_L

Lab File:

Acq: 27 Apr 2021 15:54

ClientSampleId :

OFFSITE-DDC-INTERMEDIATE-2

Tot Ion:

Ion Ratio

45 100

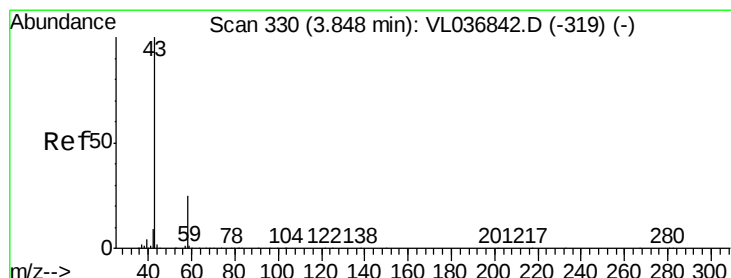
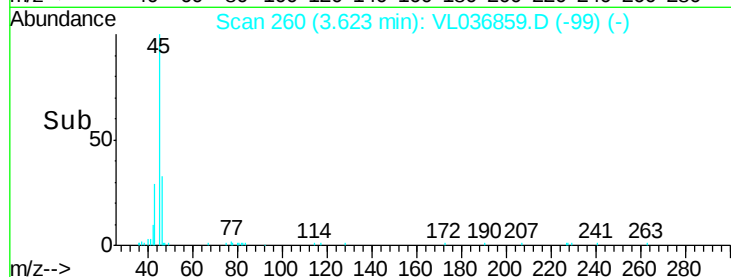
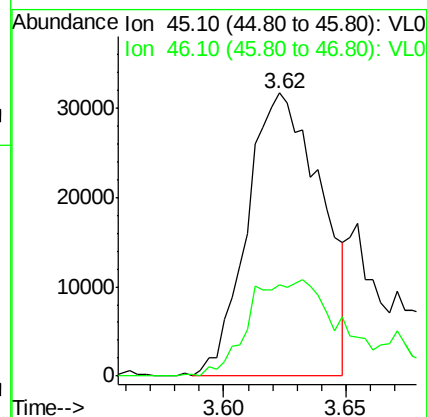
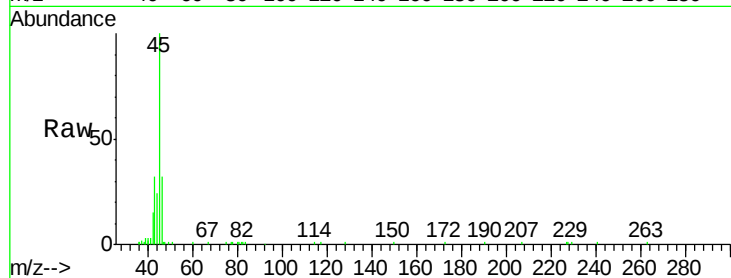
46 53.

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 04/29/2021

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#15

Acetone

Concen: 5.328 ppbv

RT: 3.86 min Scan# 333

Delta R.T. 0.01 min

Lab File: VL036859.D

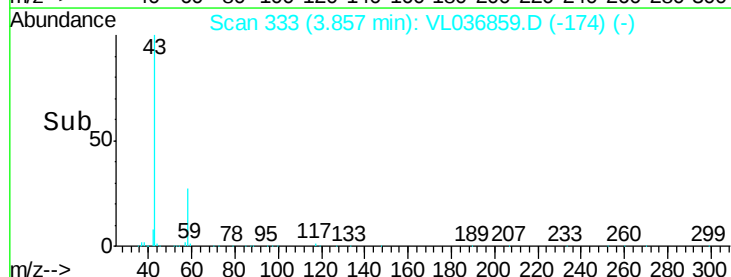
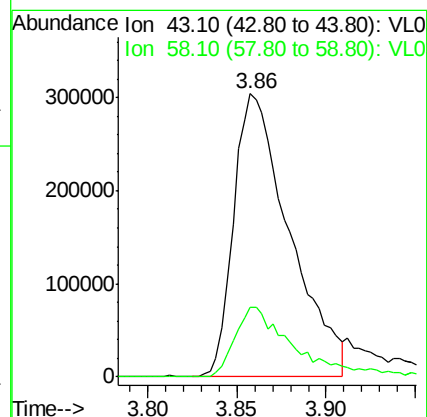
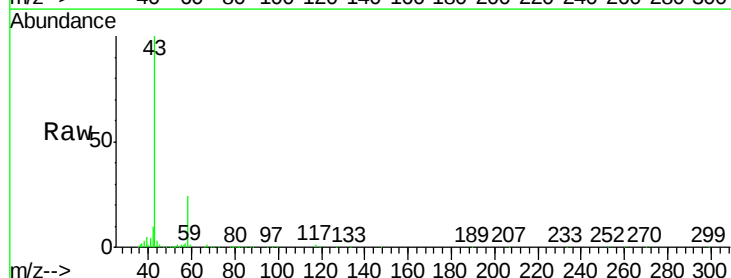
Acq: 27 Apr 2021 15:54

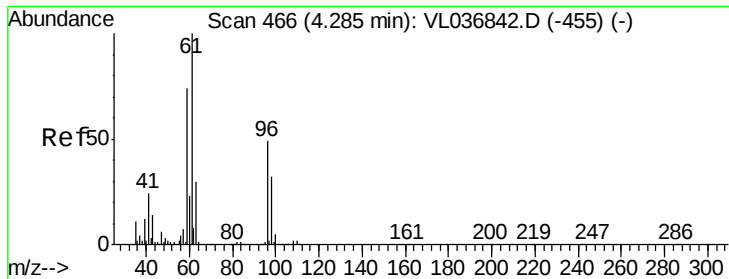
Tgt Ion: 43 Resp: 660046

Ion Ratio Lower Upper

43 100

58 26.7 21.7 32.5





#18

1,1-Dichloroethene

Concen: 0.128 ppbv m

RT: 4.30 Instrument:

Delta R.T. MSVOA_L

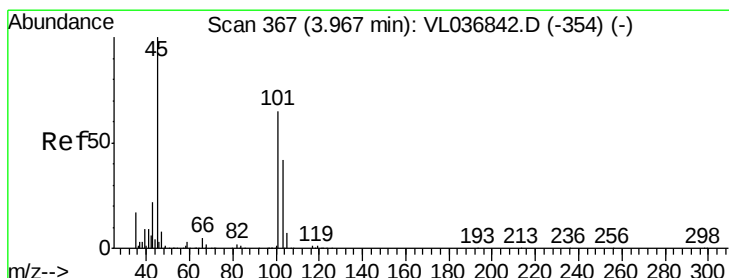
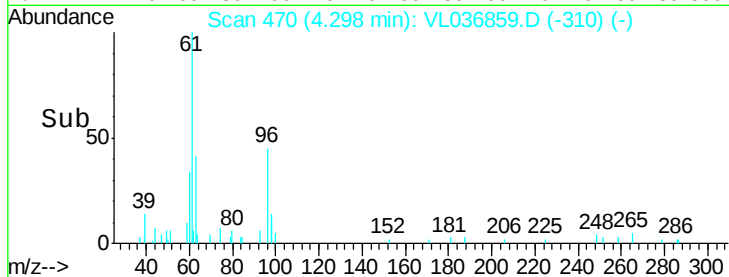
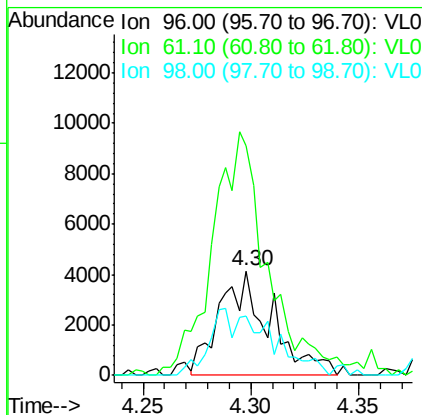
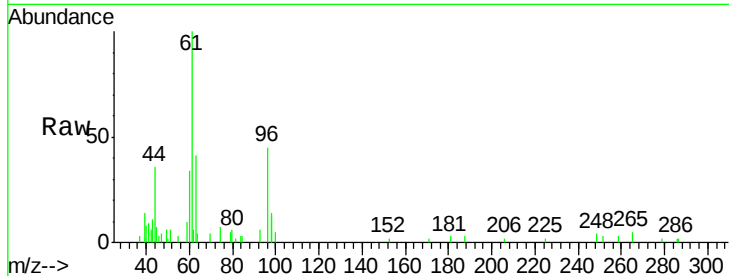
Lab File: ClientSampleId:

Acq: 27 Apr 2021 15:54 OFFSITE-DDC-INTERMEDIATE-2

Tot Ion:
Ion Ratio
96 100
61 219.
98 30.

Manual Integrations
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Supervised By :Mahesh Dadoda 04/29/2021



#19

Isopropyl Alcohol

Concen: 1.597 ppbv m

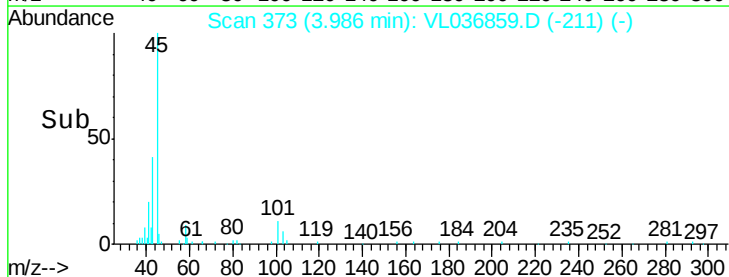
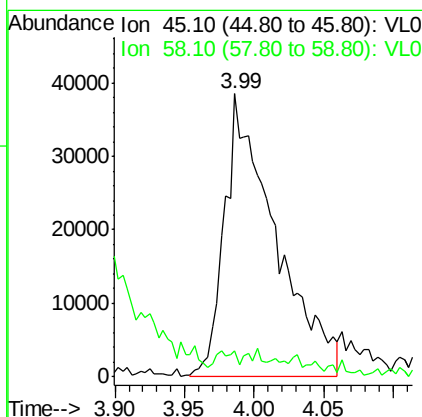
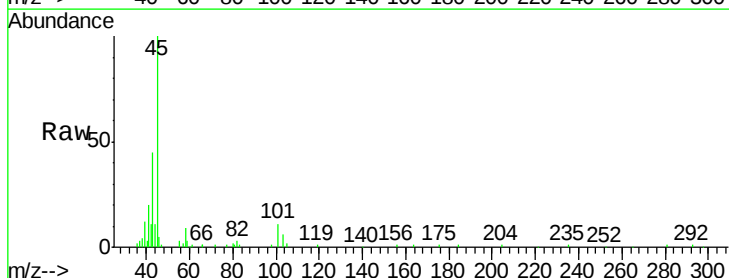
RT: 3.99 min Scan# 373

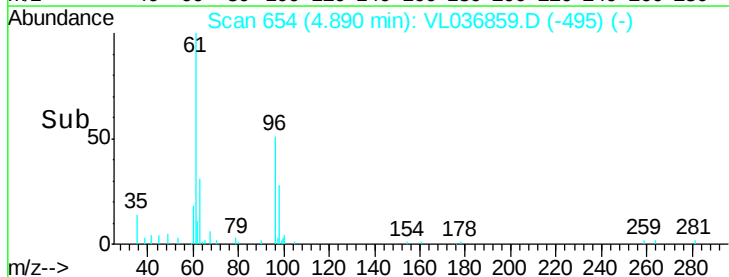
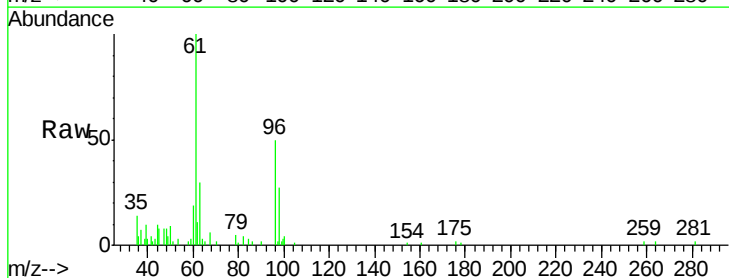
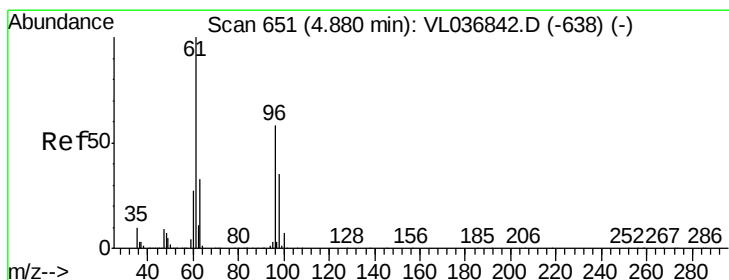
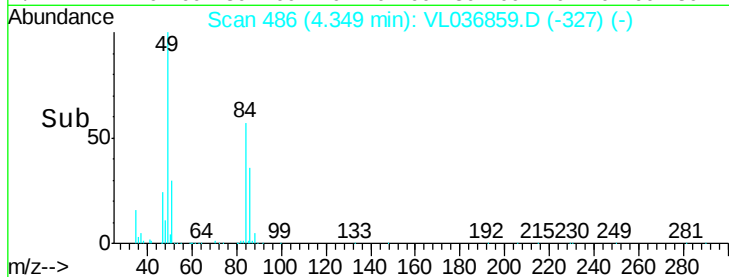
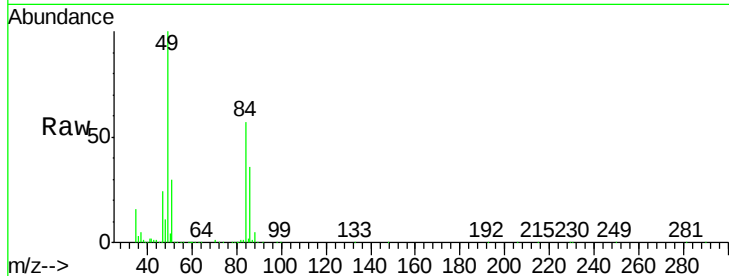
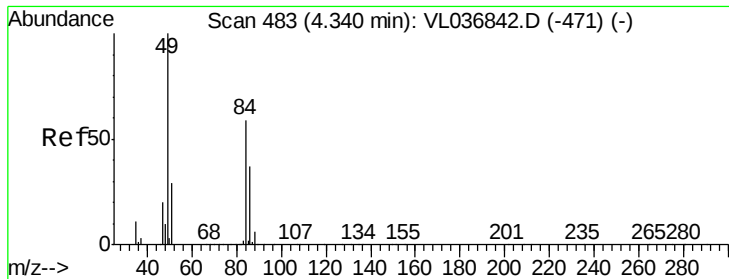
Delta R.T. 0.02 min

Lab File: VL036859.D

Acq: 27 Apr 2021 15:54

Tgt Ion: 45 Resp: 98002
Ion Ratio Lower Upper
45 100
58 0.0 2.8 4.2#





#20

Methylene Chloride

Concen: 7.356 ppbv

RT: 4.35

Delta R.T. MSVOA_L

Lab File:

Acq: 27 Apr 2021 15:54

ClientSampleId :

OFFSITE-DDC-INTERMEDIATE-2

Tot Ion:

Ion Ratio

84 100

49 173.

51 52.

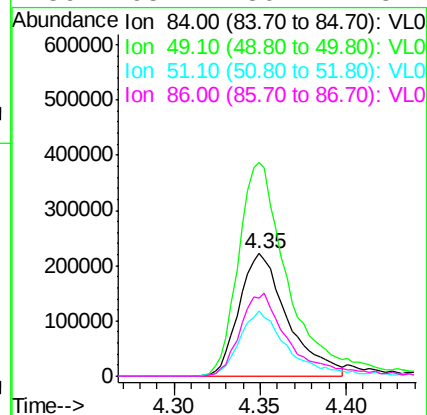
86 63.2

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 04/29/2021

Supervised By :Mahesh Dadoda 04/29/2021



#22

trans-1,2-Dichloroethene

Concen: 0.218 ppbv m

RT: 4.89 min Scan# 654

Delta R.T. 0.01 min

Lab File: VL036859.D

Acq: 27 Apr 2021 15:54

Tgt Ion: 96 Resp: 11762

Ion Ratio Lower Upper

96 100

61 200.7

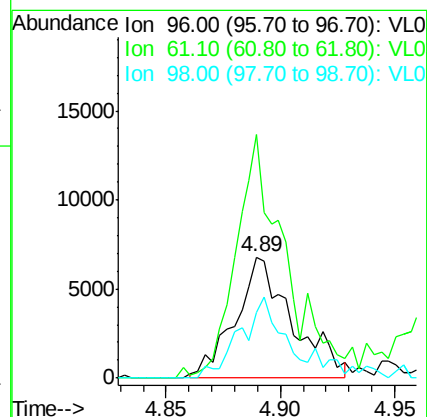
98 54.6

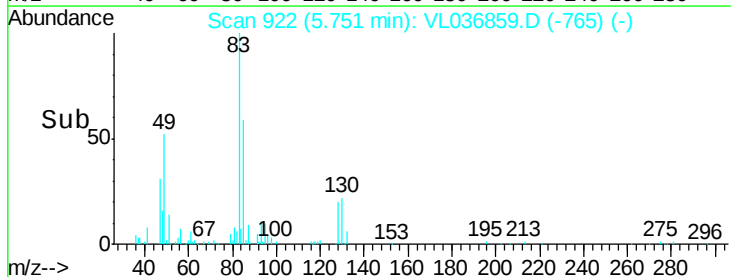
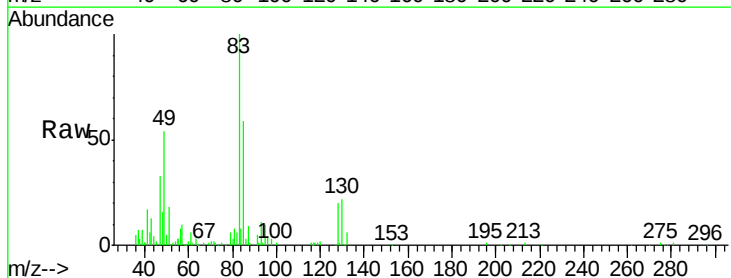
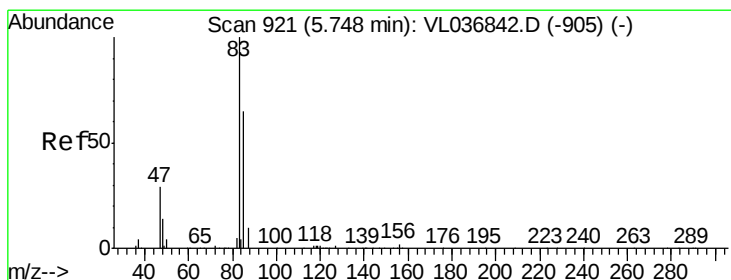
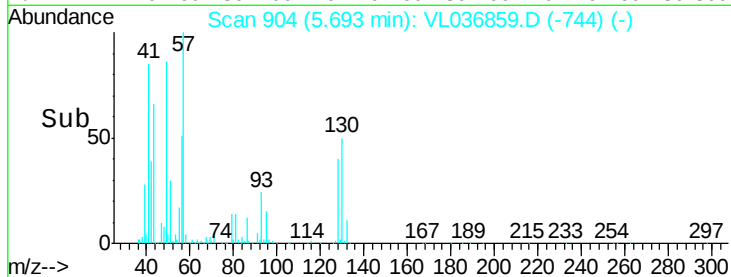
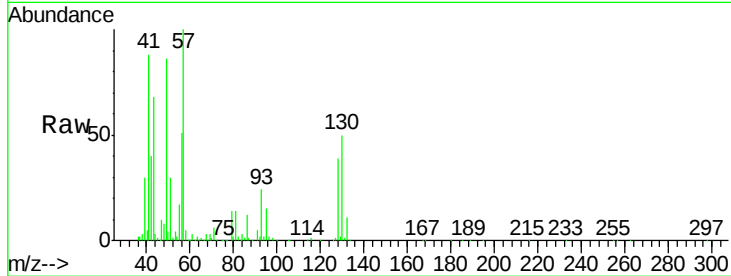
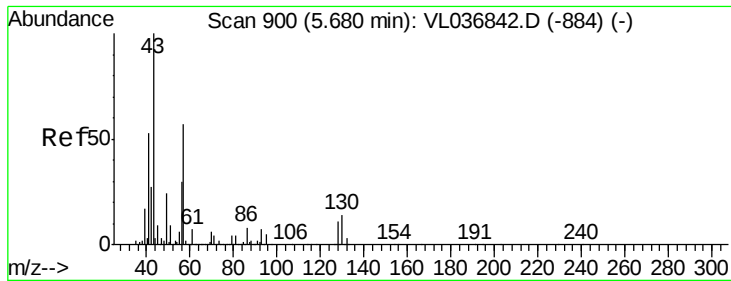
138.6

207.8

48.1

72.1





#26

Hexane

Concen: 3.270 ppbv

RT: 5.69

Delta R.T. MSVOA_L

Lab File:

Acq: 27 Apr 2021 15:54

Instrument :
ClientSampleId :
OFFSITE-DDC-INTERMEDIATE-2

Tot Ion:

Ion Ratio

57 100

41 101.

43 77.

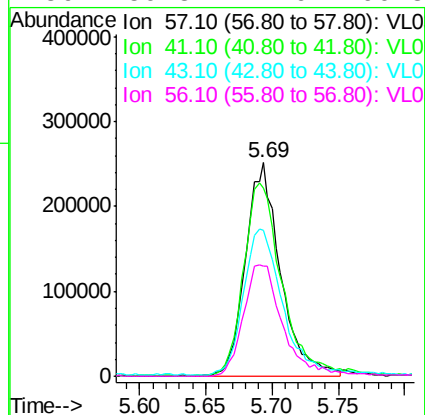
56 59.8

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 04/29/2021

Supervised By :Mahesh Dadoda 04/29/2021



#29

Chloroform

Concen: 0.497 ppbv

RT: 5.75 min Scan# 922

Delta R.T. 0.00 min

Lab File: VL036859.D

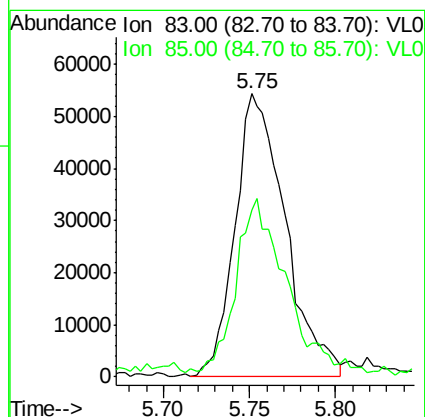
Acq: 27 Apr 2021 15:54

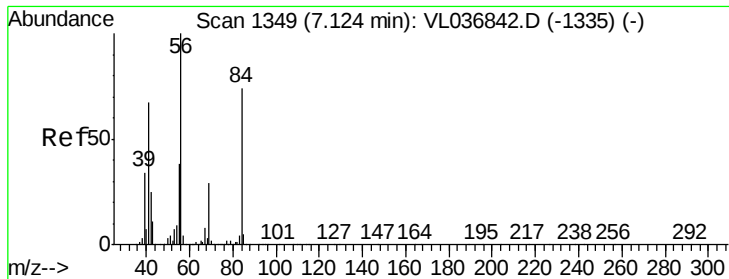
Tgt Ion: 83 Resp: 109773

Ion Ratio Lower Upper

83 100

85 56.5 52.2 78.4



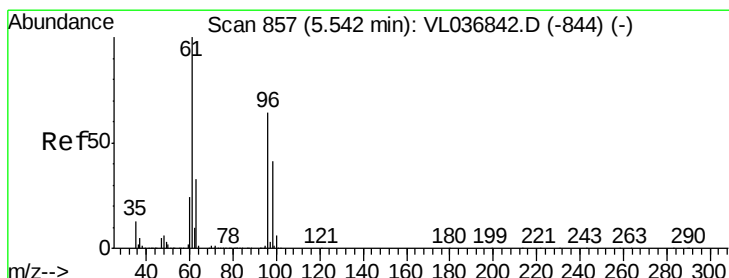
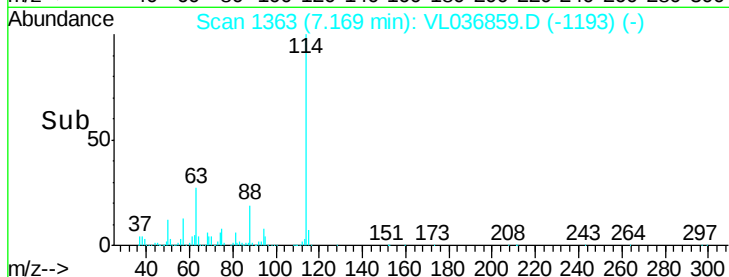
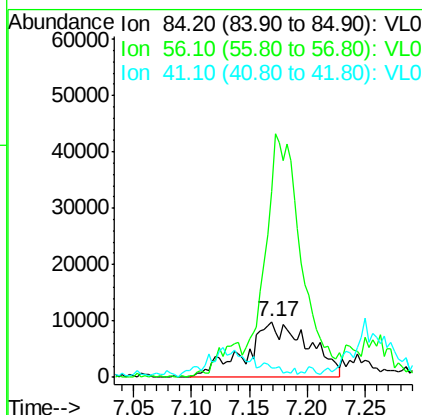
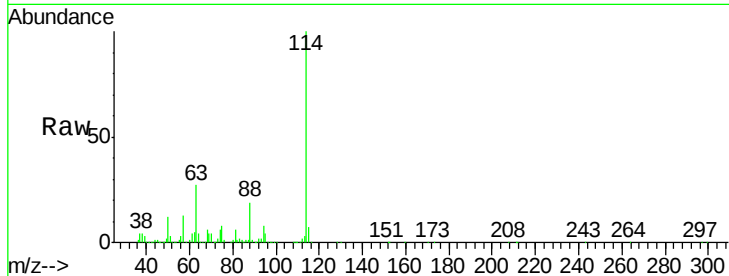


#30
Cvclohexane
Concen: 0.331 ppbv m
RT: 7.17
Instrument: MSVOA_L
Delta R.T.:
ClientSampleId:
Lab File: OFFSITE-DDC-INTERMEDIATE-2
Acq: 27 Apr 2021 15:54

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

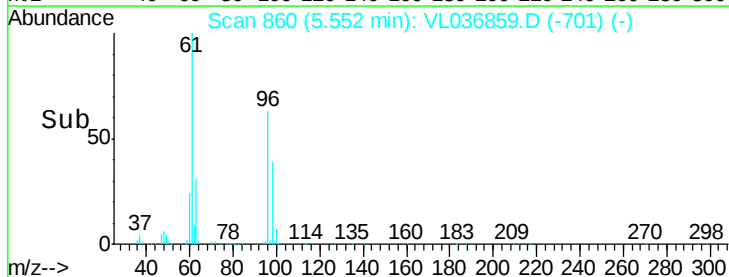
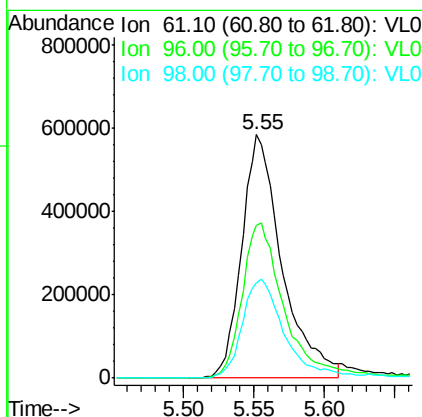
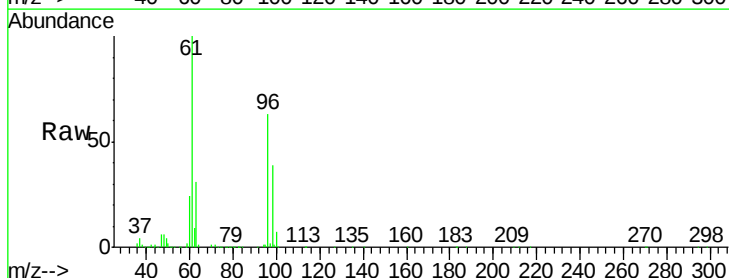
Manual Integrations
APPROVED

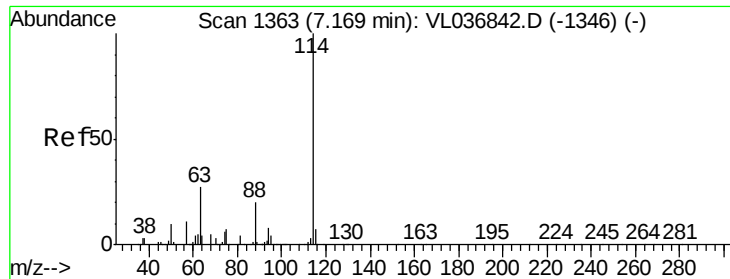
Reviewed By :Semsettin Yesilyurt 04/29/2021
Supervised By :Mahesh Dadoda 04/29/2021



#31
cis-1,2-Dichloroethene
Concen: 9.198 ppbv
RT: 5.55 min Scan# 860
Delta R.T. 0.01 min
Lab File: VL036859.D
Acq: 27 Apr 2021 15:54

Tgt Ion: 61 Resp: 1168916
Ion Ratio Lower Upper
61 100
96 62.8 51.0 76.6
98 39.3 32.7 49.1





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.18 Instrument: MSVOA_L

Delta R.T. 0.01 min

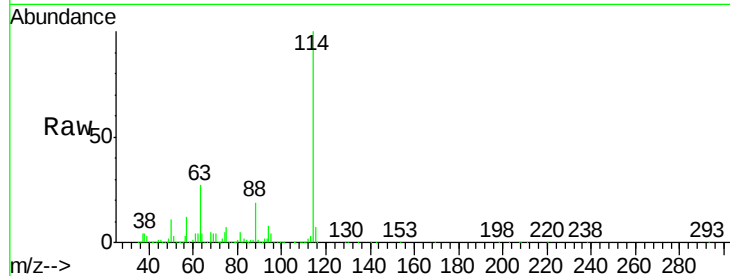
Lab File: VL036859.D

Acq: 27 Apr 2021 15:54

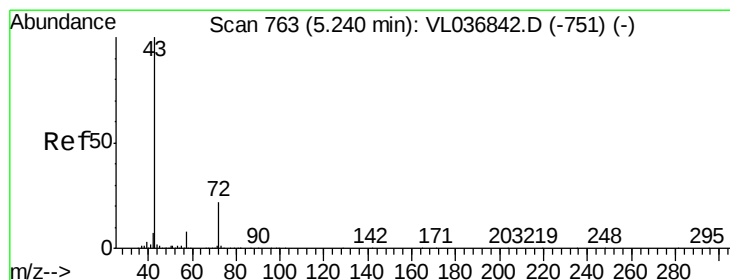
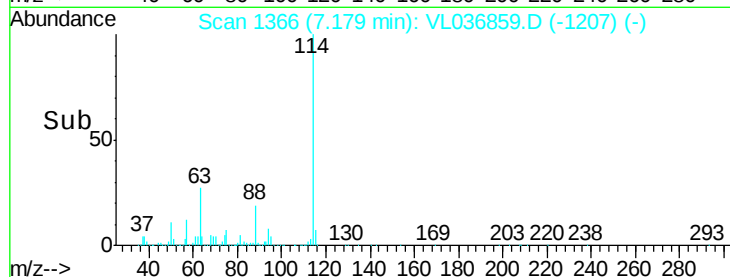
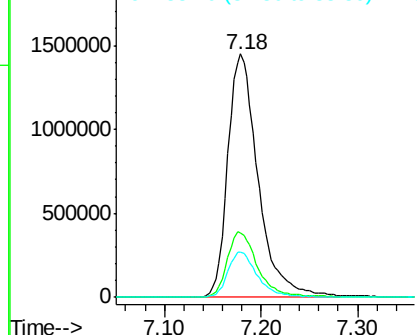
Manual Integrations
APPROVED

Tot Ion: 1
Ion Ratio
114 100
63 27.
88 18.

Reviewed By : Semsettin Yesilyurt 04/29/2021
Supervised By : Mahesh Dadoda 04/29/2021



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



#34

2-Butanone

Concen: 4.578 ppbv

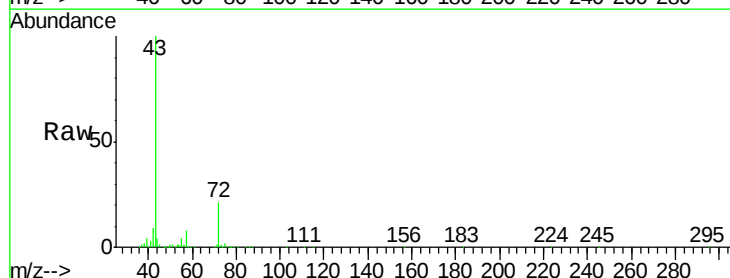
RT: 5.25 min Scan# 767

Delta R.T. 0.01 min

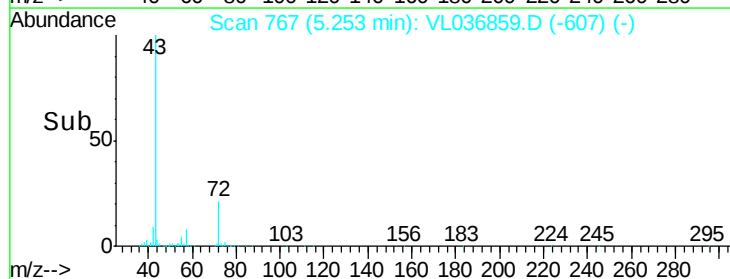
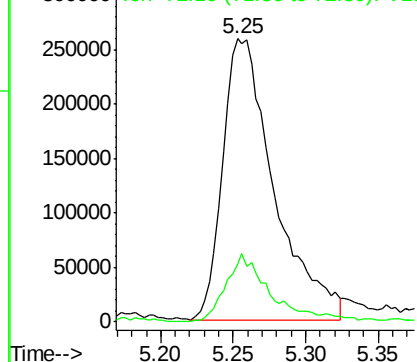
Lab File: VL036859.D

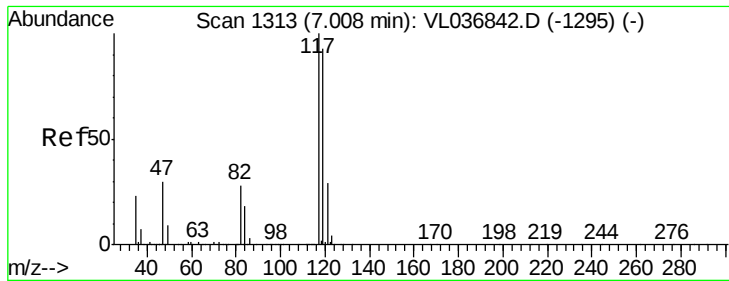
Acq: 27 Apr 2021 15:54

Tgt Ion: 43 Resp: 635431
Ion Ratio Lower Upper
43 100
72 21.2 17.6 26.4



Abundance Ion 43.10 (42.80 to 43.80): VL0
Ion 72.10 (71.80 to 72.80): VL0





#35

Carbon Tetrachloride

Concen: 0.082 ppbv m

RT: 7.02 Instrument:

Delta R.T. MSVOA_L

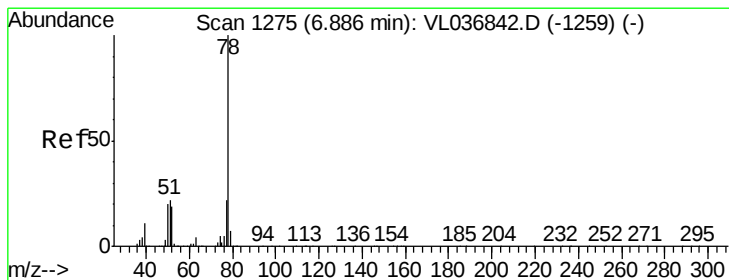
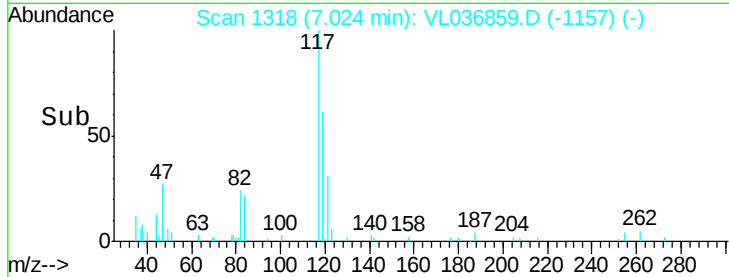
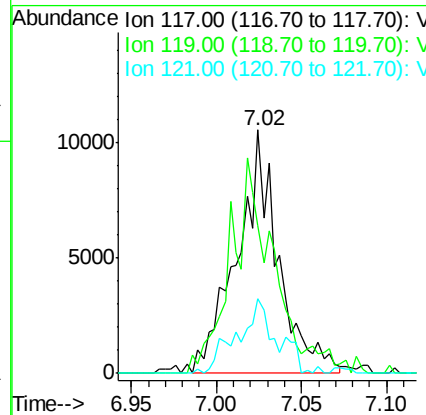
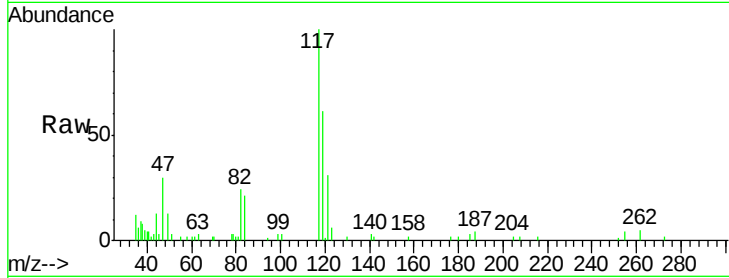
Lab File: ClientSampleId:

Acq: 27 Apr 2021 15:54 OFFSITE-DDC-INTERMEDIATE-2

Tot Ion:1
Ion Rati
117 100
119 60.
121 30.

Manual Integrations
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Reviewed By :Semsettin Yesilyurt 04/29/2021
Supervised By :Mahesh Dadoda 04/29/2021



#36

Benzene

Concen: 0.290 ppbv m

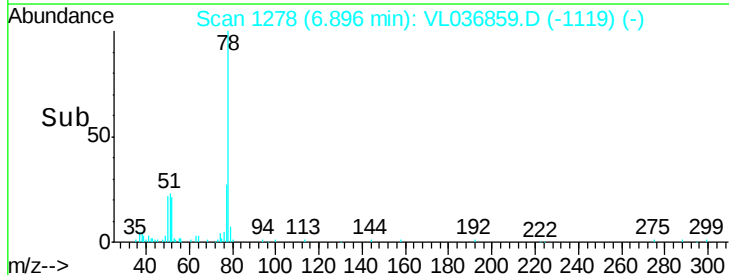
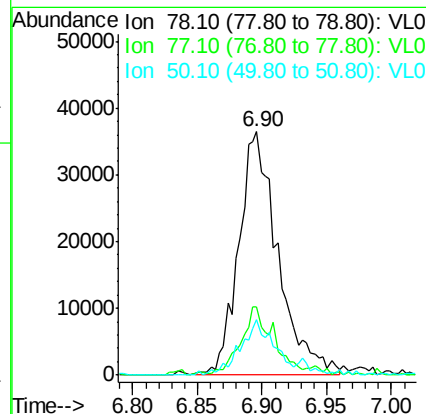
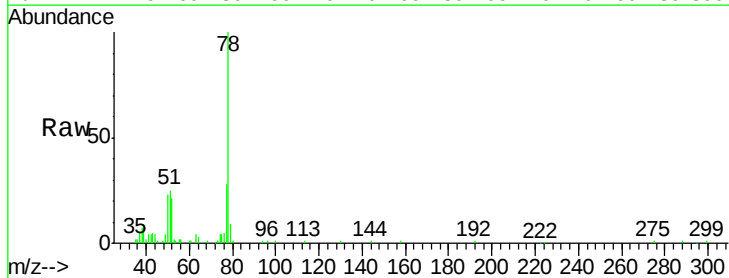
RT: 6.90 min Scan# 1278

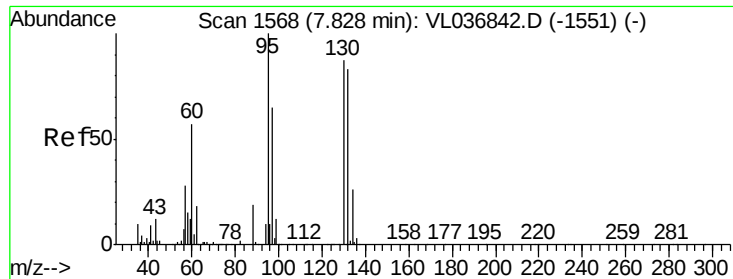
Delta R.T. 0.01 min

Lab File: VL036859.D

Acq: 27 Apr 2021 15:54

Tgt Ion: 78 Resp: 77411
Ion Ratio Lower Upper
78 100
77 28.1 17.6 26.4#
50 22.8 16.3 24.5





#38

Trichloroethene

Concen: 0.038 ppbv m

RT: 7.84 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 27 Apr 2021 15:54 OFFSITE-DDC-INTERMEDIATE-2

Tot Ion:1

Ion Ratio

130 100

95 69.

132 60.

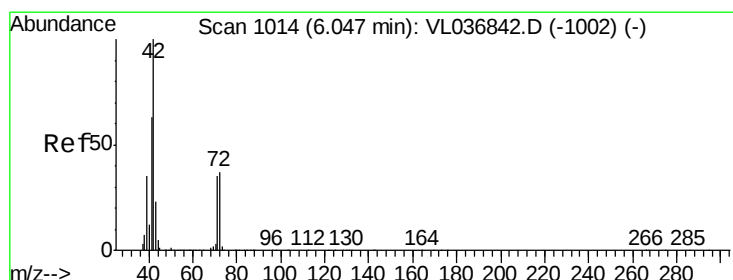
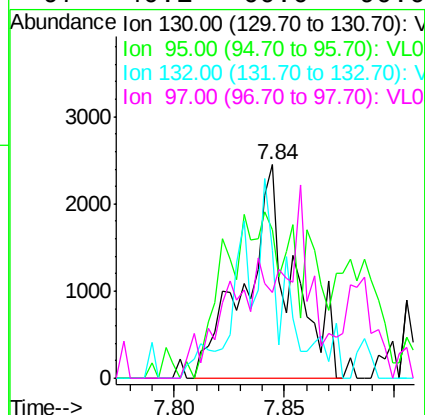
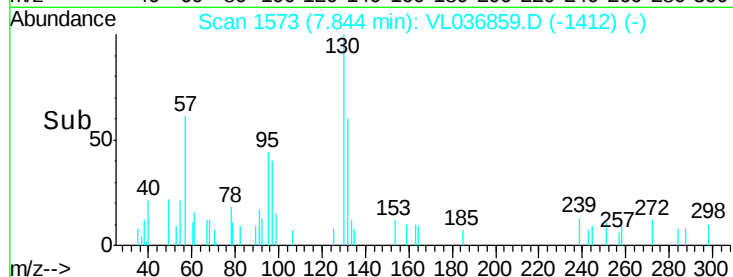
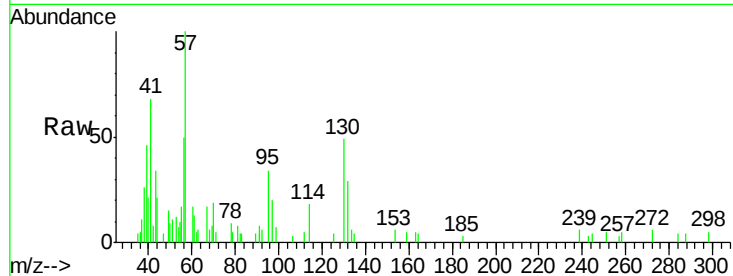
97 40.1 60.0 90.0#

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 04/29/2021

Supervised By :Mahesh Dadoda 04/29/2021



#41

Tetrahydrofuran

Concen: 0.692 ppbv m

RT: 6.07 min Scan# 1020

Delta R.T. 0.02 min

Lab File: VL036859.D

Acq: 27 Apr 2021 15:54

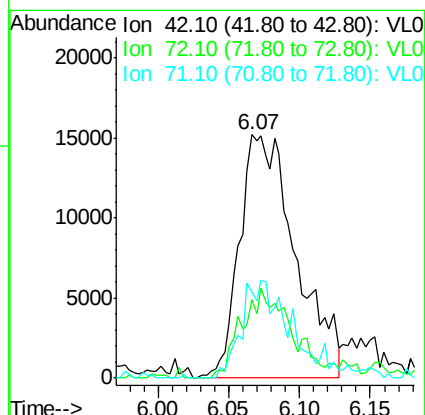
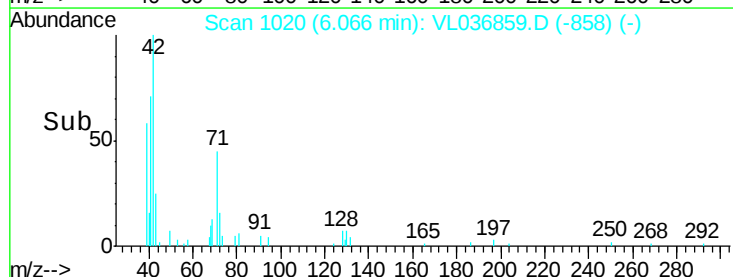
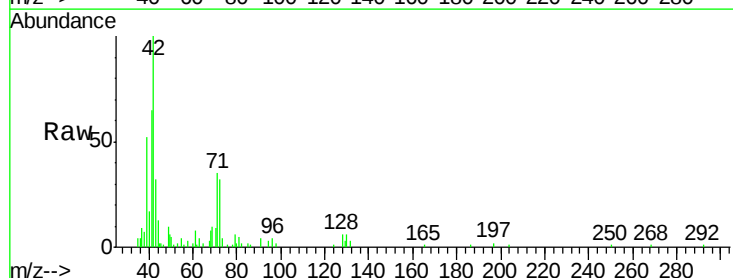
Tgt Ion: 42 Resp: 42037

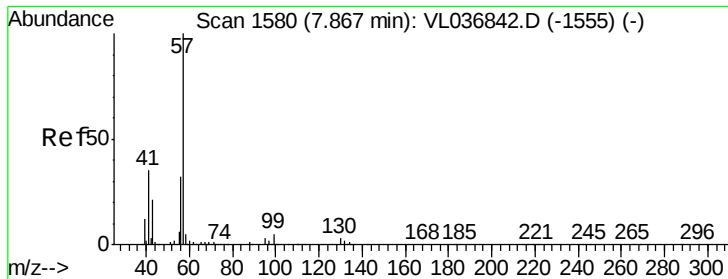
Ion Ratio Lower Upper

42 100

72 35.0 29.7 44.5

71 36.9 29.0 43.6



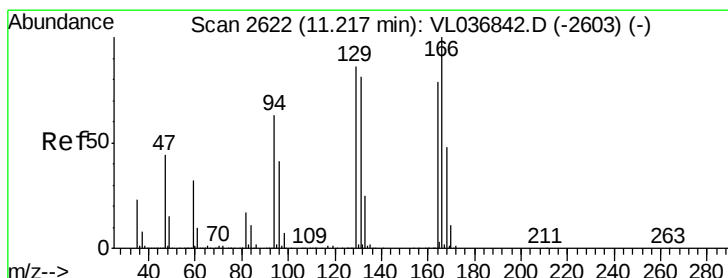
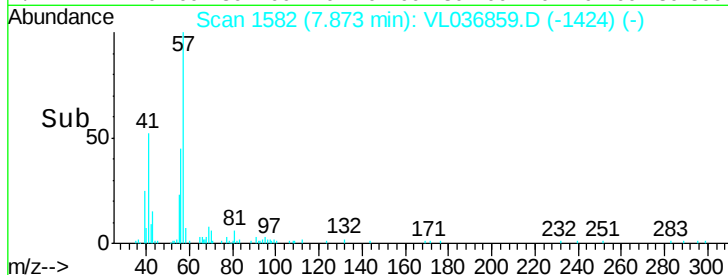
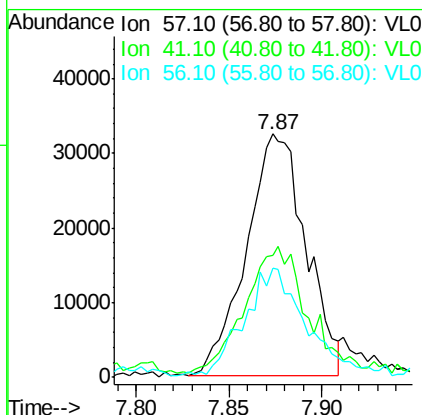
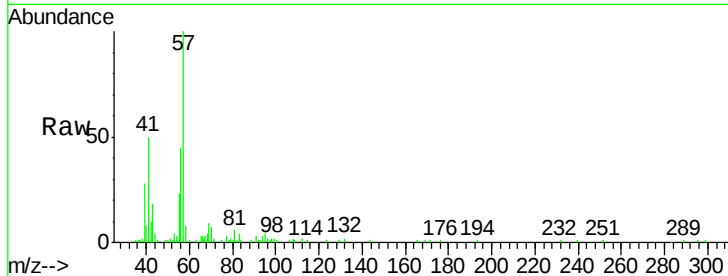


#44
 2,2,4-Trimethylpentane
 Concen: 0.158 ppbv
 RT: 7.87
 Instrument: MSVOA_1
 Delta R.T.:
 ClientSampleId:
 Lab File: OFFSITE-DDC-INTERMEDIATE-2
 Acq: 27 Apr 2021 15:54

Tot Ion:
 Ion Ratio
 57 100
 41 58.
 56 48.

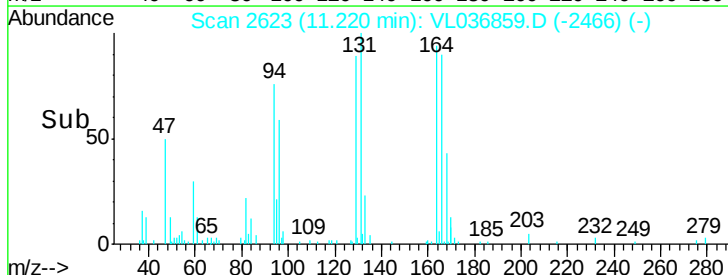
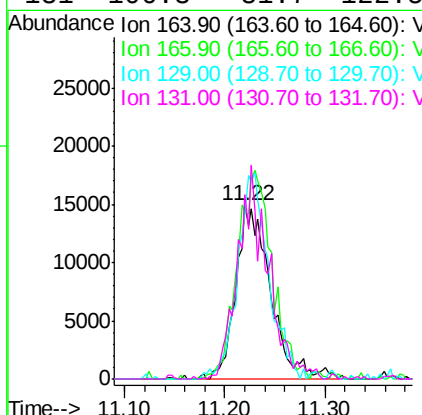
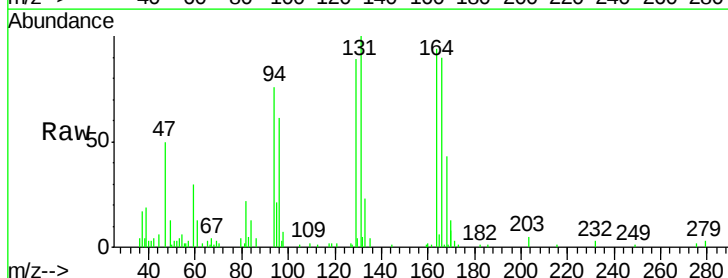
Manual Integrations
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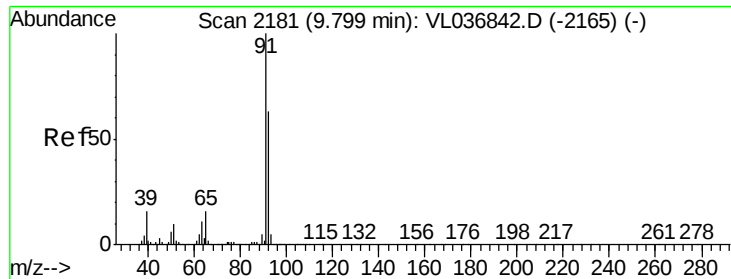
Reviewed By :Semsettin Yesilyurt 04/29/2021
 Supervised By :Mahesh Dadoda 04/29/2021



#52
 Tetrachloroethene
 Concen: 0.390 ppbv m
 RT: 11.22 min Scan# 2623
 Delta R.T. 0.00 min
 Lab File: VL036859.D
 Acq: 27 Apr 2021 15:54

Tgt Ion:164 Resp: 35422
 Ion Ratio Lower Upper
 164 100
 166 95.6 100.9 151.3#
 129 94.9 87.0 130.4
 131 106.3 81.7 122.5





#53

Toluene

Concen: 0.863 ppbv

RT: 9.82

Delta R.T. MSVOA_L

Lab File:

Acq: 27 Apr 2021 15:54

ClientSampleId :

OFFSITE-DDC-INTERMEDIATE-2

Tot Ion:

Ion Ratio

91 100

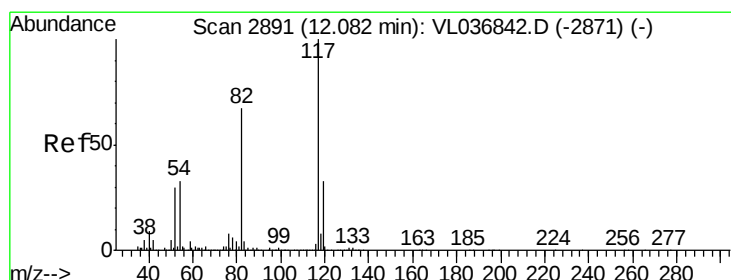
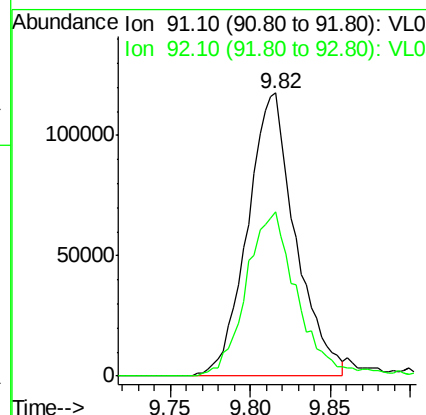
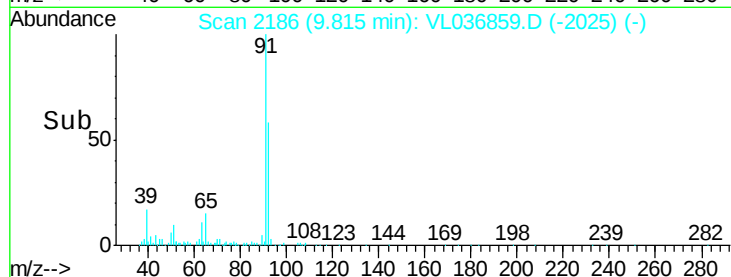
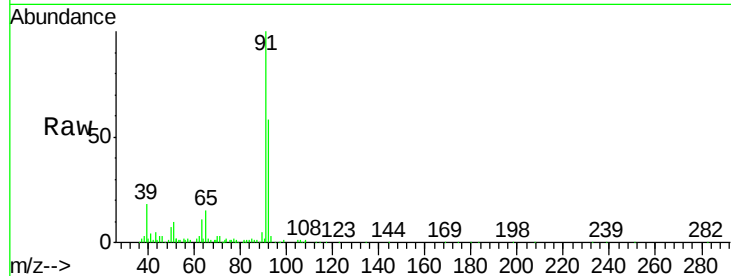
92 64.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 04/29/2021

Supervised By :Mahesh Dadoda 04/29/2021



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.09 min Scan# 2894

Delta R.T. 0.01 min

Lab File: VL036859.D

Acq: 27 Apr 2021 15:54

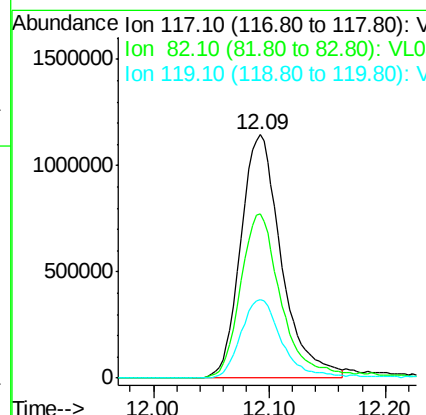
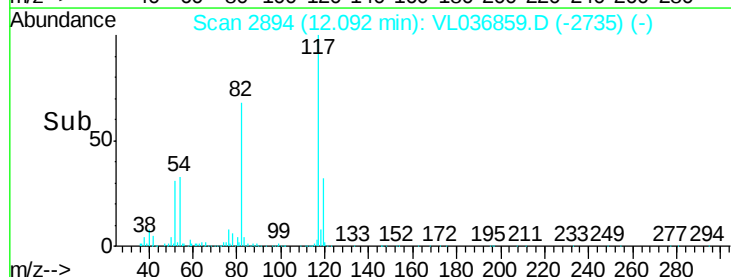
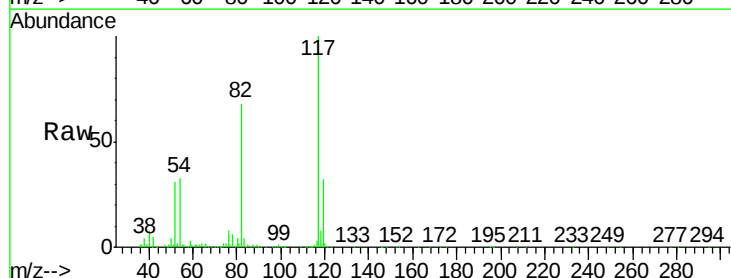
Tgt Ion:117 Resp: 2788295

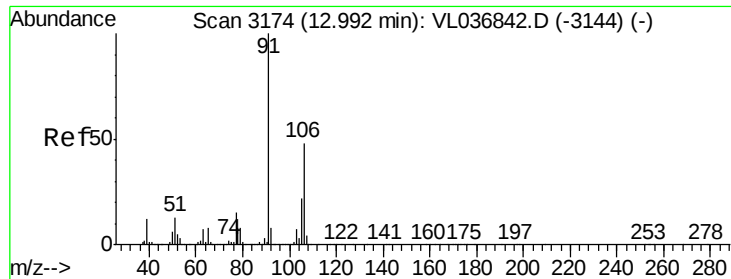
Ion Ratio Lower Upper

117 100

82 70.3 53.5 80.3

119 33.7 25.6 38.4





#59

m/p-Xylene

Concen: 0.264 ppbv m

RT: 12.97

Delta R.T. MSVOA_L

Lab File:

Acq: 27 Apr 2021 15:54

ClientSampleId :

OFFSITE-DDC-INTERMEDIATE-2

Tot Ion:

Ion Ratio

91 100

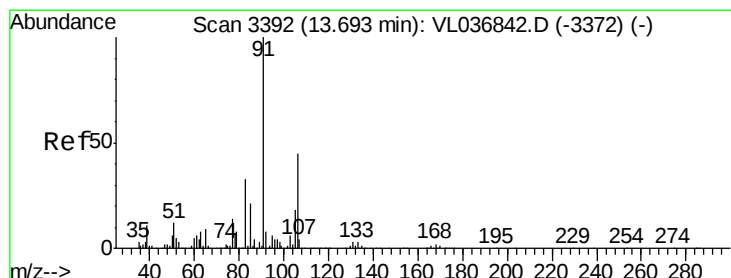
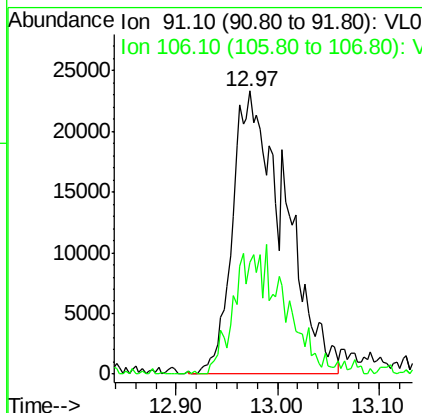
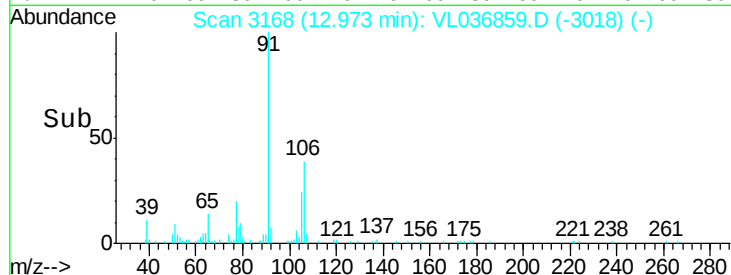
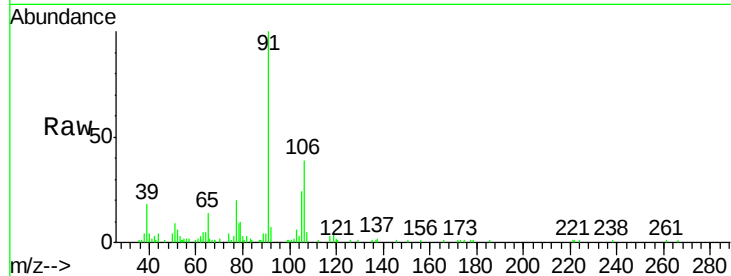
106 0.

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 04/29/2021

Supervised By :Mahesh Dadoda 04/29/2021



#60

o-Xylene

Concen: 0.125 ppbv m

RT: 13.70 min Scan# 3394

Delta R.T. 0.01 min

Lab File: VL036859.D

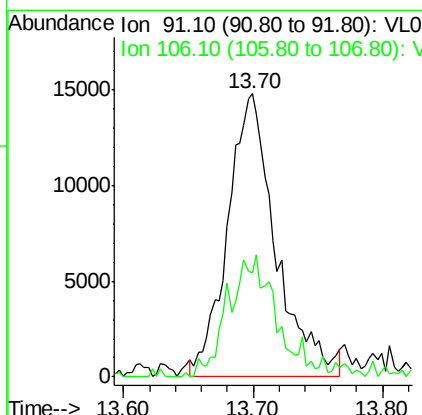
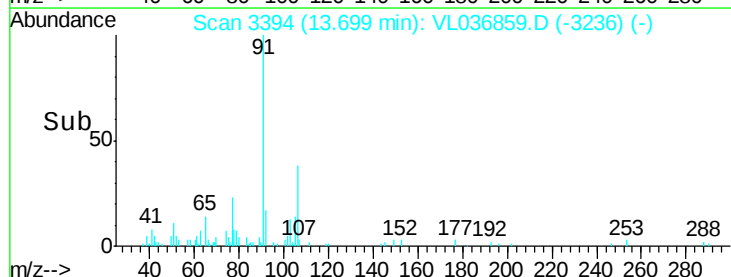
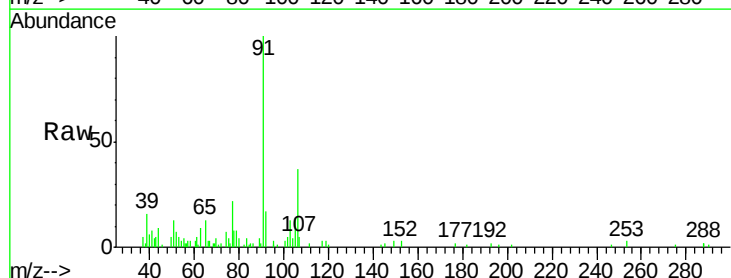
Acq: 27 Apr 2021 15:54

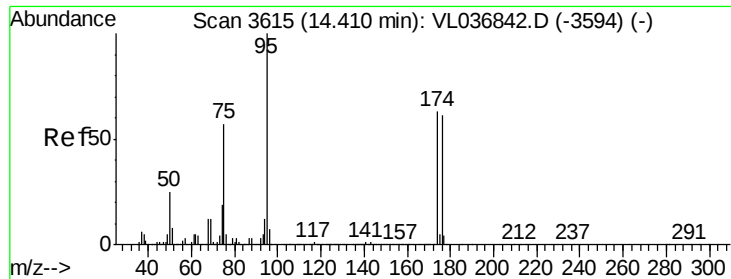
Tgt Ion: 91 Resp: 38280

Ion Ratio Lower Upper

91 100

106 45.3 22.6 67.7





#68

1-Bromo-4-Fluorobenzene

Concen: 9.811 ppbv

RT: 14.42

Delta R.T

Lab File: ClientSampleId :

Acq: 27 Apr 2021 13:54

Tot Ion:

Ion Ratio

95 100

174 67.

175 4.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 04/29/2021

Supervised By :Mahesh Dadoda 04/29/2021

