

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL021622\
 Data File : VL038365.D
 Acq On : 16 Feb 2022 14:01
 Operator : SY/AP
 Sample : VL0216ABS01
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VL0216ABS01

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 02/17/2022
 Supervised By :Mahesh Dadoda 02/21/2022

Quant Time: Feb 17 06:32:57 2022

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL012422A

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

QLast Update : Mon Jan 24 14:12:48 2022

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.63	49	872462	10.00	ppbv	-0.05
33) 1,4-Difluorobenzene	7.13	114	2166063	10.00	ppbv	-0.05
55) Chlorobenzene-d5	12.04	117	2017023m	10.00	ppbv	-0.05

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.37	95	1678913	10.97	ppbv	-0.05
Spiked Amount	10.000	Range	65 - 135	Recovery	=	109.70%

Target Compounds

	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.03	85	1374676	7.40	ppbv	98
3) Chlorodifluoromethane	2.97	51	1521453	8.76	ppbv	99
4) Chloromethane	3.12	50	508324	8.51	ppbv	98
5) Vinyl Chloride	3.23	62	532516	8.93	ppbv	96
6) Bromomethane	3.45	94	298545	9.26	ppbv	98
7) Chloroethane	3.54	64	181366	9.00	ppbv	98
8) Dichlorotetrafluoroethane	3.17	85	1273070	8.86	ppbv	98
9) Propene	2.99	41	501759	8.87	ppbv	98
10) Heptane	8.08	43	1287732	8.85	ppbv	100
11) Trichlorofluoromethane	3.92	101	1303004	9.01	ppbv	98
12) 1,1,2-Trichlorotrifluoroet	4.46	101	946533	8.65	ppbv	98
13) Ethanol	3.58	45	38742	6.38	ppbv	89
14) Bromoethene	3.71	108	391476	9.16	ppbv	99
15) Acetone	3.82	43	613390	7.98	ppbv	99
16) 1,3-Butadiene	3.30	39	515883	9.35	ppbv	97
17) tert-Butyl alcohol	4.25	59	777913	9.22	ppbv	97
18) 1,1-Dichloroethene	4.26	96	418992	8.81	ppbv	95
19) Isopropyl Alcohol	3.94	45	413520	8.59	ppbv #	98
20) Methylene Chloride	4.32	84	341474	7.63	ppbv	96
21) Allyl Chloride	4.38	41	623030	9.16	ppbv	99
22) trans-1,2-Dichloroethene	4.85	96	444380	9.04	ppbv	98
23) Vinyl Acetate	5.04	43	976853	8.74	ppbv	98
24) 1,1-Dichloroethane	4.98	63	874327	8.78	ppbv	99
25) Ethyl Acetate	5.64	43	1974093	9.17	ppbv	100
26) Hexane	5.65	57	920608	9.19	ppbv	99
27) Carbon Disulfide	4.52	76	1046464	8.93	ppbv	100
28) Methyl tert-Butyl Ether	5.00	73	931300	8.96	ppbv	100
29) Chloroform	5.72	83	1491943	9.13	ppbv	100
30) Cyclohexane	7.09	84	785188	9.00	ppbv	100
31) cis-1,2-Dichloroethene	5.51	61	894827	10.24	ppbv	98
32) 1,1,1-Trichloroethane	6.47	97	1488170	9.11	ppbv	99
34) 2-Butanone	5.21	43	656029	9.26	ppbv	100
35) Carbon Tetrachloride	6.98	117	1545528	10.16	ppbv	96
36) Benzene	6.85	78	1918438	10.01	ppbv	99
37) 1,2-Dichloroethane	6.27	62	1120811	10.21	ppbv	99
38) Trichloroethene	7.79	130	690359	9.67	ppbv	96
39) 1,2-Dichloropropane	7.57	63	761458	9.80	ppbv	98
40) 1,4-Dioxane	7.79	88	168957	9.04	ppbv	97
41) Tetrahydrofuran	6.01	42	478931	10.06	ppbv	99
42) Bromodichloromethane	7.75	83	1598998	9.82	ppbv	99
43) Methyl Methacrylate	7.97	69	719430	10.62	ppbv	100

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Manual Integrations
 APPROVED

Reviewed By : Semsettin Yesilyurt 02/17/2022
 Supervised By : Mahesh Dadoda 02/21/2022

Quant Time: Feb 17 06:32:57 2022

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL012422A

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

QLast Update : Mon Jan 24 14:12:48 2022

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) 2,2,4-Trimethylpentane	7.83	57	3270413	9.69	ppbv	100
45) t-1,3-Dichloropropene	9.24	75	565495	10.27	ppbv	99
46) cis-1,3-Dichloropropene	8.66	75	712022	9.69	ppbv	100
47) 1,1,2-Trichloroethane	9.43	97	743113	9.74	ppbv	97
48) Dibromochloromethane	10.26	129	1248641	9.72	ppbv	99
49) Bromoform	12.99	173	838866	9.06	ppbv	98
50) 4-Methyl-2-Pentanone	8.70	43	1269301	10.04	ppbv	100
51) 2-Hexanone	10.09	43	528780	9.50	ppbv #	97
52) Tetrachloroethene	11.18	164	587584	8.90	ppbv	96
53) Toluene	9.76	91	2110532	9.95	ppbv	99
54) 1,2-Dibromoethane	10.56	107	1055699	9.73	ppbv	100
56) 1,1,1,2-Tetrachloroethane	12.08	131	798989	9.05	ppbv #	57
57) Chlorobenzene	12.10	112	1417300	8.78	ppbv	98
58) Ethyl Benzene	12.66	91	2716767	9.16	ppbv	100
59) m/p-Xylene	12.95	91	4509802m	17.83	ppbv	
60) o-Xylene	13.64	91	2086640	8.87	ppbv	99
61) Styrene	13.48	104	1027154	9.36	ppbv	98
62) Isopropylbenzene	14.62	105	2754772	8.78	ppbv	100
63) 1,1,2,2-Tetrachloroethane	13.63	83	1423921	8.18	ppbv	99
64) n-propylbenzene	15.51	120	672772	8.92	ppbv	95
65) tert-Butylbenzene	16.70	119	2249687	8.71	ppbv	99
66) Benzyl Chloride	16.94	91	70253	5.99	ppbv	96
67) sec-Butylbenzene	17.25	105	3134196	8.72	ppbv	100
69) p-Isopropyltoluene	17.61	119	2521460	9.17	ppbv	99
70) n-Butylbenzene	18.50	91	2604651	9.67	ppbv	99
71) 2-Chlorotoluene	15.40	91	2006432	8.64	ppbv	100
72) 4-Ethyltoluene	15.79	105	2243259	9.12	ppbv	99
73) 1,3,5-Trimethylbenzene	15.95	105	1956303	8.84	ppbv	97
74) 1,2,4-Trimethylbenzene	16.72	105	2029586	8.71	ppbv	97
75) 1,3-Dichlorobenzene	16.95	146	1091086	8.72	ppbv	99
76) 1,4-Dichlorobenzene	17.09	146	1043865	8.62	ppbv	97
77) 1,2-Dichlorobenzene	17.77	146	1020858	8.79	ppbv	99
78) Hexachloro-1,3-Butadiene	23.33	225	834816	10.34	ppbv	99
79) Naphthalene	22.14	128	1583022	14.53	ppbv	99
80) Naphthalene,2-methyl-	24.93	142	265208	22.38	ppbv	95
81) 1,2,4-Trichlorobenzene	21.87	180	843909	13.17	ppbv	100

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

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 VL0216ABS01

Manual Integrations APPROVED

Quant Time: Feb 17 06:32:57 2022

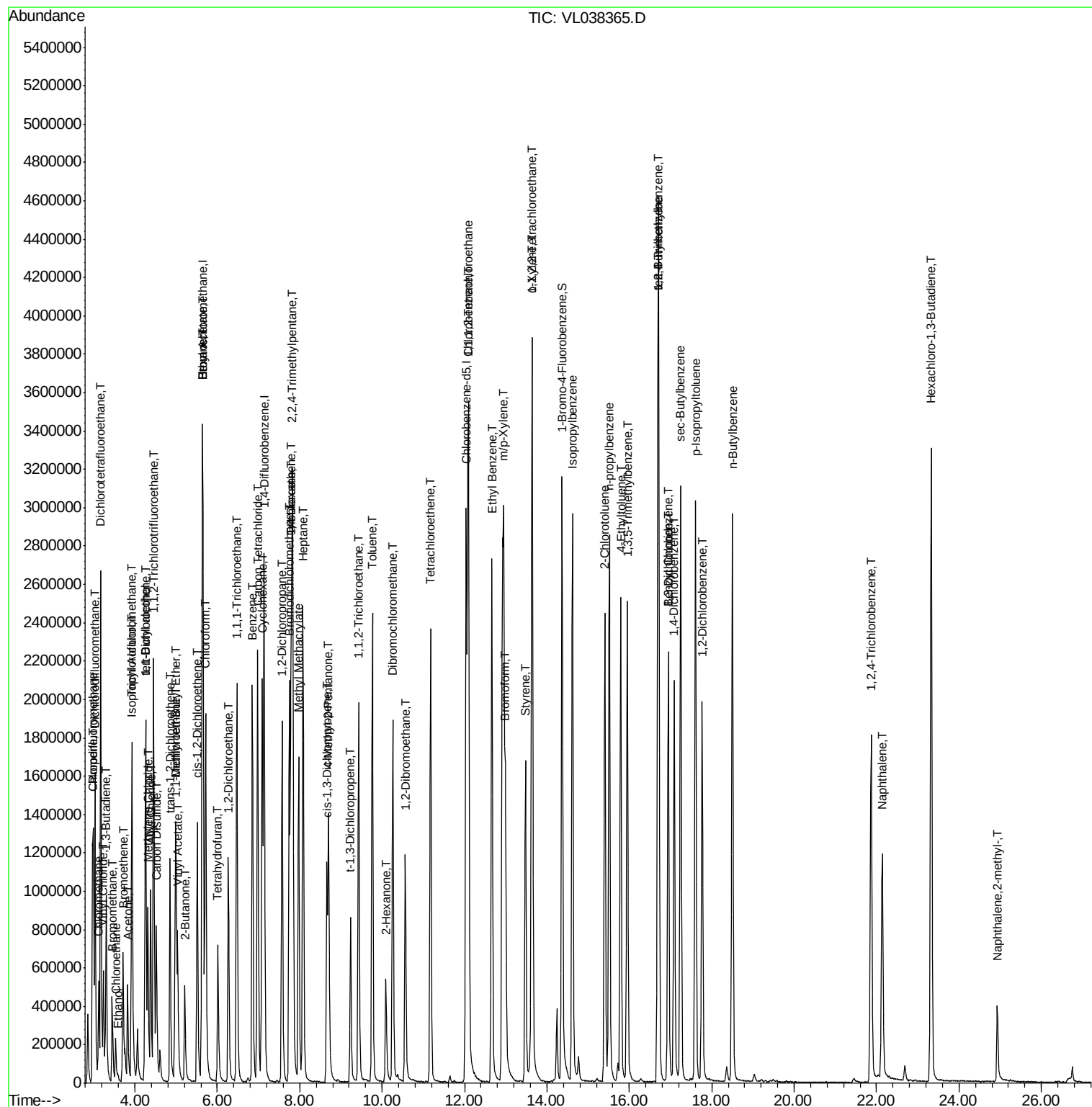
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_L\METHODS\VL012422

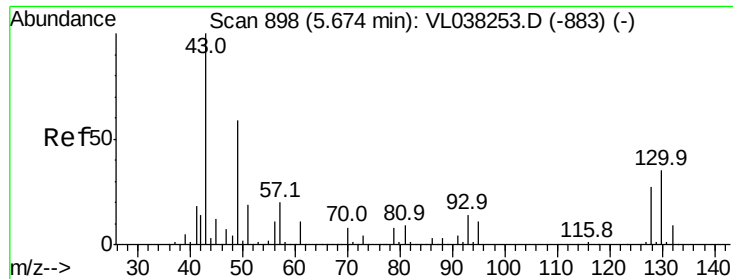
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument:

QLast Update : Mon Jan 24 14:12:48 2022

Response via : Initial Calibration

Reviewed By : Semsettin Yesilyurt 02/17/2022
 Supervised By : Mahesh Dadoda 02/21/2022





#1

Bromochloromethane

Concen: 10.00 ppbv

RT: 5.63 Instrument: MSVOA_1

Delta R.T.:

Lab File: ClientSampleId: VL0216ABS01

Acq: 16 Feb 2022 14:01

Tgt Ion:

Ion Ratio

49 100

128 48.

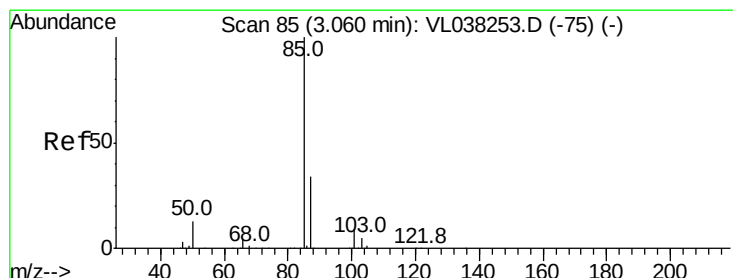
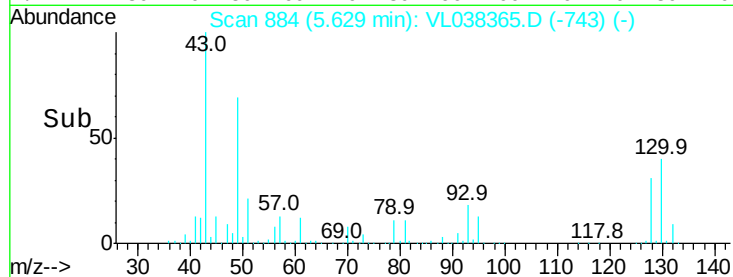
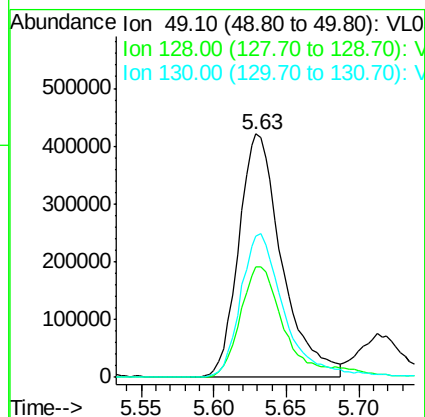
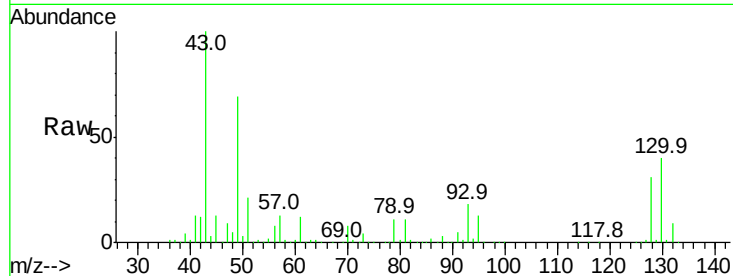
130 60.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 02/17/2022

Supervised By :Mahesh Dadoda 02/21/2022



#2

Dichlorodifluoromethane

Concen: 7.40 ppbv

RT: 3.03 min Scan# 75

Delta R.T. -0.03 min

Lab File: VL038365.D

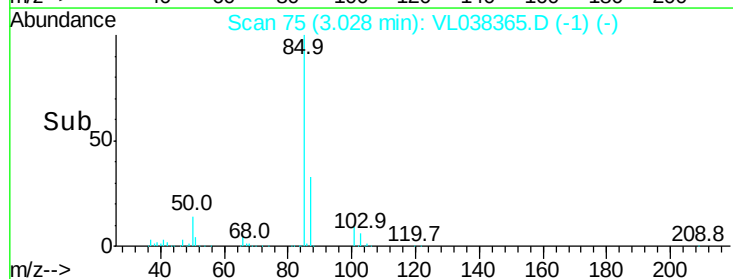
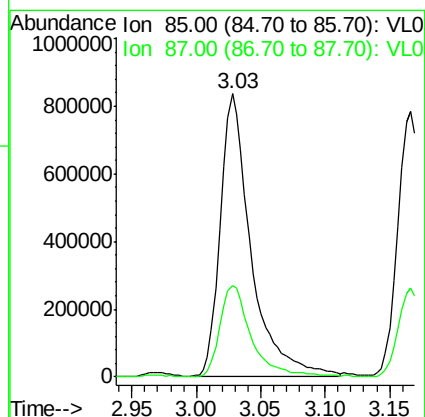
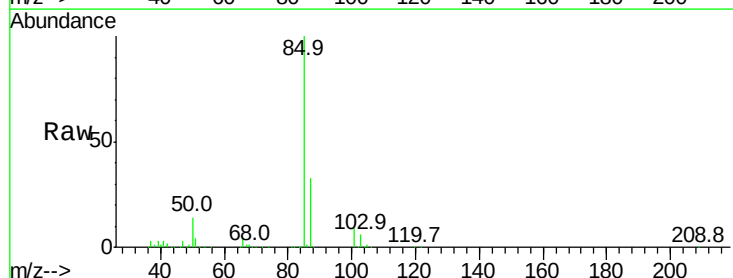
Acq: 16 Feb 2022 14:01

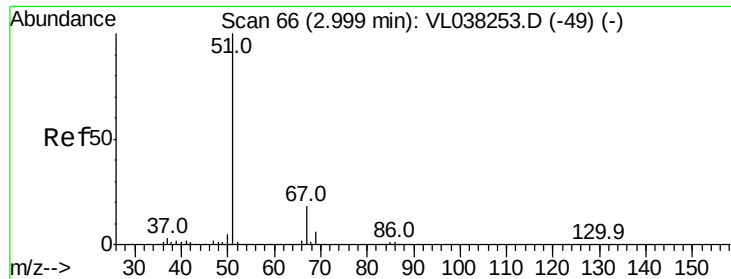
Tgt Ion: 85 Resp: 1374676

Ion Ratio Lower Upper

85 100

87 32.5 27.0 40.6





#3

Chlorodifluoromethane

Concen: 8.76 ppbv

RT: 2.97 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 16 Feb 2022 14:01 VL0216ABS01

Tgt Ion:

Ion Ratio

51 100

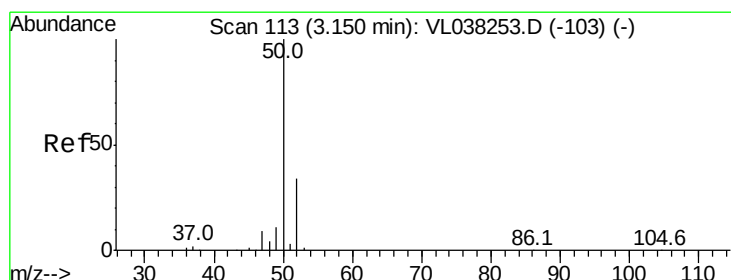
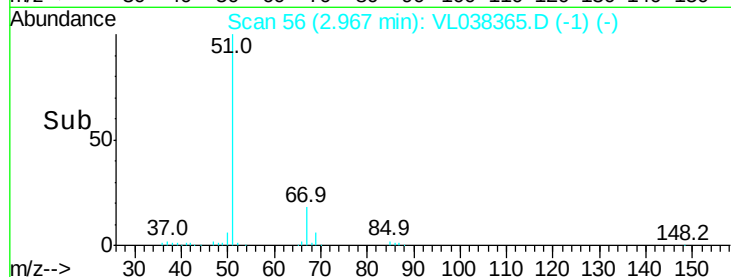
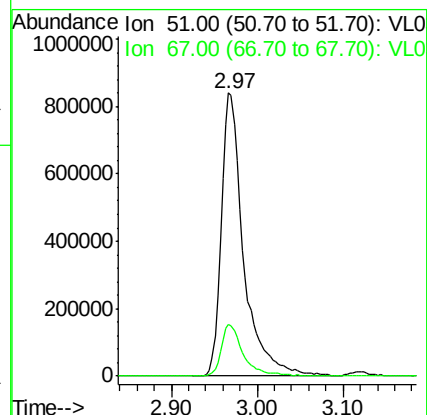
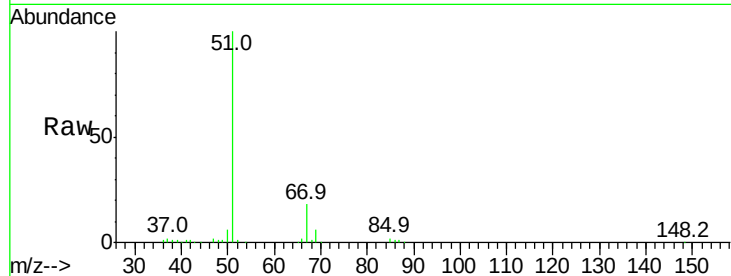
67 18.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 02/17/2022

Supervised By :Mahesh Dadoda 02/21/2022



#4

Chloromethane

Concen: 8.51 ppbv

RT: 3.12 min Scan# 103

Delta R.T. -0.03 min

Lab File: VL038365.D

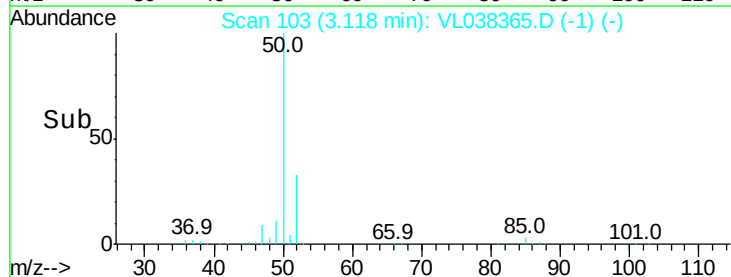
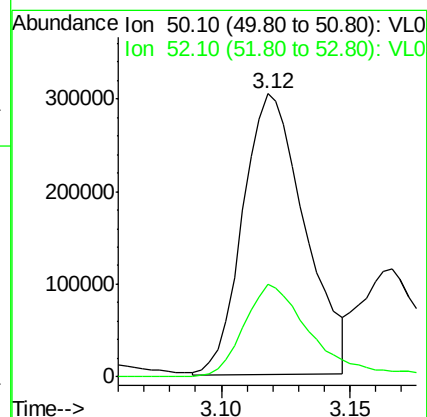
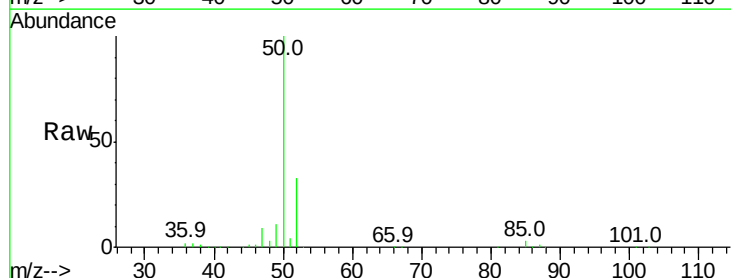
Acq: 16 Feb 2022 14:01

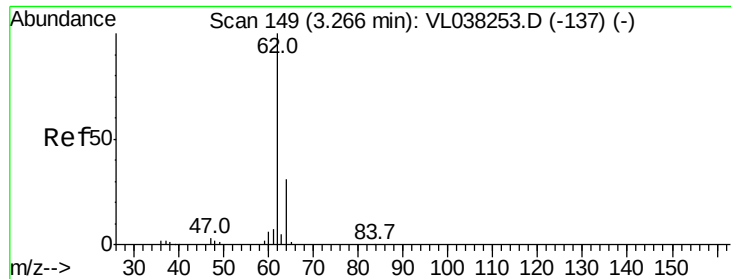
Tgt Ion: 50 Resp: 508324

Ion Ratio Lower Upper

50 100

52 33.0 27.1 40.7





#5

Vinyl Chloride

Concen: 8.93 ppbv

RT: 3.23 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: VL0216ABS01

Acq: 16 Feb 2022 14:01

Tgt Ion:

Ion Ratio

62 100

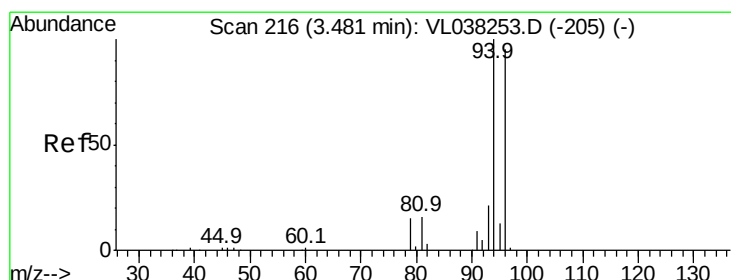
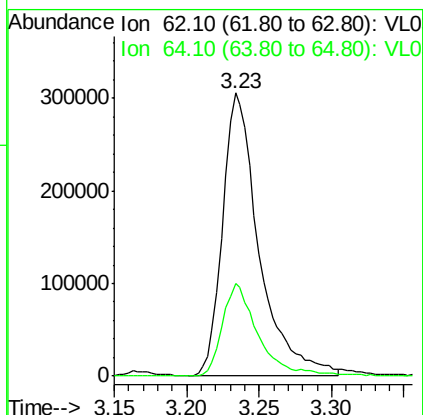
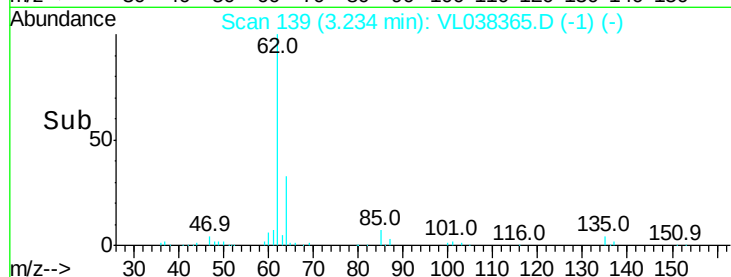
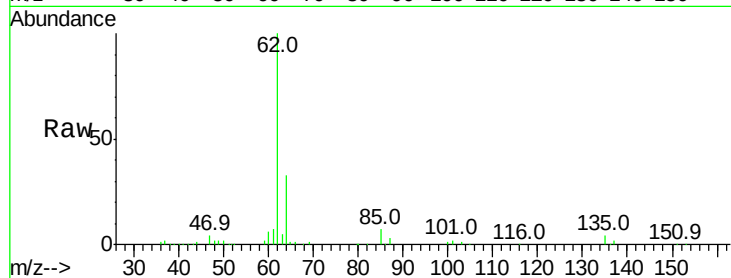
64 32.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 02/17/2022

Supervised By :Mahesh Dadoda 02/21/2022



#6

Bromomethane

Concen: 9.26 ppbv

RT: 3.45 min Scan# 206

Delta R.T. -0.03 min

Lab File: VL038365.D

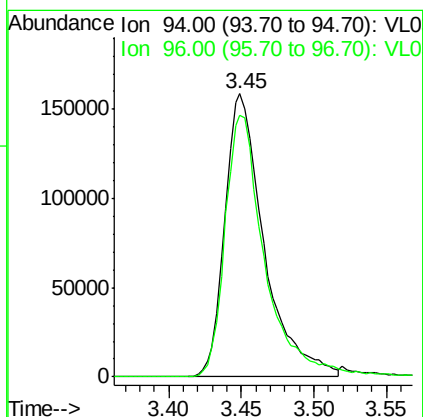
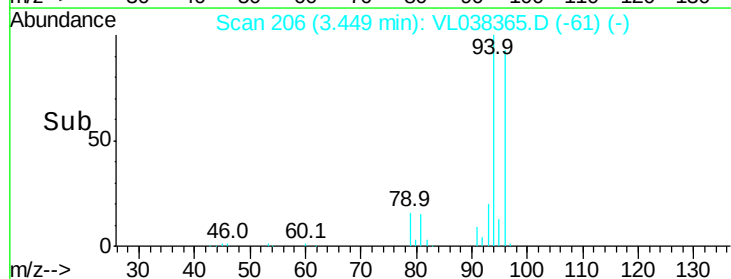
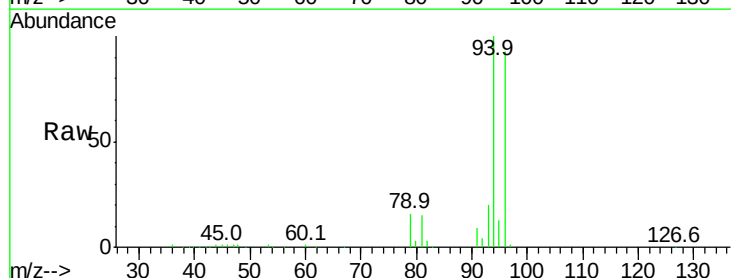
Acq: 16 Feb 2022 14:01

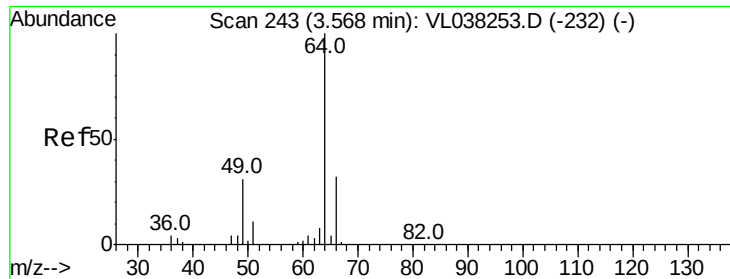
Tgt Ion: 94 Resp: 298545

Ion Ratio Lower Upper

94 100

96 92.6 76.0 114.0





#7

Chloroethane

Concen: 9.00 ppbv

RT: 3.54 Instrument: MSVOA_1

Delta R.T.:

Lab File: ClientSampleId:

Acq: 16 Feb 2022 14:01 VL0216ABS01

Tgt Ion:

Ion Ratio

64 100

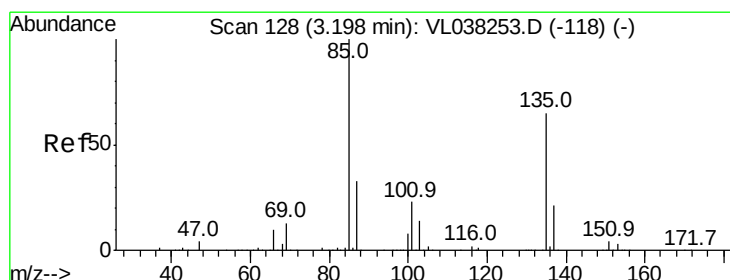
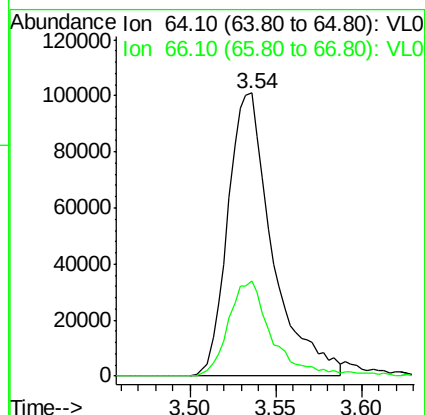
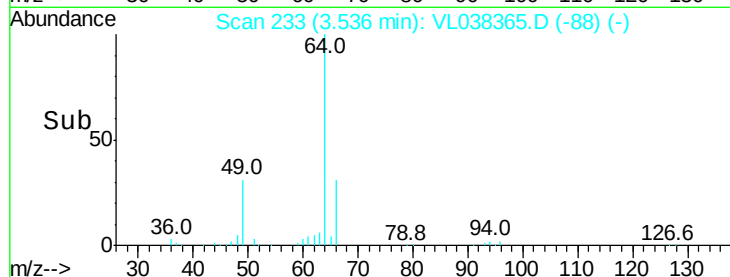
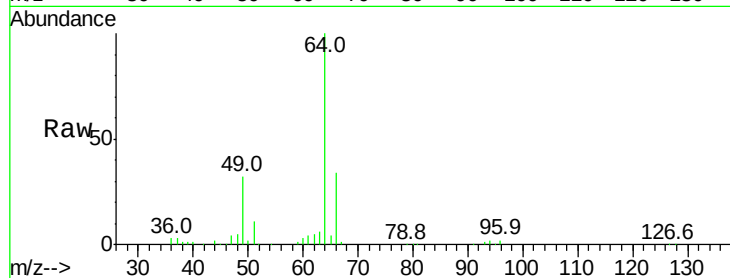
66 33.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 02/17/2022

Supervised By :Mahesh Dadoda 02/21/2022



#8

Dichlorotetrafluoroethane

Concen: 8.86 ppbv

RT: 3.17 min Scan# 118

Delta R.T. -0.03 min

Lab File: VL038365.D

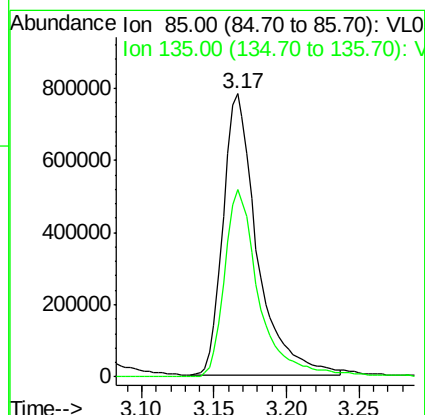
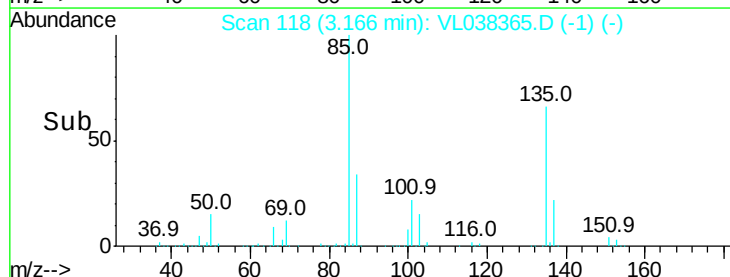
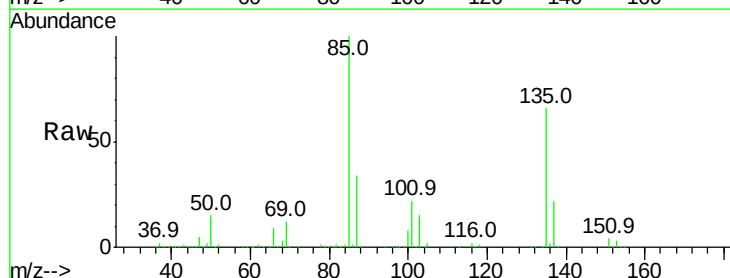
Acq: 16 Feb 2022 14:01

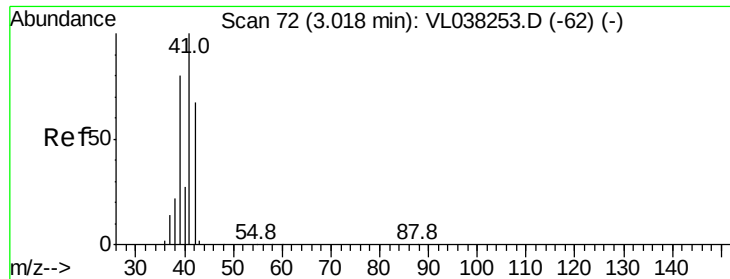
Tgt Ion: 85 Resp: 1273070

Ion Ratio Lower Upper

85 100

135 68.4 53.7 80.5





#9

Propene

Concen: 8.87 ppbv

RT: 2.99

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 16 Feb 2022 14:01

Tgt Ion:

Ion Ratio

41 100

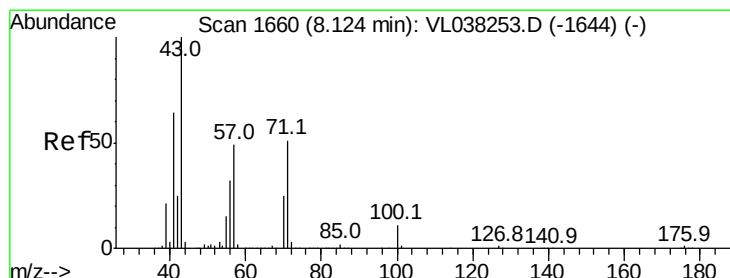
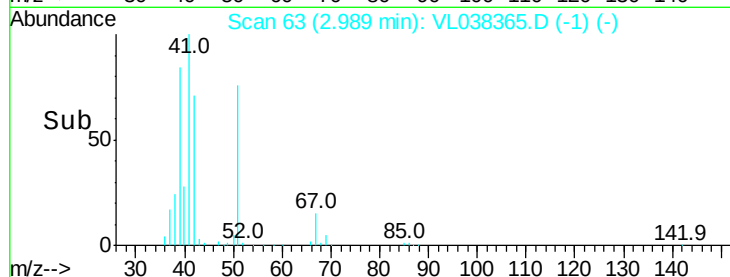
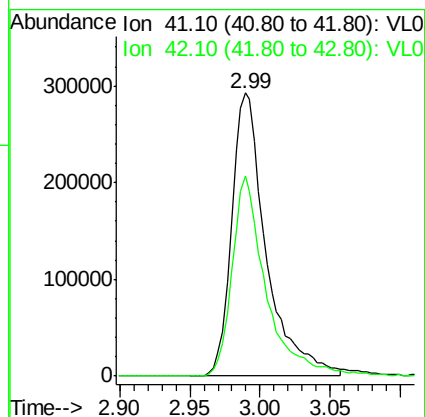
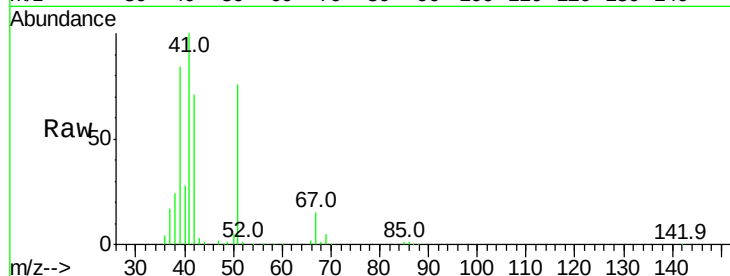
42 70.

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 02/17/2022

Supervised By :Mahesh Dadoda 02/21/2022



#10

Heptane

Concen: 8.85 ppbv

RT: 8.08 min Scan# 1647

Delta R.T. -0.04 min

Lab File: VL038365.D

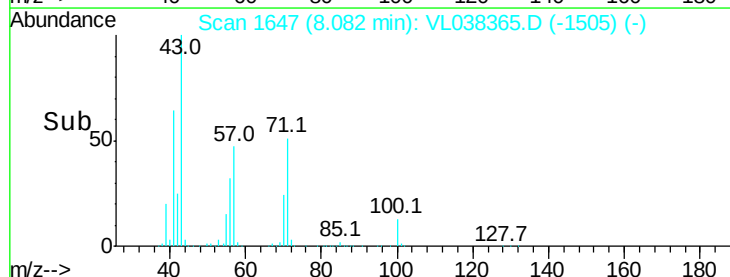
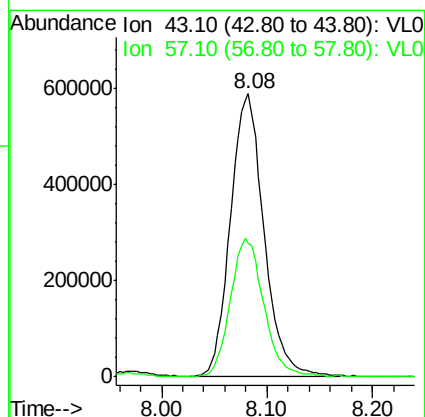
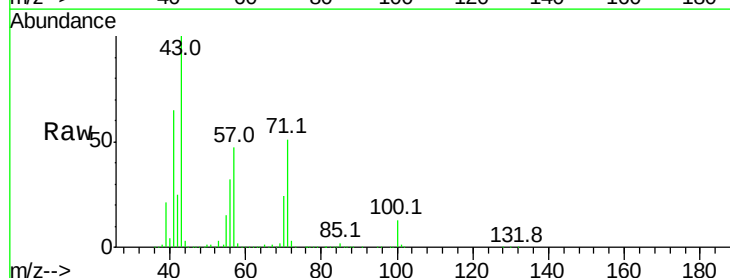
Acq: 16 Feb 2022 14:01

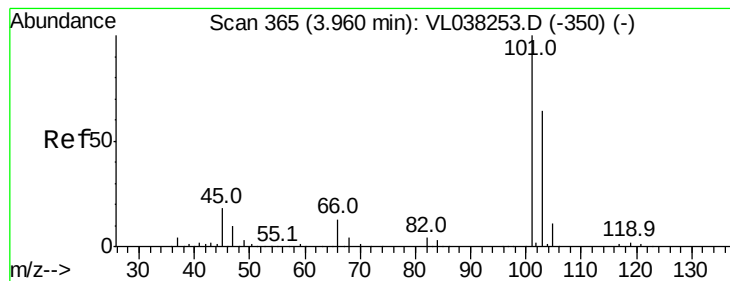
Tgt Ion: 43 Resp: 1287732

Ion Ratio Lower Upper

43 100

57 49.2 39.5 59.3





#11

Trichlorofluoromethane

Concen: 9.01 ppbv

RT: 3.92 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 16 Feb 2022 14:01 VL0216ABS01

Tgt Ion:1

Ion Ratio

101 100

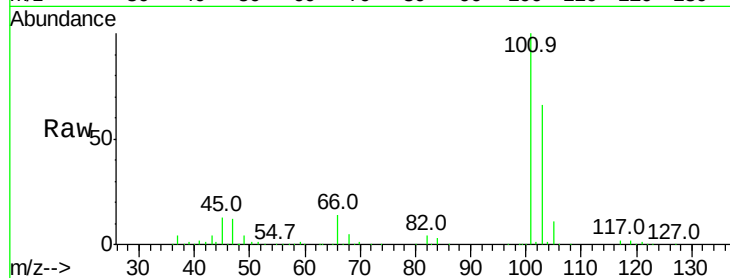
103 65.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 02/17/2022

Supervised By :Mahesh Dadoda 02/21/2022



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V

3.92

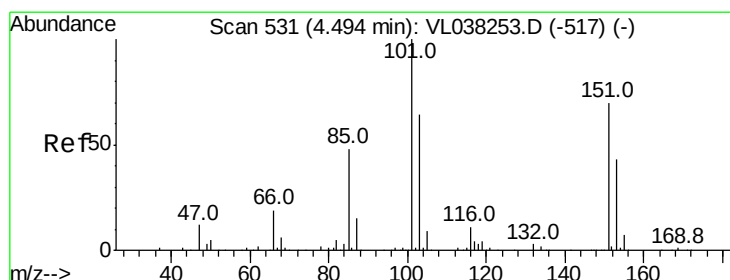
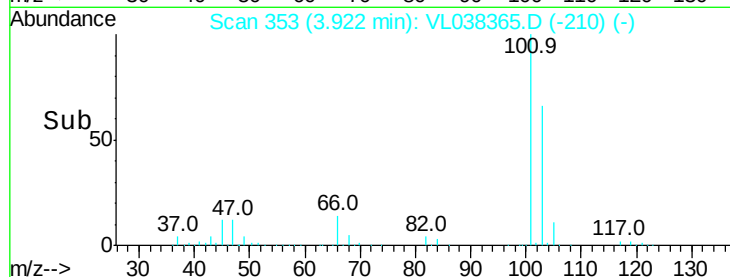
600000

400000

200000

0

Time-->



#12

1,1,2-Trichlorotrifluoroethane

Concen: 8.65 ppbv

RT: 4.46 min Scan# 519

Delta R.T. -0.04 min

Lab File: VL038365.D

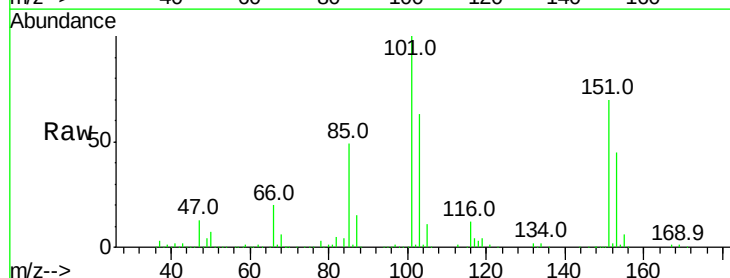
Acq: 16 Feb 2022 14:01

Tgt Ion:101 Resp: 946533

Ion Ratio Lower Upper

101 100

151 71.1 55.3 82.9



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V

4.46

500000

400000

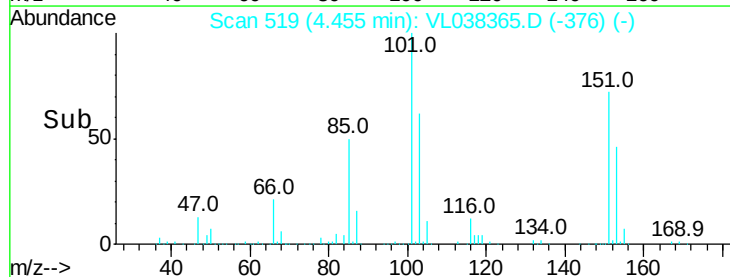
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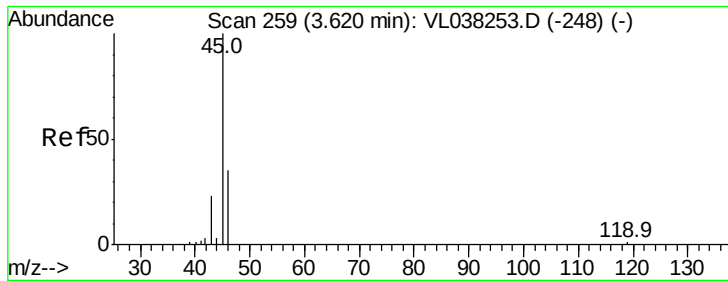
200000

100000

0

Time-->



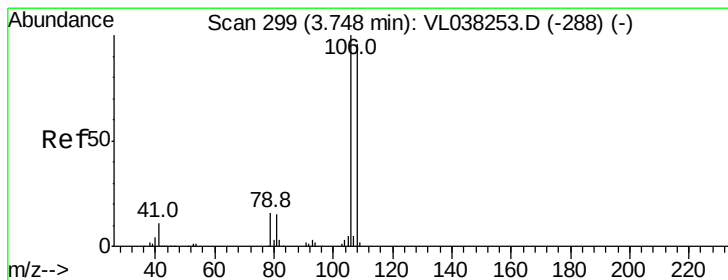
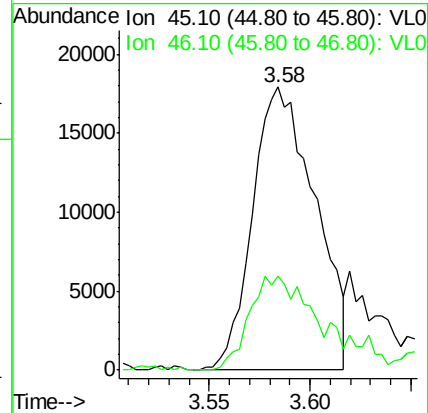
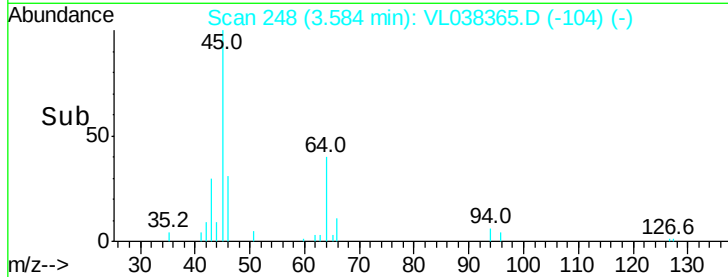
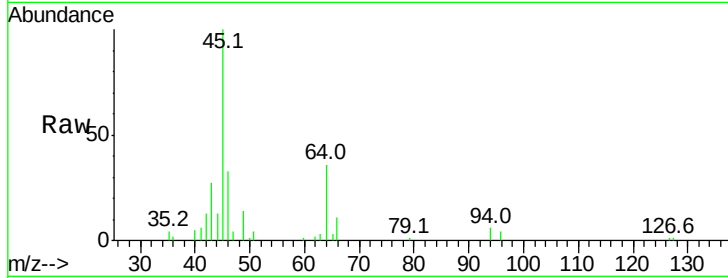


#13
Ethanol
Concen: 6.38 ppbv
RT: 3.58
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId : VL0216ABS01
Acq: 16 Feb 2022 14:01

Tgt Ion:
Ion Ratio
45 100
46 45.

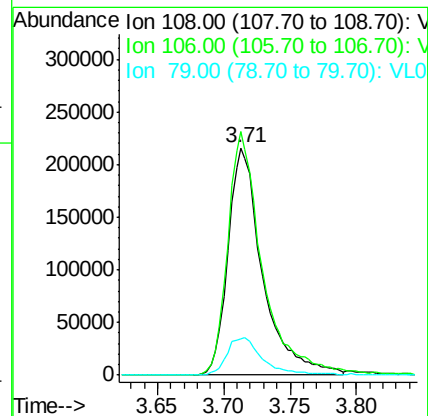
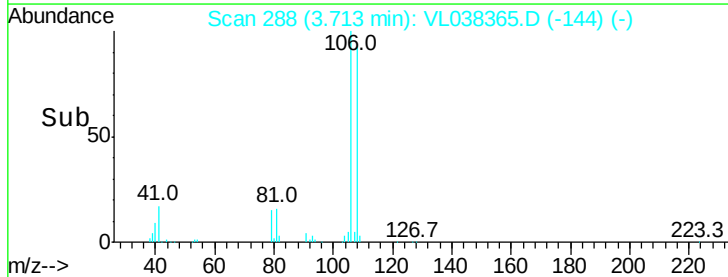
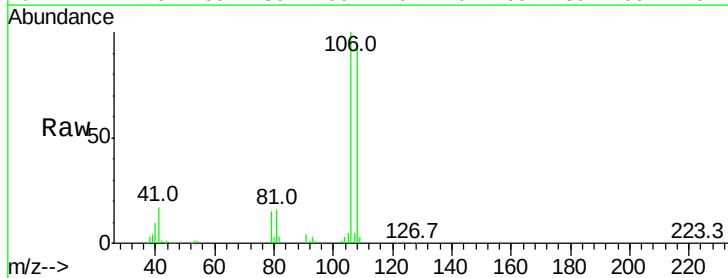
Manual Integrations
APPROVED

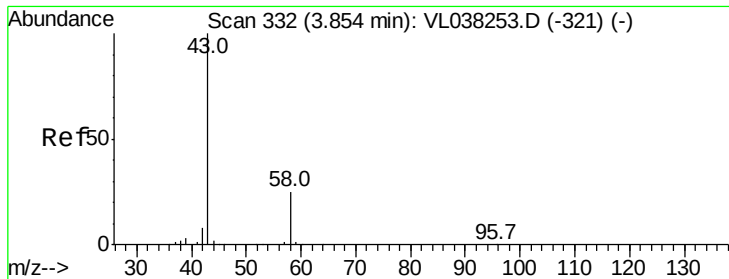
Reviewed By :Semsettin Yesilyurt 02/17/2022
Supervised By :Mahesh Dadoda 02/21/2022



#14
Bromoethene
Concen: 9.16 ppbv
RT: 3.71 min Scan# 288
Delta R.T. -0.04 min
Lab File: VL038365.D
Acq: 16 Feb 2022 14:01

Tgt Ion:108 Resp: 391476
Ion Ratio Lower Upper
108 100
106 108.9 86.4 129.6
79 17.9 14.1 21.1





#15

Acetone

Concen: 7.98 ppbv

RT: 3.82

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 16 Feb 2022 14:01

Tgt Ion:

Ion Ratio

43 100

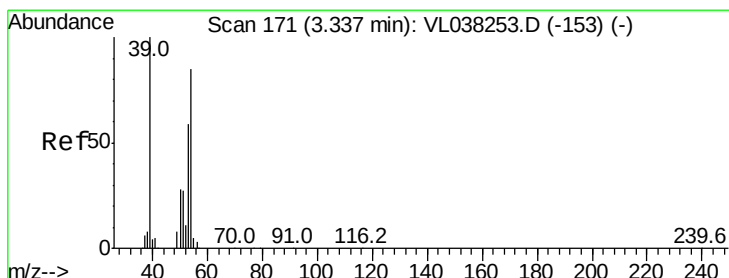
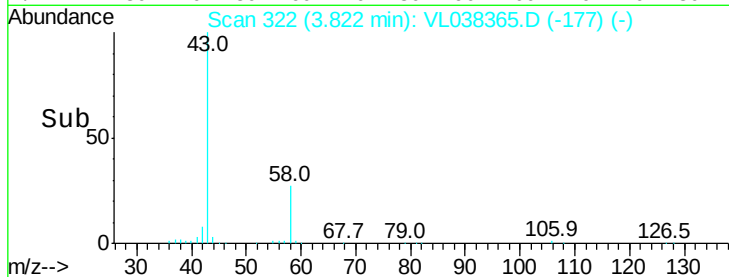
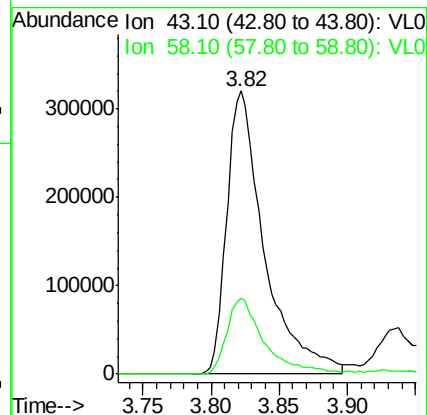
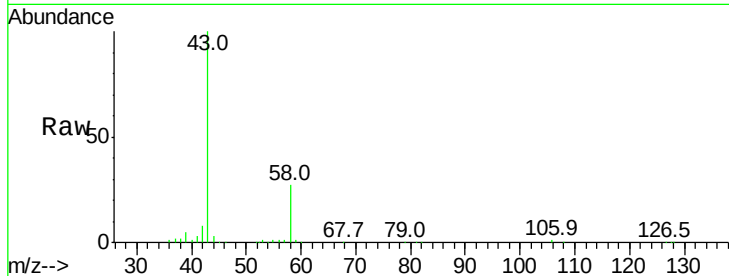
58 26.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 02/17/2022

Supervised By :Mahesh Dadoda 02/21/2022



#16

1,3-Butadiene

Concen: 9.35 ppbv

RT: 3.30 min Scan# 161

Delta R.T. -0.03 min

Lab File: VL038365.D

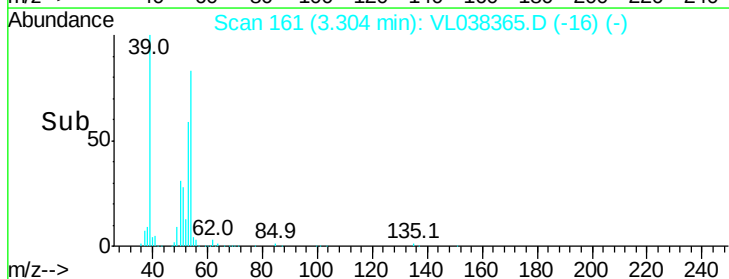
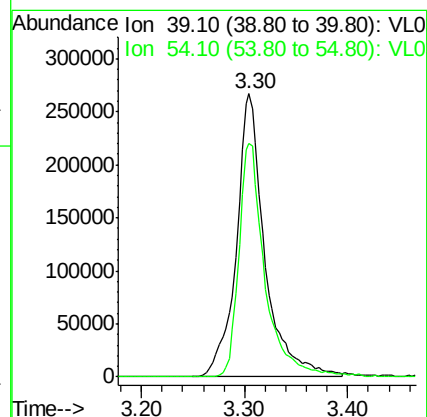
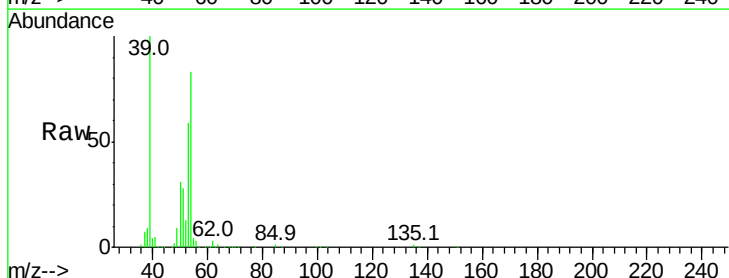
Acq: 16 Feb 2022 14:01

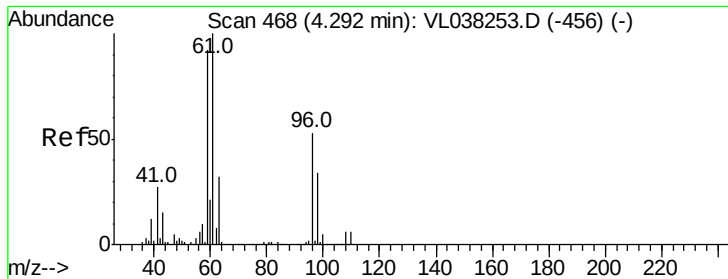
Tgt Ion: 39 Resp: 515883

Ion Ratio Lower Upper

39 100

54 75.9 62.6 94.0





#17

tert-Butyl alcohol

Concen: 9.22 ppbv

RT: 4.25 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: VL0216ABS01

Acq: 16 Feb 2022 14:01

Tgt Ion:

Ion Ratio

59 100

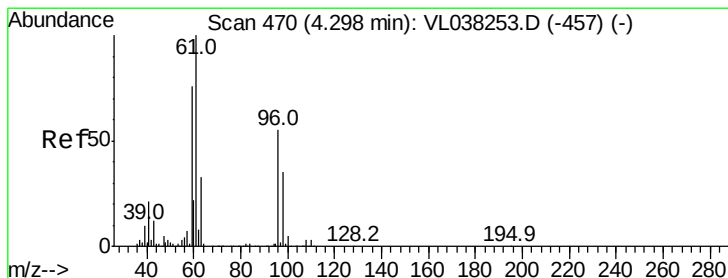
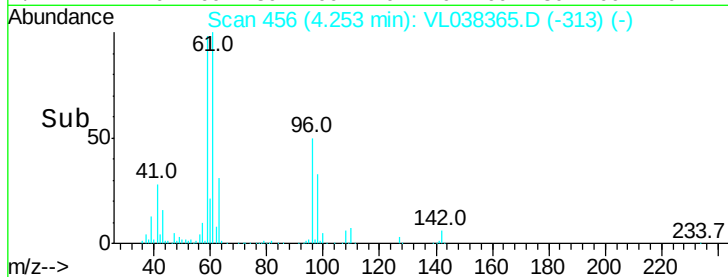
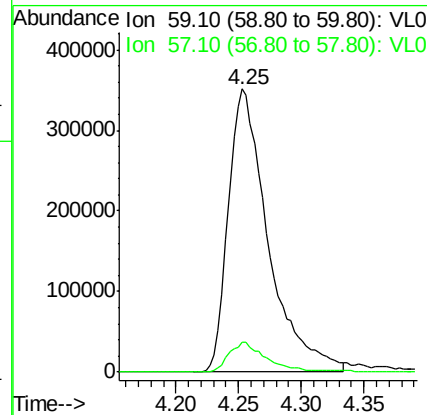
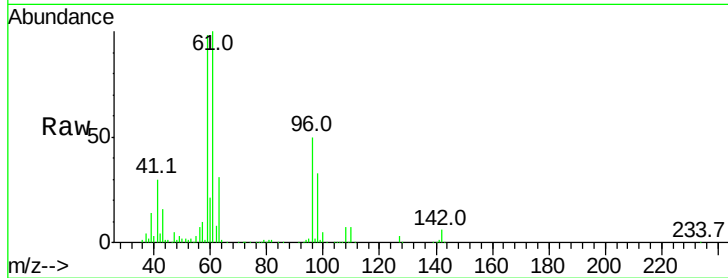
57 10.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 02/17/2022

Supervised By :Mahesh Dadoda 02/21/2022



#18

1,1-Dichloroethene

Concen: 8.81 ppbv

RT: 4.26 min Scan# 458

Delta R.T. -0.04 min

Lab File: VL038365.D

Acq: 16 Feb 2022 14:01

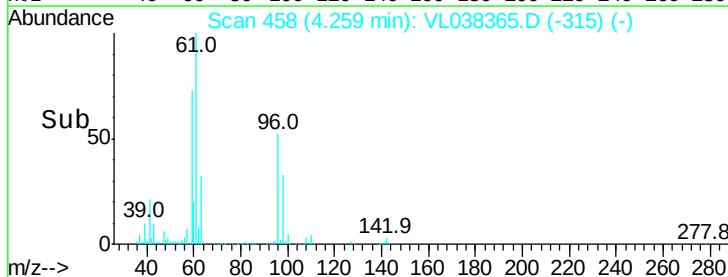
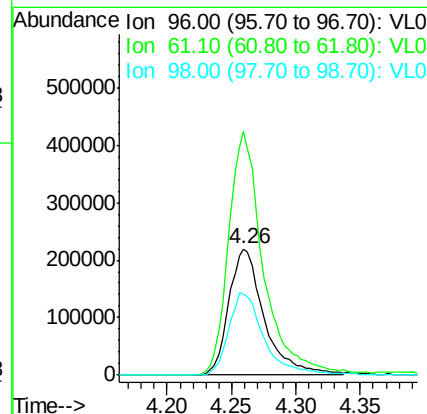
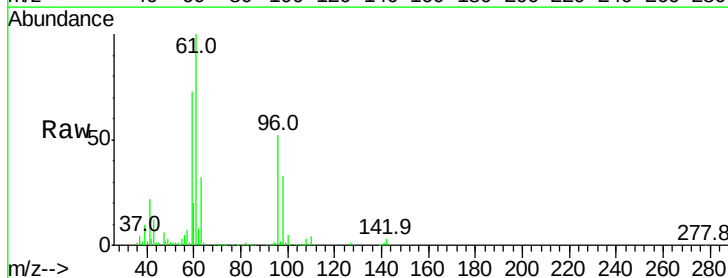
Tgt Ion: 96 Resp: 418992

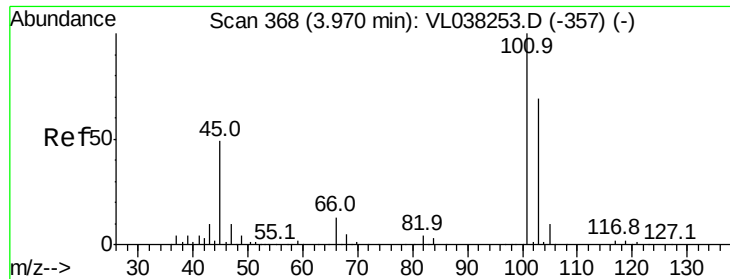
Ion Ratio Lower Upper

96 100

61 193.1 146.5 219.7

98 64.3 51.9 77.9





#19

Isopropyl Alcohol

Concen: 8.59 ppbv

RT: 3.94 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 16 Feb 2022 14:01 VL0216ABS01

Tgt Ion:

Ion Ratio

45 100

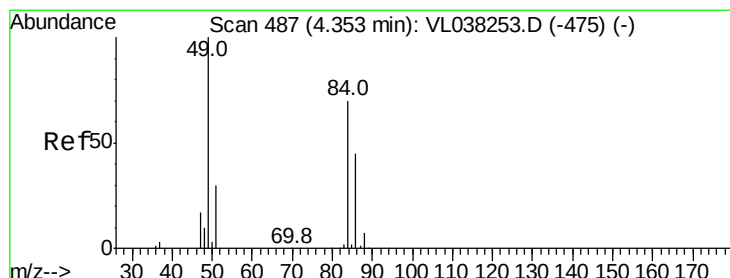
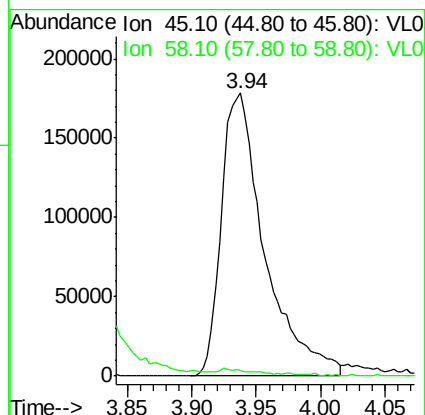
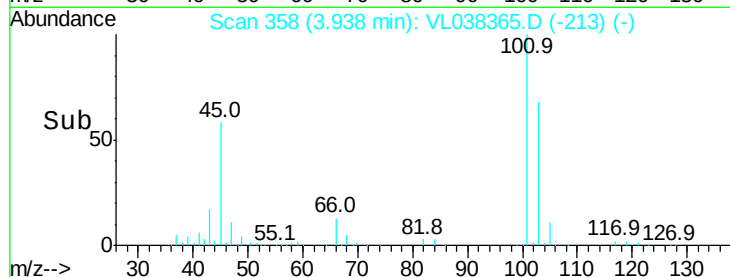
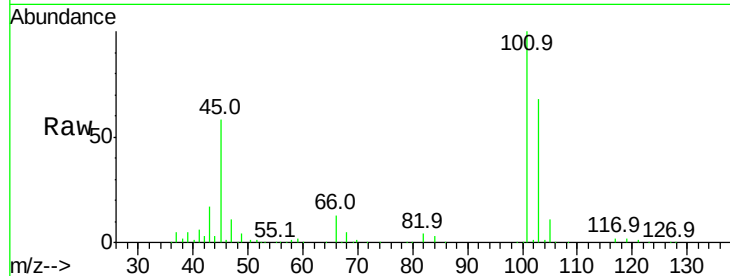
58 3.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 02/17/2022

Supervised By :Mahesh Dadoda 02/21/2022



#20

Methylene Chloride

Concen: 7.63 ppbv

RT: 4.32 min Scan# 476

Delta R.T. -0.04 min

Lab File: VL038365.D

Acq: 16 Feb 2022 14:01

Tgt Ion: 84 Resp: 341474

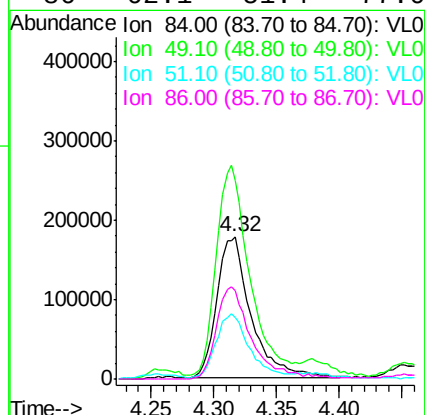
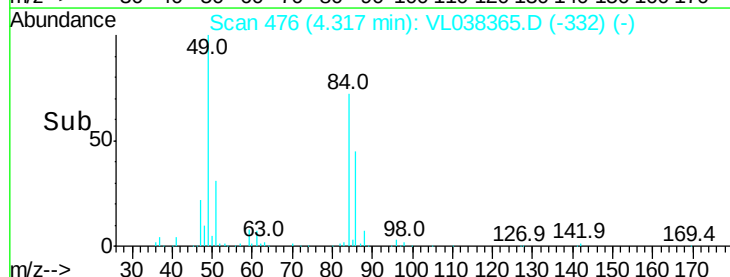
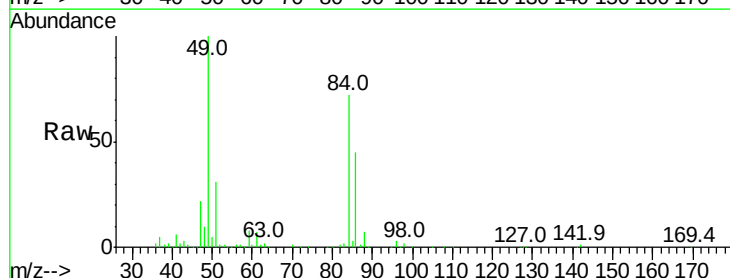
Ion Ratio Lower Upper

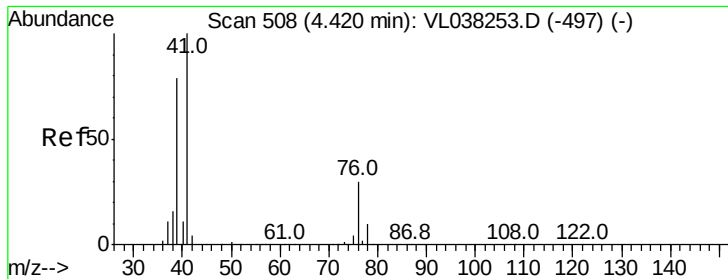
84 100

49 137.2 115.0 172.6

51 42.5 35.0 52.6

86 62.1 51.4 77.0





#21

Allyl Chloride

Concen: 9.16 ppbv

RT: 4.38

Instrument: MSVOA_1

Delta R.T.

Client Sample Id: VL0216ABS01

Lab File: VL0216ABS01

Acq: 16 Feb 2022 14:01

Tgt Ion:

Ion Ratio

41 100

76 31.

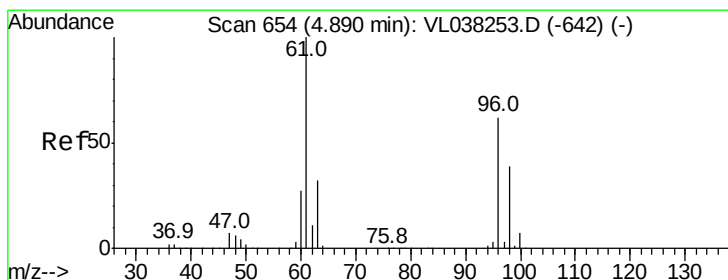
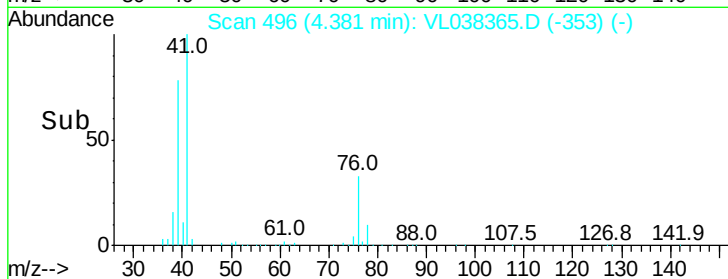
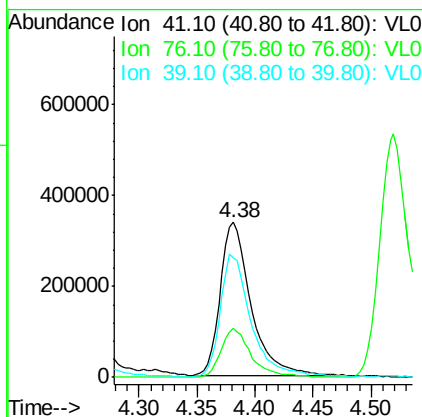
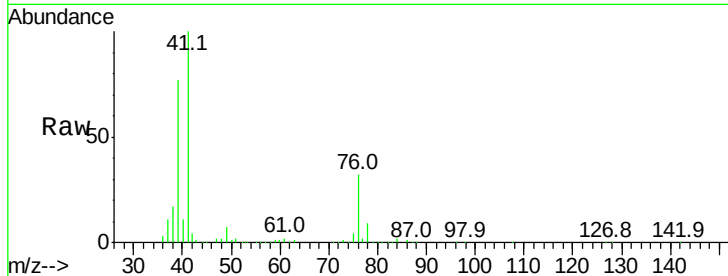
39 79.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 02/17/2022

Supervised By :Mahesh Dadoda 02/21/2022



#22

trans-1,2-Dichloroethene

Concen: 9.04 ppbv

RT: 4.85 min Scan# 642

Delta R.T. -0.04 min

Lab File: VL038365.D

Acq: 16 Feb 2022 14:01

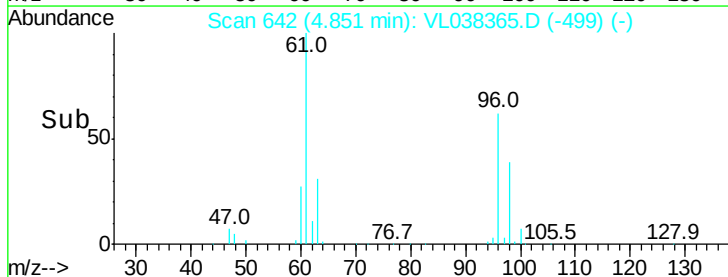
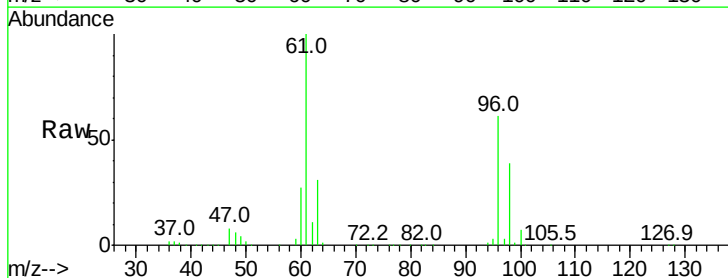
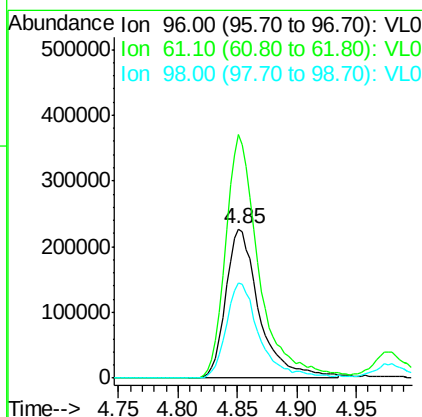
Tgt Ion: 96 Resp: 444380

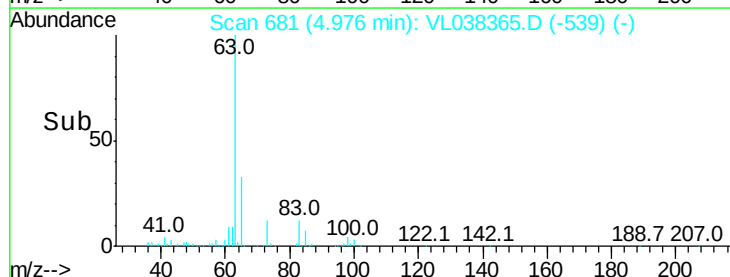
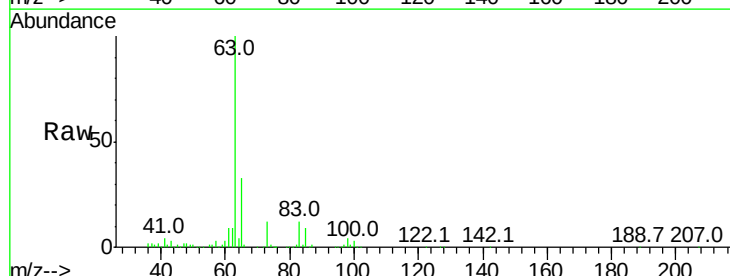
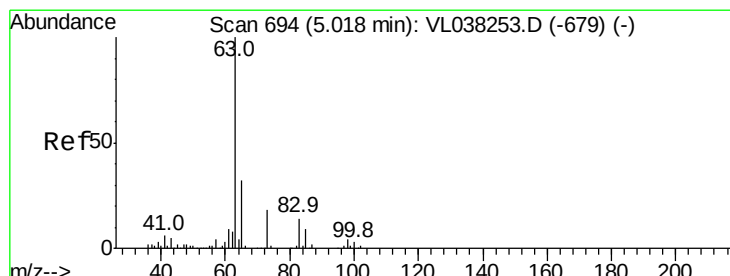
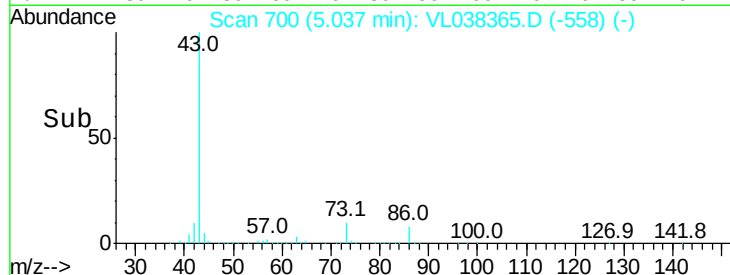
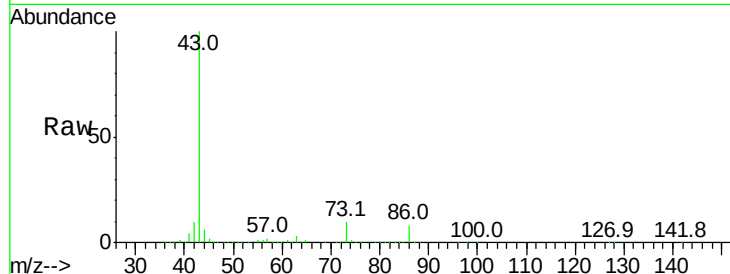
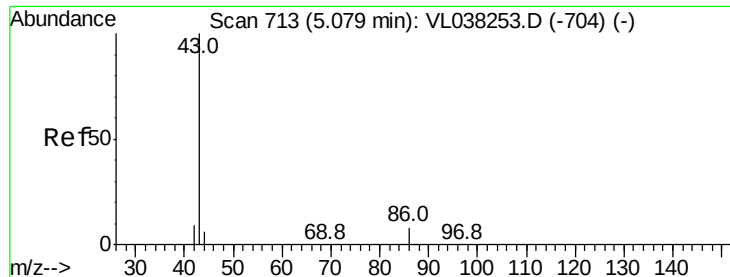
Ion Ratio Lower Upper

96 100

61 163.0 128.8 193.2

98 63.6 49.8 74.8





#23

Vinyl Acetate

Concen: 8.74 ppbv

RT: 5.04 Instrument:

Delta R.T. MSVOA_1

Lab File: ClientSampleId:

Acq: 16 Feb 2022 14:01 VL0216ABS01

Tgt Ion:

Ion Ratio

43 100

86 7.

42 10.

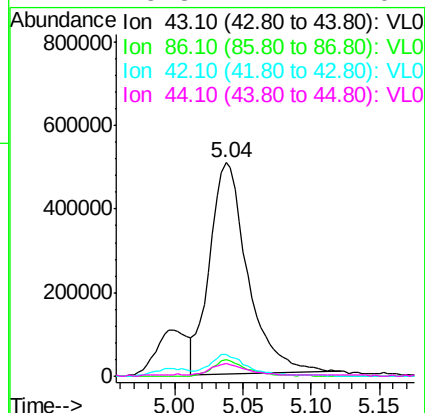
44 5.8

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 02/17/2022

Supervised By :Mahesh Dadoda 02/21/2022



#24

1,1-Dichloroethane

Concen: 8.78 ppbv

RT: 4.98 min Scan# 681

Delta R.T. -0.04 min

Lab File: VL038365.D

Acq: 16 Feb 2022 14:01

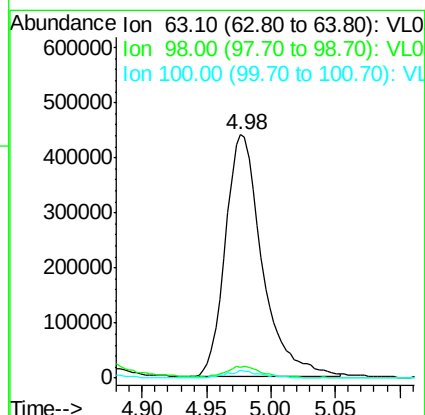
Tgt Ion: 63 Resp: 874327

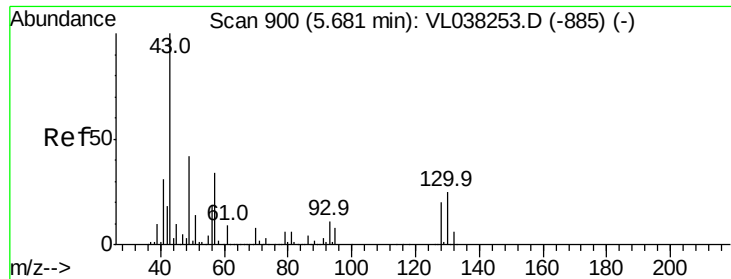
Ion Ratio Lower Upper

63 100

98 4.3 2.3 6.8

100 3.2 1.3 3.9





#25

Ethyl Acetate

Concen: 9.17 ppbv

RT: 5.64 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 16 Feb 2022 14:01 VL0216ABS01

Tgt Ion:

Ion Ratio

43 100

45 9.

61 9.

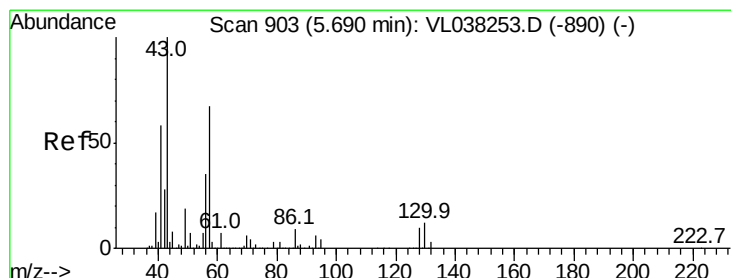
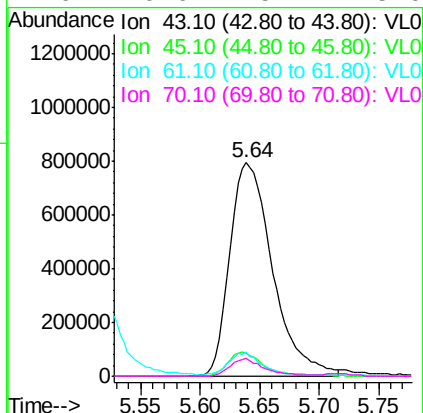
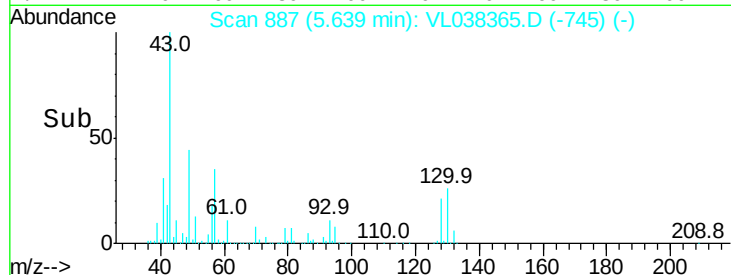
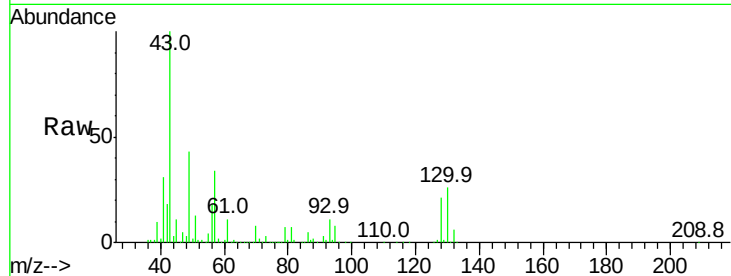
70 6.6 5.4 8.0

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 02/17/2022

Supervised By :Mahesh Dadoda 02/21/2022



#26

Hexane

Concen: 9.19 ppbv

RT: 5.65 min Scan# 890

Delta R.T. -0.04 min

Lab File: VL038365.D

Acq: 16 Feb 2022 14:01

Tgt Ion: 57 Resp: 920608

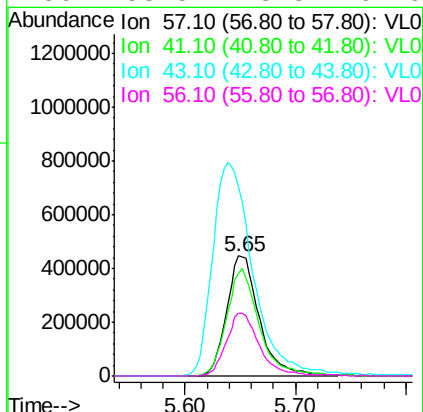
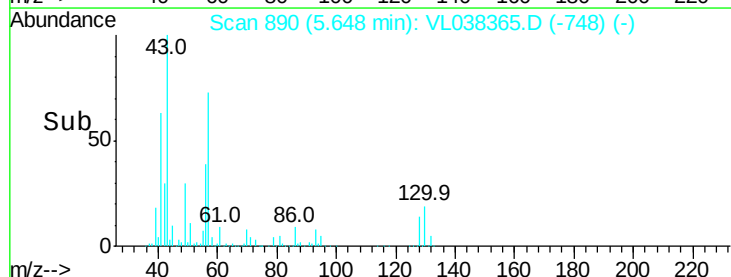
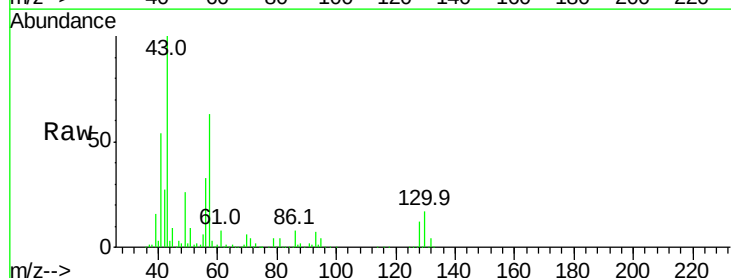
Ion Ratio Lower Upper

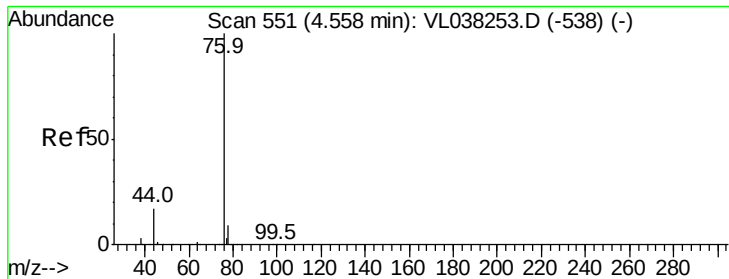
57 100

41 89.9 72.8 109.2

43 220.2 177.0 265.6

56 53.5 43.3 64.9





#27

Carbon Disulfide

Concen: 8.93 ppbv

RT: 4.52 Instrument: MSVOA_1

Delta R.T.

Lab File: ClientSampleId:

Acq: 16 Feb 2022 14:01

Tgt Ion:

Ion Ratio

76 100

44 18.

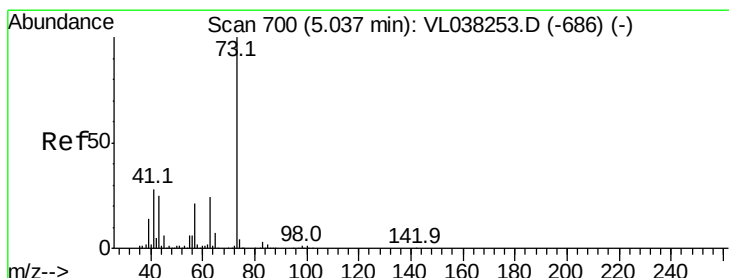
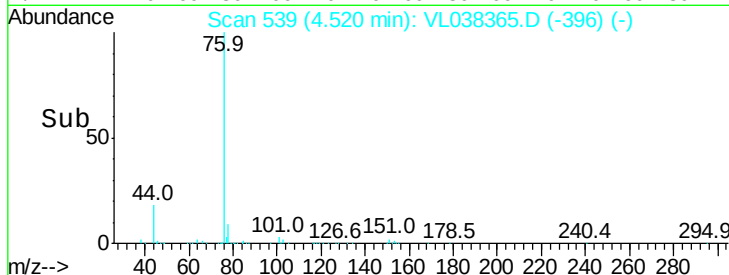
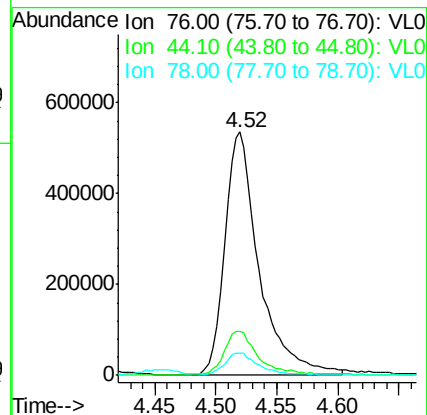
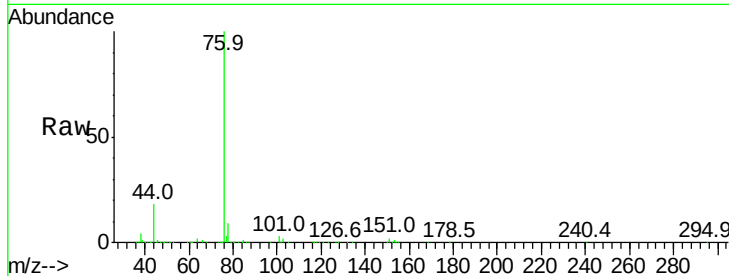
78 9.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 02/17/2022

Supervised By :Mahesh Dadoda 02/21/2022



#28

Methyl tert-Butyl Ether

Concen: 8.96 ppbv

RT: 5.00 min Scan# 688

Delta R.T. -0.04 min

Lab File: VL038365.D

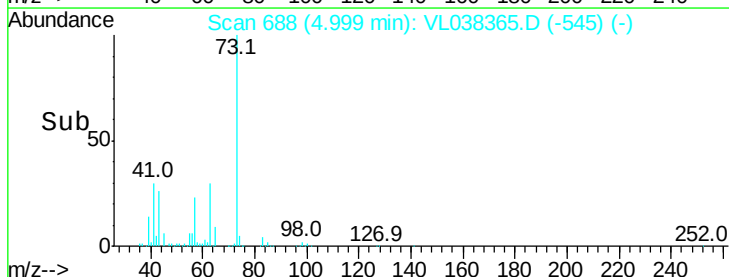
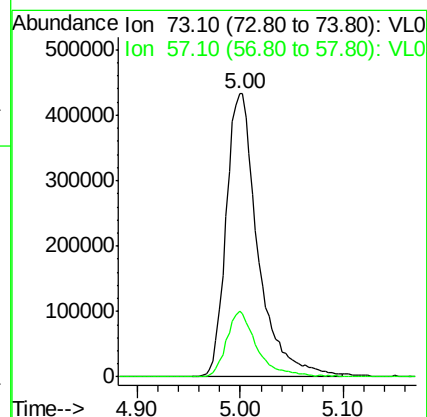
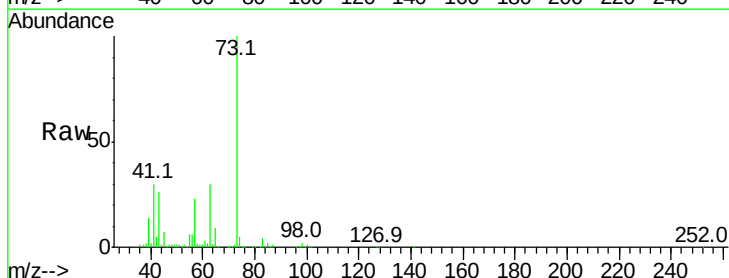
Acq: 16 Feb 2022 14:01

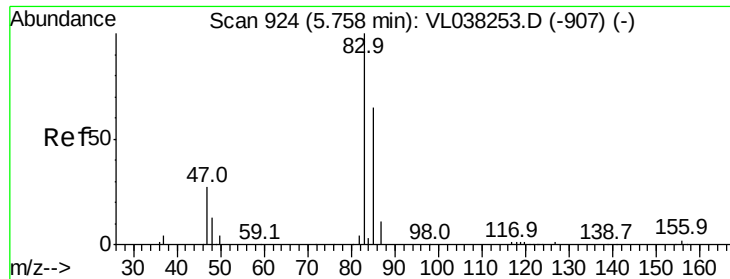
Tgt Ion: 73 Resp: 931300

Ion Ratio Lower Upper

73 100

57 22.7 18.2 27.4



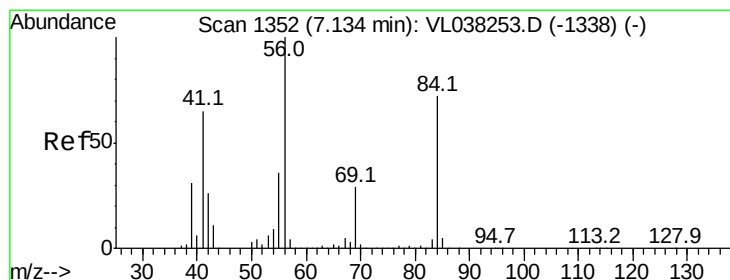
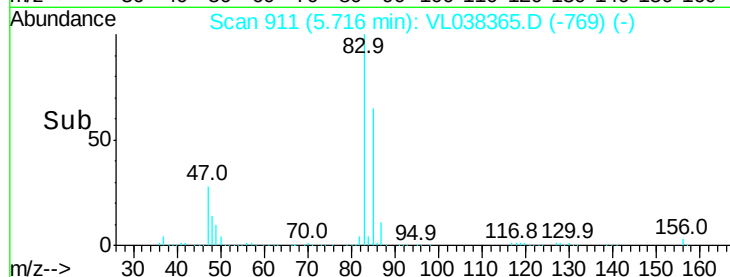
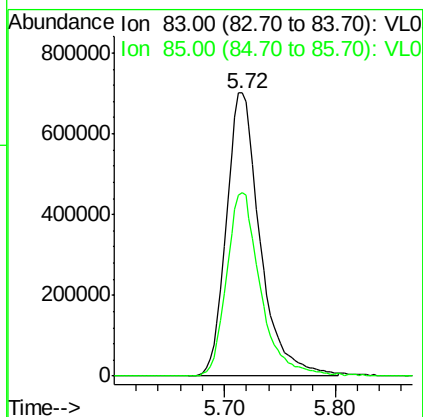
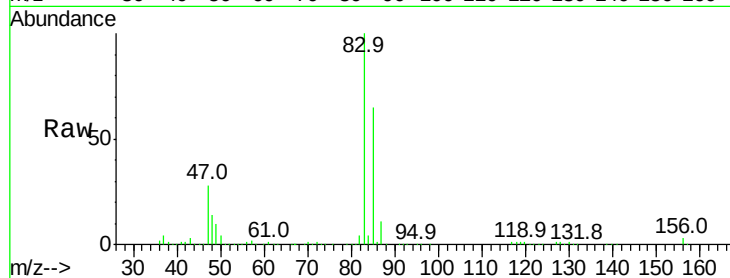


#29
Chloroform
Concen: 9.13 ppbv
RT: 5.72
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId : VL0216ABS01
Acq: 16 Feb 2022 14:01

Tgt Ion:
Ion Ratio
83 100
85 64.

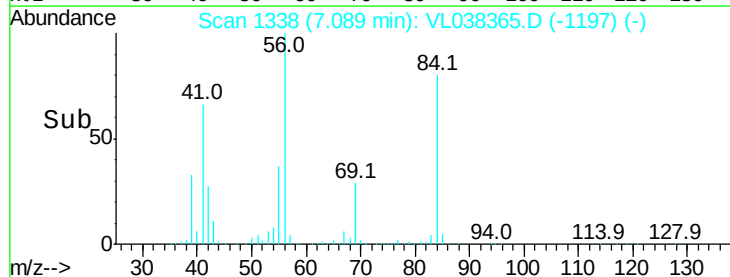
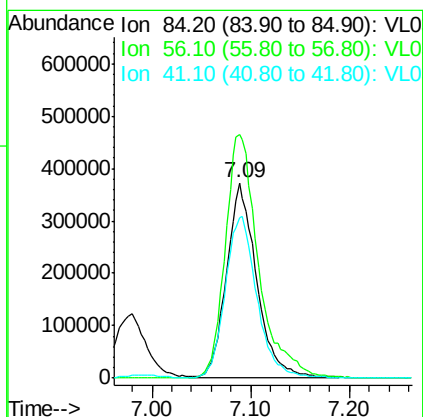
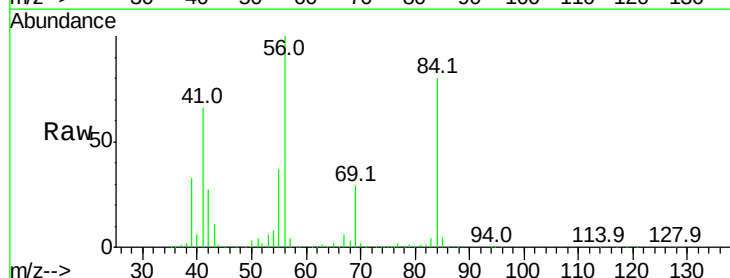
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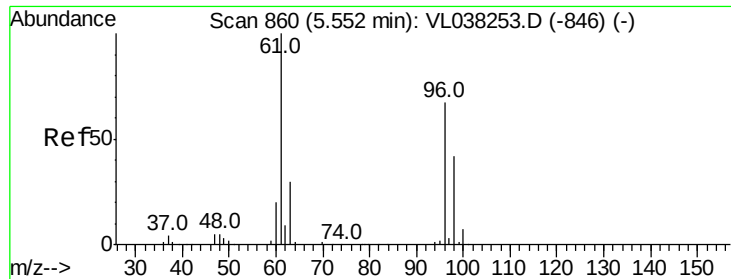
Reviewed By :Semsettin Yesilyurt 02/17/2022
Supervised By :Mahesh Dadoda 02/21/2022



#30
Cyclohexane
Concen: 9.00 ppbv
RT: 7.09 min Scan# 1338
Delta R.T. -0.05 min
Lab File: VL038365.D
Acq: 16 Feb 2022 14:01

Tgt Ion: 84 Resp: 785188
Ion Ratio Lower Upper
84 100
56 140.5 112.7 169.1
41 88.4 71.1 106.7





#31

cis-1,2-Dichloroethene

Concen: 10.24 ppbv

RT: 5.51 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

VL0216ABS01

Acq: 16 Feb 2022 14:01

Tgt Ion:

Ion Ratio

61 100

96 65.

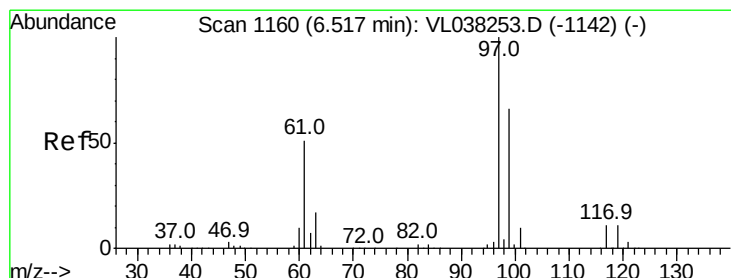
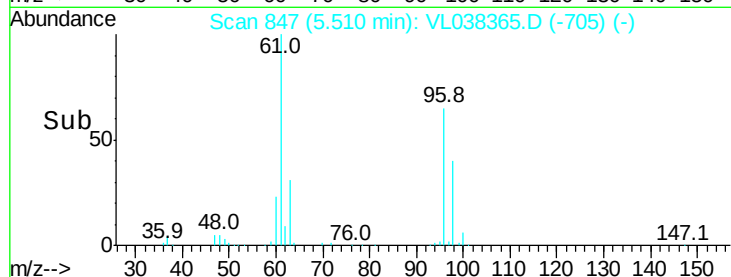
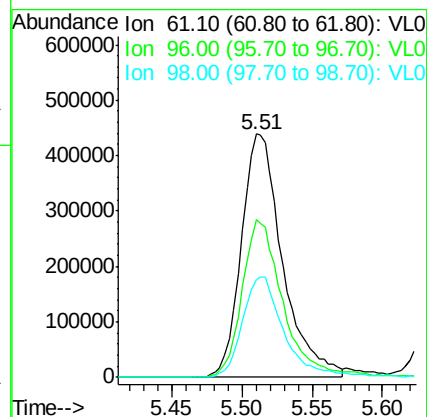
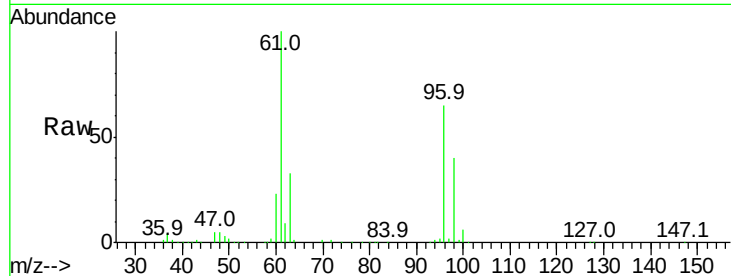
98 40.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 02/17/2022

Supervised By :Mahesh Dadoda 02/21/2022



#32

1,1,1-Trichloroethane

Concen: 9.11 ppbv

RT: 6.47 min Scan# 1146

Delta R.T. -0.05 min

Lab File: VL038365.D

Acq: 16 Feb 2022 14:01

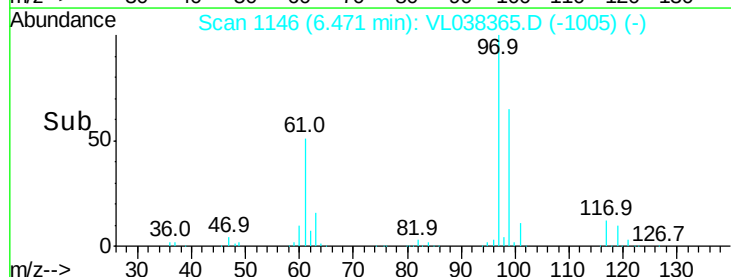
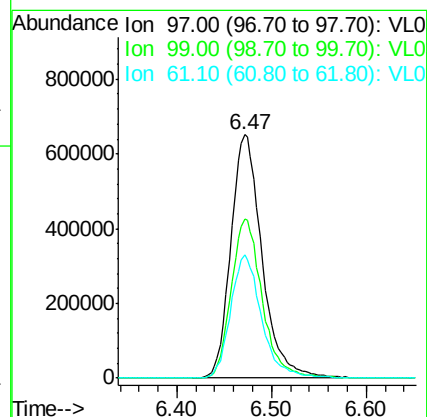
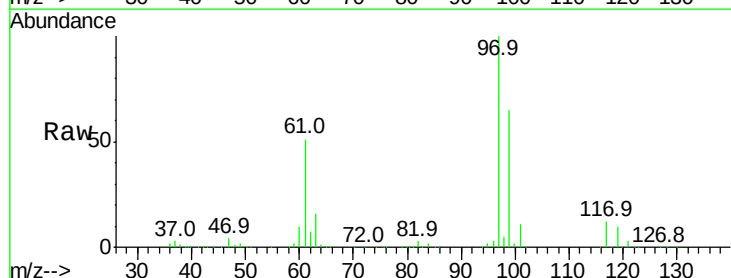
Tgt Ion: 97 Resp: 1488170

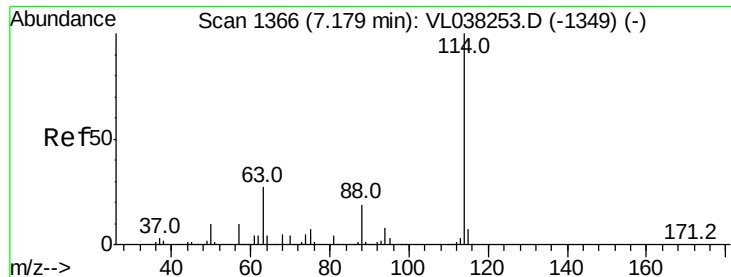
Ion Ratio Lower Upper

97 100

99 65.2 51.5 77.3

61 50.5 40.5 60.7



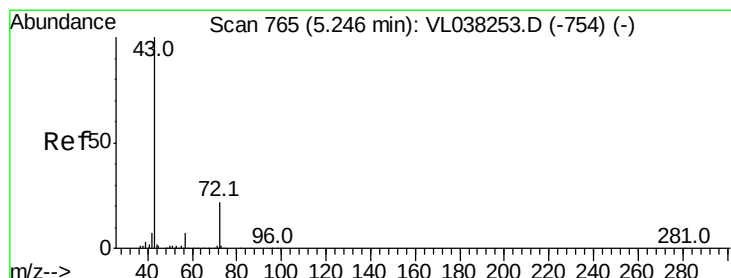
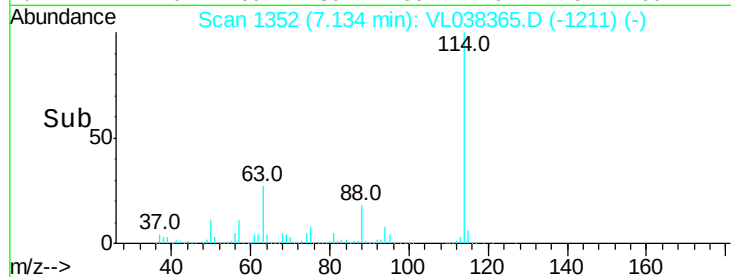
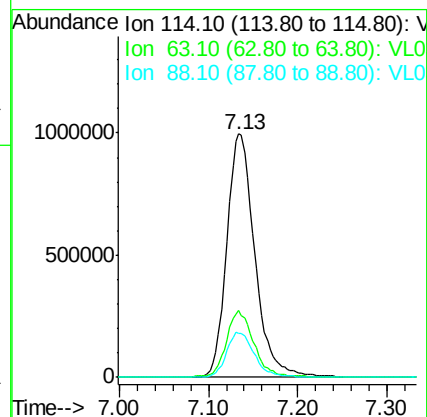
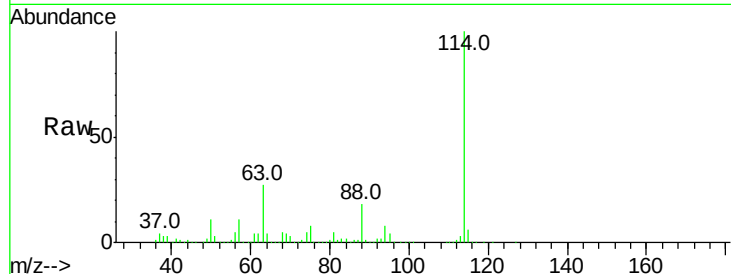


#33
 1,4-Difluorobenzene
 Concen: 10.00 ppbv
 RT: 7.13
 Instrument: MSVOA_L
 Delta R.T.:
 Lab File: ClientSampleId : VL0216ABS01
 Acq: 16 Feb 2022 14:01

Tgt Ion: 114
 Ion Ratio: 100
 63 27.1
 88 18.1

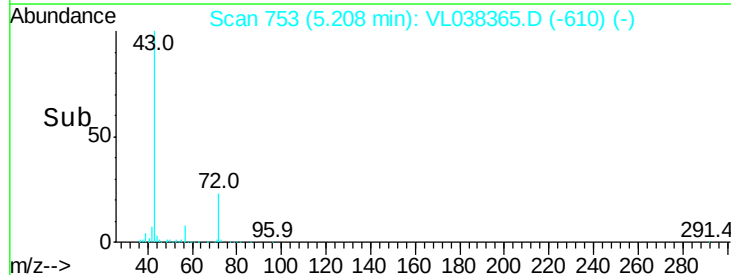
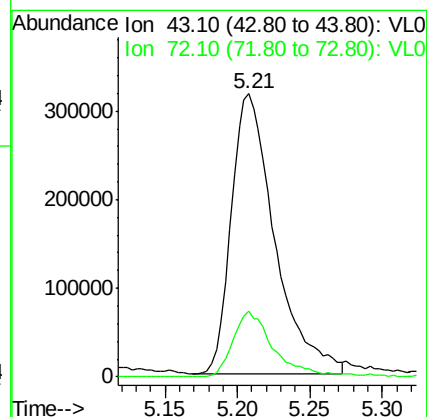
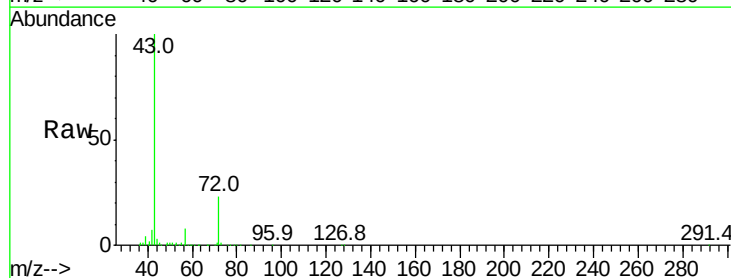
Manual Integrations
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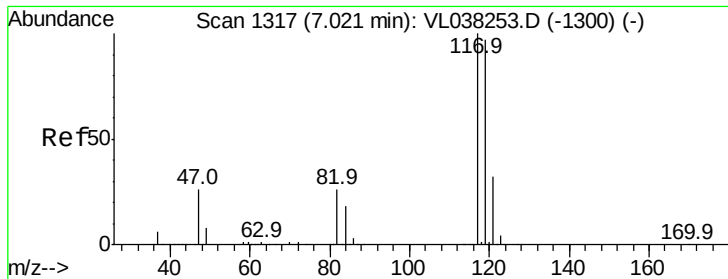
Reviewed By : Semsettin Yesilyurt 02/17/2022
 Supervised By : Mahesh Dadoda 02/21/2022



#34
 2-Butanone
 Concen: 9.26 ppbv
 RT: 5.21 min Scan# 753
 Delta R.T. -0.04 min
 Lab File: VL038365.D
 Acq: 16 Feb 2022 14:01

Tgt Ion: 43 Resp: 656029
 Ion Ratio Lower Upper
 43 100
 72 22.7 18.1 27.1



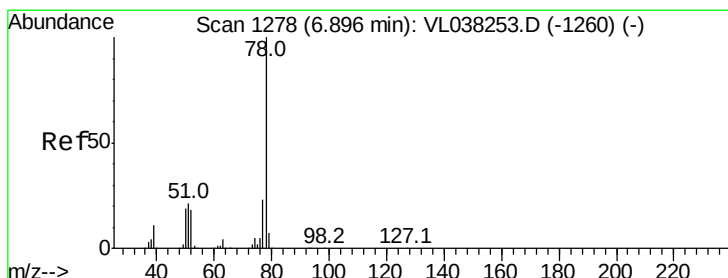
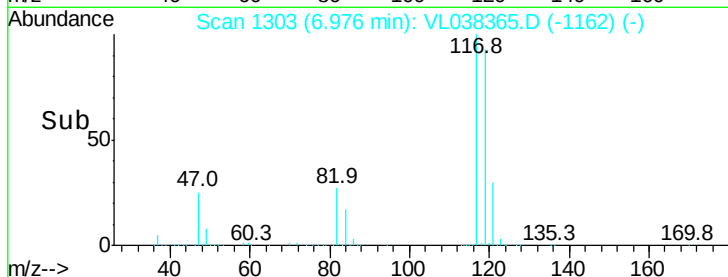
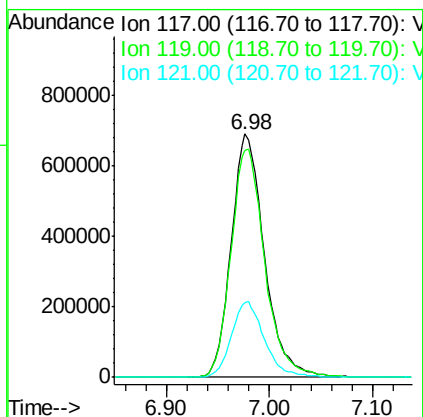
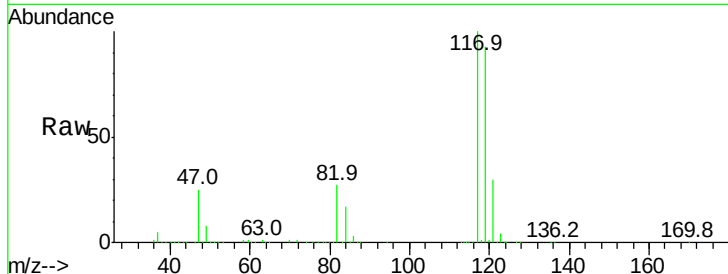


#35
Carbon Tetrachloride
Concen: 10.16 ppbv
RT: 6.98
Instrument: MSVOA_L
Delta R.T.:
Lab File: ClientSampleId : VL0216ABS01
Acq: 16 Feb 2022 14:01

Tgt Ion: 1
Ion Ratio
117 100
119 93.
121 30.

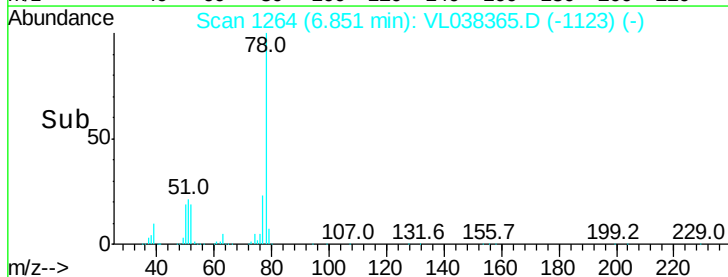
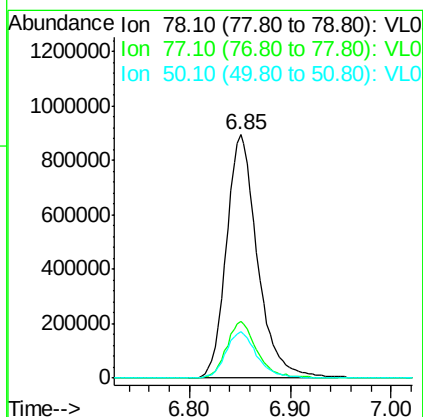
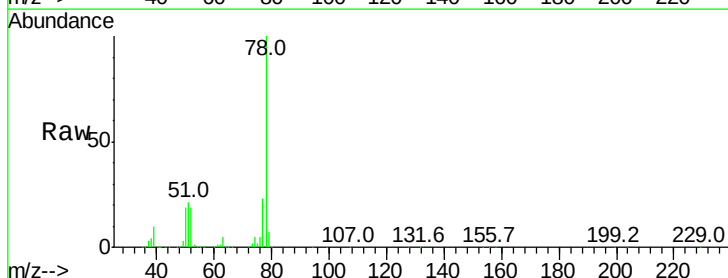
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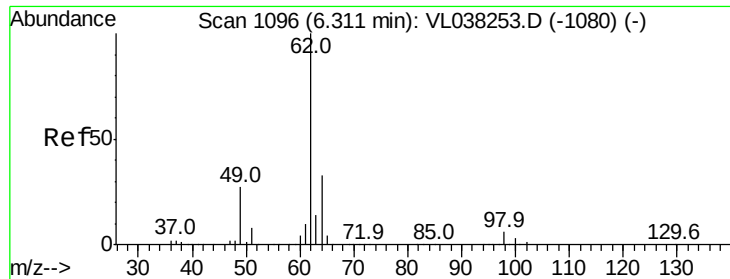
Reviewed By : Semsettin Yesilyurt 02/17/2022
Supervised By : Mahesh Dadoda 02/21/2022



#36
Benzene
Concen: 10.01 ppbv
RT: 6.85 min Scan# 1264
Delta R.T. -0.05 min
Lab File: VL038365.D
Acq: 16 Feb 2022 14:01

Tgt Ion: 78 Resp: 1918438
Ion Ratio Lower Upper
78 100
77 23.2 18.2 27.2
50 19.0 15.1 22.7



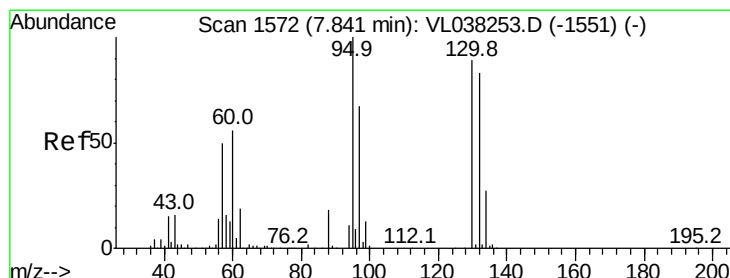
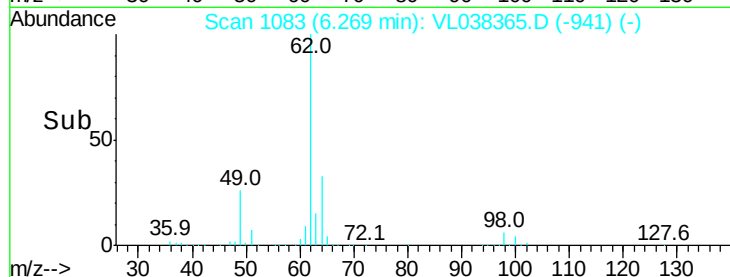
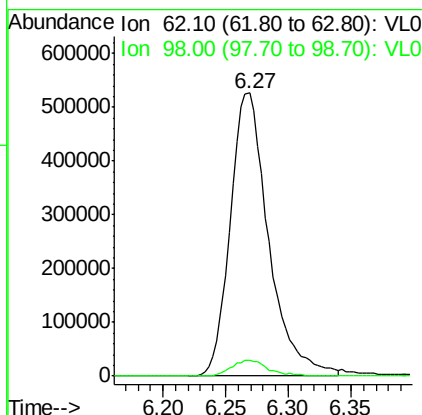
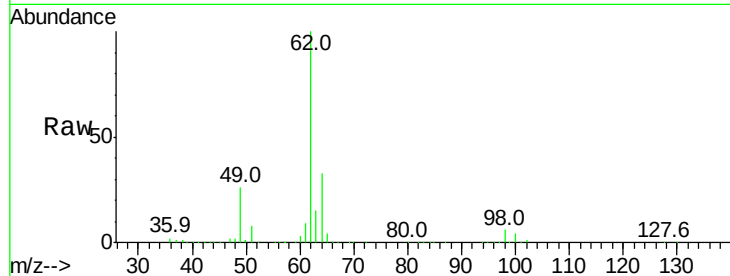


#37
 1,2-Dichloroethane
 Concen: 10.21 ppbv
 RT: 6.27
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId : VL0216ABS01
 Acq: 16 Feb 2022 14:01

Tgt Ion:
 Ion Ratio
 62 100
 98 5.

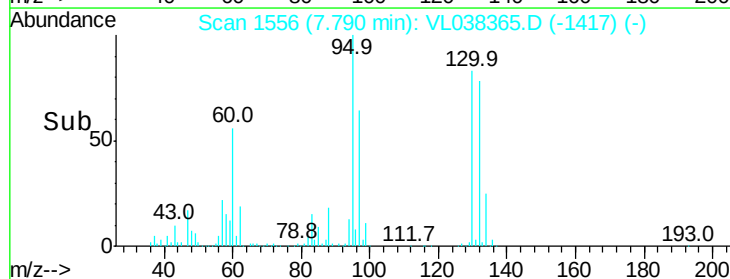
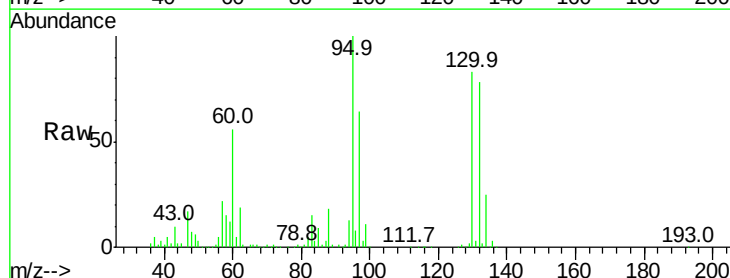
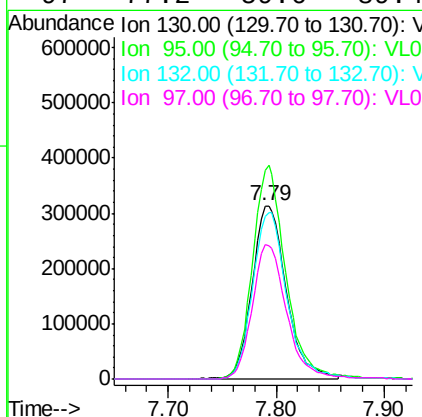
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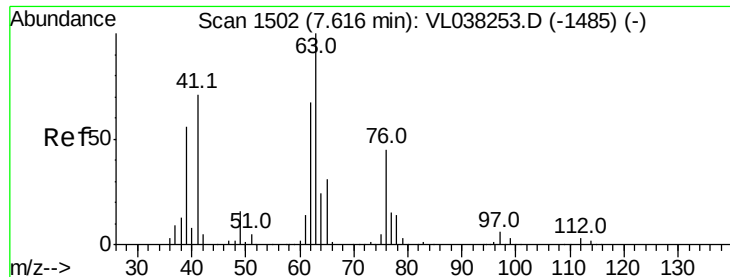
Reviewed By :Semsettin Yesilyurt 02/17/2022
 Supervised By :Mahesh Dadoda 02/21/2022



#38
 Trichloroethene
 Concen: 9.67 ppbv
 RT: 7.79 min Scan# 1556
 Delta R.T. -0.05 min
 Lab File: VL038365.D
 Acq: 16 Feb 2022 14:01

Tgt Ion:130 Resp: 690359
 Ion Ratio Lower Upper
 130 100
 95 120.0 89.4 134.2
 132 94.0 74.6 111.8
 97 77.2 59.6 89.4



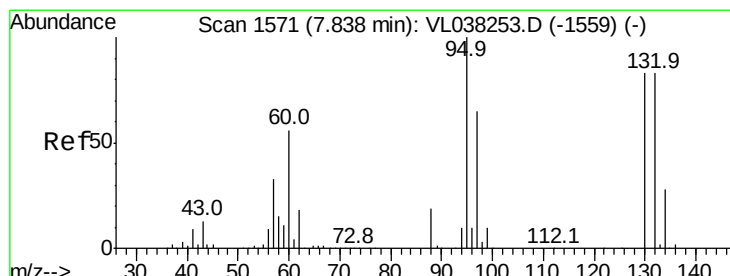
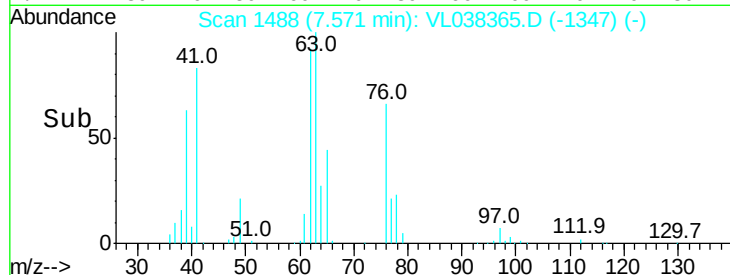
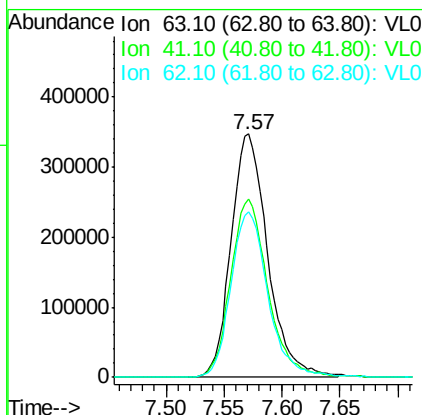
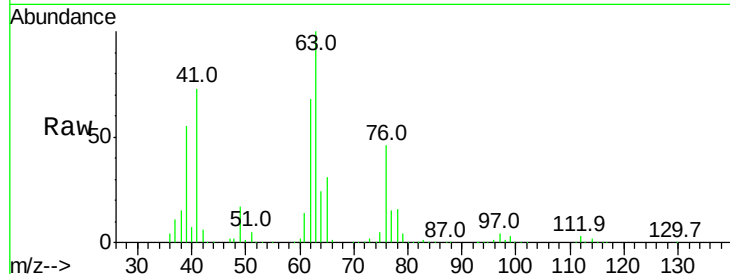


#39
 1,2-Dichloropropane
 Concen: 9.80 ppbv
 RT: 7.57
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId : VL0216ABS01
 Acq: 16 Feb 2022 14:01

Tgt Ion:
 Ion Ratio
 63 100
 41 73.
 62 67.

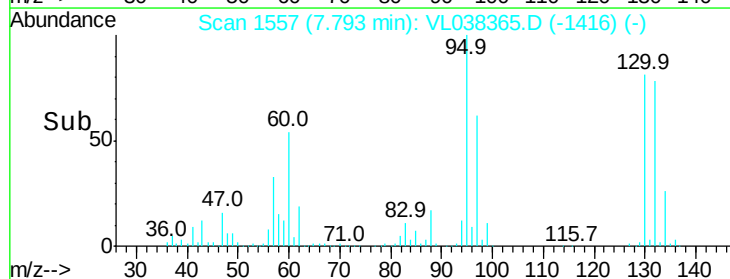
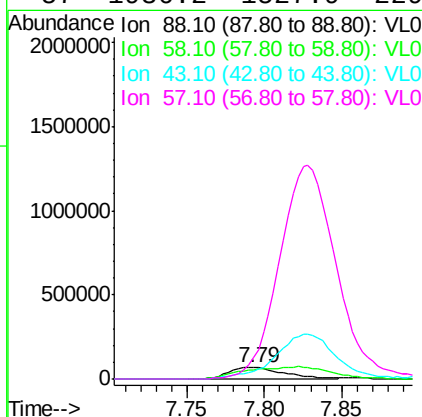
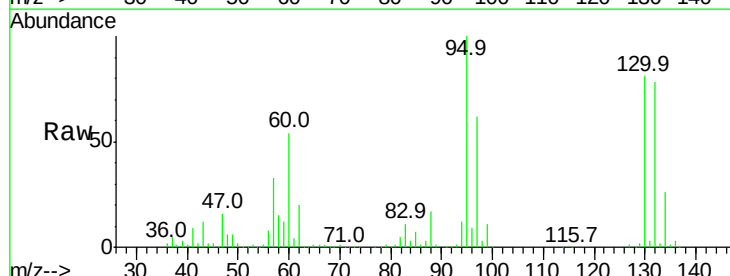
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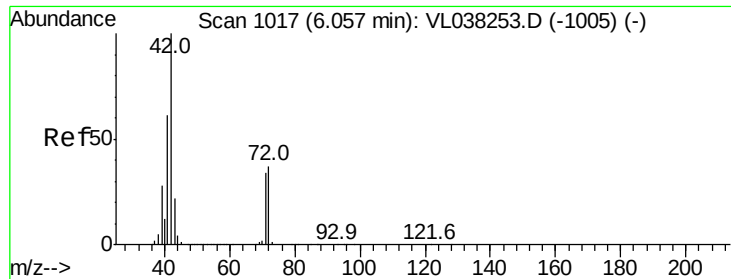
Reviewed By :Semsettin Yesilyurt 02/17/2022
 Supervised By :Mahesh Dadoda 02/21/2022



#40
 1,4-Dioxane
 Concen: 9.04 ppbv
 RT: 7.79 min Scan# 1557
 Delta R.T. -0.05 min
 Lab File: VL038365.D
 Acq: 16 Feb 2022 14:01

Tgt Ion: 88 Resp: 168957
 Ion Ratio Lower Upper
 88 100
 58 172.1 138.6 208.0
 43 426.6 346.9 520.3
 57 1936.2 1527.9 2291.9



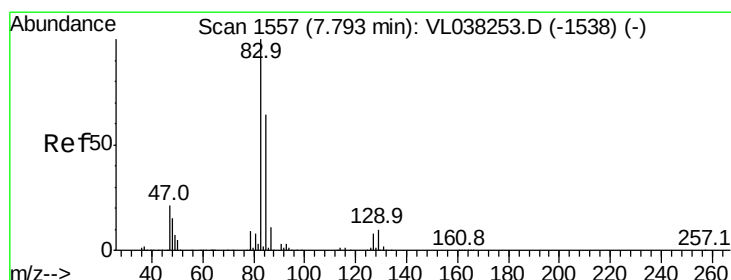
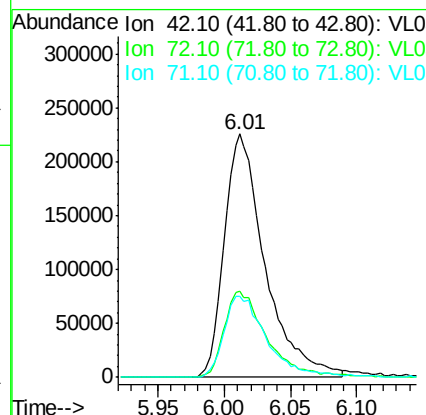
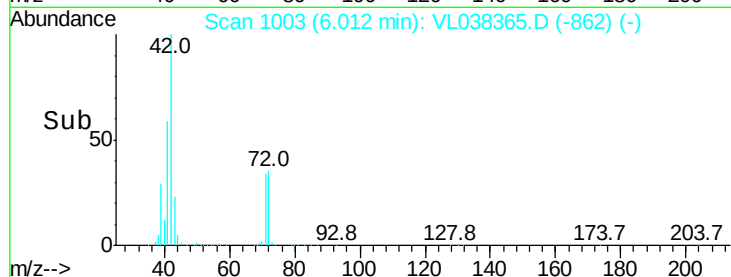
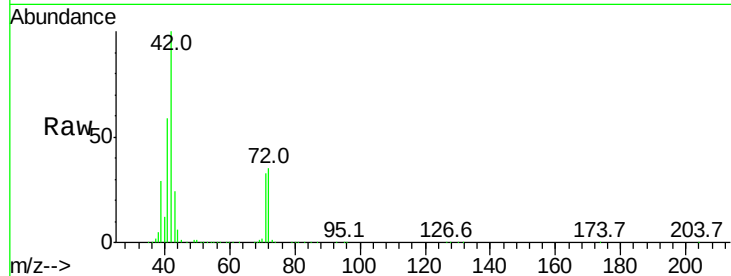


#41
Tetrahydrofuran
Concen: 10.06 ppbv
RT: 6.01
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId : VL0216ABS01
Acq: 16 Feb 2022 14:01

Tgt Ion:
Ion Ratio
42 100
72 37.
71 35.

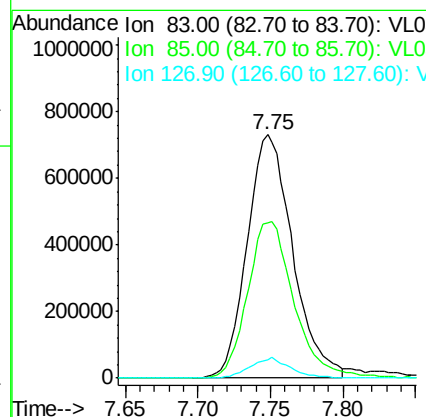
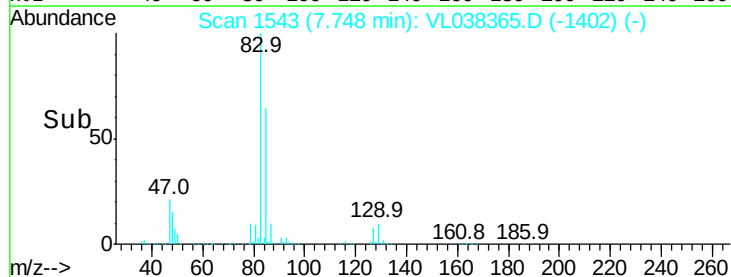
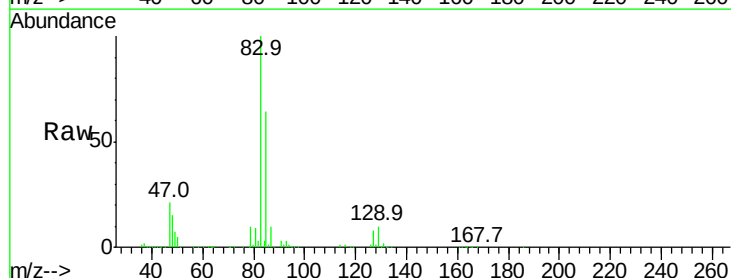
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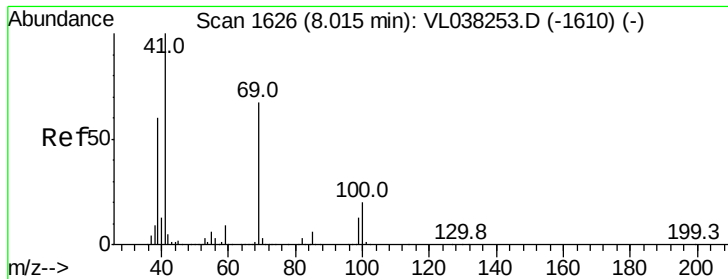
Reviewed By :Semsettin Yesilyurt 02/17/2022
Supervised By :Mahesh Dadoda 02/21/2022



#42
Bromodichloromethane
Concen: 9.82 ppbv
RT: 7.75 min Scan# 1543
Delta R.T. -0.05 min
Lab File: VL038365.D
Acq: 16 Feb 2022 14:01

Tgt Ion: 83 Resp: 1598998
Ion Ratio Lower Upper
83 100
85 63.7 51.5 77.3
127 7.8 6.2 9.4



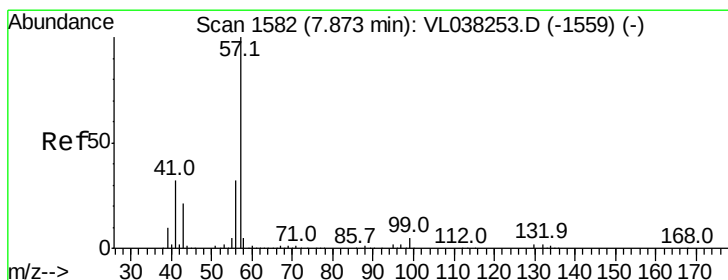
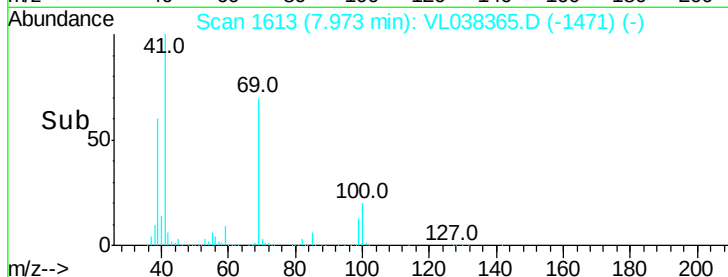
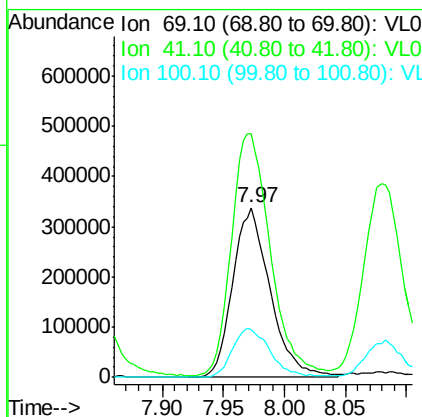
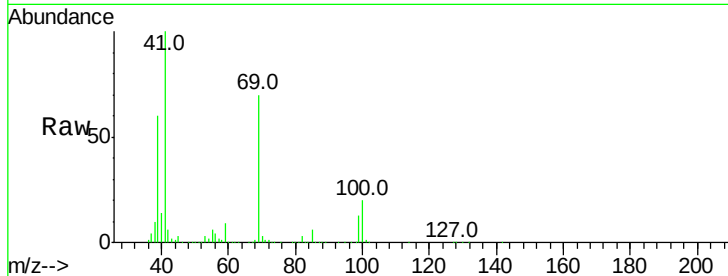


#43
Methyl Methacrylate
Concen: 10.62 ppbv
RT: 7.97
Instrument: MSVOA_1
Delta R.T.
Lab File: ClientSampleId : VL0216ABS01
Acq: 16 Feb 2022 14:01

Tgt Ion:
Ion Ratio
69 100
41 150.
100 29.

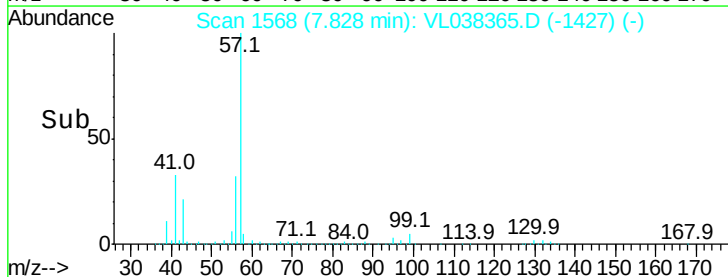
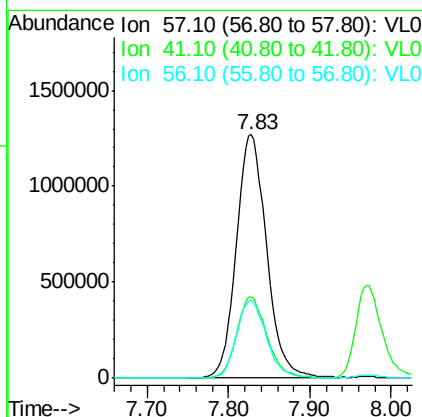
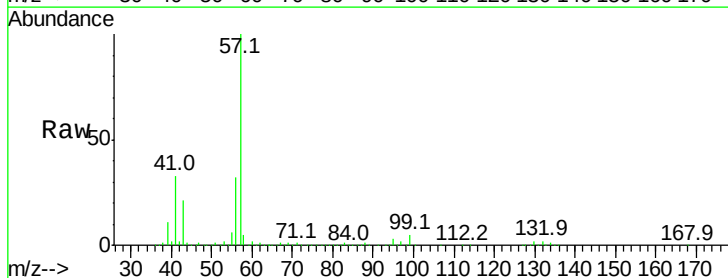
Manual Integrations
APPROVED

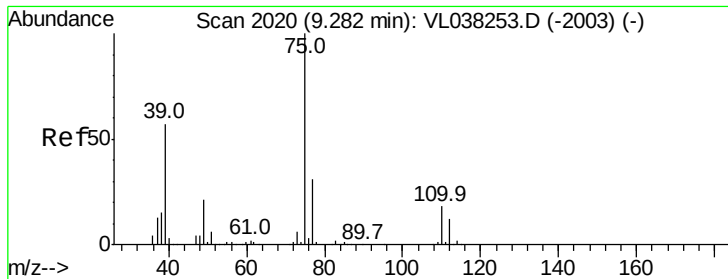
Reviewed By :Semsettin Yesilyurt 02/17/2022
Supervised By :Mahesh Dadoda 02/21/2022



#44
2,2,4-Trimethylpentane
Concen: 9.69 ppbv
RT: 7.83 min Scan# 1568
Delta R.T. -0.05 min
Lab File: VL038365.D
Acq: 16 Feb 2022 14:01

Tgt Ion: 57 Resp: 3270413
Ion Ratio Lower Upper
57 100
41 33.3 26.3 39.5
56 31.6 25.2 37.8





#45

t-1,3-Dichloropropene

Concen: 10.27 ppbv

RT: 9.24 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 16 Feb 2022 14:01 VL0216ABS01

Tgt Ion:

Ion Ratio

75 100

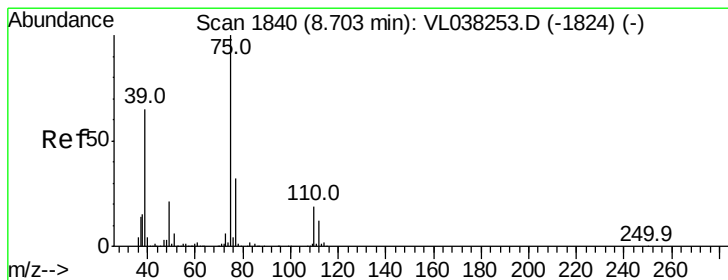
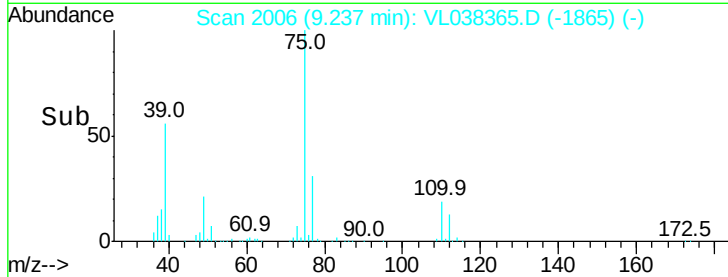
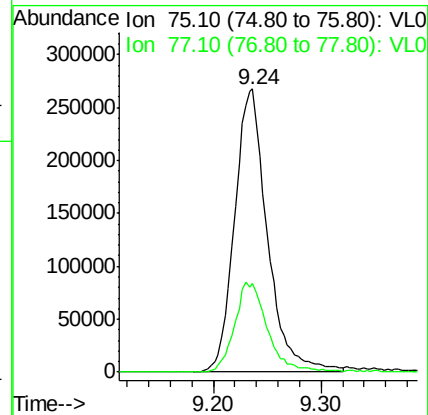
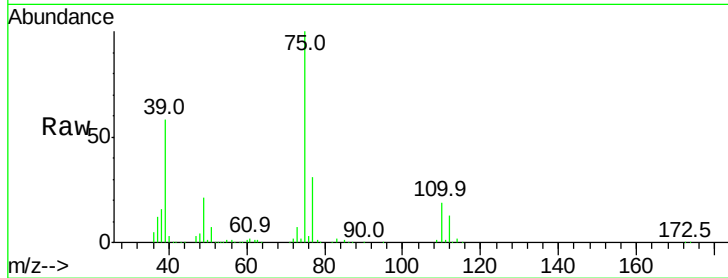
77 31.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 02/17/2022

Supervised By :Mahesh Dadoda 02/21/2022



#46

cis-1,3-Dichloropropene

Concen: 9.69 ppbv

RT: 8.66 min Scan# 1826

Delta R.T. -0.05 min

Lab File: VL038365.D

Acq: 16 Feb 2022 14:01

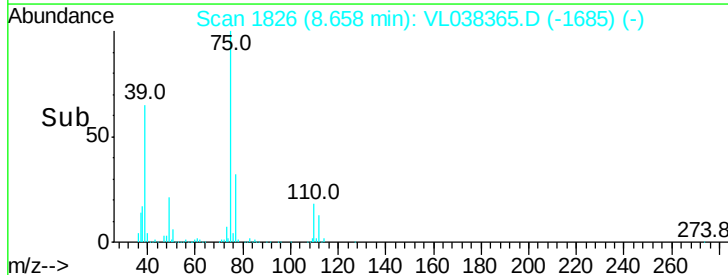
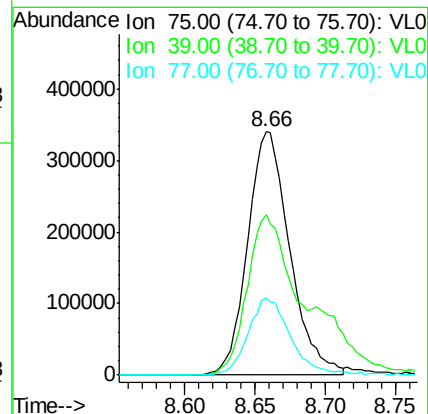
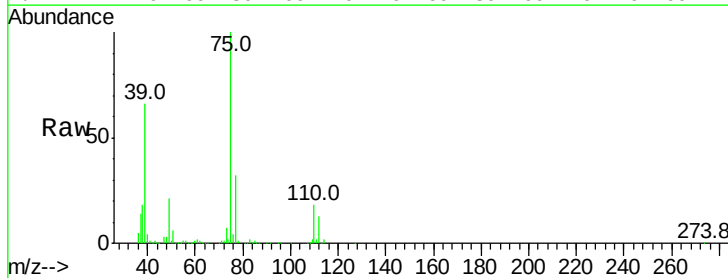
Tgt Ion: 75 Resp: 712022

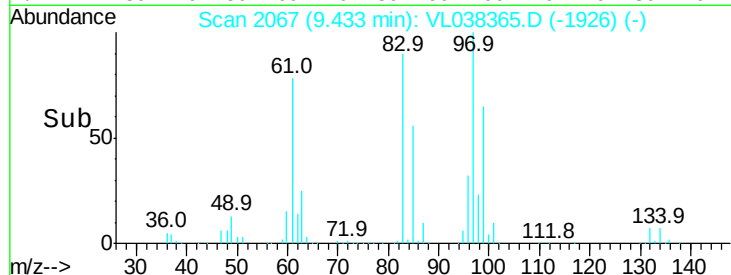
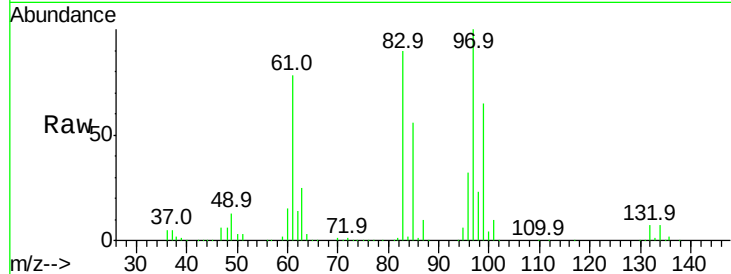
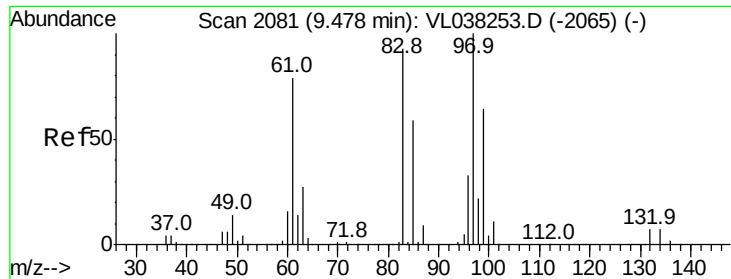
Ion Ratio Lower Upper

75 100

39 65.6 52.3 78.5

77 31.7 25.4 38.0



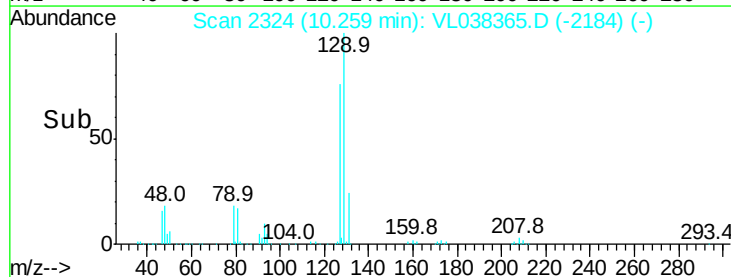
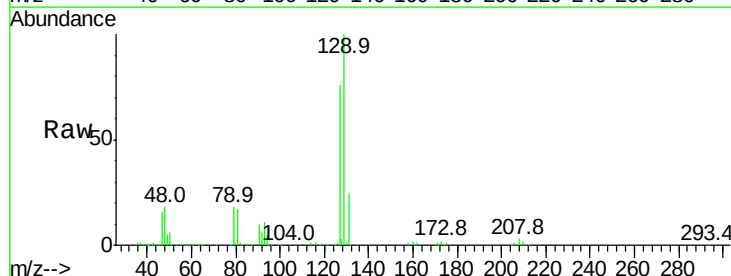
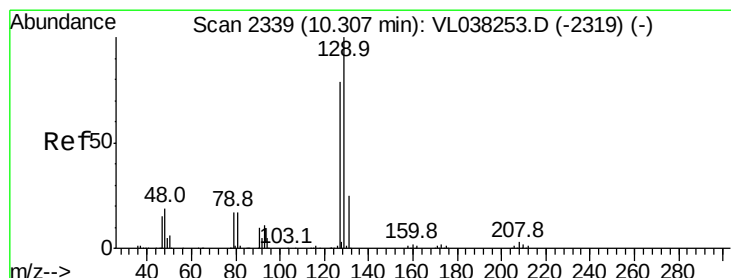
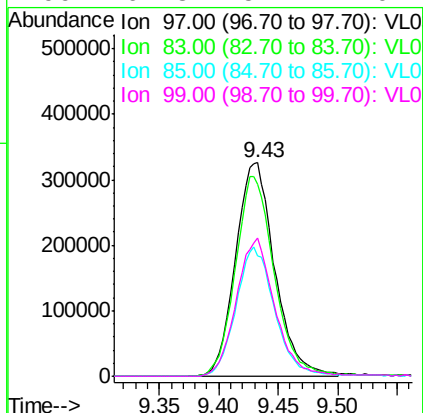


#47
1,1,2-Trichloroethane
Concen: 9.74 ppbv
RT: 9.43
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 16 Feb 2022 14:01 VL0216ABS01

Tgt Ion:
Ion Ratio
97 100
83 90.
85 56.
99 64.8 51.1 76.7

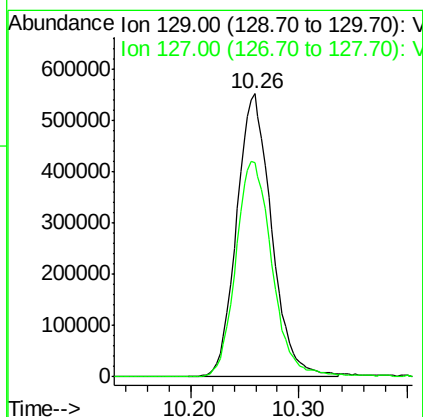
Manual Integrations
APPROVED

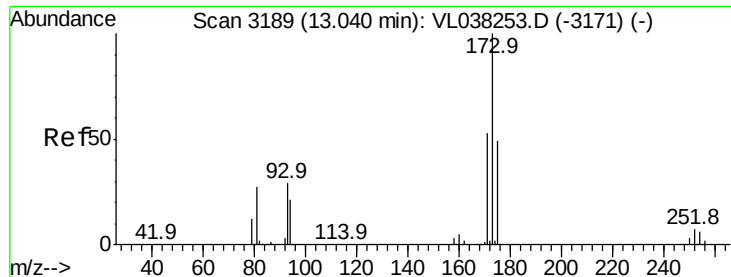
Reviewed By :Semsettin Yesilyurt 02/17/2022
Supervised By :Mahesh Dadoda 02/21/2022



#48
Dibromochloromethane
Concen: 9.72 ppbv
RT: 10.26 min Scan# 2324
Delta R.T. -0.05 min
Lab File: VL038365.D
Acq: 16 Feb 2022 14:01

Tgt Ion:129 Resp: 1248641
Ion Ratio Lower Upper
129 100
127 79.0 39.1 117.3





#49

Bromoform

Concen: 9.06 ppbv

RT: 12.99

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 16 Feb 2022 14:01

Tgt Ion:1

Ion Ratio

173 100

175 51.

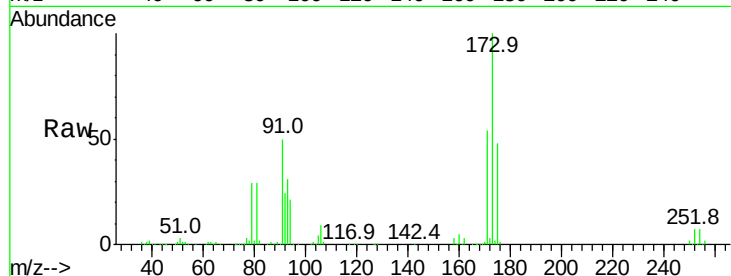
171 54.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 02/17/2022

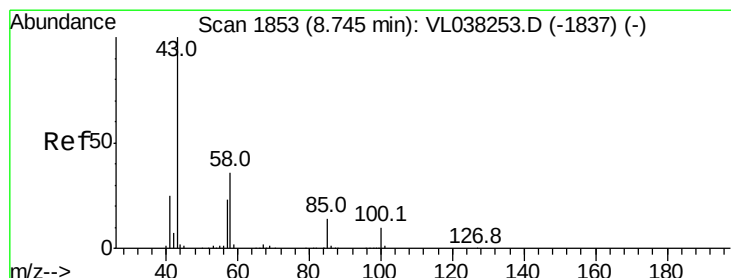
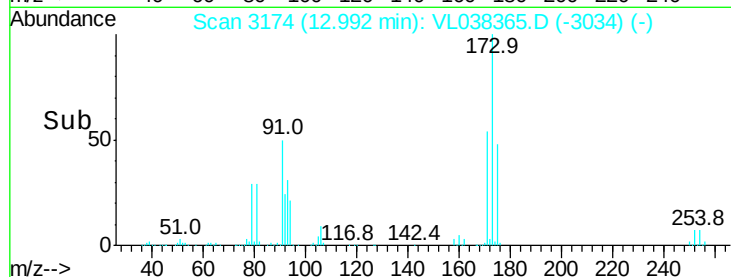
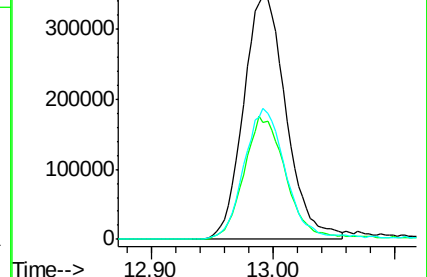
Supervised By :Mahesh Dadoda 02/21/2022



Abundance Ion 172.90 (172.60 to 173.60): V

Ion 174.90 (174.60 to 175.60): V

Ion 170.90 (170.60 to 171.60): V



#50

4-Methyl-2-Pentanone

Concen: 10.04 ppbv

RT: 8.70 min Scan# 1838

Delta R.T. -0.05 min

Lab File: VL038365.D

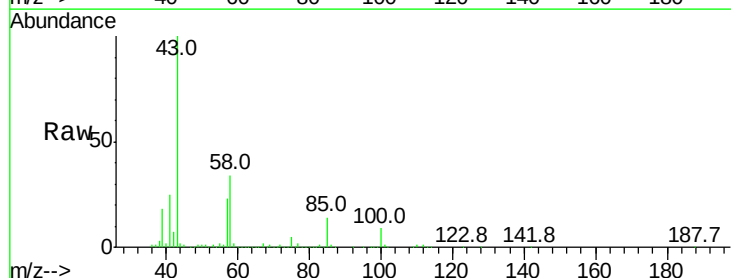
Acq: 16 Feb 2022 14:01

Tgt Ion: 43 Resp: 1269301

Ion Ratio Lower Upper

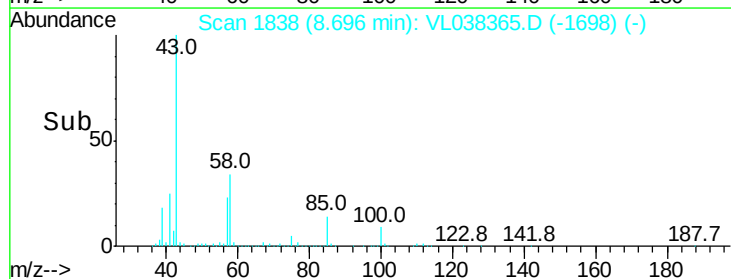
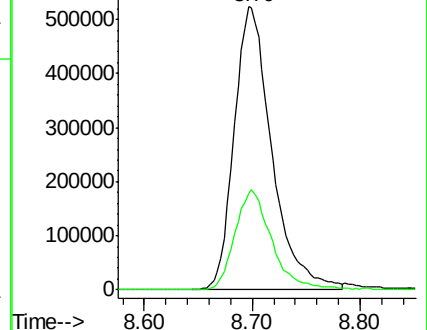
43 100

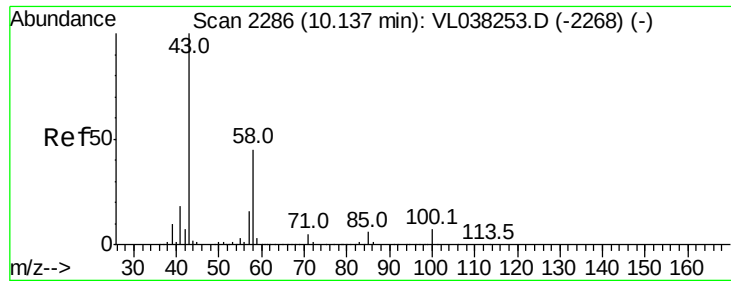
58 35.3 28.2 42.4



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0





#51

2-Hexanone

Concen: 9.50 ppbv

RT: 10.09

Instrument: MSVOA_1

Delta R.T.:

Lab File: ClientSampleId: VL0216ABS01

Acq: 16 Feb 2022 14:01

Tgt Ion:

Ion Ratio

43 100

58 48.

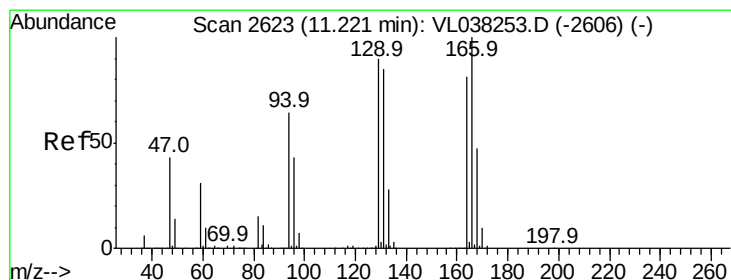
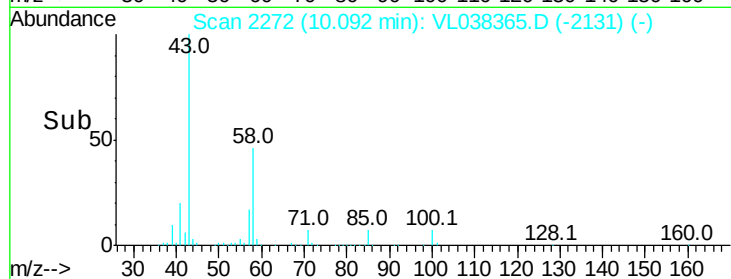
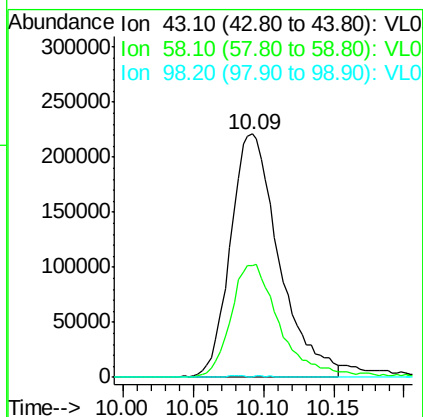
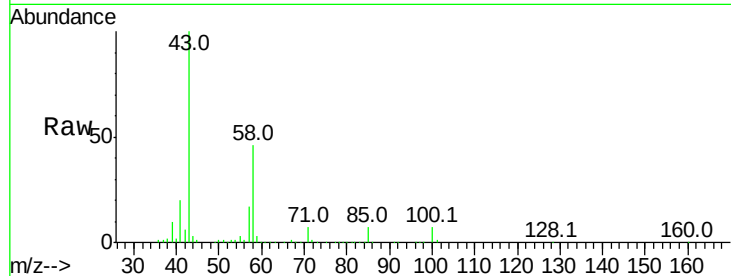
98 0.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 02/17/2022

Supervised By :Mahesh Dadoda 02/21/2022



#52

Tetrachloroethene

Concen: 8.90 ppbv

RT: 11.18 min Scan# 2609

Delta R.T. -0.05 min

Lab File: VL038365.D

Acq: 16 Feb 2022 14:01

Tgt Ion:164 Resp: 587584

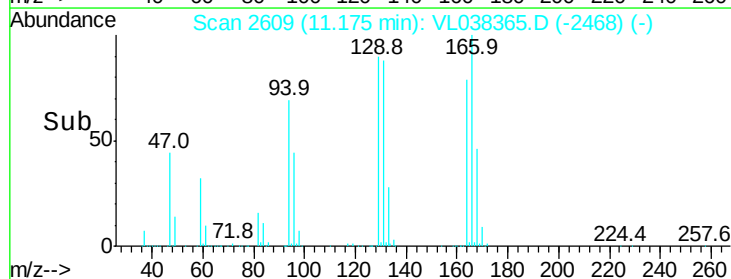
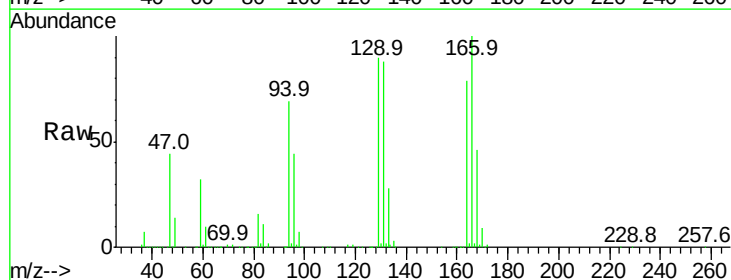
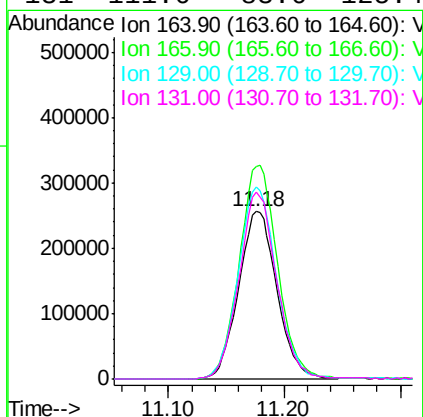
Ion Ratio Lower Upper

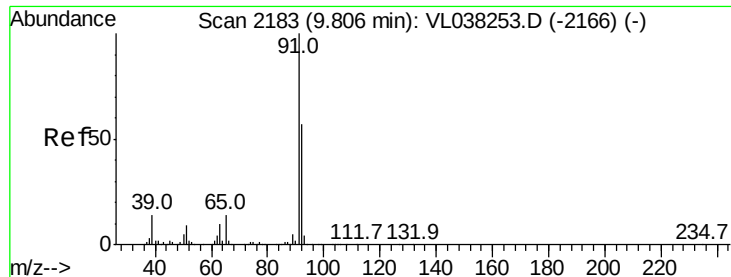
164 100

166 127.0 98.8 148.2

129 114.5 89.2 133.8

131 111.6 83.6 125.4





#53

Toluene

Concen: 9.95 ppbv

RT: 9.76 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 16 Feb 2022 14:01 VL0216ABS01

Tgt Ion:

Ion Ratio

91 100

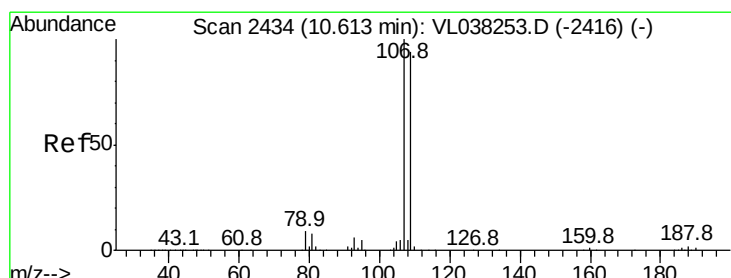
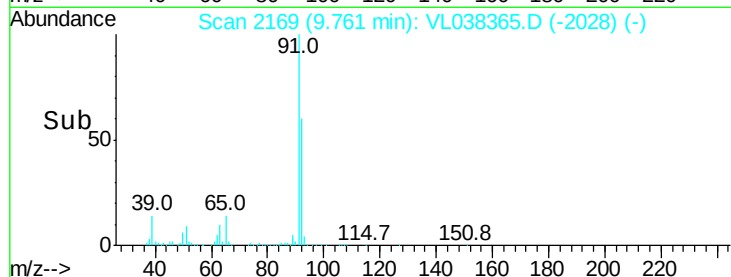
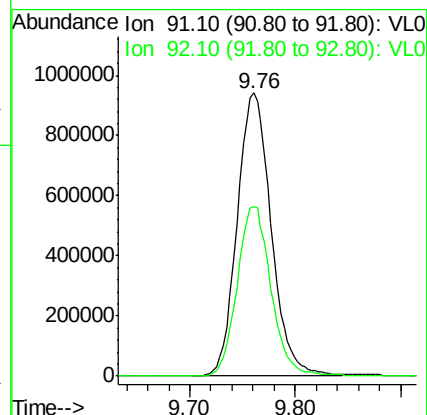
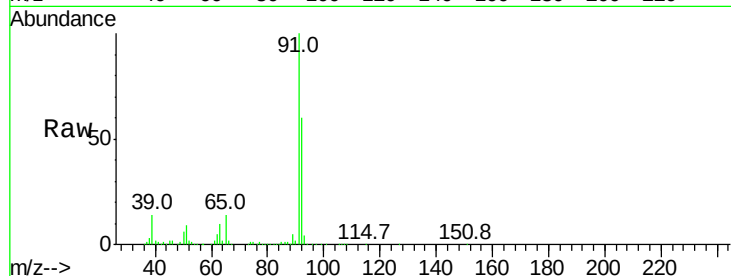
92 59.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 02/17/2022

Supervised By :Mahesh Dadoda 02/21/2022



#54

1,2-Dibromoethane

Concen: 9.73 ppbv

RT: 10.56 min Scan# 2419

Delta R.T. -0.05 min

Lab File: VL038365.D

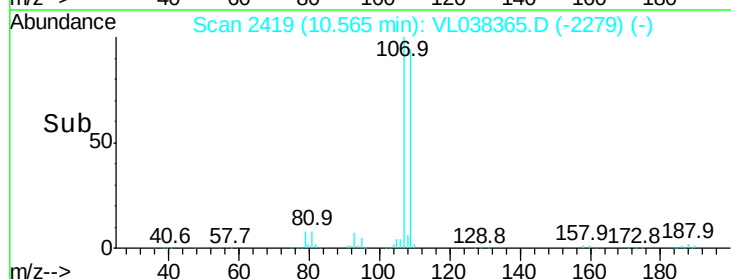
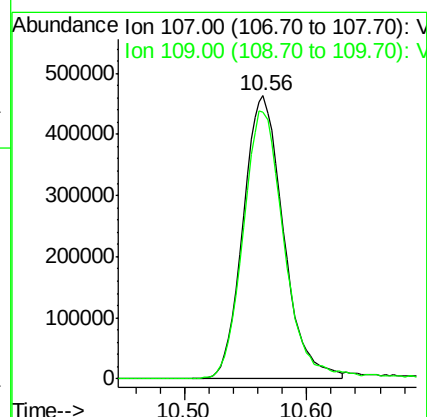
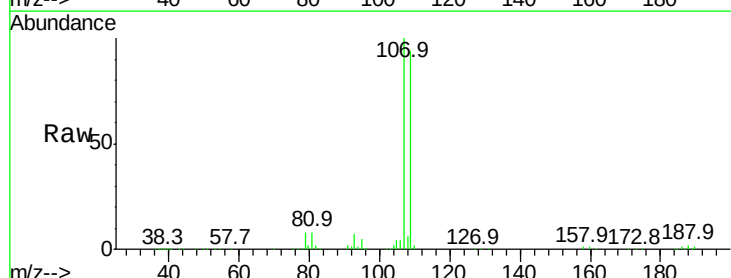
Acq: 16 Feb 2022 14:01

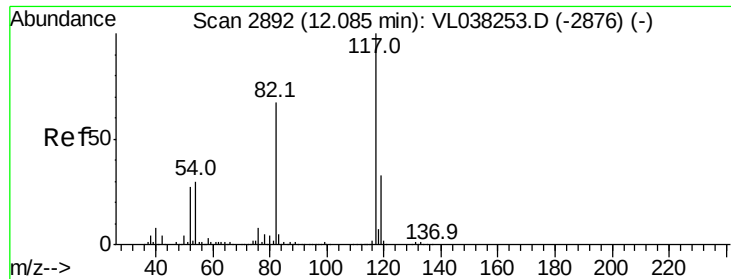
Tgt Ion:107 Resp: 1055699

Ion Ratio Lower Upper

107 100

109 94.3 75.4 113.0



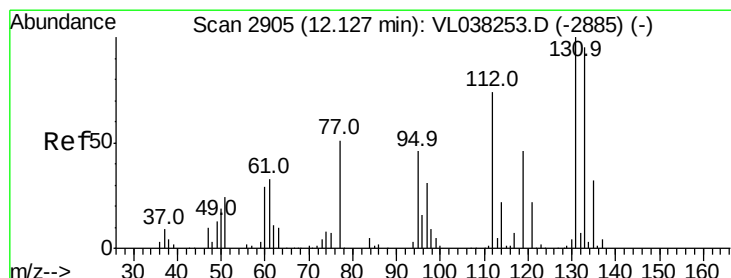
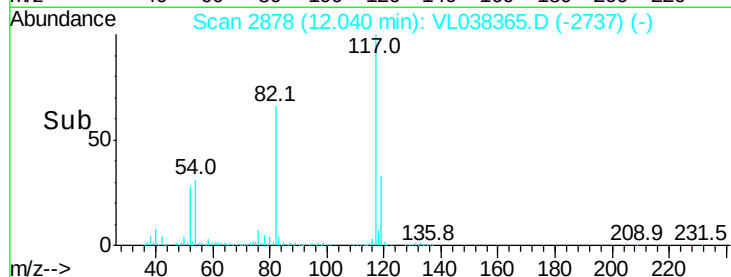
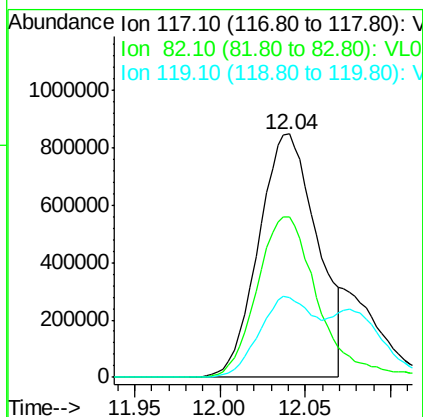
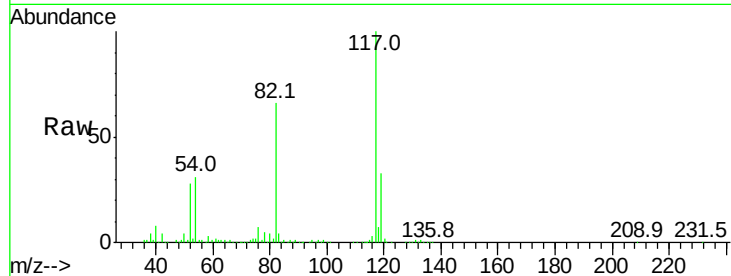


#55
Chlorobenzene-d5
Concen: 10.00 ppbv m
RT: 12.04 min
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId : VL0216ABS01
Acq: 16 Feb 2022 14:01

Tgt Ion: 117.10
Ion Ratio: 100
117 100
82 71.1
119 33.3

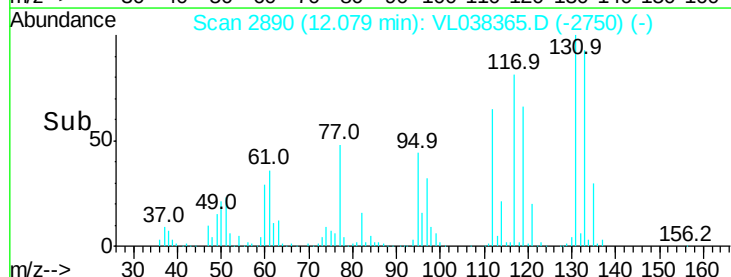
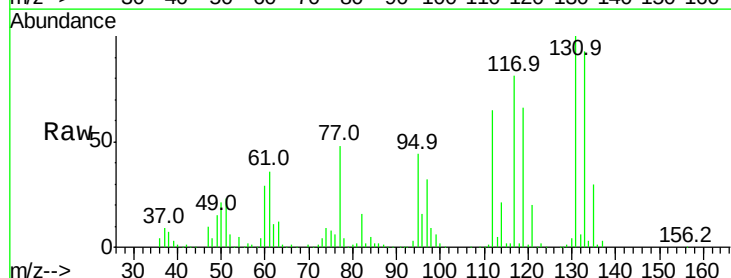
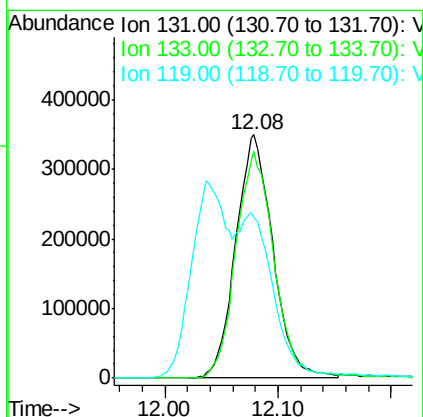
Manual Integrations
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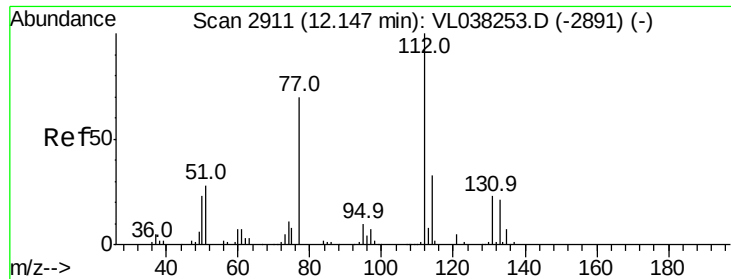
Reviewed By : Semsettin Yesilyurt 02/17/2022
Supervised By : Mahesh Dadoda 02/21/2022



#56
1,1,1,2-Tetrachloroethane
Concen: 9.05 ppbv
RT: 12.08 min Scan# 2890
Delta R.T.: -0.05 min
Lab File: VL038365.D
Acq: 16 Feb 2022 14:01

Tgt Ion: 131.00
Ion Ratio: 100
131 100
133 96.6
119 147.7





#57

Chlorobenzene

Concen: 8.78 ppbv

RT: 12.10

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 16 Feb 2022 14:01

Tgt Ion:1

Ion Rati

112 100

77 68.

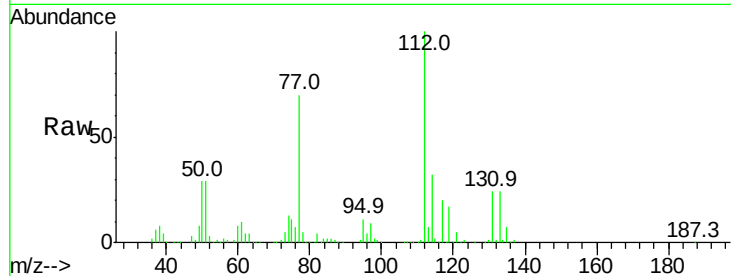
114 31.

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 02/17/2022

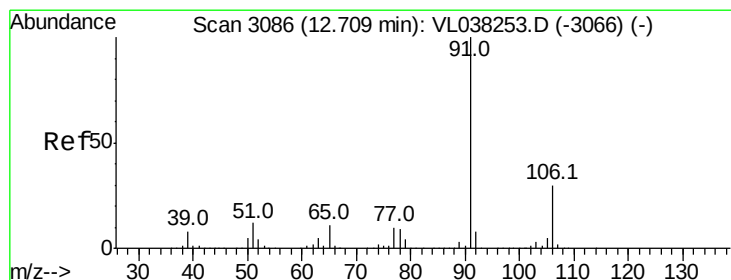
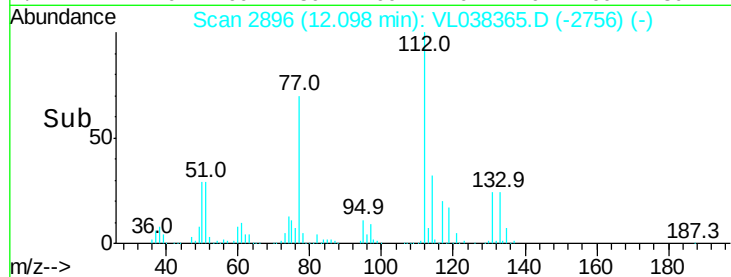
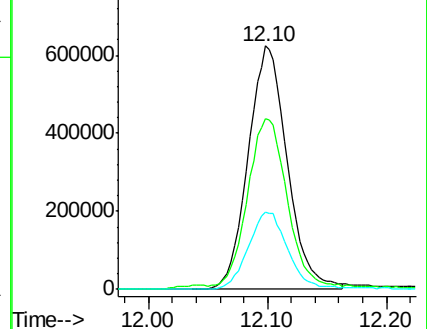
Supervised By :Mahesh Dadoda 02/21/2022



Abundance Ion 112.10 (111.80 to 112.80): V

Ion 77.10 (76.80 to 77.80): VL0

Ion 114.10 (113.80 to 114.80): V



#58

Ethyl Benzene

Concen: 9.16 ppbv

RT: 12.66 min Scan# 3072

Delta R.T. -0.05 min

Lab File: VL038365.D

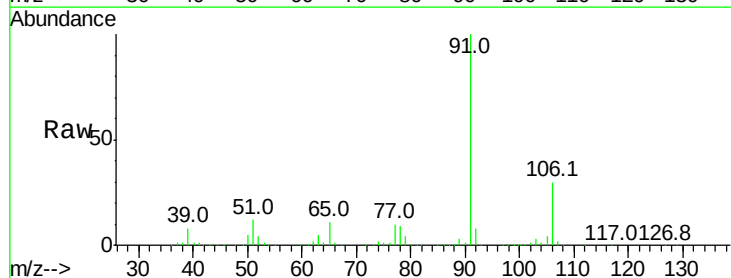
Acq: 16 Feb 2022 14:01

Tgt Ion: 91 Resp: 2716767

Ion Ratio Lower Upper

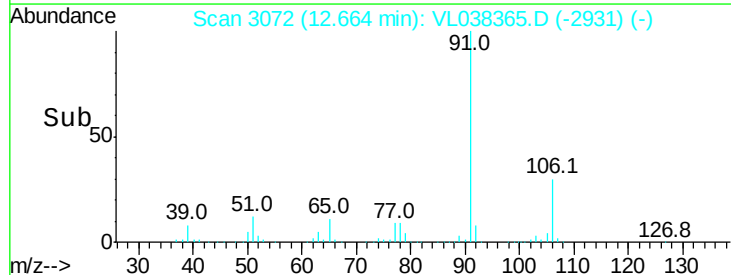
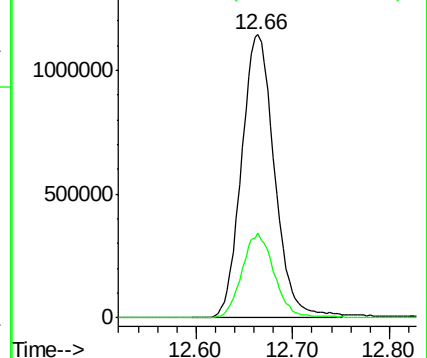
91 100

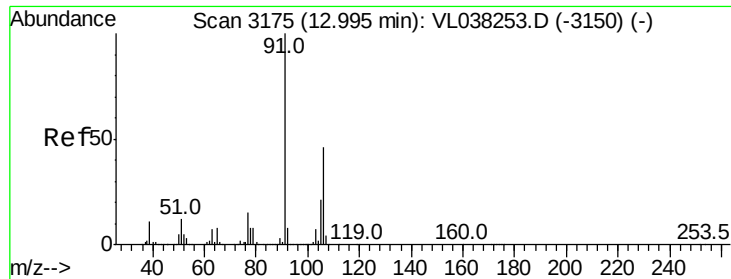
106 30.2 24.1 36.1



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



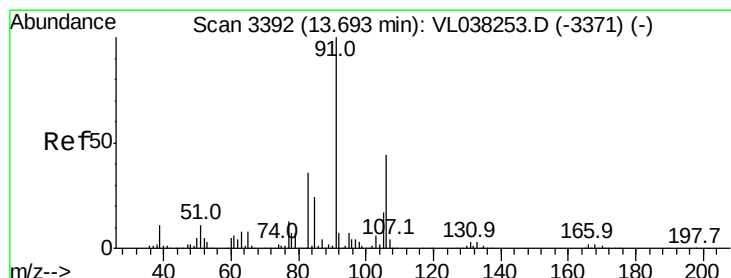
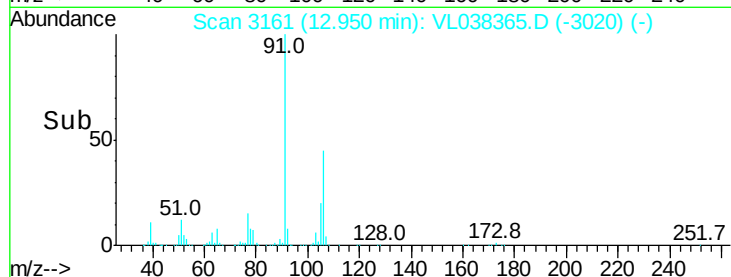
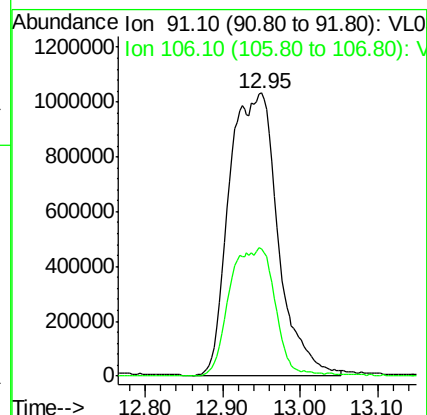
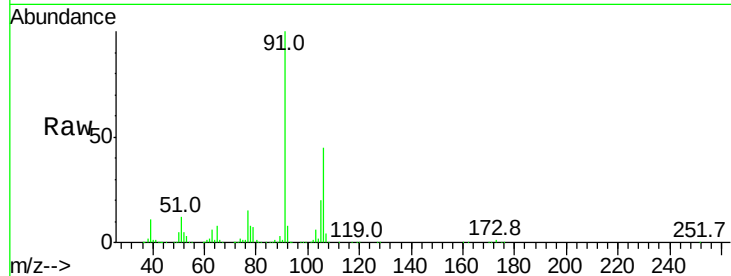


#59
m/p-Xylene
Concen: 17.83 ppbv m
RT: 12.95
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
VL0216ABS01
Acq: 16 Feb 2022 14:01

Tgt Ion:
Ion Ratio
91 100
106 42.

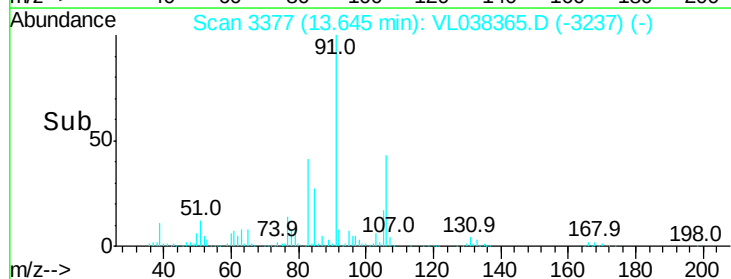
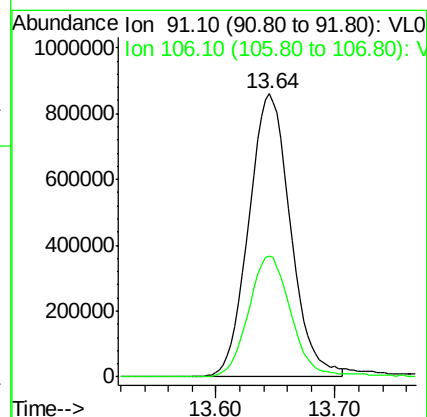
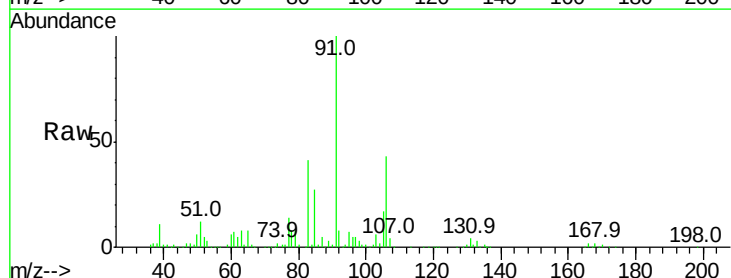
Manual Integrations
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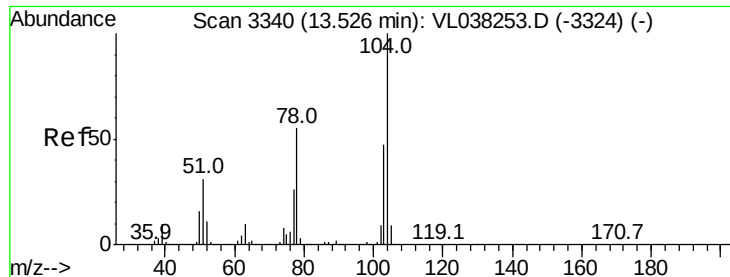
Reviewed By :Semsettin Yesilyurt 02/17/2022
Supervised By :Mahesh Dadoda 02/21/2022



#60
o-Xylene
Concen: 8.87 ppbv
RT: 13.64 min Scan# 3377
Delta R.T. -0.05 min
Lab File: VL038365.D
Acq: 16 Feb 2022 14:01

Tgt Ion: 91 Resp: 2086640
Ion Ratio Lower Upper
91 100
106 44.0 22.2 66.6



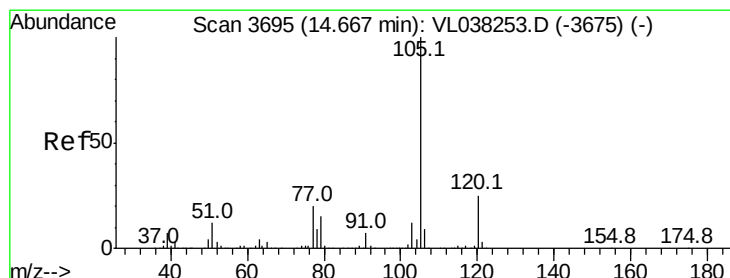
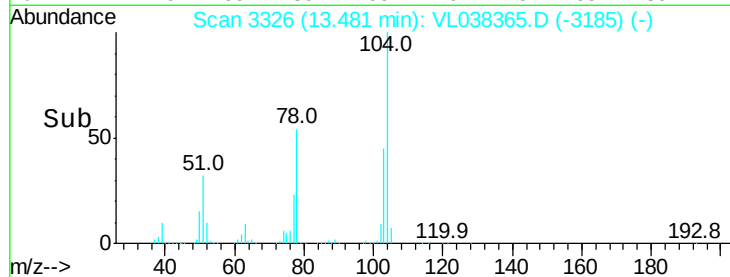
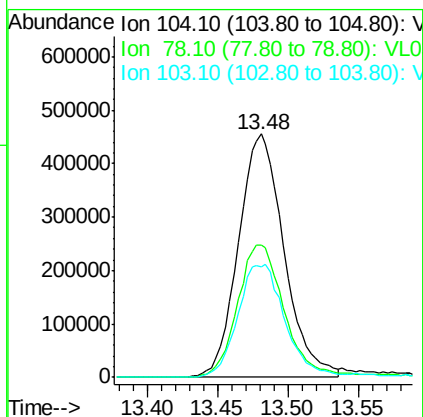
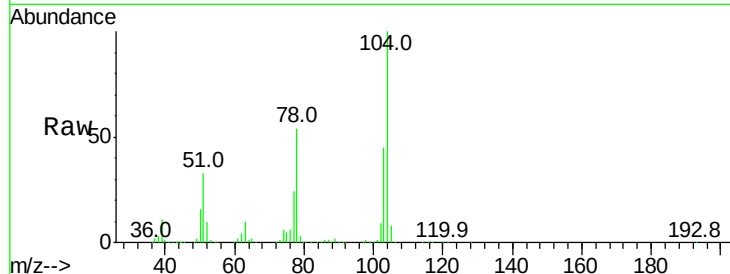


#61
 Styrene
 Concen: 9.36 ppbv
 RT: 13.48 min
 Delta R.T.: MSVOA_L
 Lab File: ClientSampleId : VL0216ABS01
 Acq: 16 Feb 2022 14:01

Tgt Ion: 104
 Ion Ratio: 100
 78 57.1
 103 49.1

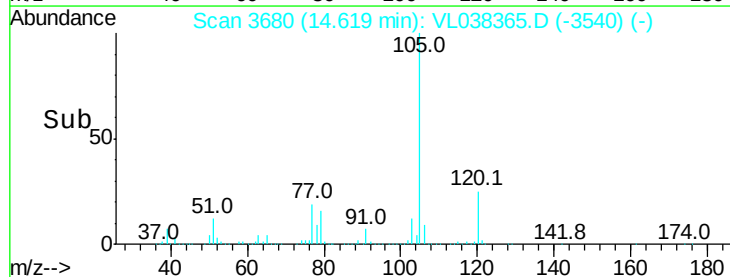
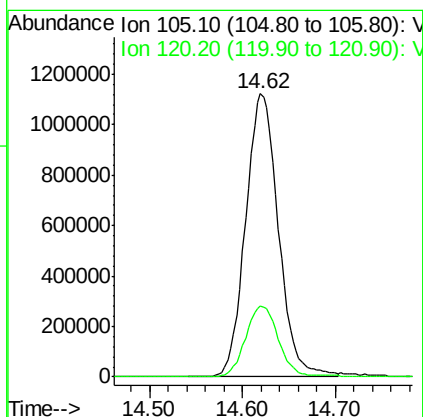
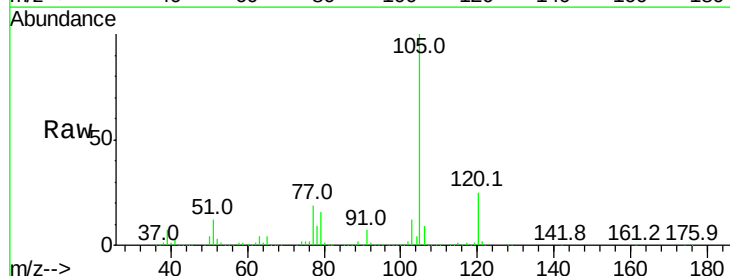
Manual Integrations
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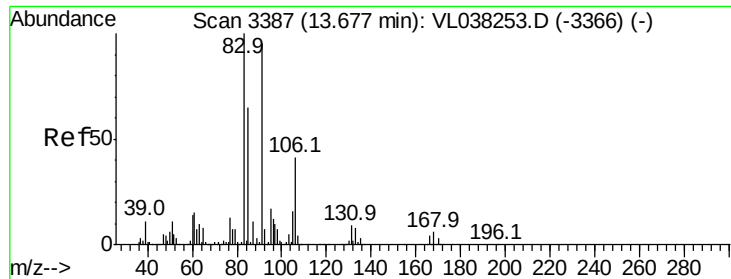
Reviewed By : Semsettin Yesilyurt 02/17/2022
 Supervised By : Mahesh Dadoda 02/21/2022



#62
 Isopropylbenzene
 Concen: 8.78 ppbv
 RT: 14.62 min Scan# 3680
 Delta R.T.: -0.05 min
 Lab File: VL038365.D
 Acq: 16 Feb 2022 14:01

Tgt Ion: 105 Resp: 2754772
 Ion Ratio Lower Upper
 105 100
 120 25.6 20.5 30.7





#63

1,1,2,2-Tetrachloroethane

Concen: 8.18 ppbv

RT: 13.63

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 16 Feb 2022 14:01

Tgt Ion:

Ion Ratio

83 100

131 9.

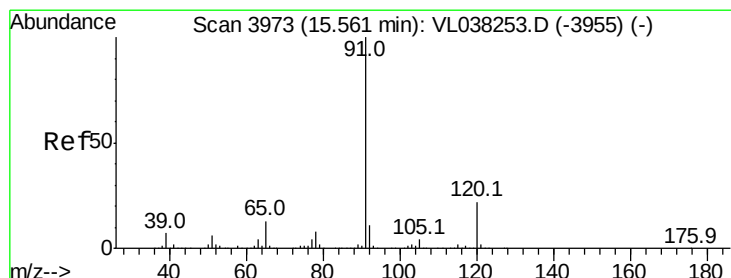
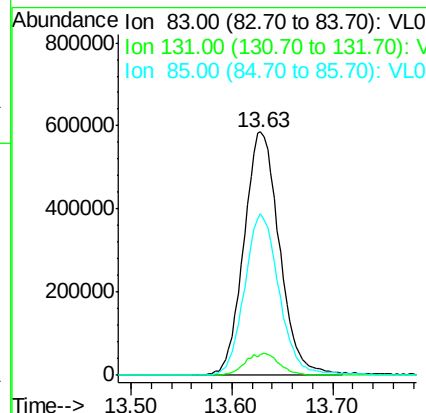
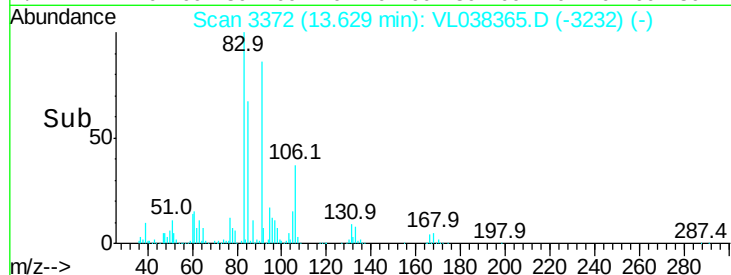
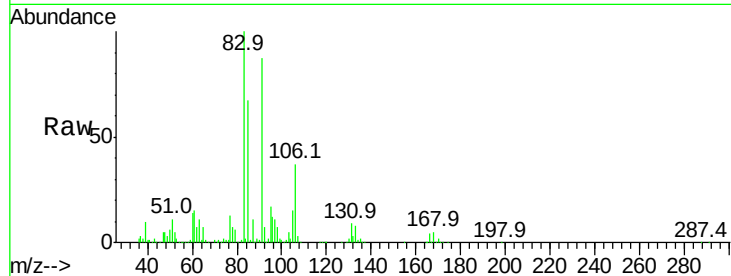
85 65.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 02/17/2022

Supervised By :Mahesh Dadoda 02/21/2022



#64

n-propylbenzene

Concen: 8.92 ppbv

RT: 15.51 min Scan# 3958

Delta R.T. -0.05 min

Lab File: VL038365.D

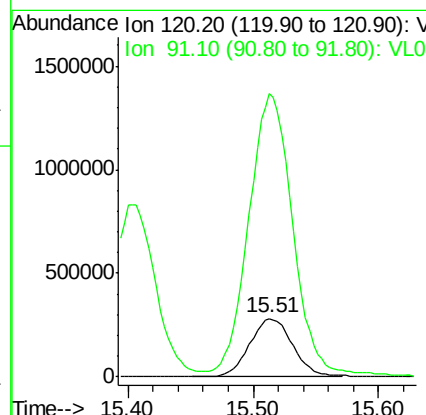
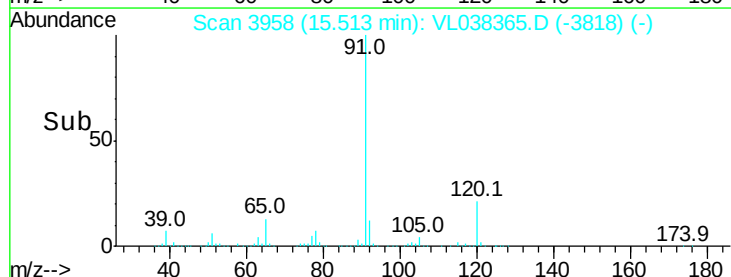
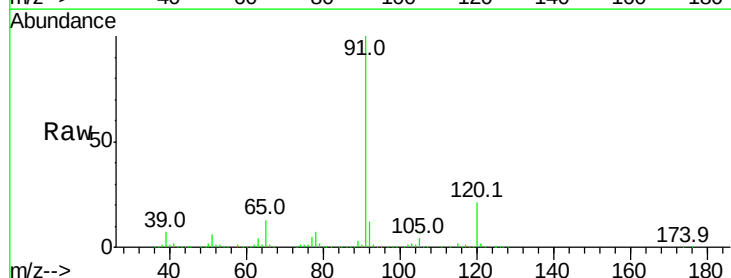
Acq: 16 Feb 2022 14:01

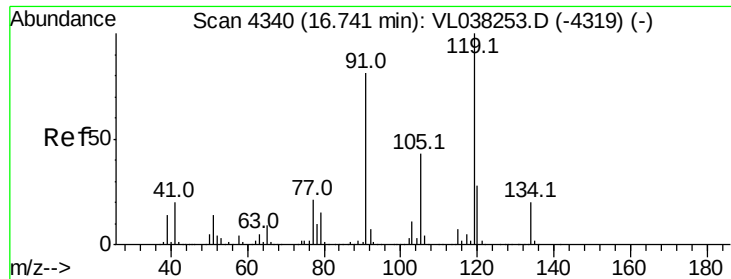
Tgt Ion:120 Resp: 672772

Ion Ratio Lower Upper

120 100

91 500.9 390.8 586.2





#65

tert-Butylbenzene

Concen: 8.71 ppbv

RT: 16.70

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 16 Feb 2022 14:01

Tgt Ion:1

Ion Rati

119 100

91 84.

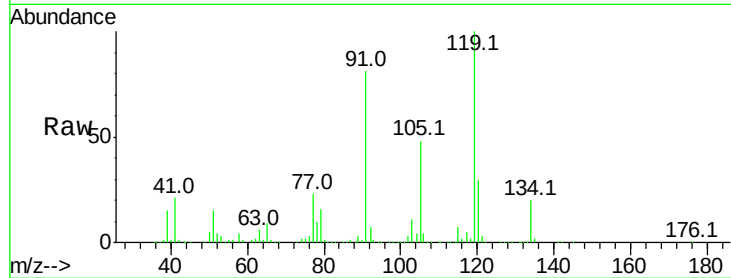
134 19.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 02/17/2022

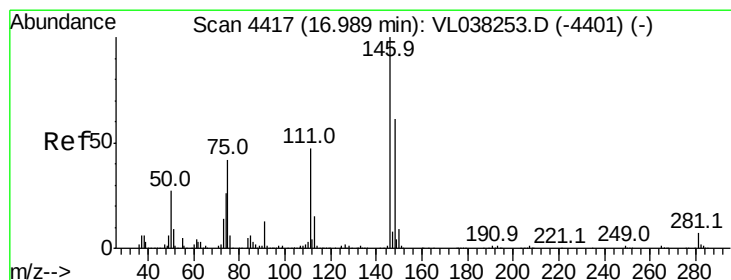
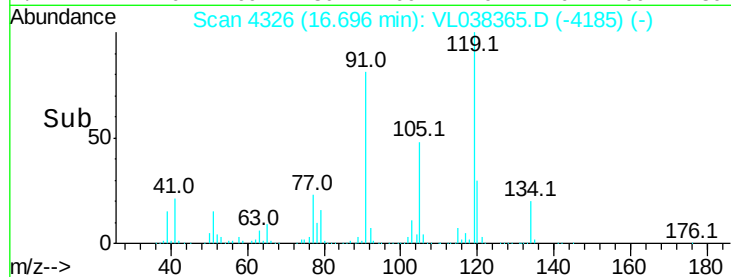
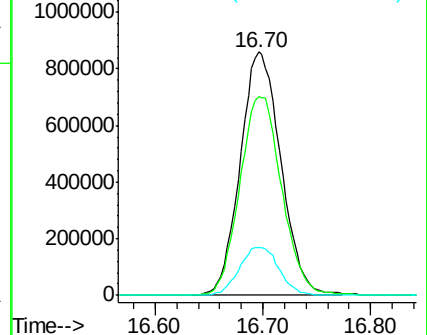
Supervised By :Mahesh Dadoda 02/21/2022



Abundance Ion 119.20 (118.90 to 119.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 134.20 (133.90 to 134.90): V



#66

Benzyl Chloride

Concen: 5.99 ppbv

RT: 16.94 min Scan# 4401

Delta R.T. -0.05 min

Lab File: VL038365.D

Acq: 16 Feb 2022 14:01

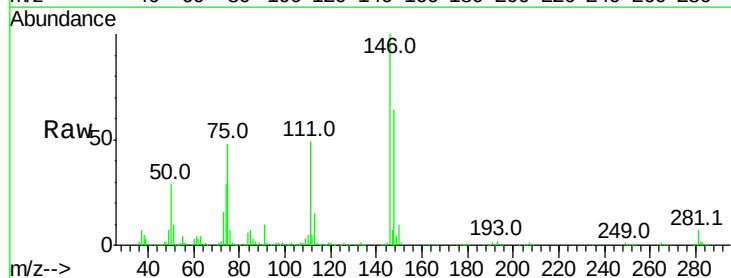
Tgt Ion: 91 Resp: 70253

Ion Ratio Lower Upper

91 100

126 17.8 12.6 18.8

128 6.3 4.3 6.5



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V

Ion 128.10 (127.80 to 128.80): V

