

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL020122\
 Data File : VL038319.D
 Acq On : 1 Feb 2022 13:06
 Operator : SY/AP
 Sample : VL0201ABS01
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 VL0201ABS01

Manual Integrations
 APPROVED

Reviewed By : Semsettin Yesilyurt 02/07/2022
 Supervised By : Mahesh Dadoda 02/07/2022

Quant Time: Feb 02 06:01:32 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	5.64	49	924323	10.00	ppbv	-0.04
33) 1,4-Difluorobenzene	7.14	114	2527164	10.00	ppbv	-0.04
55) Chlorobenzene-d5	12.04	117	2357586m	10.00	ppbv	-0.04

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.37	95	1931298	10.79	ppbv	-0.04
Spiked Amount	10.000	Range	65 - 135	Recovery	=	107.90%

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	3.03	85	1858884	9.447	ppbv	100
3) Chlorodifluoromethane	2.97	51	1571148	8.538	ppbv	99
4) Chloromethane	3.12	50	538100	8.500	ppbv	97
5) Vinyl Chloride	3.24	62	546258	8.645	ppbv	97
6) Bromomethane	3.46	94	318573	9.326	ppbv	98
7) Chloroethane	3.54	64	183580	8.602	ppbv	98
8) Dichlorotetrafluoroethane	3.17	85	1311178	8.612	ppbv	98
9) Propene	3.00	41	523589	8.741	ppbv	99
10) Heptane	8.09	43	1350889	8.765	ppbv	99
11) Trichlorofluoromethane	3.93	101	1373334	8.959	ppbv	98
12) 1,1,2-Trichlorotrifluoroet	4.46	101	1030593	8.894	ppbv	98
13) Ethanol	3.58	45	62741m	9.757	ppbv	
14) Bromoethene	3.72	108	413303	9.128	ppbv	100
15) Acetone	3.83	43	672806	8.257	ppbv	100
16) 1,3-Butadiene	3.31	39	512373	8.763	ppbv	100
17) tert-Butyl alcohol	4.26	59	798557	8.930	ppbv	97
18) 1,1-Dichloroethene	4.26	96	461017	9.149	ppbv	96
19) Isopropyl Alcohol	3.94	45	445276	8.736	ppbv	100
20) Methylene Chloride	4.32	84	368846	7.783	ppbv	98
21) Allyl Chloride	4.39	41	647980	8.988	ppbv	95
22) trans-1,2-Dichloroethene	4.86	96	490990	9.430	ppbv	97
23) Vinyl Acetate	5.04	43	1080853	9.123	ppbv	99
24) 1,1-Dichloroethane	4.98	63	964421	9.138	ppbv	99
25) Ethyl Acetate	5.65	43	2097109	9.192	ppbv	100
26) Hexane	5.65	57	965031	9.095	ppbv	99
27) Carbon Disulfide	4.53	76	1148954	9.255	ppbv	99
28) Methyl tert-Butyl Ether	5.01	73	1012217	9.196	ppbv	99
29) Chloroform	5.72	83	1560685	9.011	ppbv	99
30) Cyclohexane	7.09	84	827959	8.962	ppbv	99
31) cis-1,2-Dichloroethene	5.52	61	882950	9.539	ppbv	98
32) 1,1,1-Trichloroethane	6.48	97	1574462	9.101	ppbv	99
34) 2-Butanone	5.21	43	735788	8.903	ppbv	99
35) Carbon Tetrachloride	6.98	117	1632438	9.202	ppbv	98
36) Benzene	6.85	78	2059384	9.213	ppbv	99
37) 1,2-Dichloroethane	6.27	62	1201967	9.388	ppbv	99
38) Trichloroethene	7.80	130	737919	8.862	ppbv	96
39) 1,2-Dichloropropane	7.58	63	816885	9.013	ppbv	100
40) 1,4-Dioxane	7.79	88	191719	8.789	ppbv #	1
41) Tetrahydrofuran	6.02	42	522838	9.411	ppbv	99
42) Bromodichloromethane	7.75	83	1746855	9.196	ppbv	99
43) Methyl Methacrylate	7.98	69	763445	9.656	ppbv	98

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Instrument :
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 Supervised By : Mahesh Dadoda 02/07/2022

Quant Time: Feb 02 06:01:32 2022

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

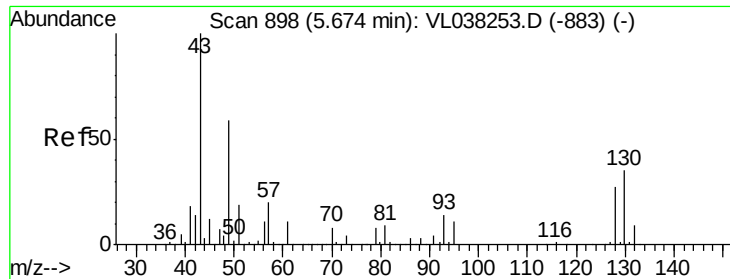
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument:

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	3463686	8.792	ppbv	100
45) t-1,3-Dichloropropene	9.24	75	703346	10.948	ppbv	97
46) cis-1,3-Dichloropropene	8.66	75	864637	10.088	ppbv	97
47) 1,1,2-Trichloroethane	9.43	97	829131	9.311	ppbv	100
48) Dibromochloromethane	10.26	129	1429070	9.532	ppbv	99
49) Bromoform	13.00	173	1101709	10.193	ppbv	99
50) 4-Methyl-2-Pentanone	8.70	43	1391912	9.441	ppbv	100
51) 2-Hexanone	10.09	43	623232	9.598	ppbv #	98
52) Tetrachloroethene	11.18	164	685091	8.892	ppbv	97
53) Toluene	9.76	91	2326997	9.405	ppbv	98
54) 1,2-Dibromoethane	10.57	107	1226718	9.690	ppbv	96
56) 1,1,1,2-Tetrachloroethane	12.08	131	918727	8.903	ppbv #	59
57) Chlorobenzene	12.10	112	1696439	8.992	ppbv	99
58) Ethyl Benzene	12.67	91	3125551	9.021	ppbv	100
59) m/p-Xylene	12.95	91	5253235m	17.771	ppbv	
60) o-Xylene	13.65	91	2487903	9.049	ppbv	99
61) Styrene	13.48	104	1304272	10.165	ppbv	100
62) Isopropylbenzene	14.63	105	3315345	9.045	ppbv	100
63) 1,1,2,2-Tetrachloroethane	13.63	83	1791202	8.805	ppbv	100
64) n-propylbenzene	15.52	120	845053	9.584	ppbv	98
65) tert-Butylbenzene	16.70	119	2815310	9.326	ppbv	100
66) Benzyl Chloride	16.94	91	166228	12.122	ppbv	99
67) sec-Butylbenzene	17.25	105	3953555	9.414	ppbv	100
69) p-Isopropyltoluene	17.61	119	3155247	9.818	ppbv	99
70) n-Butylbenzene	18.50	91	3167478	10.063	ppbv	100
71) 2-Chlorotoluene	15.41	91	2581777	9.510	ppbv	98
72) 4-Ethyltoluene	15.79	105	2834187	9.857	ppbv	99
73) 1,3,5-Trimethylbenzene	15.95	105	2522313	9.755	ppbv	99
74) 1,2,4-Trimethylbenzene	16.72	105	2573164	9.446	ppbv	99
75) 1,3-Dichlorobenzene	16.95	146	1455027	9.954	ppbv	100
76) 1,4-Dichlorobenzene	17.09	146	1384805	9.785	ppbv	97
77) 1,2-Dichlorobenzene	17.77	146	1322012	9.737	ppbv	99
78) Hexachloro-1,3-Butadiene	23.33	225	713218	7.556	ppbv	100
79) Naphthalene	22.14	128	1231845	9.672	ppbv	98
80) Naphthalene,2-methyl-	24.94	142	231389	16.706	ppbv	99
81) 1,2,4-Trichlorobenzene	21.87	180	663895	8.863	ppbv	99

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

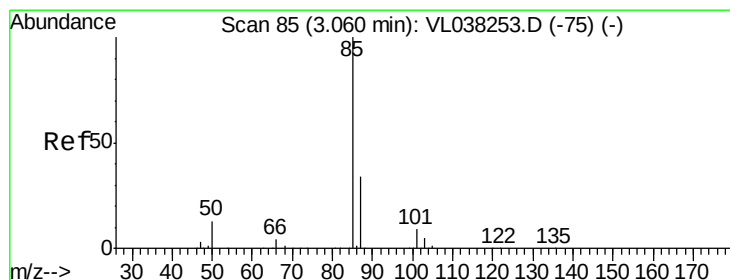
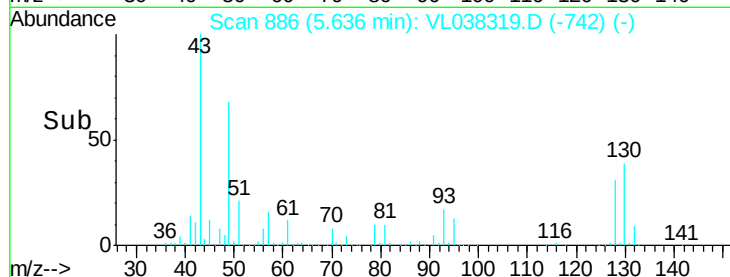
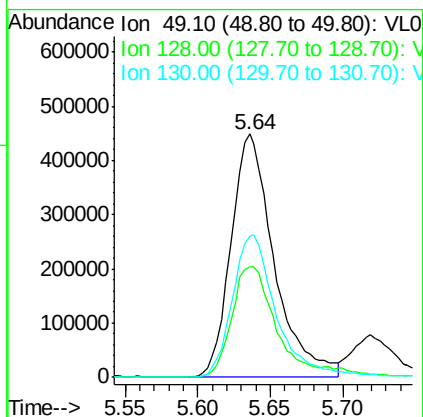
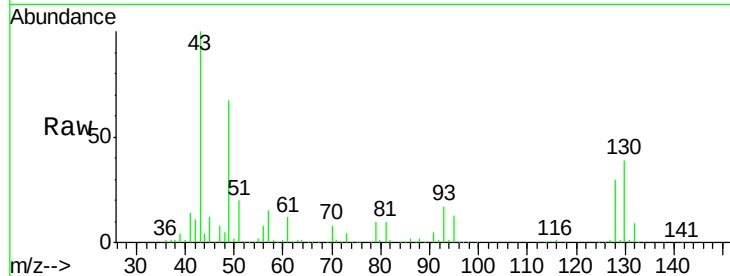


#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.64
 Instrument: MSVOA_L
 Delta R.T.:
 Lab File: ClientSampleId : VL0201ABS01
 Acq: 1 Feb 2022 13:00

Tgt Ion:
 Ion Ratio
 49 100
 128 49.
 130 61.

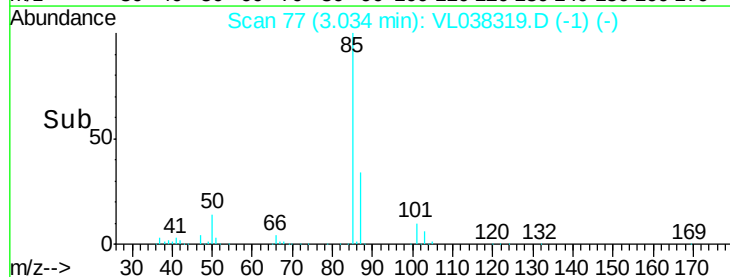
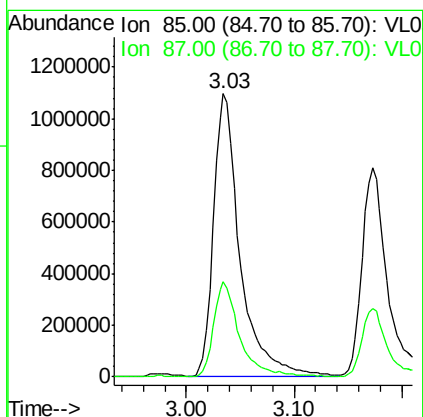
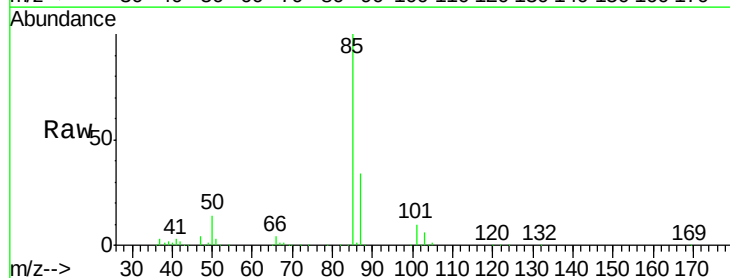
Manual Integrations
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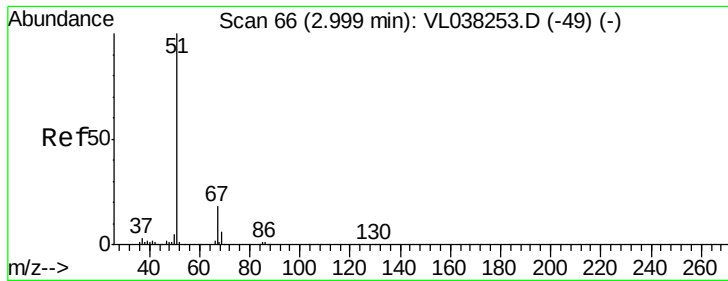
Reviewed By :Semsettin Yesilyurt 02/07/2022
 Supervised By :Mahesh Dadoda 02/07/2022



#2
 Dichlorodifluoromethane
 Concen: 9.447 ppbv
 RT: 3.03 min Scan# 77
 Delta R.T. -0.03 min
 Lab File: VL038319.D
 Acq: 1 Feb 2022 13:06

Tgt Ion: 85 Resp: 1858884
 Ion Ratio Lower Upper
 85 100
 87 33.6 27.0 40.6



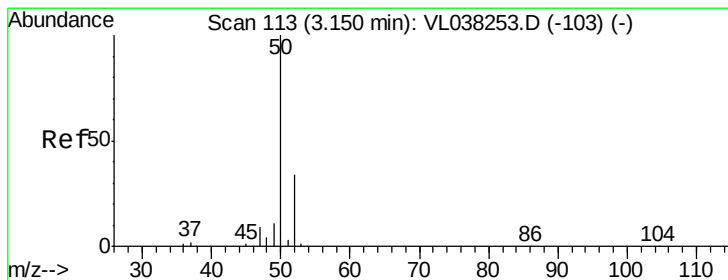
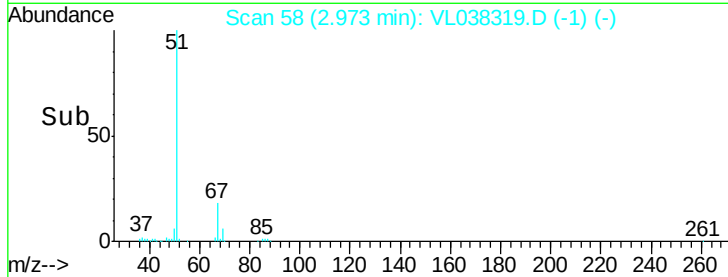
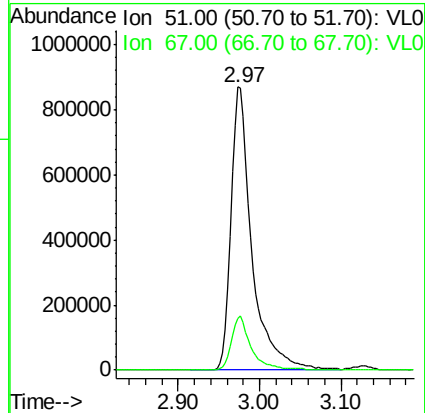
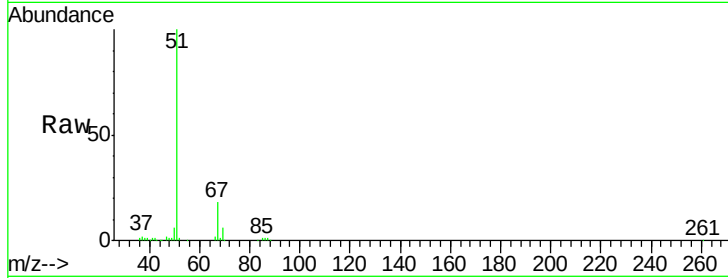


#3
Chlorodifluoromethane
Concen: 8.538 ppbv
RT: 2.97 min
Delta R.T. MSVOA_L
Lab File: ClientSampleId : VL0201ABS01
Acq: 1 Feb 2022 13:00

Tgt Ion:
Ion Ratio
51 100
67 18.

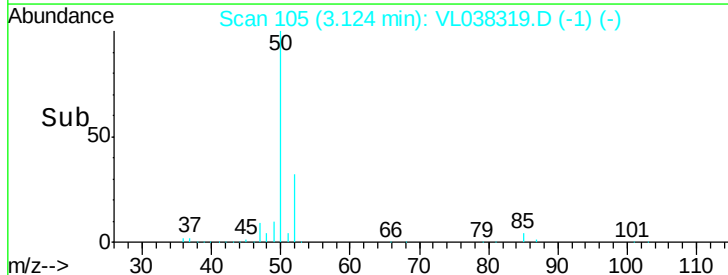
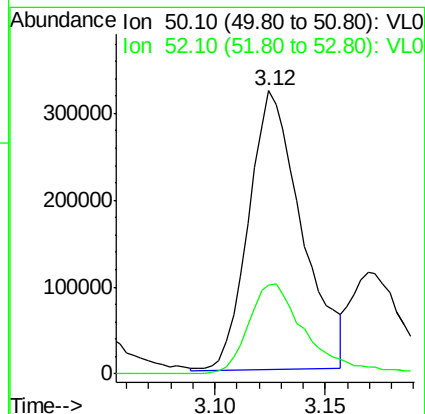
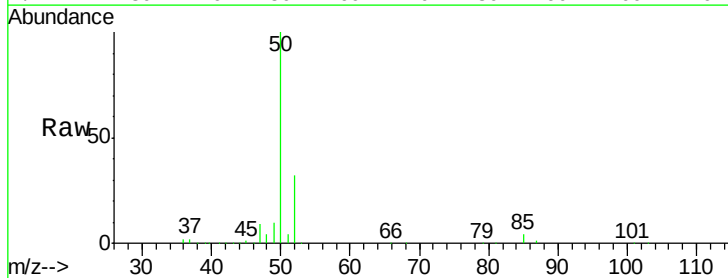
Manual Integrations
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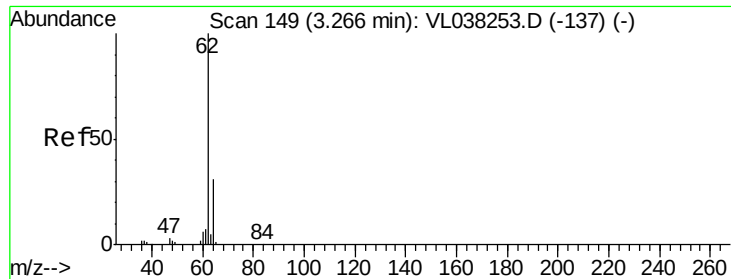
Reviewed By :Semsettin Yesilyurt 02/07/2022
Supervised By :Mahesh Dadoda 02/07/2022



#4
Chloromethane
Concen: 8.500 ppbv
RT: 3.12 min Scan# 105
Delta R.T. -0.03 min
Lab File: VL038319.D
Acq: 1 Feb 2022 13:06

Tgt Ion: 50 Resp: 538100
Ion Ratio Lower Upper
50 100
52 32.1 27.1 40.7





#5

Vinyl Chloride

Concen: 8.645 ppbv

RT: 3.24 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: VL0201ABS01

Acq: 1 Feb 2022 13:00

Tgt Ion:

Ion Ratio

62 100

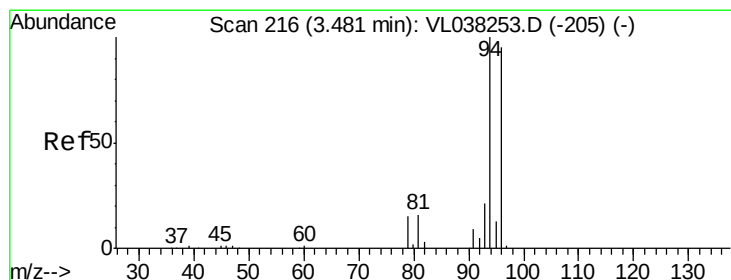
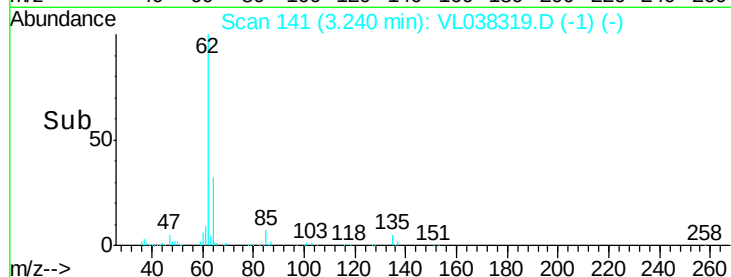
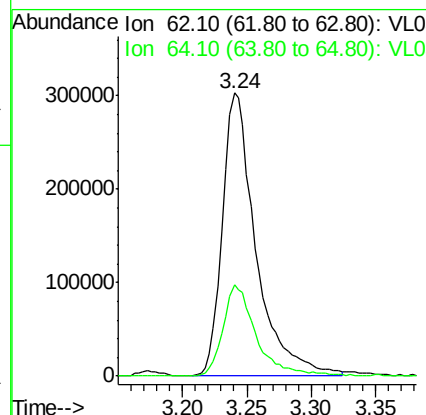
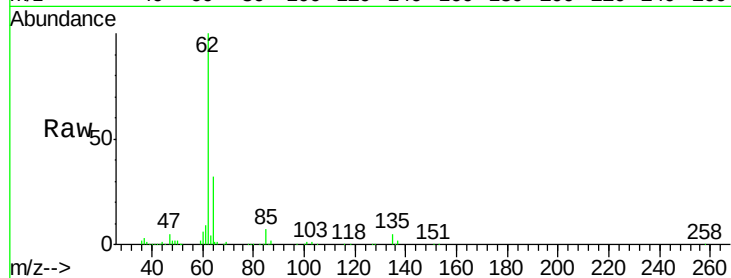
64 32.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 02/07/2022

Supervised By :Mahesh Dadoda 02/07/2022



#6

Bromomethane

Concen: 9.326 ppbv

RT: 3.46 min Scan# 208

Delta R.T. -0.03 min

Lab File: VL038319.D

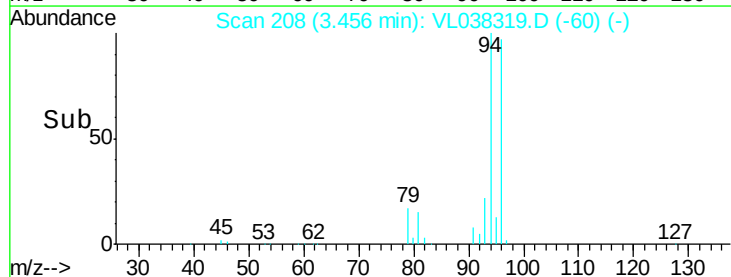
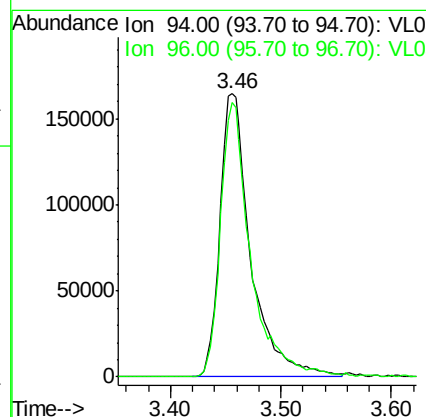
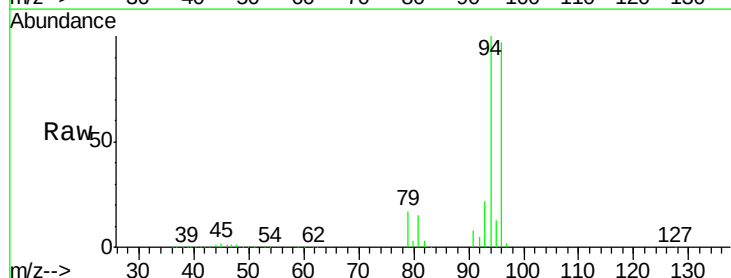
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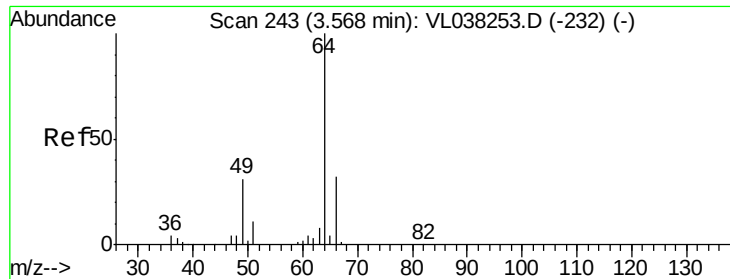
Tgt Ion: 94 Resp: 318573

Ion Ratio Lower Upper

94 100

96 96.8 76.0 114.0





#7

Chloroethane

Concen: 8.602 ppbv

RT: 3.54 Instrument: MSVOA_1

Delta R.T. ClientSampleId:

Lab File: VL0201ABS01

Acq: 1 Feb 2022 13:00

Tgt Ion:

Ion Ratio

64 100

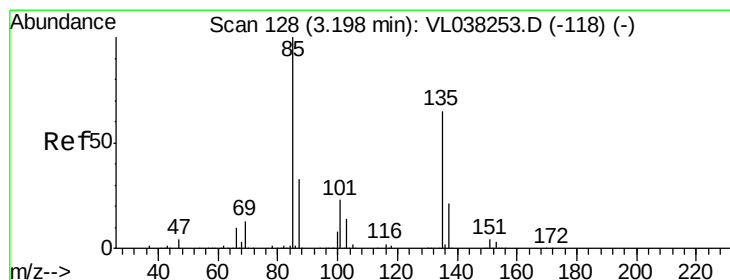
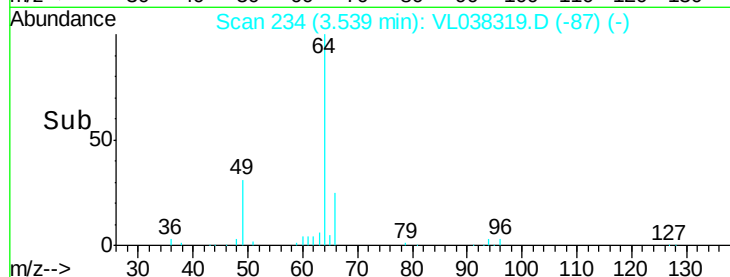
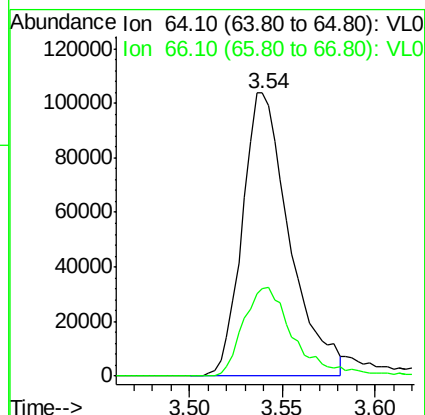
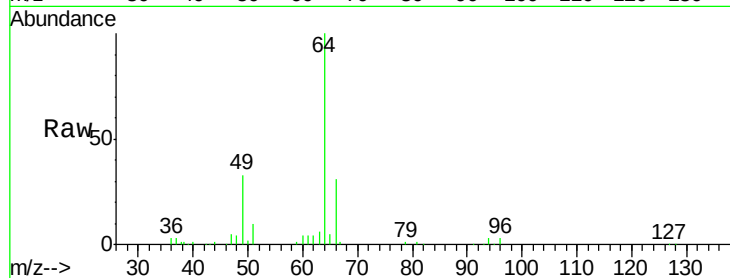
66 31.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 02/07/2022

Supervised By :Mahesh Dadoda 02/07/2022



#8

Dichlorotetrafluoroethane

Concen: 8.612 ppbv

RT: 3.17 min Scan# 120

Delta R.T. -0.03 min

Lab File: VL038319.D

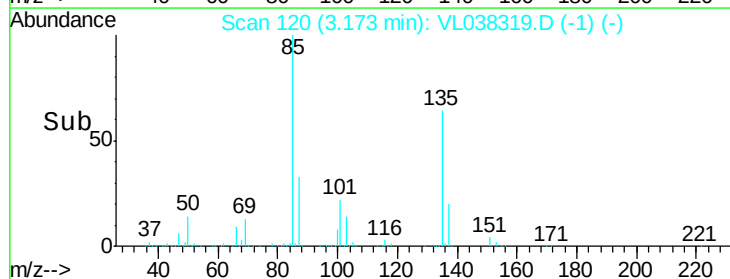
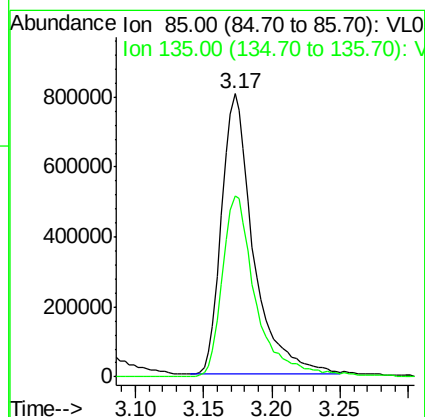
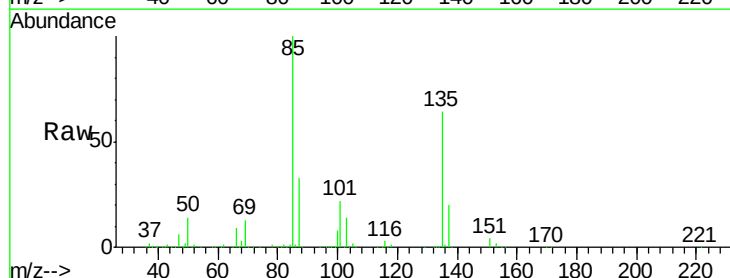
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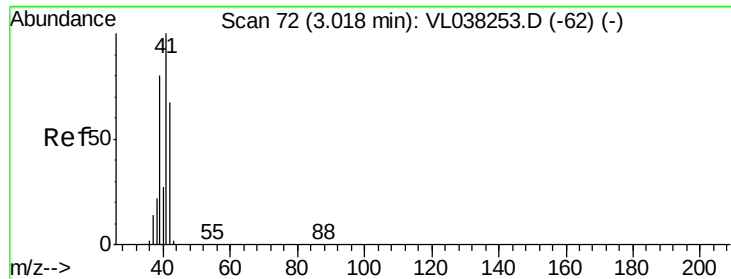
Tgt Ion: 85 Resp: 1311178

Ion Ratio Lower Upper

85 100

135 68.5 53.7 80.5



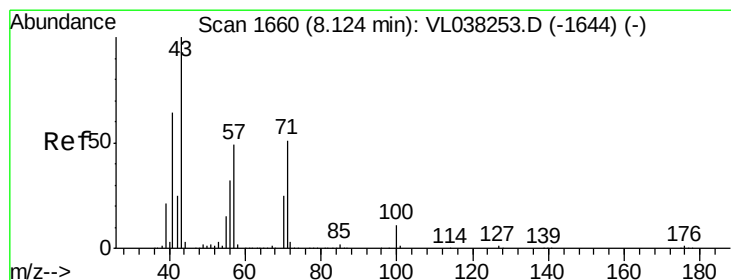
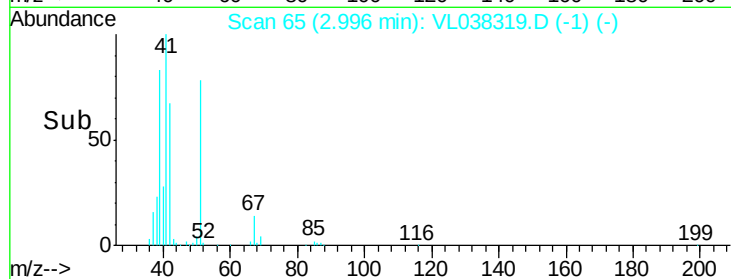
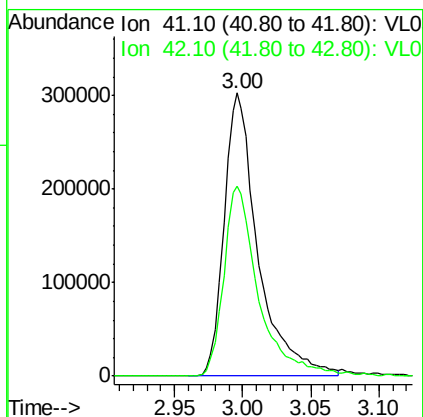
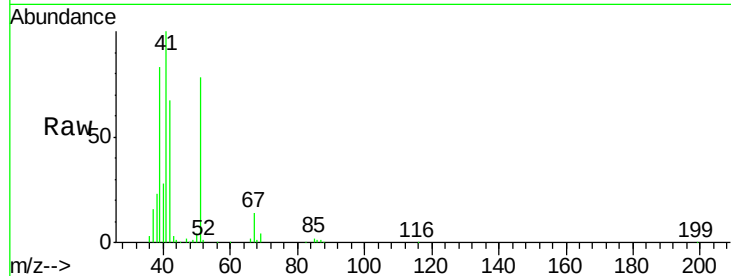


#9
 Propene
 Concen: 8.741 ppbv
 RT: 3.00
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 VL0201ABS01
 Acq: 1 Feb 2022 13:00

Tgt Ion:
 Ion Ratio
 41 100
 42 69.

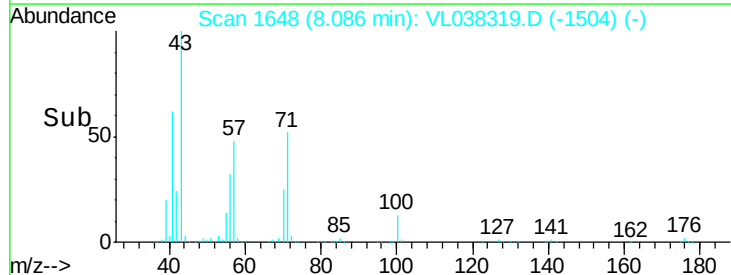
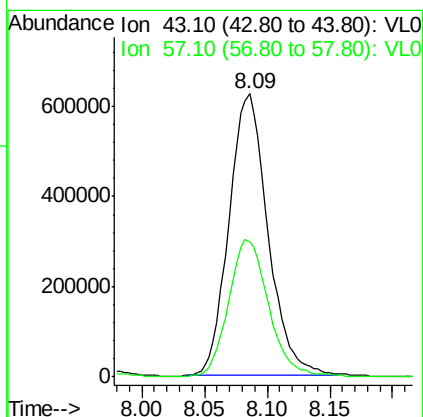
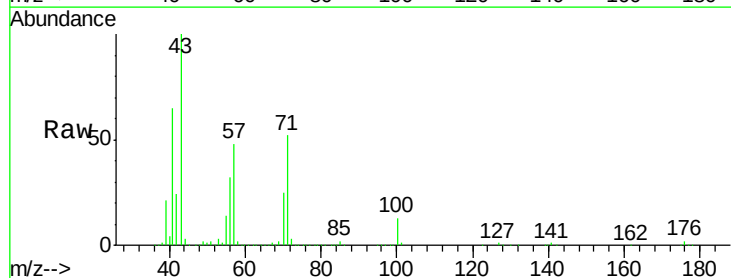
Manual Integrations
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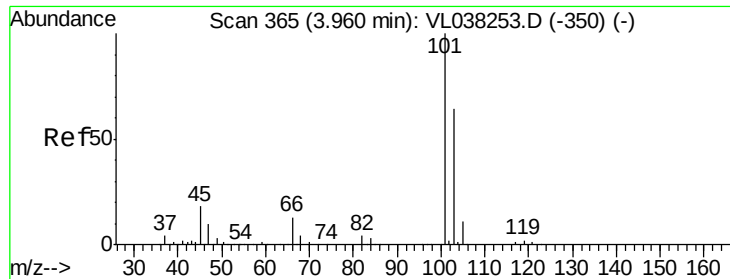
Reviewed By :Semsettin Yesilyurt 02/07/2022
 Supervised By :Mahesh Dadoda 02/07/2022



#10
 Heptane
 Concen: 8.765 ppbv
 RT: 8.09 min Scan# 1648
 Delta R.T. -0.04 min
 Lab File: VL038319.D
 Acq: 1 Feb 2022 13:06

Tgt Ion: 43 Resp: 1350889
 Ion Ratio Lower Upper
 43 100
 57 50.3 39.5 59.3





#11

Trichlorofluoromethane

Concen: 8.959 ppbv

RT: 3.93 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 1 Feb 2022 13:00 VL0201ABS01

Tgt Ion:1

Ion Ratio

101 100

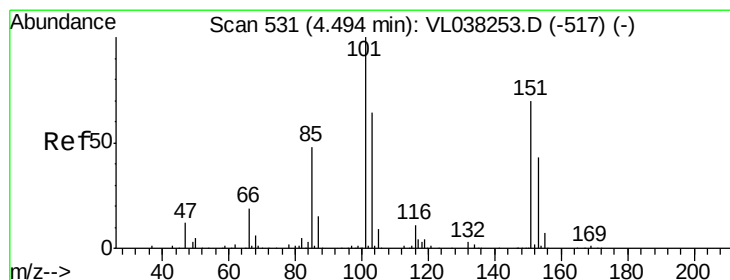
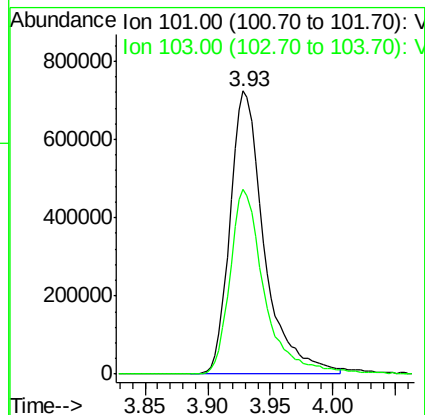
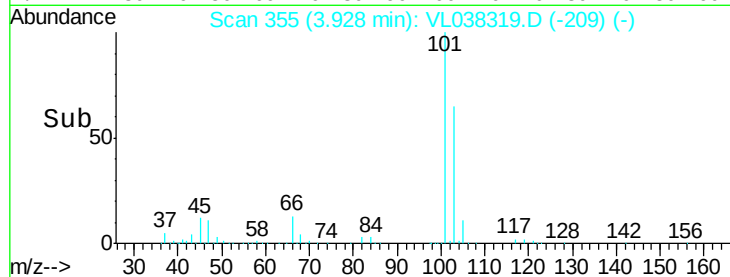
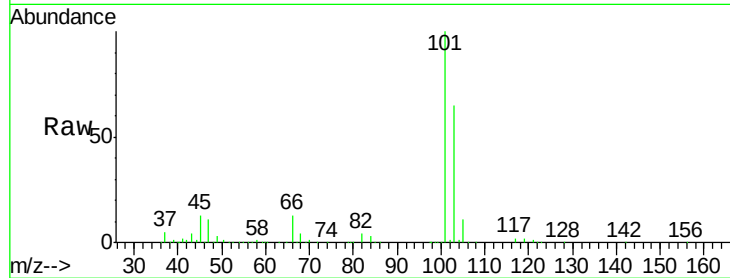
103 65.

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 02/07/2022

Supervised By :Mahesh Dadoda 02/07/2022



#12

1,1,2-Trichlorotrifluoroethane

Concen: 8.894 ppbv

RT: 4.46 min Scan# 521

Delta R.T. -0.03 min

Lab File: VL038319.D

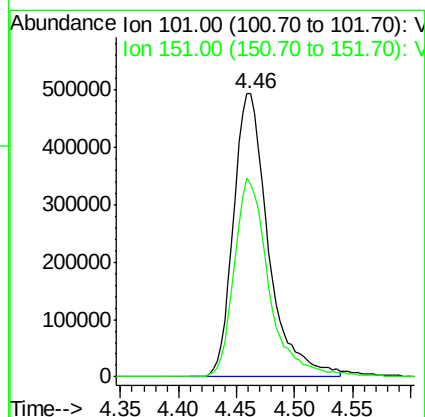
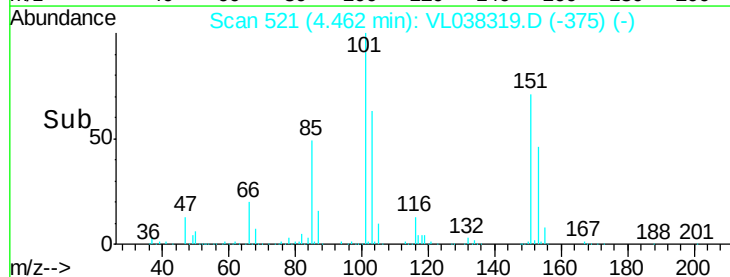
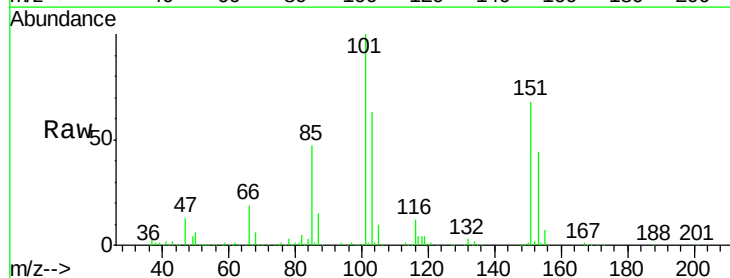
Acq: 1 Feb 2022 13:06

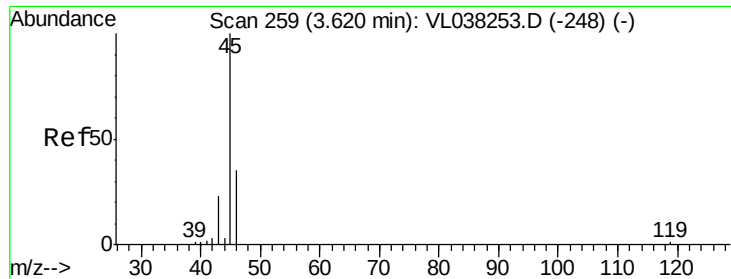
Tgt Ion:101 Resp: 1030593

Ion Ratio Lower Upper

101 100

151 70.4 55.3 82.9



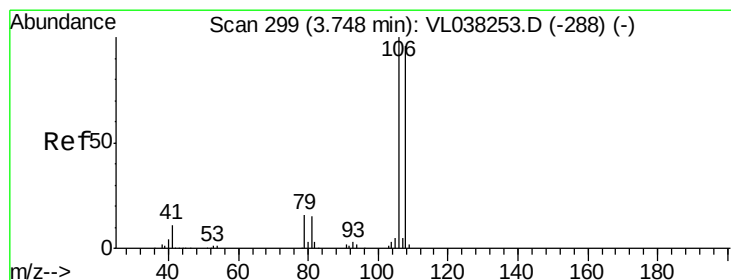
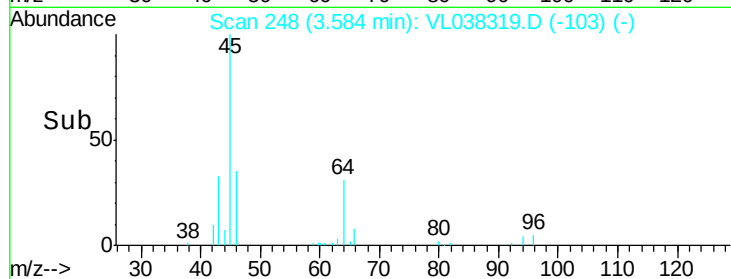
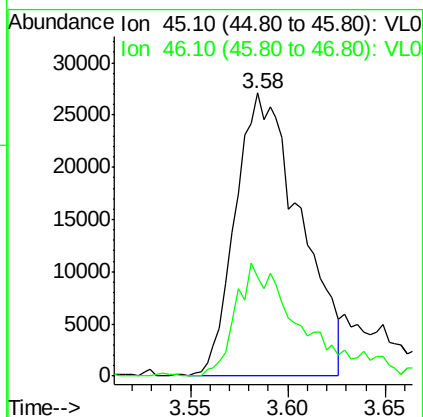
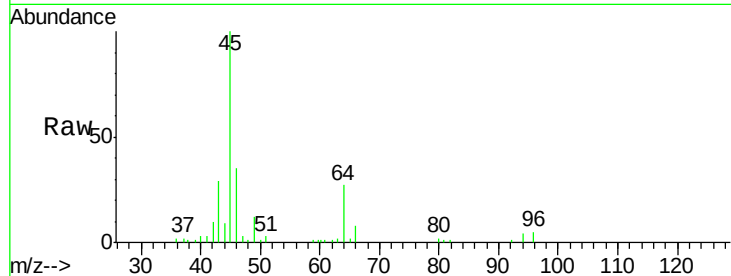


#13
Ethanol
Concen: 9.757 ppbv m
RT: 3.58
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 1 Feb 2022 13:00

Tgt Ion:
Ion Ratio
45 100
46 0.

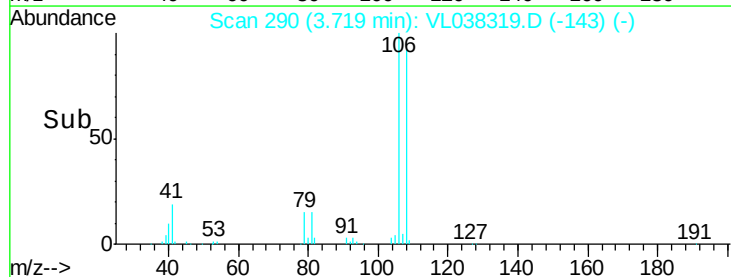
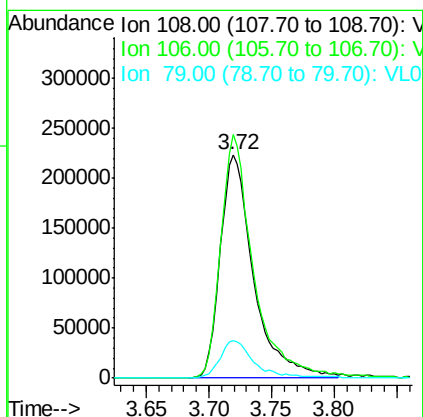
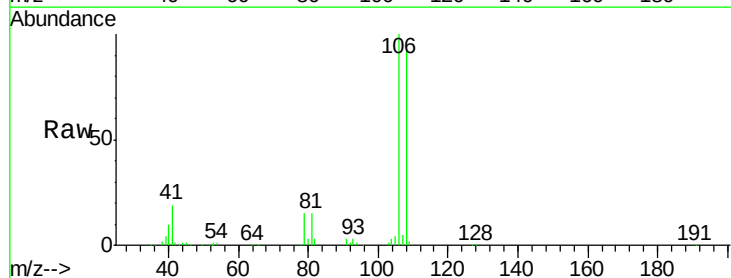
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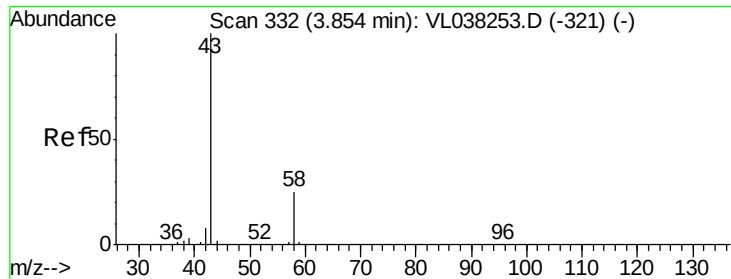
Reviewed By :Semsettin Yesilyurt 02/07/2022
Supervised By :Mahesh Dadoda 02/07/2022



#14
Bromoethene
Concen: 9.128 ppbv
RT: 3.72 min Scan# 290
Delta R.T. -0.03 min
Lab File: VL038319.D
Acq: 1 Feb 2022 13:06

Tgt Ion:108 Resp: 413303
Ion Ratio Lower Upper
108 100
106 108.4 86.4 129.6
79 17.8 14.1 21.1





#15

Acetone

Concen: 8.257 ppbv

RT: 3.83

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 1 Feb 2022 13:00

Tgt Ion:

Ion Ratio

43 100

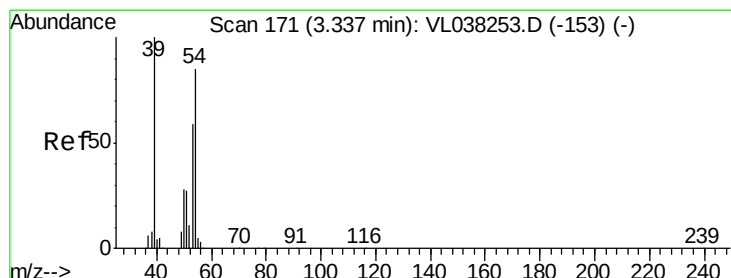
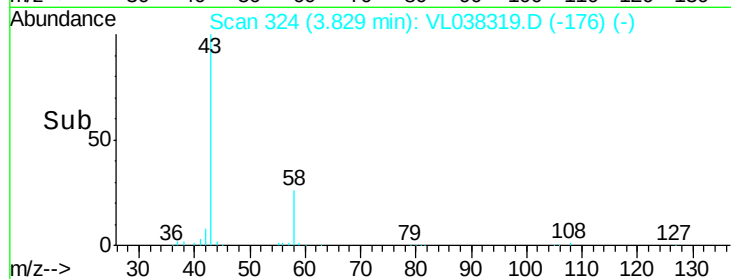
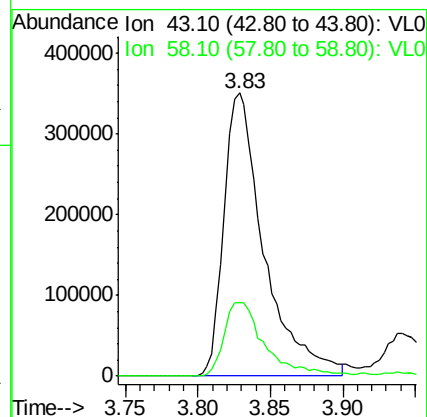
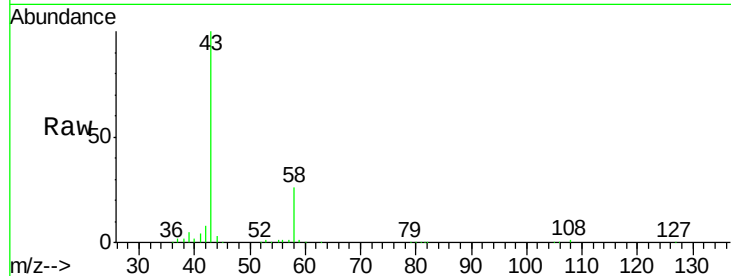
58 27.

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Reviewed By :Semsettin Yesilyurt 02/07/2022

Supervised By :Mahesh Dadoda 02/07/2022



#16

1,3-Butadiene

Concen: 8.763 ppbv

RT: 3.31 min Scan# 163

Delta R.T. -0.03 min

Lab File: VL038319.D

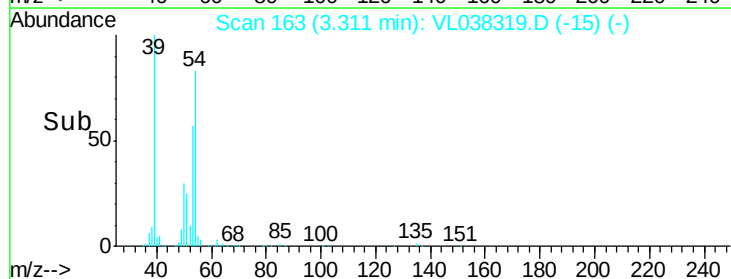
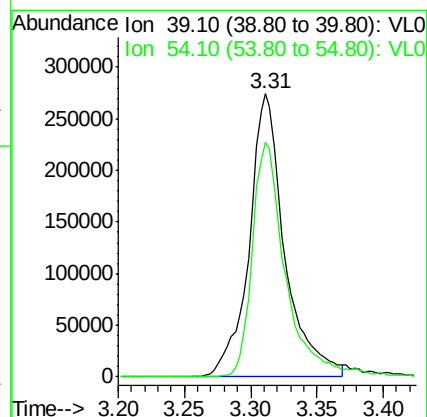
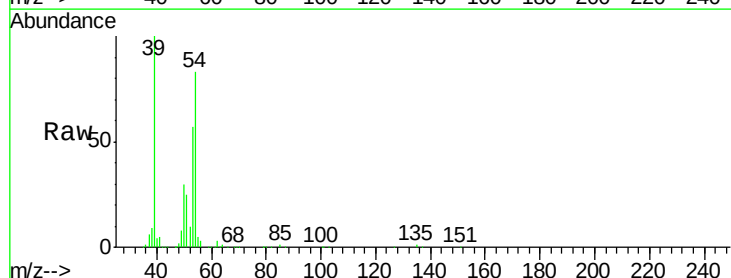
Acq: 1 Feb 2022 13:06

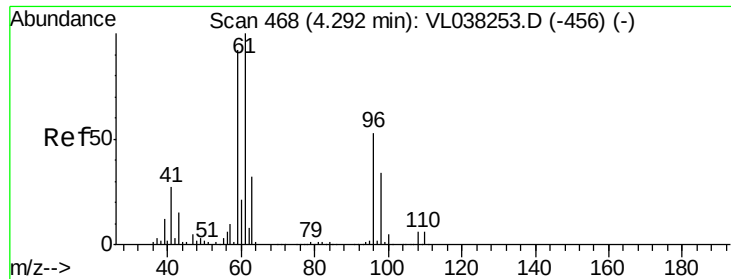
Tgt Ion: 39 Resp: 512373

Ion Ratio Lower Upper

39 100

54 77.9 62.6 94.0





#17

tert-Butyl alcohol

Concen: 8.930 ppbv

RT: 4.26 Instrument :

Delta R.T. MSVOA_1

Lab File: ClientSampleId :

Acq: 1 Feb 2022 13:00 VL0201ABS01

Tgt Ion:

Ion Ratio

59 100

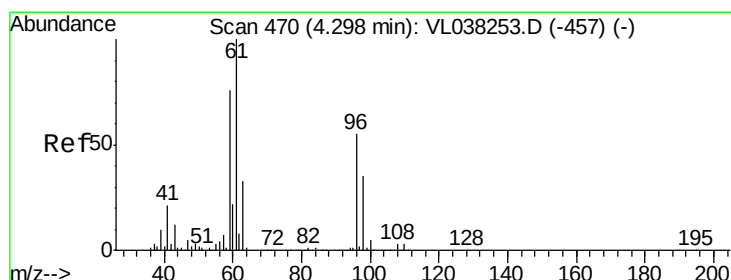
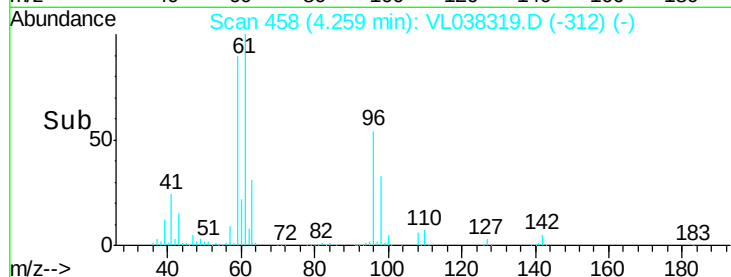
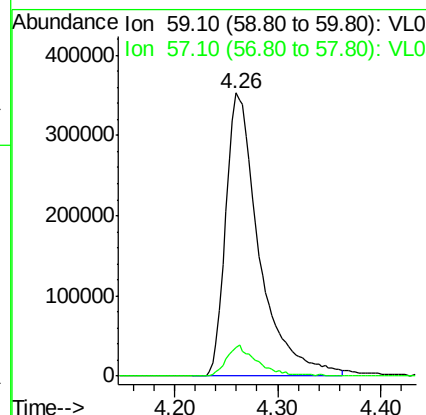
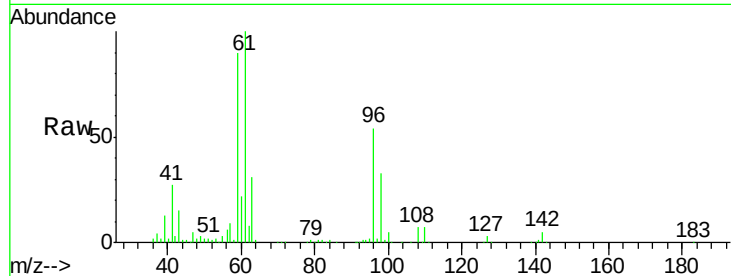
57 10.

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Reviewed By :Semsettin Yesilyurt 02/07/2022

Supervised By :Mahesh Dadoda 02/07/2022



#18

1,1-Dichloroethene

Concen: 9.149 ppbv

RT: 4.26 min Scan# 459

Delta R.T. -0.04 min

Lab File: VL038319.D

Acq: 1 Feb 2022 13:06

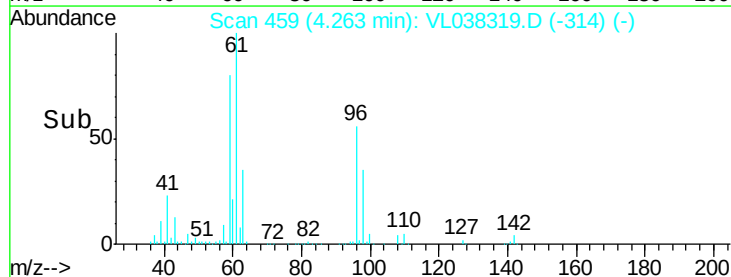
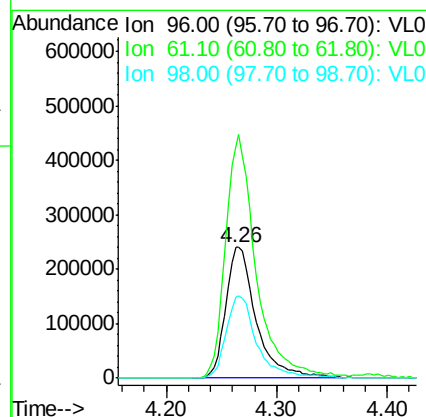
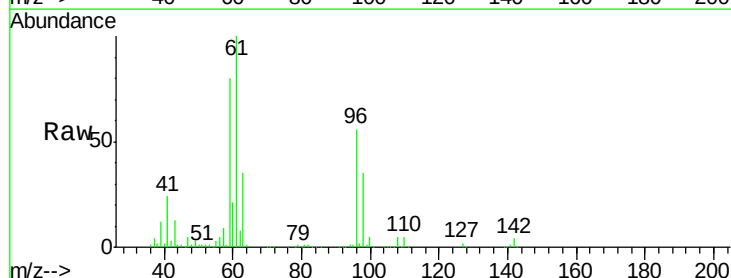
Tgt Ion: 96 Resp: 461017

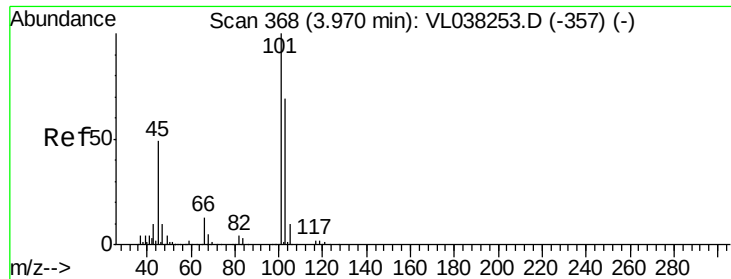
Ion Ratio Lower Upper

96 100

61 177.7 146.5 219.7

98 61.7 51.9 77.9





#19

Isopropyl Alcohol

Concen: 8.736 ppbv

RT: 3.94

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 1 Feb 2022 13:00

Tgt Ion:

Ion Ratio

45 100

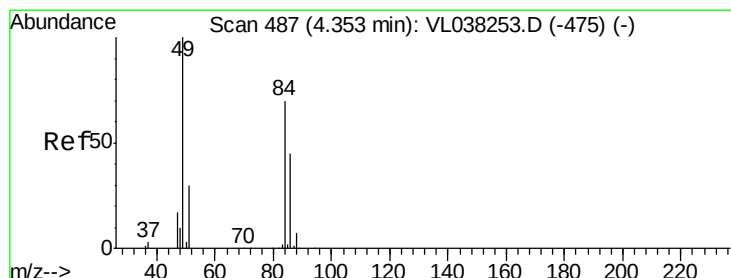
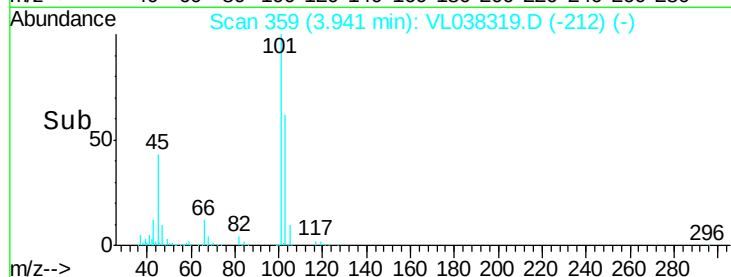
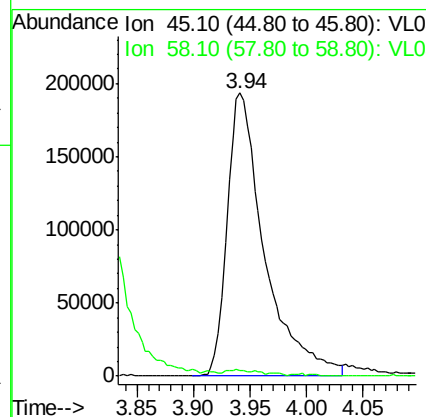
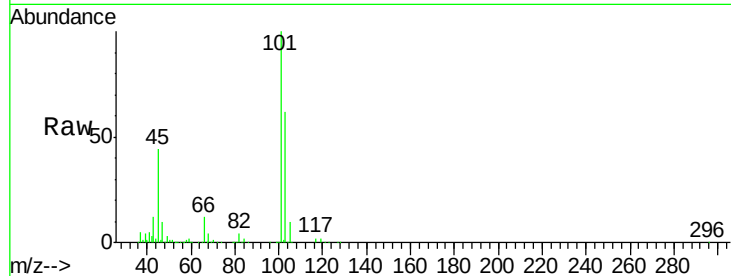
58 2.

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Reviewed By :Semsettin Yesilyurt 02/07/2022

Supervised By :Mahesh Dadoda 02/07/2022



#20

Methylene Chloride

Concen: 7.783 ppbv

RT: 4.32 min Scan# 477

Delta R.T. -0.03 min

Lab File: VL038319.D

Acq: 1 Feb 2022 13:06

Tgt Ion: 84 Resp: 368846

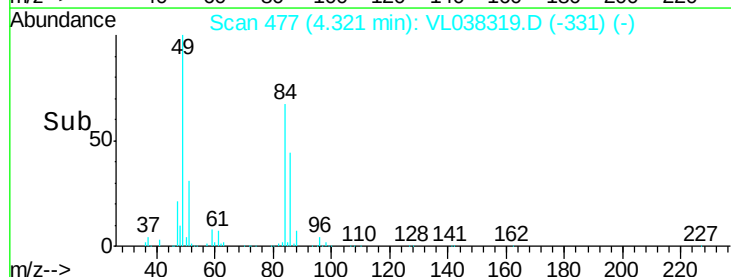
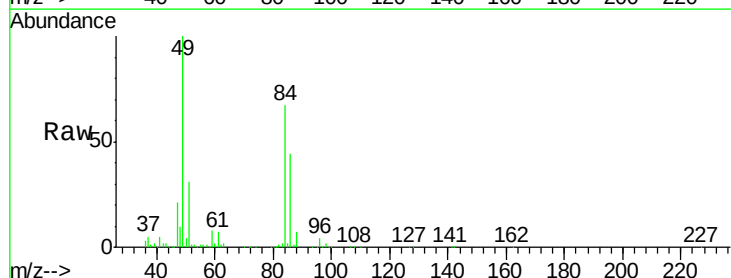
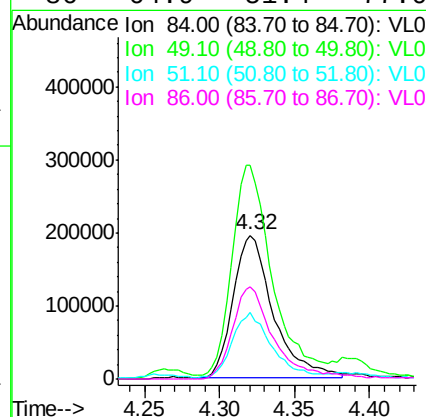
Ion Ratio Lower Upper

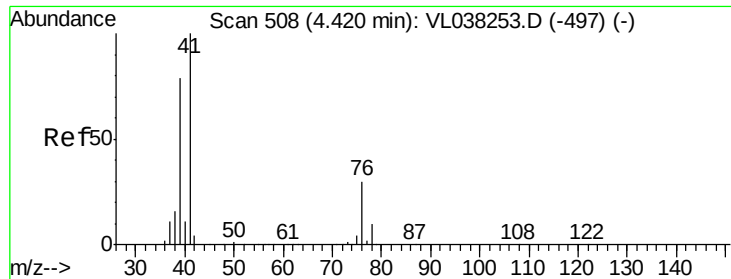
84 100

49 146.4 115.0 172.6

51 45.3 35.0 52.6

86 64.9 51.4 77.0



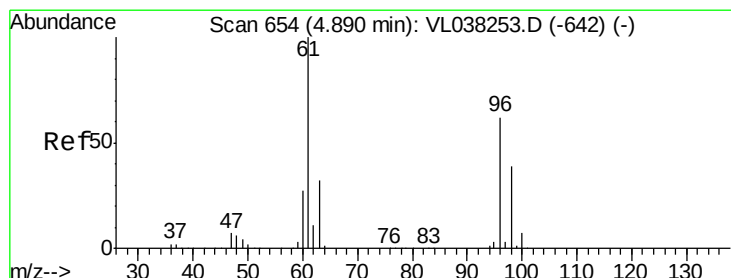
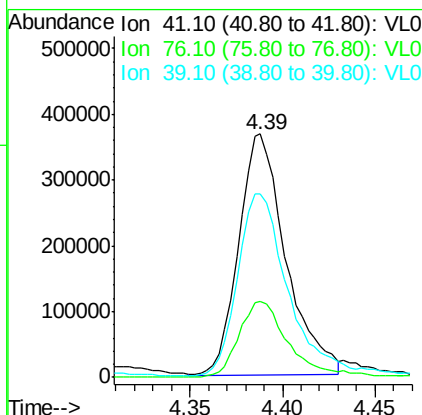
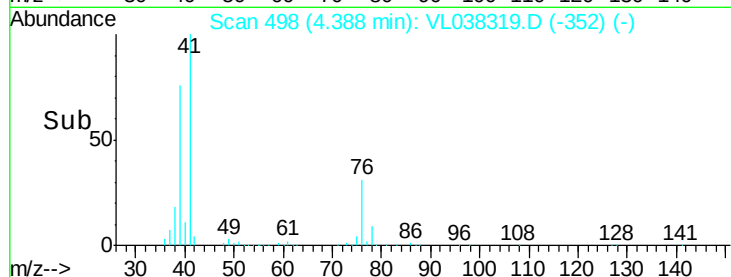
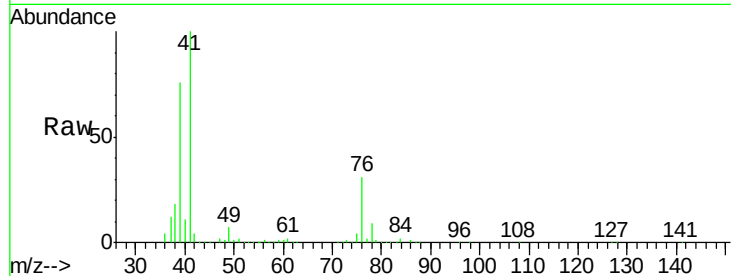


#21
 Allyl Chloride
 Concen: 8.988 ppbv
 RT: 4.39
 Delta R.T. MSVOA_L
 Lab File: ClientSampleId :
 VL0201ABS01
 Acq: 1 Feb 2022 13:00

Tgt Ion:
 Ion Ratio
 41 100
 76 33.
 39 82.

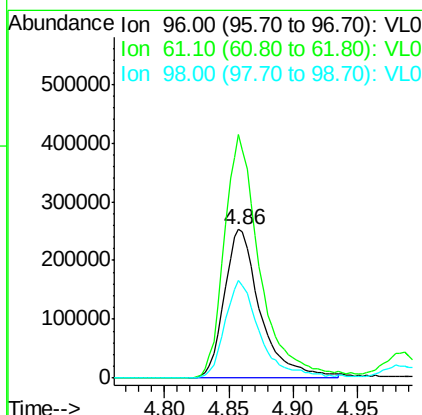
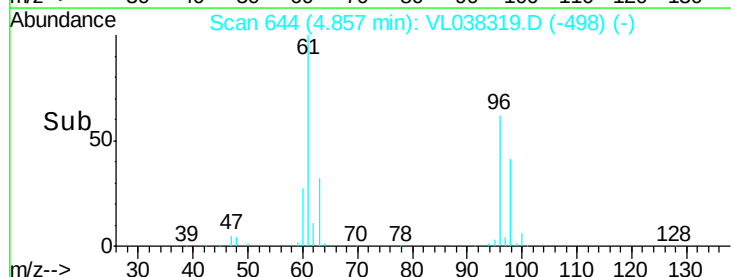
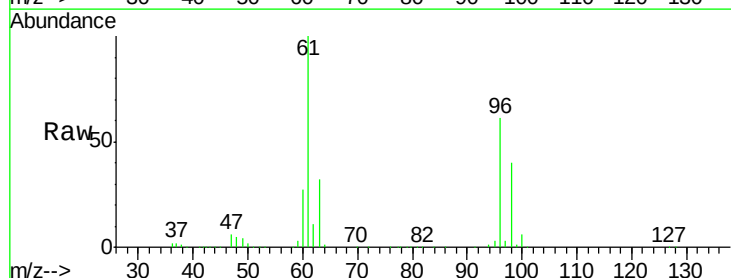
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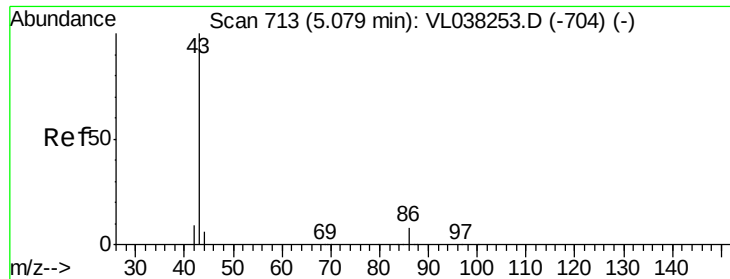
Reviewed By :Semsettin Yesilyurt 02/07/2022
 Supervised By :Mahesh Dadoda 02/07/2022



#22
 trans-1,2-Dichloroethene
 Concen: 9.430 ppbv
 RT: 4.86 min Scan# 644
 Delta R.T. -0.03 min
 Lab File: VL038319.D
 Acq: 1 Feb 2022 13:06

Tgt Ion: 96 Resp: 490990
 Ion Ratio Lower Upper
 96 100
 61 163.7 128.8 193.2
 98 65.6 49.8 74.8



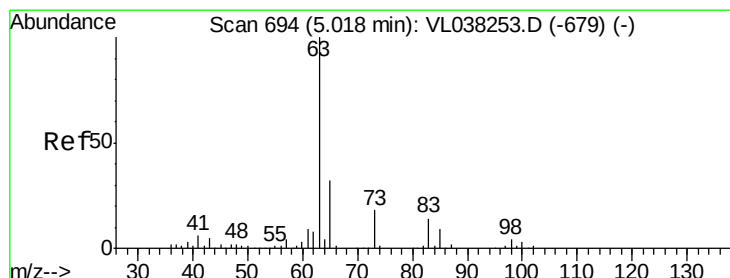
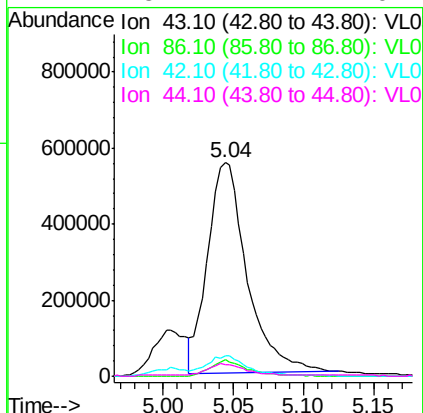
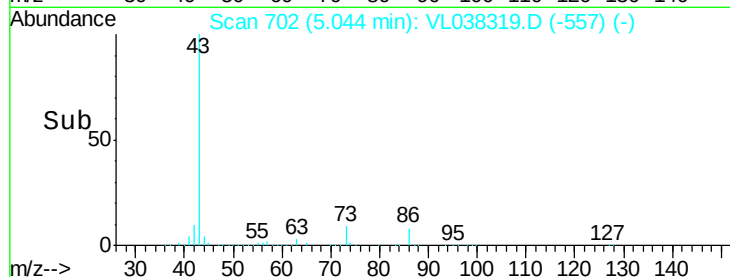
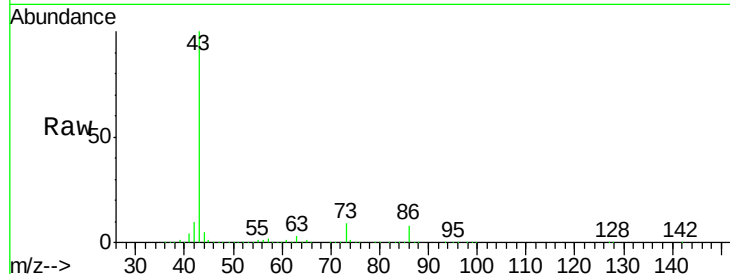


#23
 Vinyl Acetate
 Concen: 9.123 ppbv
 RT: 5.04
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId : VL0201ABS01
 Acq: 1 Feb 2022 13:00

Tgt Ion:
 Ion Ratio
 43 100
 86 8.
 42 9.
 44 5.1 4.2 6.4

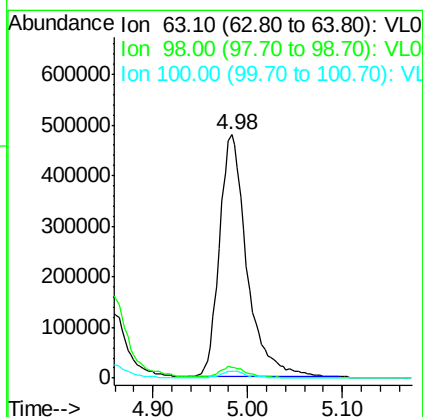
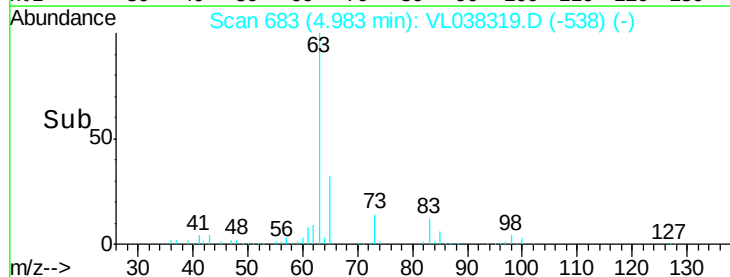
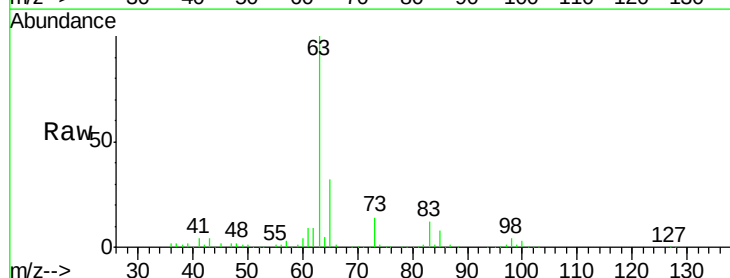
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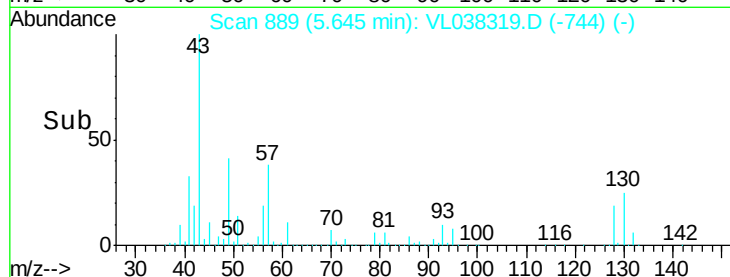
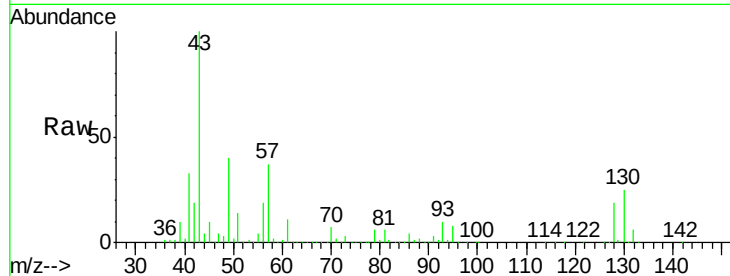
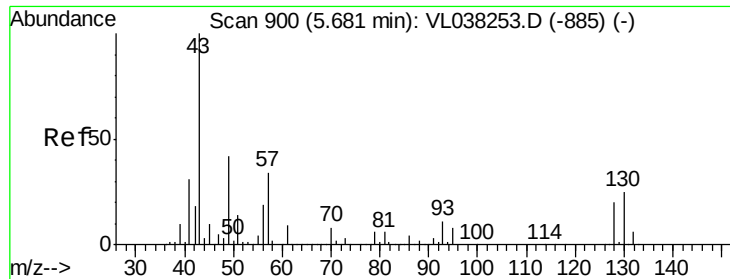
Reviewed By :Semsettin Yesilyurt 02/07/2022
 Supervised By :Mahesh Dadoda 02/07/2022



#24
 1,1-Dichloroethane
 Concen: 9.138 ppbv
 RT: 4.98 min Scan# 683
 Delta R.T. -0.04 min
 Lab File: VL038319.D
 Acq: 1 Feb 2022 13:06

Tgt Ion: 63 Resp: 964421
 Ion Ratio Lower Upper
 63 100
 98 4.0 2.3 6.8
 100 2.9 1.3 3.9



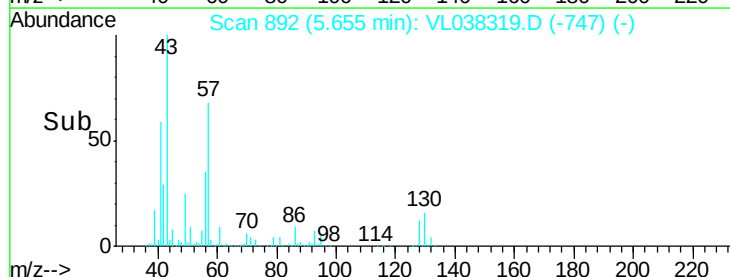
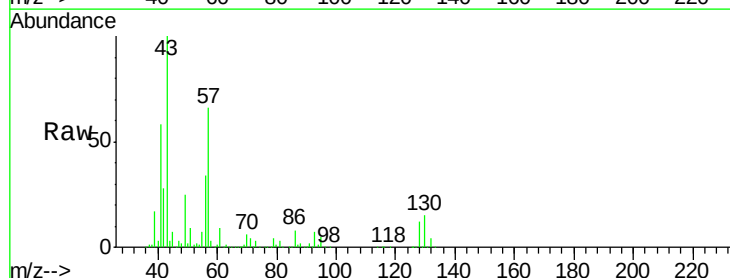
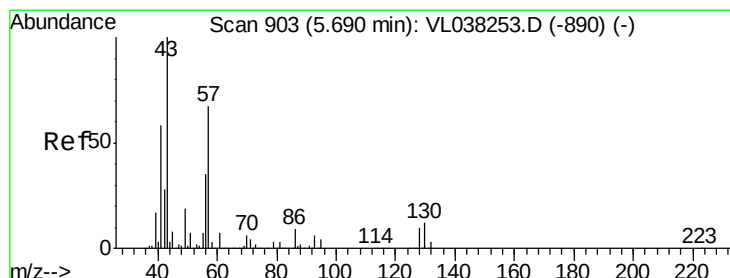
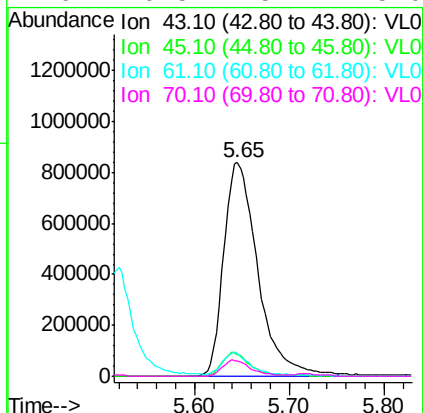


#25
Ethyl Acetate
Concen: 9.192 ppbv
RT: 5.65
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId : VL0201ABS01
Acq: 1 Feb 2022 13:00

Tgt Ion:
Ion Ratio
43 100
45 9.
61 9.
70 6.5 5.4 8.0

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Reviewed By :Semsettin Yesilyurt 02/07/2022
Supervised By :Mahesh Dadoda 02/07/2022



#26
Hexane
Concen: 9.095 ppbv
RT: 5.65 min Scan# 892
Delta R.T. -0.04 min
Lab File: VL038319.D
Acq: 1 Feb 2022 13:06

Tgt Ion: 57 Resp: 965031
Ion Ratio Lower Upper
57 100
41 89.5 72.8 109.2
43 219.5 177.0 265.6
56 52.7 43.3 64.9

