

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL012422\
 Data File : VL038276.D
 Acq On : 25 Jan 2022 1:40
 Operator : SY/AP
 Sample : N1244-03
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA L
 ClientSampleId :
 SG-3

Manual Integrations
 APPROVED

Reviewed By :Semsettin Yesilyurt 01/25/2022
 Supervised By :Mahesh Dadoda 01/26/2022

Quant Time: Jan 25 03:14:16 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	5.68	49	805043	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	2078019	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.10	117	1844055	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.42	95	1396189	9.98	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.80%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.07	85	68178	0.398	ppbv	89
3) Chlorodifluoromethane	3.01	51	32732m	0.204	ppbv	
4) Chloromethane	3.16	50	26917	0.488	ppbv	93
5) Vinyl Chloride	3.28	62	16076	0.292	ppbv	91
9) Propene	3.03	41	2045390m	39.206	ppbv	
10) Heptane	8.13	43	169128m	1.260	ppbv	
11) Trichlorofluoromethane	3.97	101	194209	1.455	ppbv	98
13) Ethanol	3.62	45	253004	45.174	ppbv	97
15) Acetone	3.86	43	1085944m	15.302	ppbv	
19) Isopropyl Alcohol	3.99	45	30171m	0.680	ppbv	
20) Methylene Chloride	4.36	84	75787	1.836	ppbv	98
26) Hexane	5.70	57	264669	2.864	ppbv #	44
27) Carbon Disulfide	4.56	76	89289	0.826	ppbv #	92
30) Cyclohexane	7.15	84	52156	0.648	ppbv	85
31) cis-1,2-Dichloroethene	5.56	61	10081m	0.125	ppbv	
34) 2-Butanone	5.26	43	106084	1.561	ppbv	94
35) Carbon Tetrachloride	7.03	117	8262m	0.057	ppbv	
36) Benzene	6.90	78	86350	0.470	ppbv #	93
38) Trichloroethene	7.85	130	8357m	0.122	ppbv	
44) 2,2,4-Trimethylpentane	7.88	57	267193	0.825	ppbv #	82
51) 2-Hexanone	10.16	43	37597m	0.704	ppbv	
52) Tetrachloroethene	11.23	164	657273	10.375	ppbv	98
53) Toluene	9.82	91	1268576	6.235	ppbv	99
58) Ethyl Benzene	12.72	91	87855	0.324	ppbv	97
59) m/p-Xylene	12.98	91	248850m	1.076	ppbv	
60) o-Xylene	13.70	91	84675	0.394	ppbv	98
72) 4-Ethyltoluene	15.85	105	23871m	0.106	ppbv	
74) 1,2,4-Trimethylbenzene	16.77	105	50923m	0.239	ppbv	

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.68 Instrument: MSVOA_1

Delta R.T. ClientSampleId :

Lab File: SG-3

Acq: 25 Jan 2022 1:40

Tot Ion:

Ion Ratio

49 100

128 46.

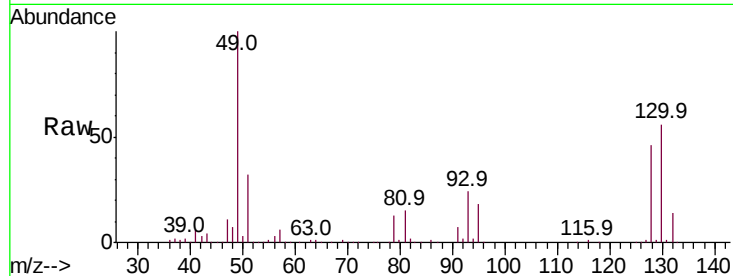
130 60.

Manual Integrations

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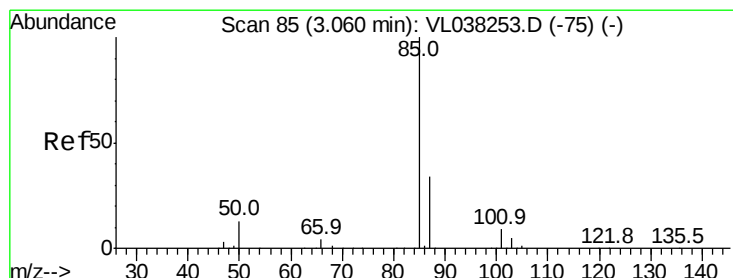
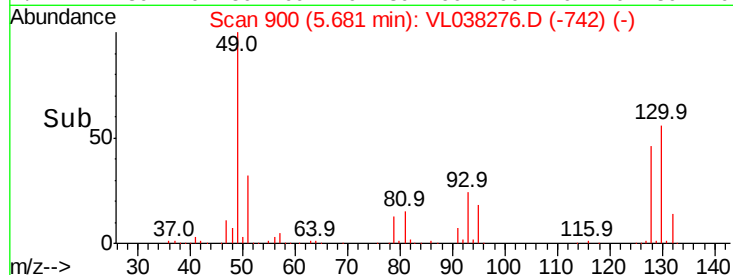
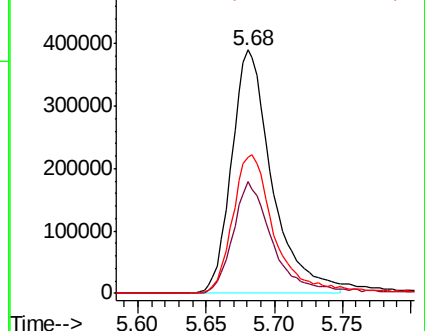
Supervised By :Mahesh Dadoda 01/26/2022



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.398 ppbv

RT: 3.07 min Scan# 87

Delta R.T. 0.01 min

Lab File: VL038276.D

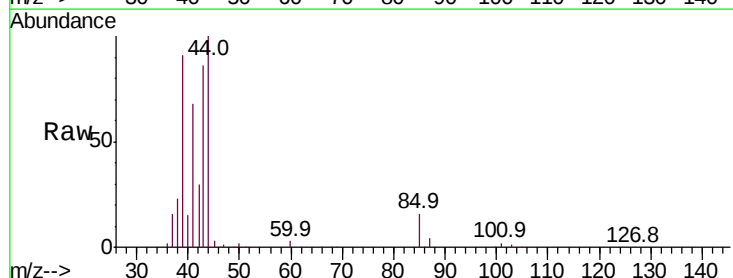
Acq: 25 Jan 2022 1:40

Tgt Ion: 85 Resp: 68178

Ion Ratio Lower Upper

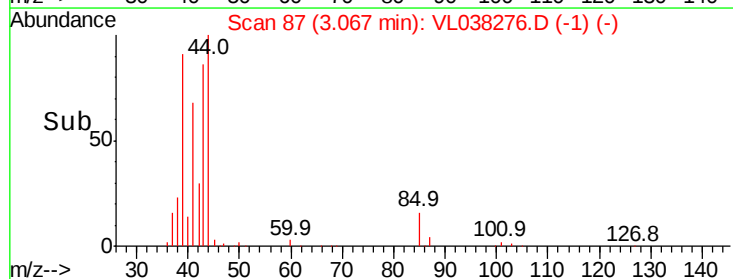
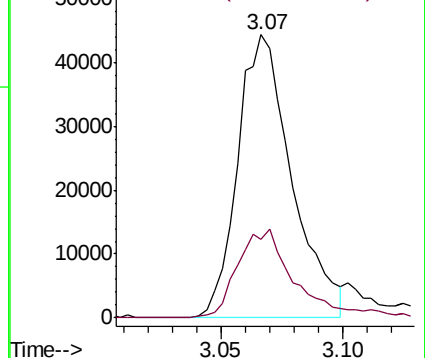
85 100

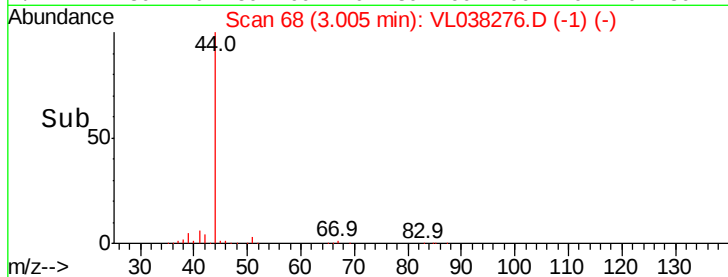
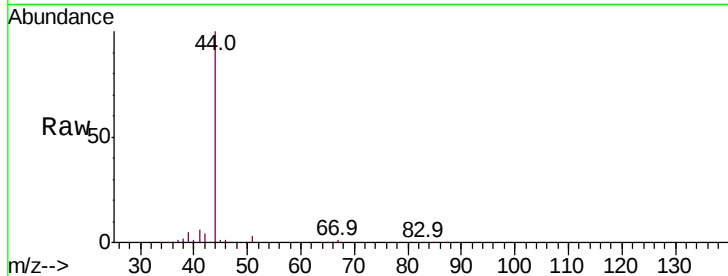
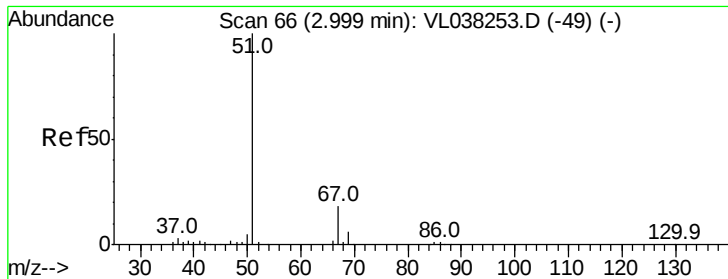
87 27.6 27.0 40.6



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.204 ppbv m

RT: 3.01 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 25 Jan 2022 1:40 SG-3

Tot Ion:

Ion Ratio

51 100

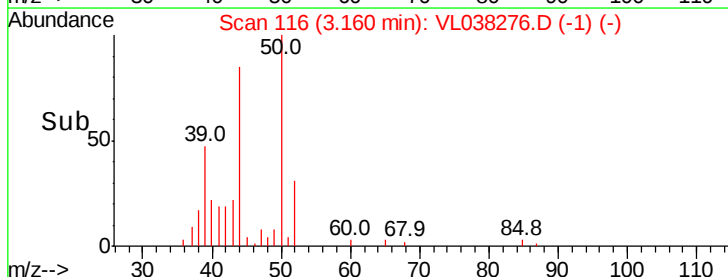
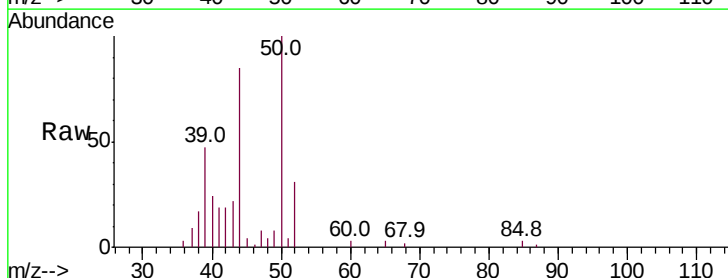
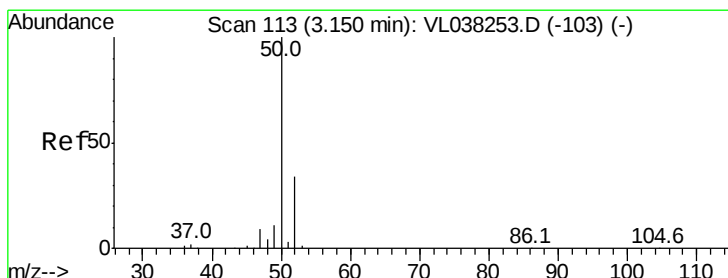
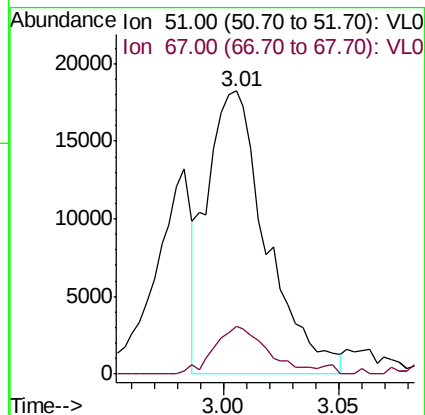
67 15.

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 01/25/2022

Supervised By :Mahesh Dadoda 01/26/2022



#4

Chloromethane

Concen: 0.488 ppbv

RT: 3.16 min Scan# 116

Delta R.T. 0.01 min

Lab File: VL038276.D

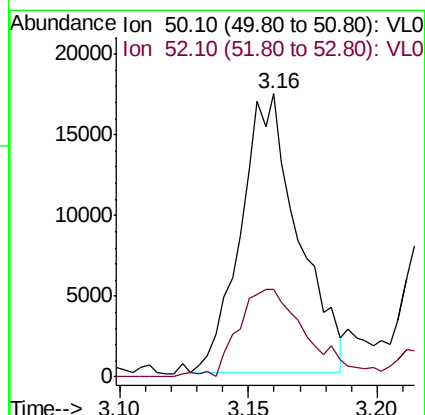
Acq: 25 Jan 2022 1:40

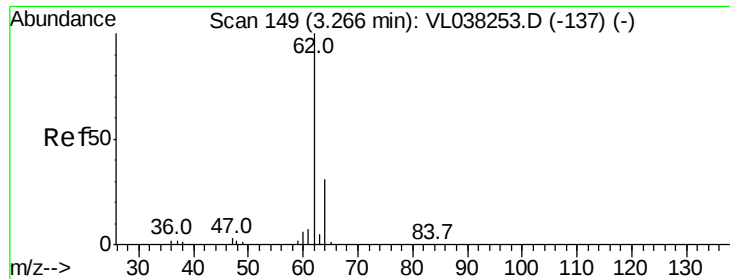
Tgt Ion: 50 Resp: 26917

Ion Ratio Lower Upper

50 100

52 29.9 27.1 40.7





#5

Vinyl Chloride

Concen: 0.292 ppbv

RT: 3.28 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 25 Jan 2022 1:40 SG-3

Tot Ion:

Ion Ratio

62 100

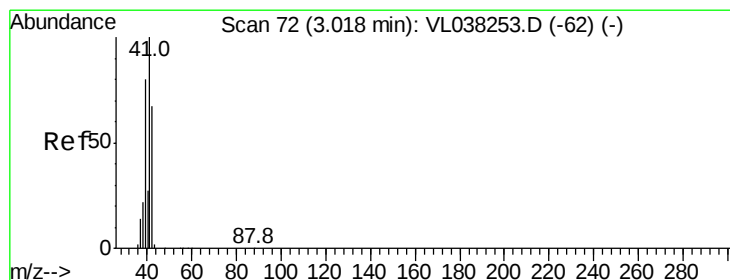
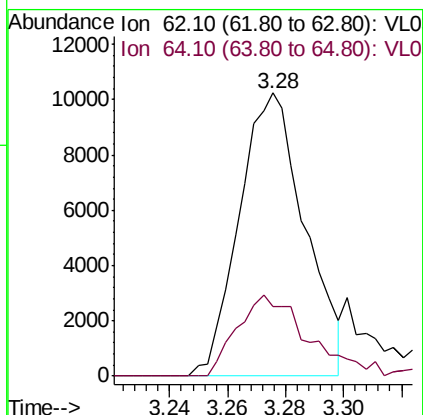
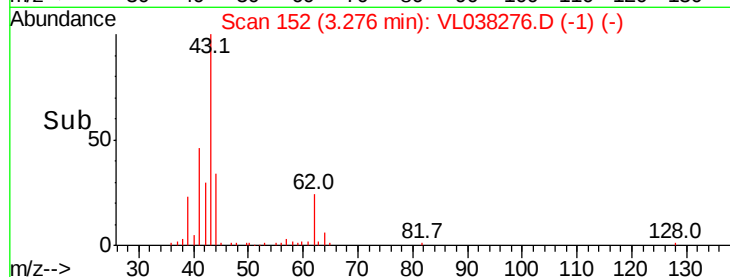
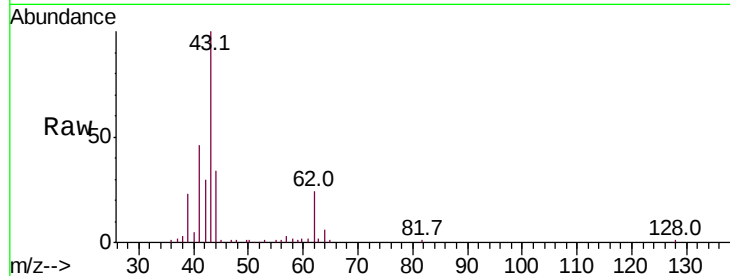
64 25.

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#9

Propene

Concen: 39.206 ppbv m

RT: 3.03 min Scan# 77

Delta R.T. 0.02 min

Lab File: VL038276.D

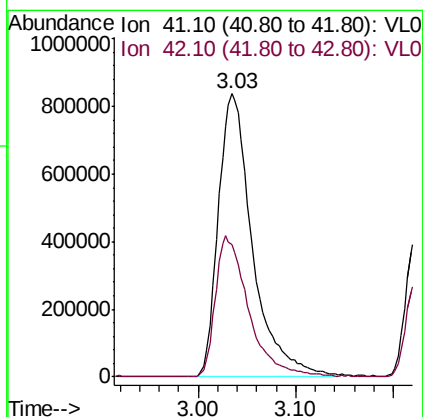
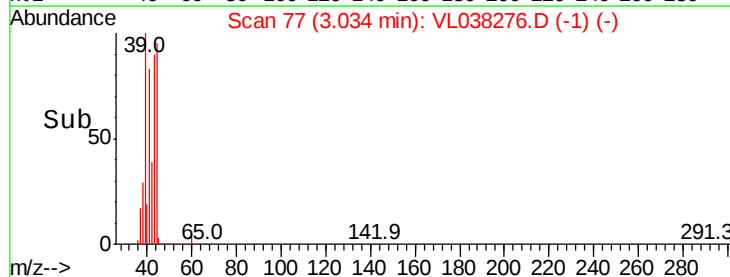
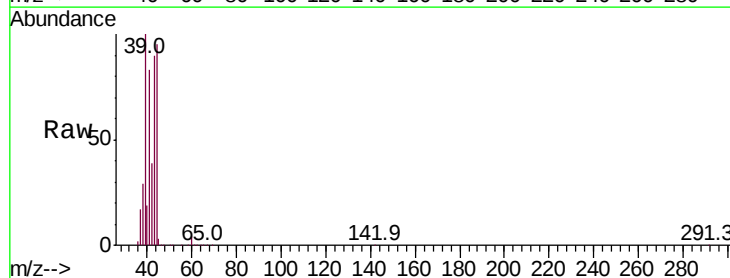
Acq: 25 Jan 2022 1:40

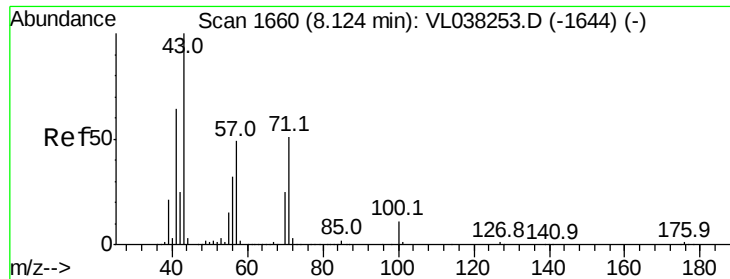
Tgt Ion: 41 Resp: 2045390

Ion Ratio Lower Upper

41 100

42 22.9 54.9 82.3#





#10

Heptane

Concen: 1.260 ppbv m

RT: 8.13 Instrument :

Delta R.T. MSVOA_1

Lab File: ClientSampleId :

Acq: 25 Jan 2022 1:40 SG-3

Tot Ion:

Ion Ratio

43 100

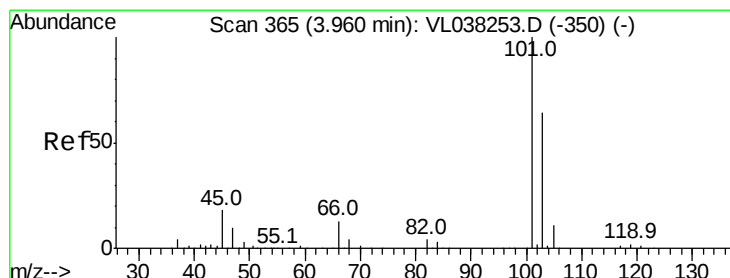
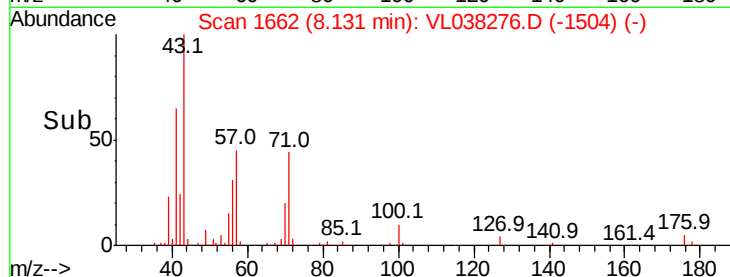
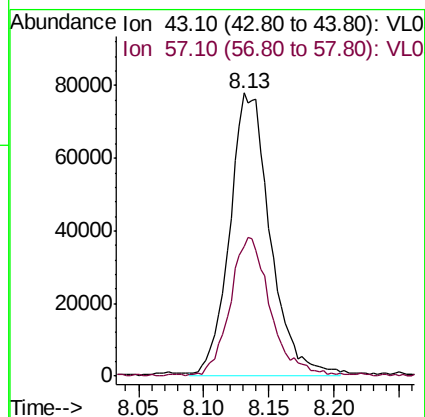
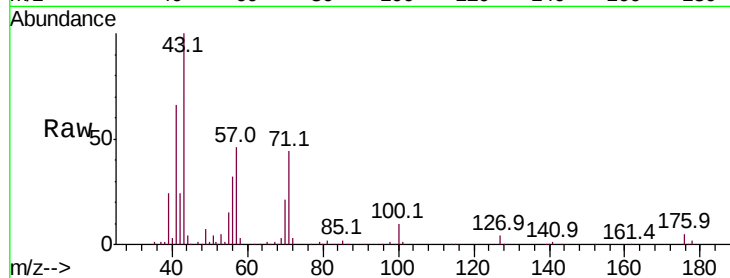
57 49.

Manual Integrations

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#11

Trichlorofluoromethane

Concen: 1.455 ppbv

RT: 3.97 min Scan# 367

Delta R.T. 0.01 min

Lab File: VL038276.D

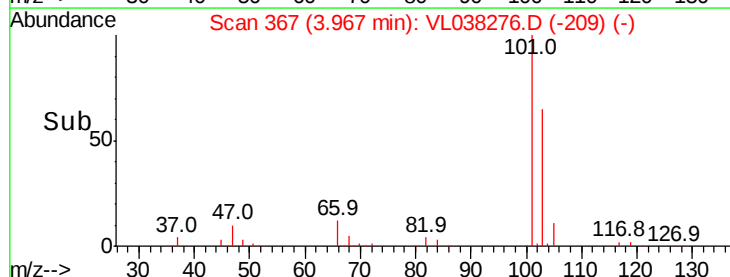
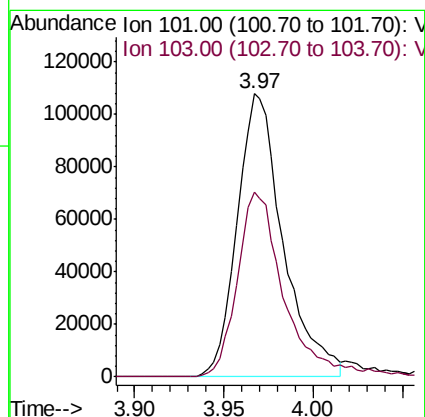
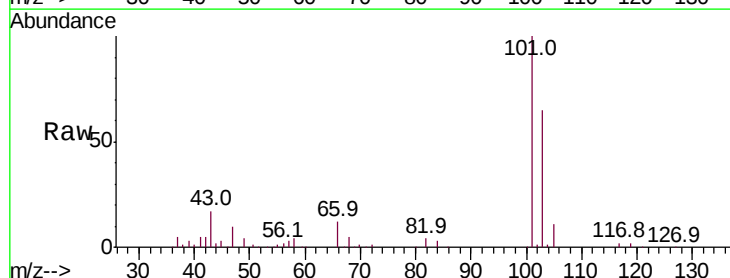
Acq: 25 Jan 2022 1:40

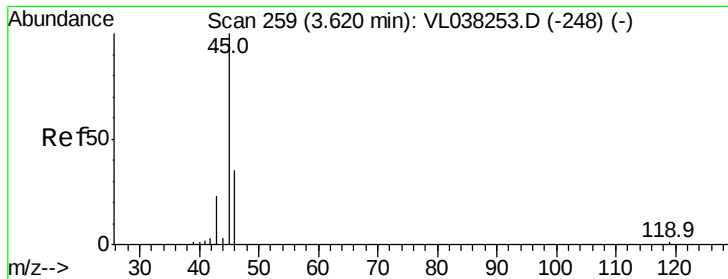
Tgt Ion:101 Resp: 194209

Ion Ratio Lower Upper

101 100

103 65.2 51.2 76.8



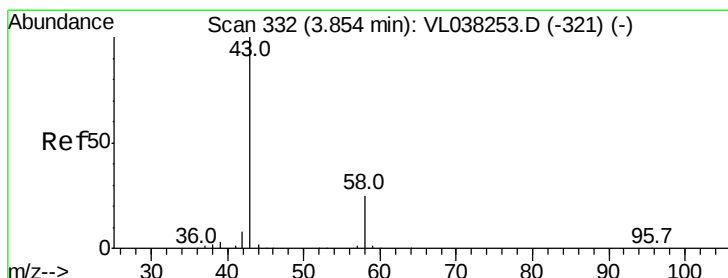
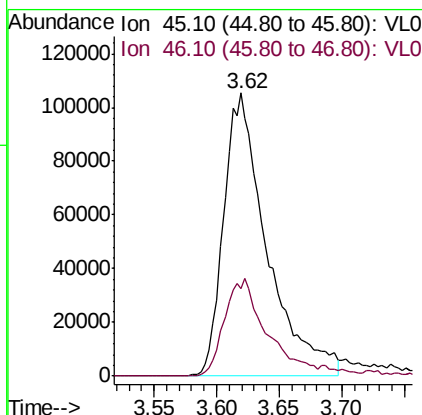
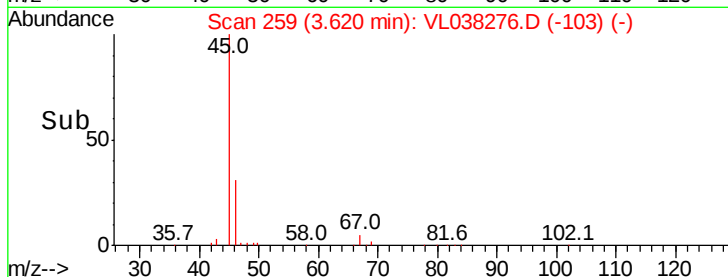
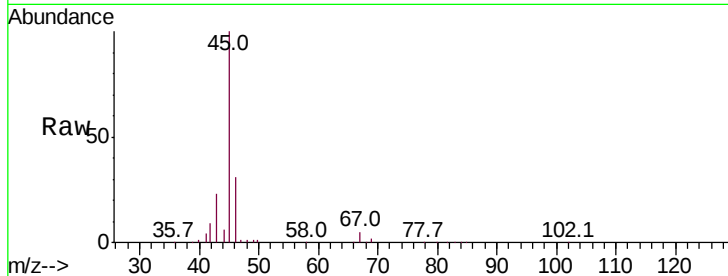


#13
Ethanol
Concen: 45.174 ppbv
RT: 3.62
Delta R.T. MSVOA_L
Lab File: ClientSampled :
Acq: 25 Jan 2022 1:40

Tot Ion:
Ion Ratio
45 100
46 36.

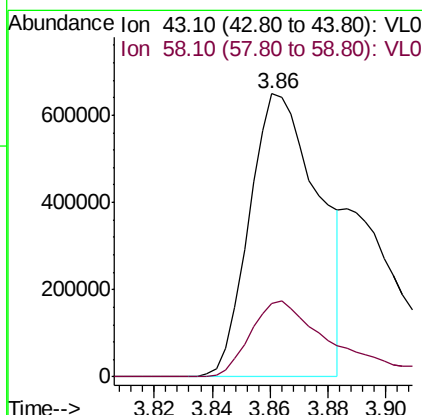
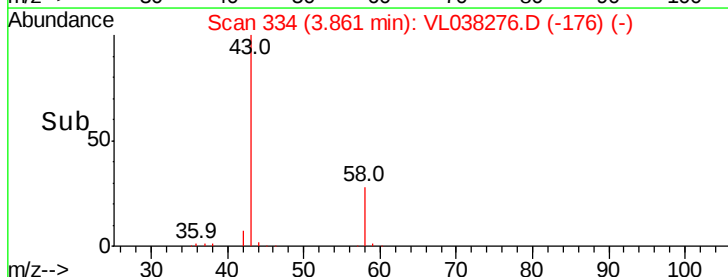
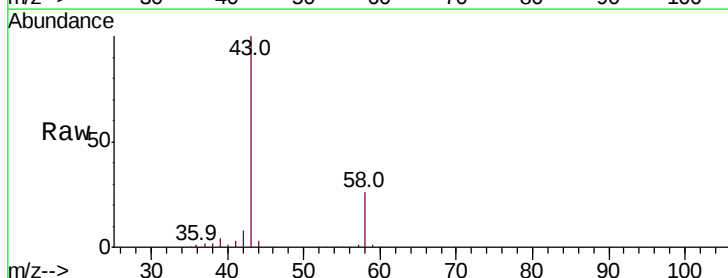
Manual Integrations
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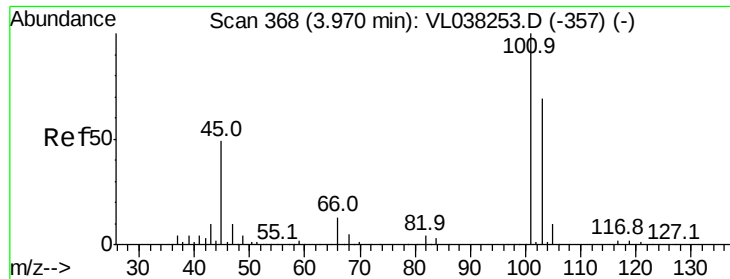
Reviewed By :Semsettin Yesilyurt 01/25/2022
Supervised By :Mahesh Dadoda 01/26/2022



#15
Acetone
Concen: 15.302 ppbv m
RT: 3.86 min Scan# 334
Delta R.T. 0.01 min
Lab File: VL038276.D
Acq: 25 Jan 2022 1:40

Tgt Ion: 43 Resp: 1085944
Ion Ratio Lower Upper
43 100
58 34.3 21.5 32.3#





#19

Isopropyl Alcohol

Concen: 0.680 ppbv m

RT: 3.99 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 25 Jan 2022 1:40

Tot Ion:

Ion Ratio

45 100

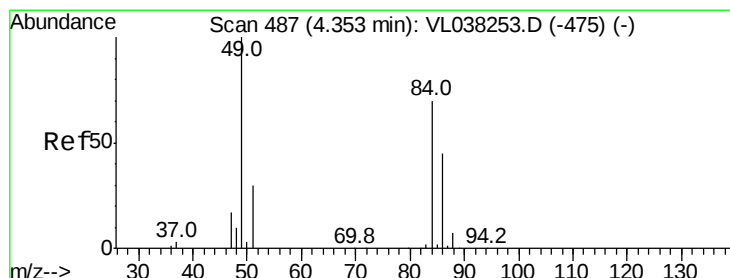
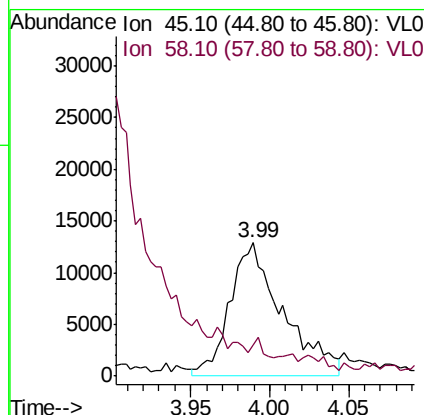
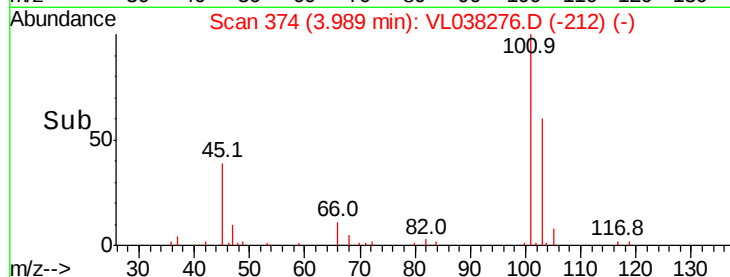
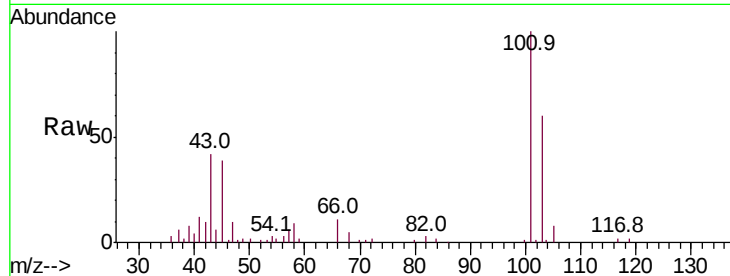
58 1234

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 01/25/2022

Supervised By :Mahesh Dadoda 01/26/2022



#20

Methylene Chloride

Concen: 1.836 ppbv

RT: 4.36 min Scan# 489

Delta R.T. 0.01 min

Lab File: VL038276.D

Acq: 25 Jan 2022 1:40

Tgt Ion: 84 Resp: 75787

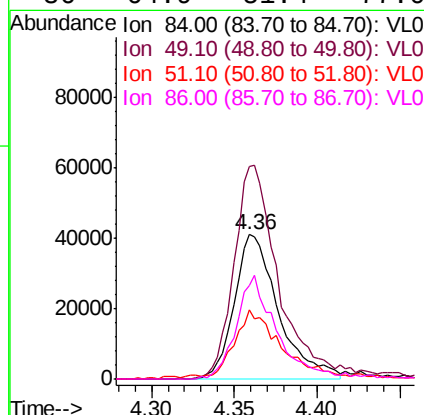
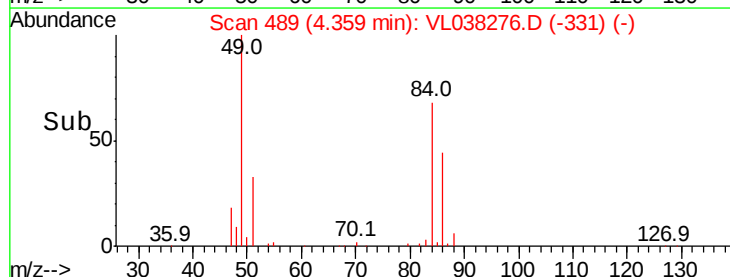
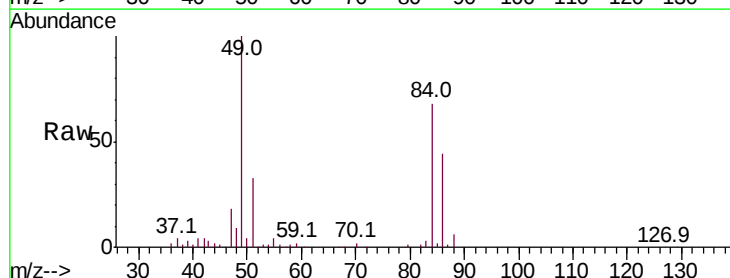
Ion Ratio Lower Upper

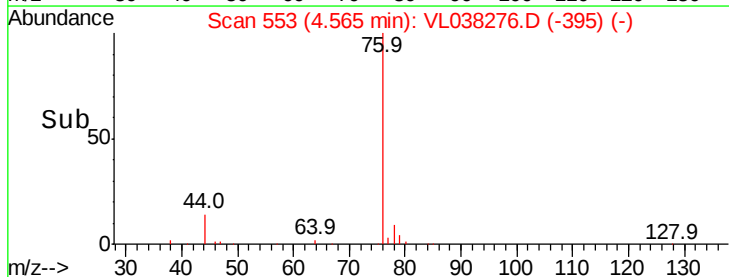
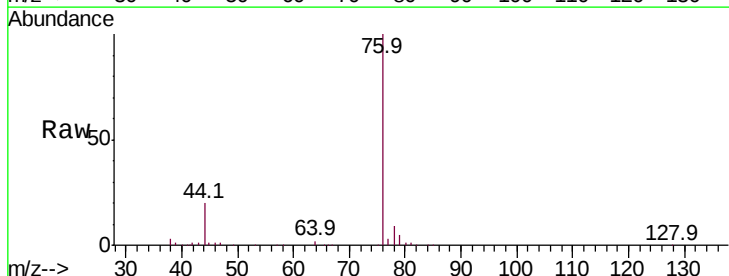
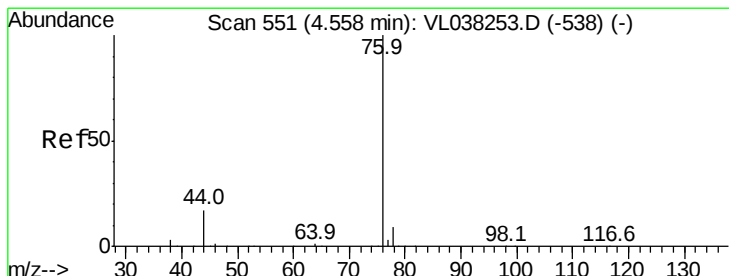
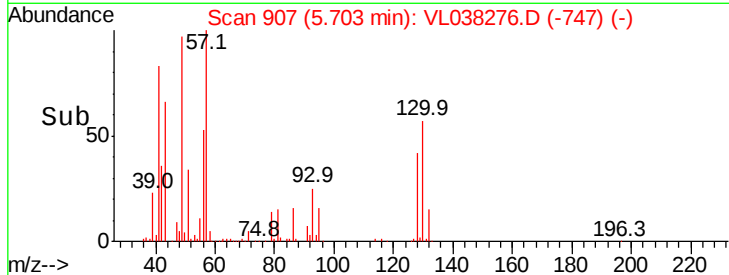
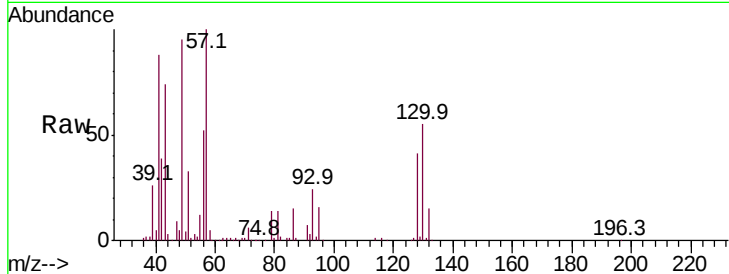
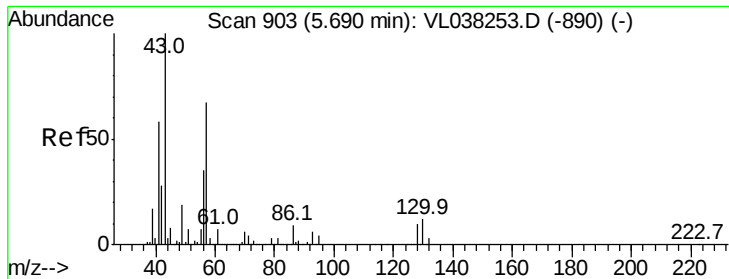
84 100

49 147.2 115.0 172.6

51 45.8 35.0 52.6

86 64.9 51.4 77.0





#26

Hexane

Concen: 2.864 ppbv

RT: 5.70

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 25 Jan 2022 1:40

Tot Ion: Manual Integrations

Ion Ratio APPROVED

57 100

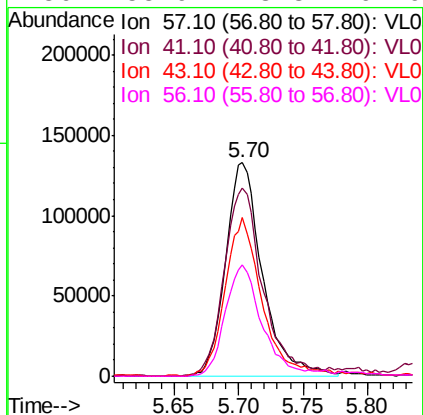
41 93.

43 74.

56 55.9 43.3 64.9

Reviewed By :Semsettin Yesilyurt 01/25/2022

Supervised By :Mahesh Dadoda 01/26/2022



#27

Carbon Disulfide

Concen: 0.826 ppbv

RT: 4.56 min Scan# 553

Delta R.T. 0.01 min

Lab File: VL038276.D

Acq: 25 Jan 2022 1:40

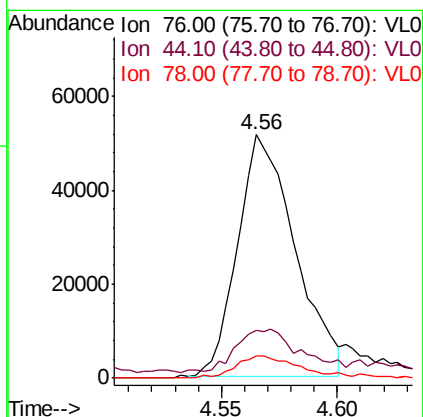
Tgt Ion: 76 Resp: 89289

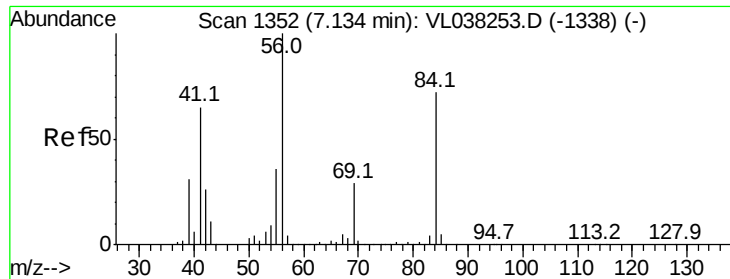
Ion Ratio Lower Upper

76 100

44 23.4 14.8 22.2#

78 10.9 7.9 11.9



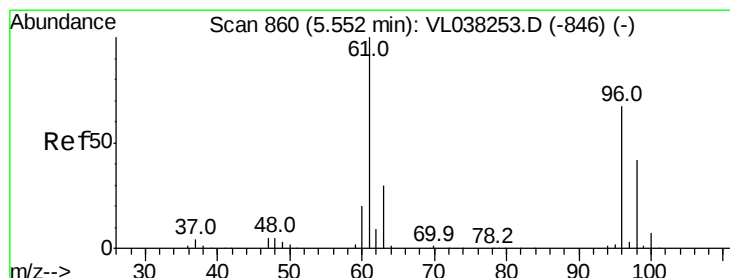
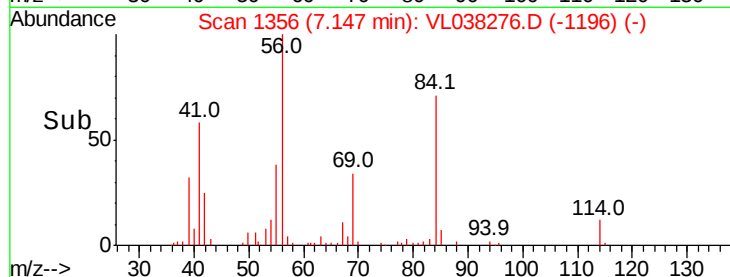
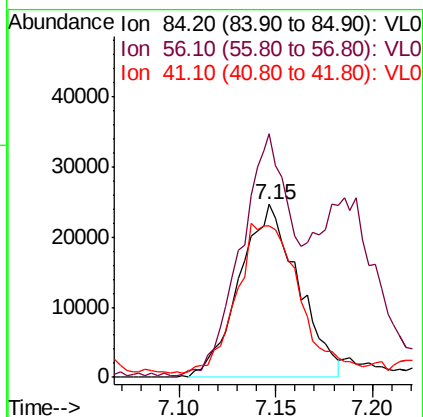
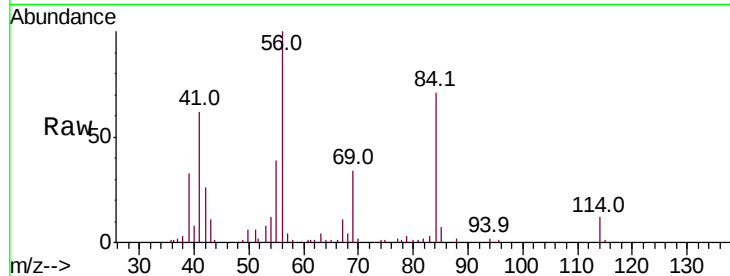


#30
Cvclohexane
Concen: 0.648 ppbv
RT: 7.15
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 25 Jan 2022 1:40

Tot Ion:
Ion Ratio
84 100
56 116.
41 94.

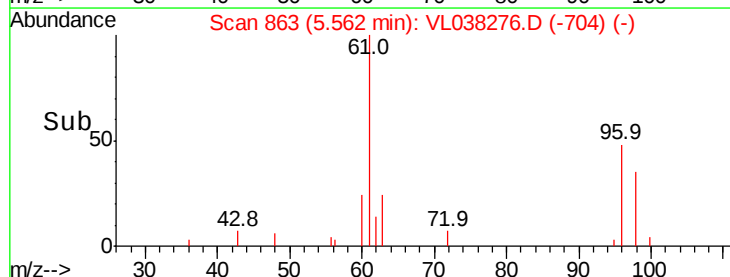
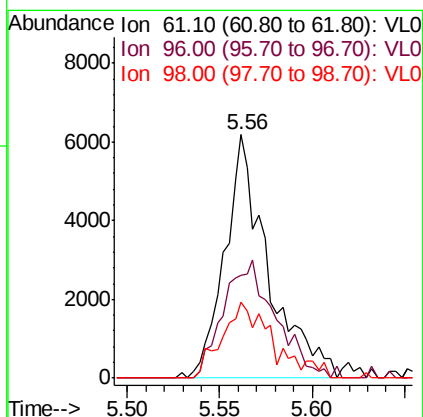
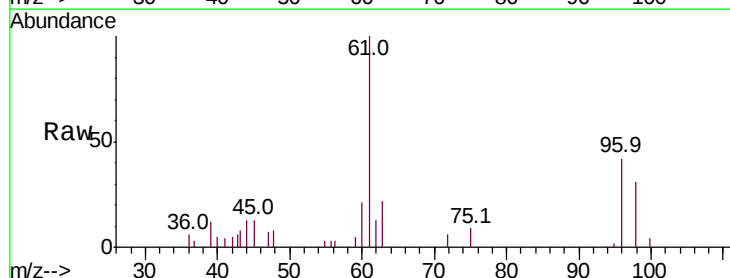
Manual Integrations
APPROVED

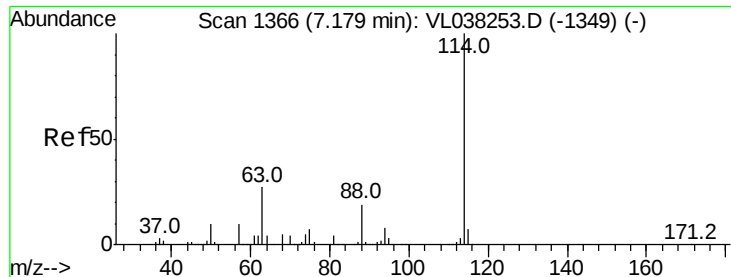
Reviewed By :Semsettin Yesilyurt 01/25/2022
Supervised By :Mahesh Dadoda 01/26/2022



#31
cis-1,2-Dichloroethene
Concen: 0.125 ppbv m
RT: 5.56 min Scan# 863
Delta R.T. 0.01 min
Lab File: VL038276.D
Acq: 25 Jan 2022 1:40

Tgt Ion: 61 Resp: 10081
Ion Ratio Lower Upper
61 100
96 42.1 53.3 79.9#
98 31.3 33.7 50.5#



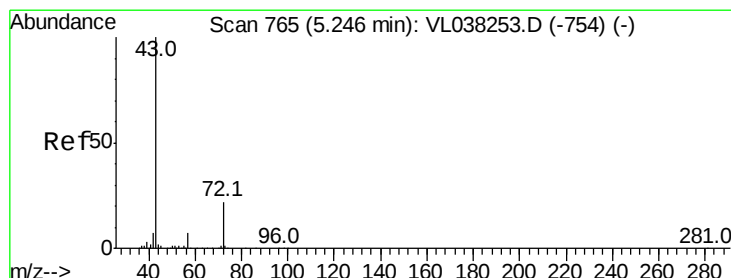
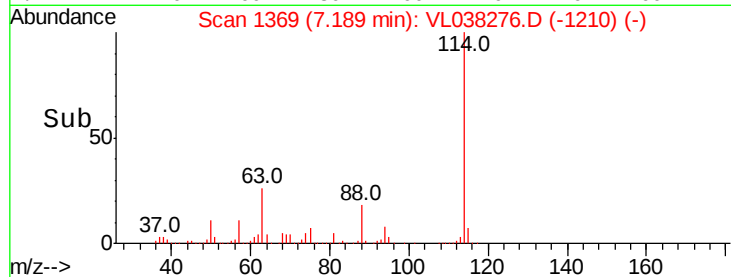
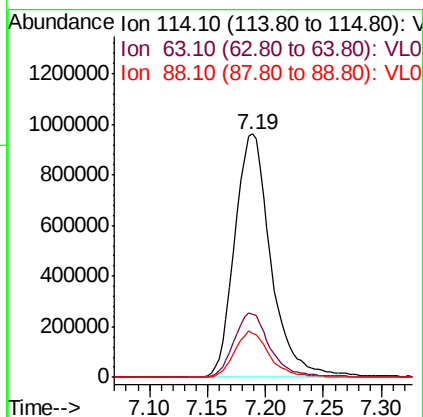
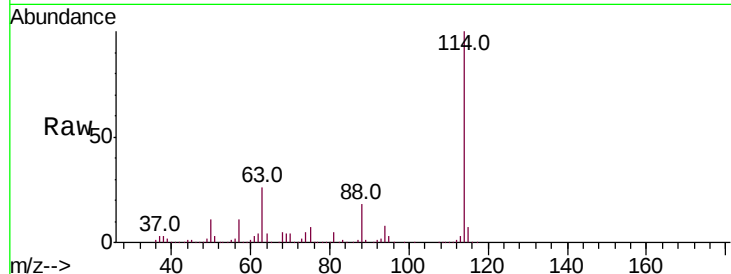


#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.19
 Instrument : MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId :
 Acq: 25 Jan 2022 1:40

Tot Ion:1
 Ion Rati
 114 100
 63 26.
 88 18.

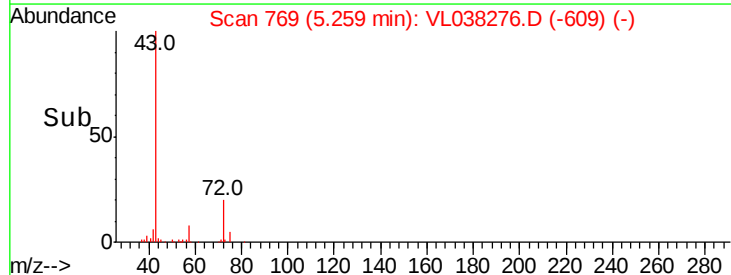
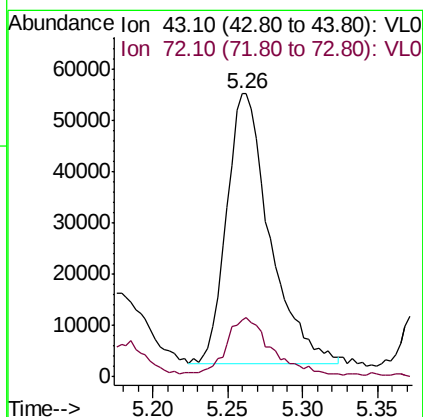
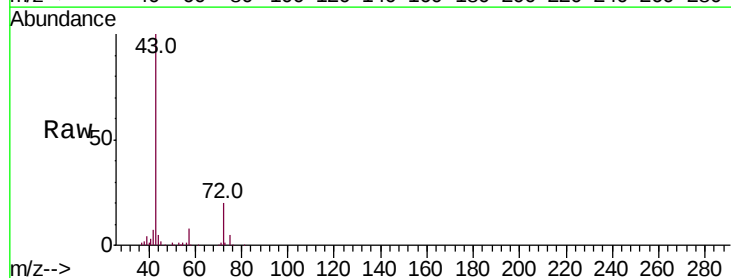
Manual Integrations
 APPROVED

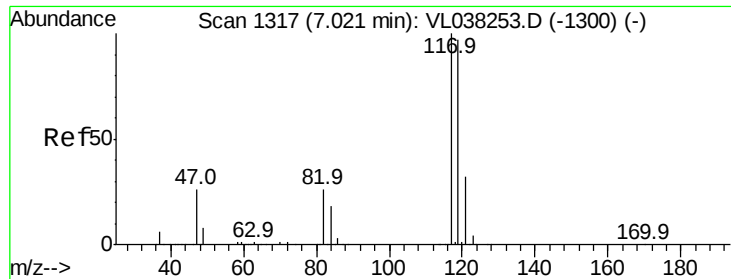
Reviewed By :Semsettin Yesilyurt 01/25/2022
 Supervised By :Mahesh Dadoda 01/26/2022



#34
 2-Butanone
 Concen: 1.561 ppbv
 RT: 5.26 min Scan# 769
 Delta R.T. 0.01 min
 Lab File: VL038276.D
 Acq: 25 Jan 2022 1:40

Tgt Ion	Ratio	Lower	Upper
43	100		
72	25.3	18.1	27.1





#35

Carbon Tetrachloride

Concen: 0.057 ppbv m

RT: 7.03

Delta R.T. MSVOA_L

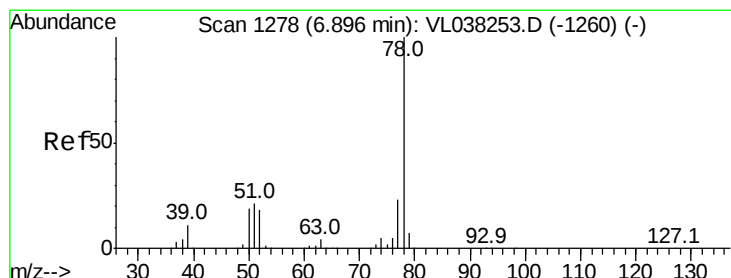
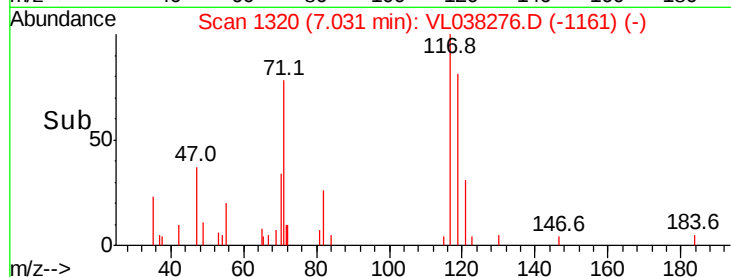
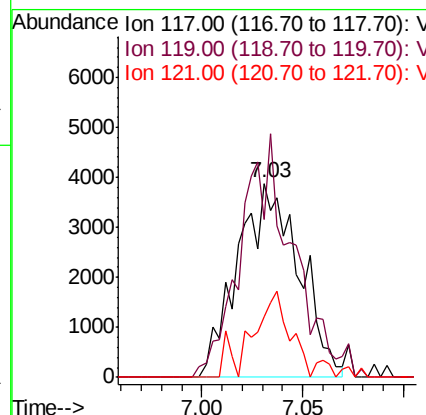
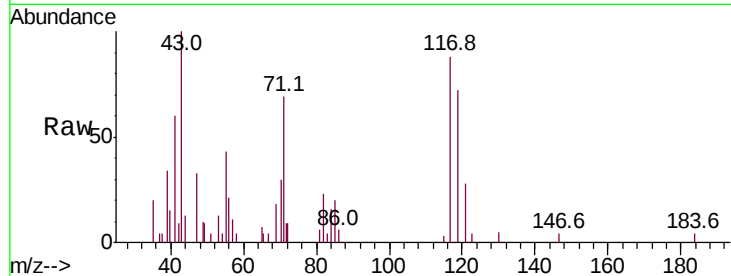
Lab File: ClientSampleId :

Acq: 25 Jan 2022 1:40

Tot Ion:1
Ion Rati
117 100
119 81.
121 31.

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Reviewed By :Semsettin Yesilyurt 01/25/2022
Supervised By :Mahesh Dadoda 01/26/2022



#36

Benzene

Concen: 0.470 ppbv

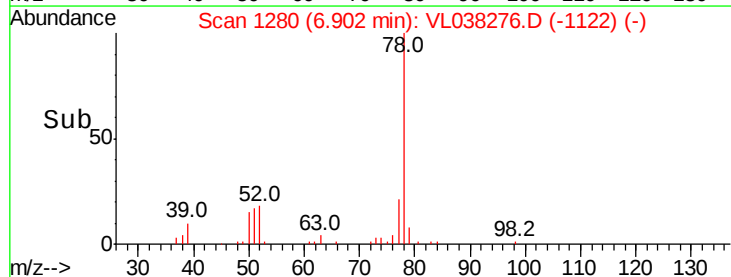
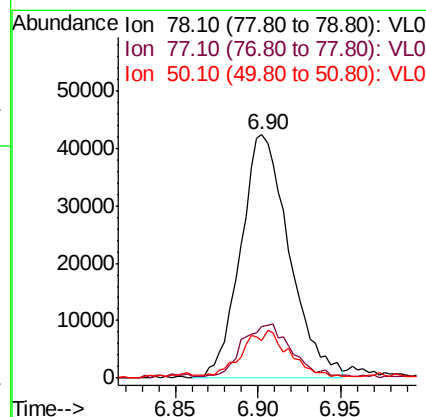
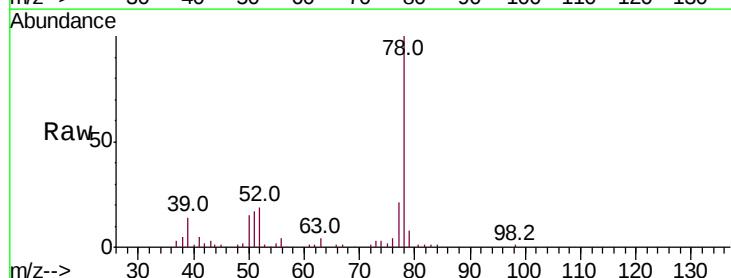
RT: 6.90 min Scan# 1280

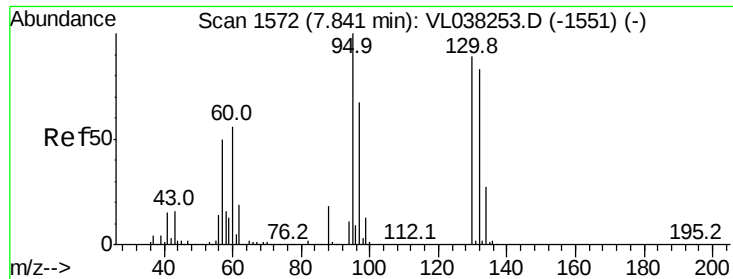
Delta R.T. 0.01 min

Lab File: VL038276.D

Acq: 25 Jan 2022 1:40

Tgt Ion: 78 Resp: 86350
Ion Ratio Lower Upper
78 100
77 20.3 18.2 27.2
50 14.6 15.1 22.7#





#38

Trichloroethene

Concen: 0.122 ppbv m

RT: 7.85 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 25 Jan 2022 1:40

Tot Ion:1

Ion Rati

130 100

95 108.

132 81.

97 69.7

59.6

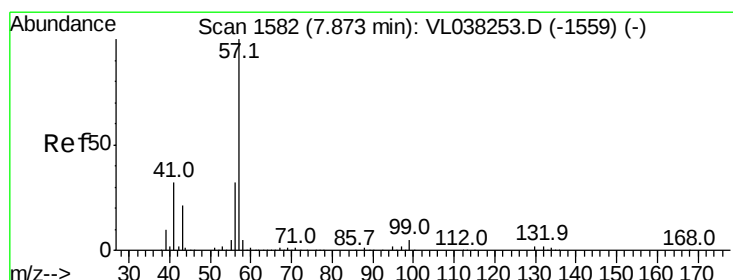
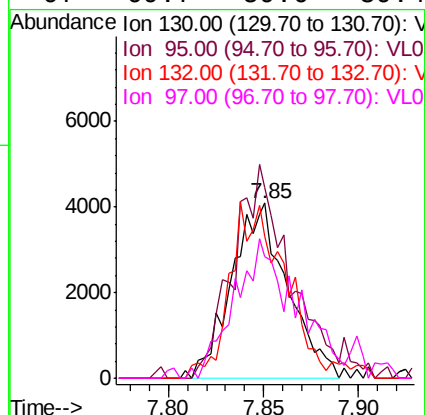
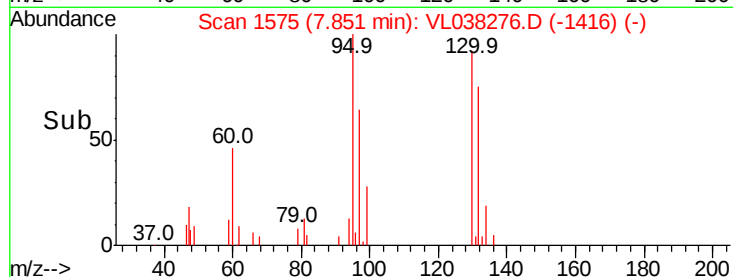
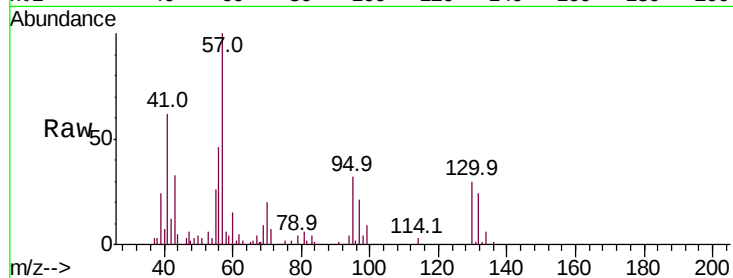
89.4

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 01/25/2022

Supervised By :Mahesh Dadoda 01/26/2022



#44

2,2,4-Trimethylpentane

Concen: 0.825 ppbv

RT: 7.88 min Scan# 1584

Delta R.T. 0.01 min

Lab File: VL038276.D

Acq: 25 Jan 2022 1:40

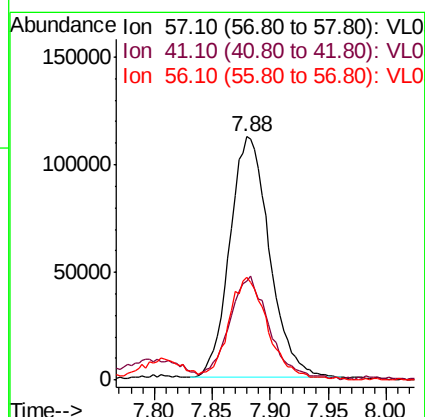
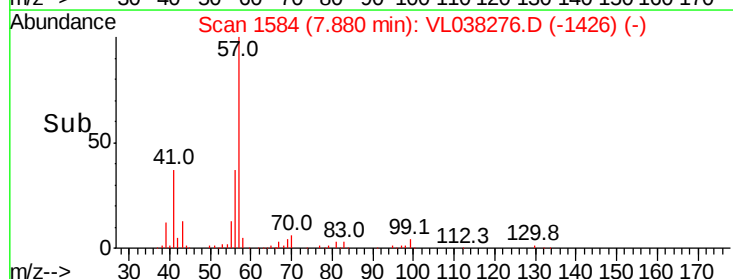
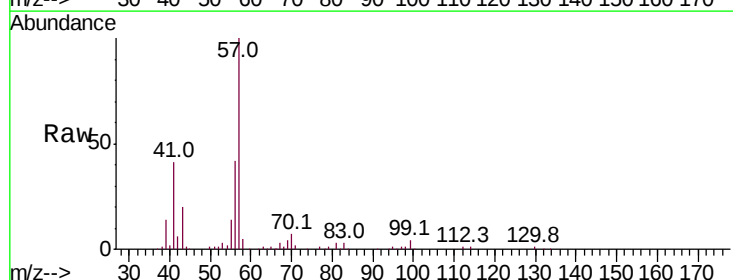
Tgt Ion: 57 Resp: 267193

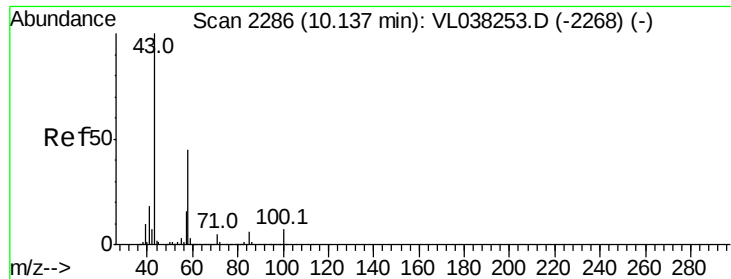
Ion Ratio Lower Upper

57 100

41 43.1 26.3 39.5#

56 41.9 25.2 37.8#



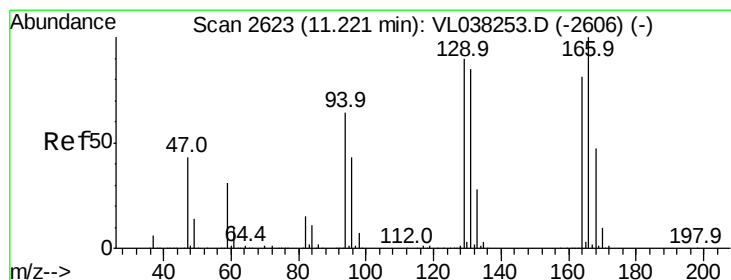
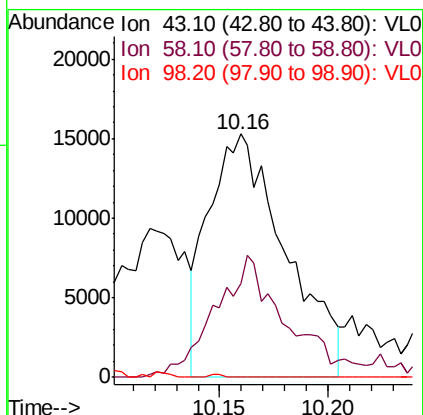
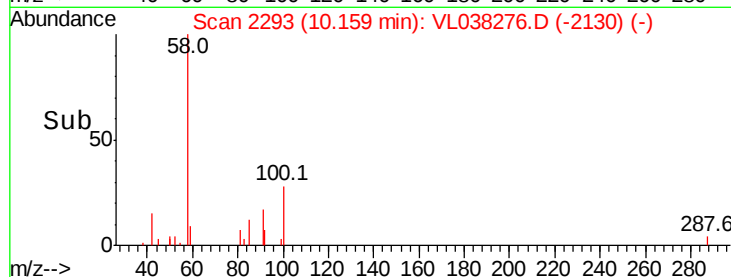
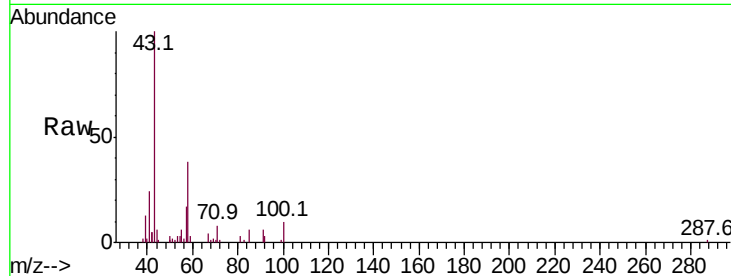


#51
2-Hexanone
Concen: 0.704 ppbv m
RT: 10.16
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 25 Jan 2022 1:40

Tot Ion:
Ion Ratio
43 100
58 50.
98 0.

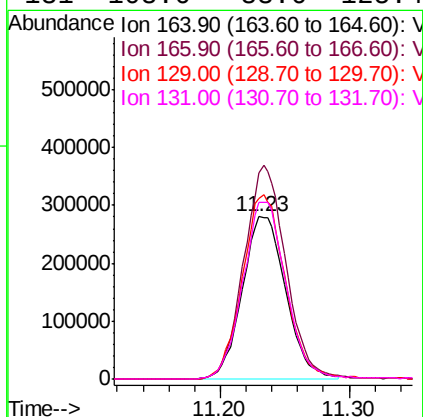
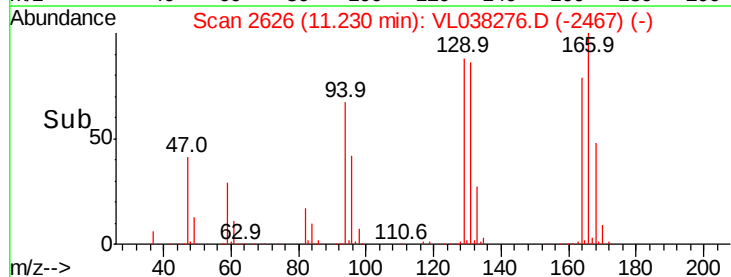
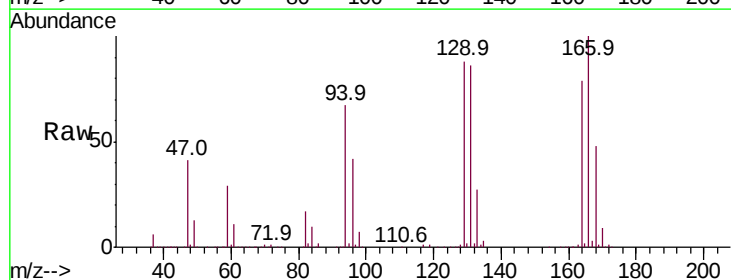
Manual Integrations
APPROVED

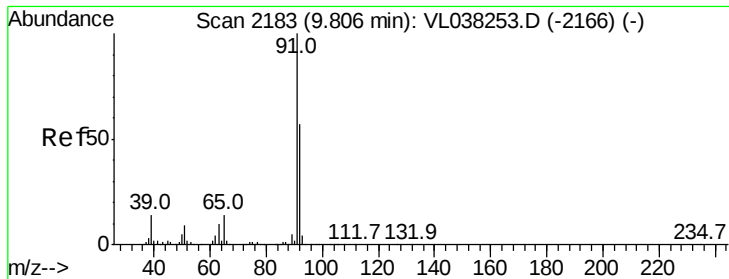
Reviewed By :Semsettin Yesilyurt 01/25/2022
Supervised By :Mahesh Dadoda 01/26/2022



#52
Tetrachloroethene
Concen: 10.375 ppbv
RT: 11.23 min Scan# 2626
Delta R.T. 0.01 min
Lab File: VL038276.D
Acq: 25 Jan 2022 1:40

Tgt Ion:164 Resp: 657273
Ion Ratio Lower Upper
164 100
166 126.7 98.8 148.2
129 111.6 89.2 133.8
131 108.6 83.6 125.4



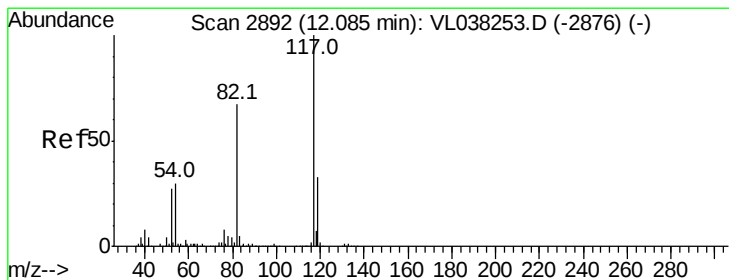
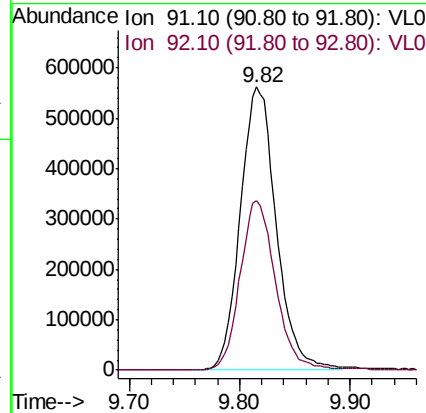
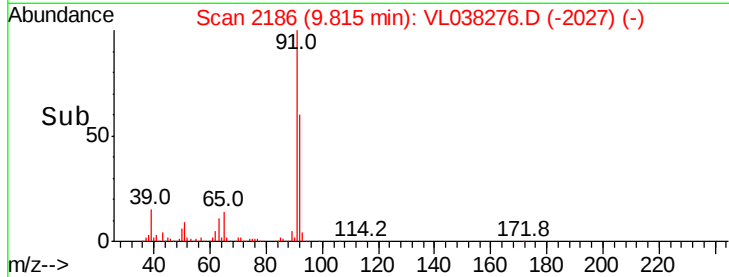
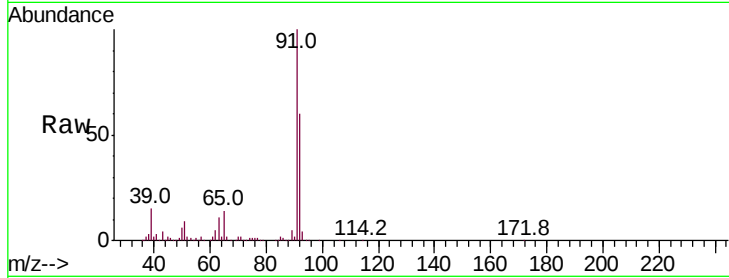


#53
Toluene
Concen: 6.235 ppbv
RT: 9.82
Instrument : MSVOA_1
Delta R.T.:
Lab File: ClientSampleId :
Acq: 25 Jan 2022 1:40

Tot Ion:
Ion Ratio
91 100
92 59.

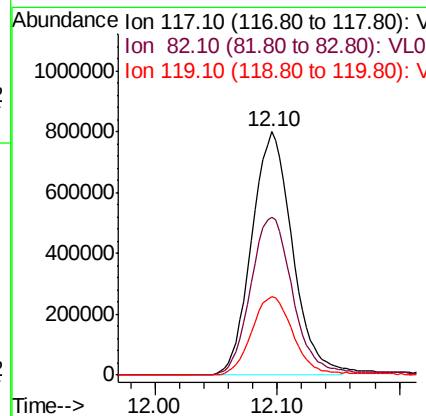
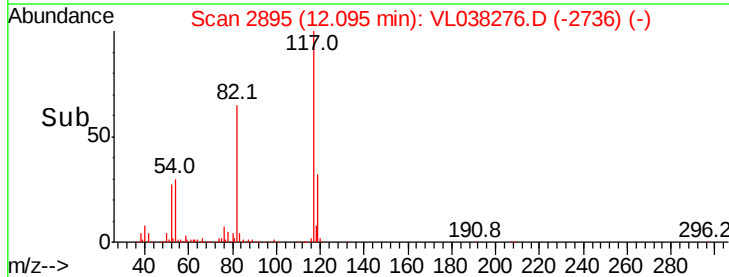
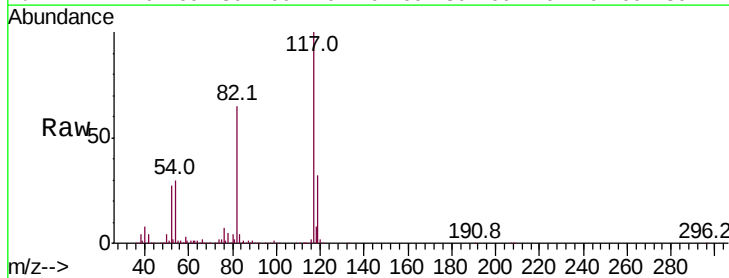
Manual Integrations
APPROVED

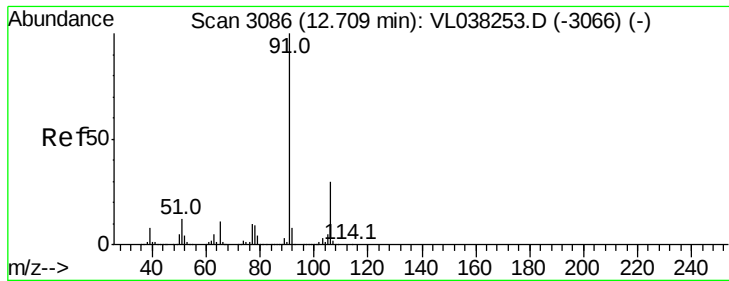
Reviewed By :Semsettin Yesilyurt 01/25/2022
Supervised By :Mahesh Dadoda 01/26/2022



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.10 min Scan# 2895
Delta R.T. 0.01 min
Lab File: VL038276.D
Acq: 25 Jan 2022 1:40

Tgt Ion:117 Resp: 1844055
Ion Ratio Lower Upper
117 100
82 69.9 54.4 81.6
119 33.9 45.9 68.9#





#58

Ethyl Benzene

Concen: 0.324 ppbv

RT: 12.72

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 25 Jan 2022 1:40

Tot Ion:

Ion Ratio

91 100

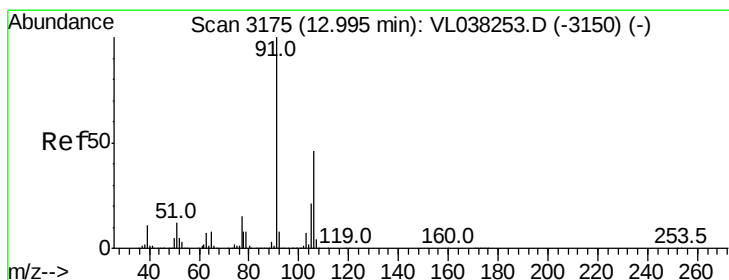
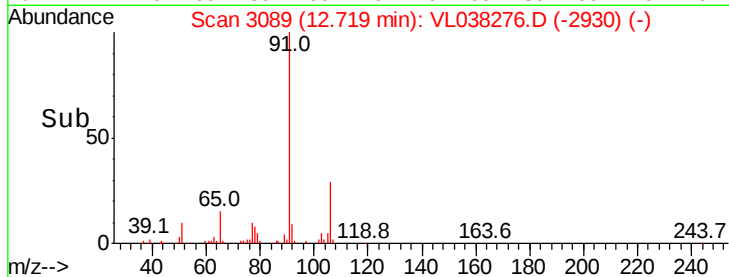
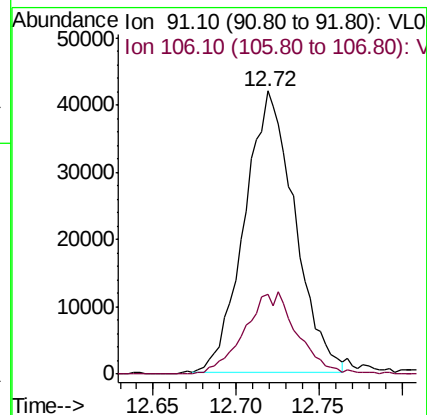
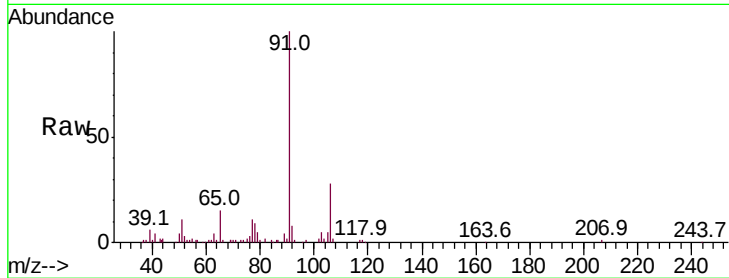
106 28.

Manual Integrations

APPROVED

Reviewed By :Semsettin Yesilyurt 01/25/2022

Supervised By :Mahesh Dadoda 01/26/2022



#59

m/p-Xylene

Concen: 1.076 ppbv m

RT: 12.98 min Scan# 3170

Delta R.T. -0.02 min

Lab File: VL038276.D

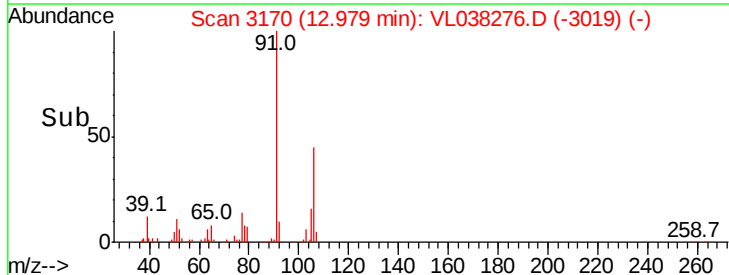
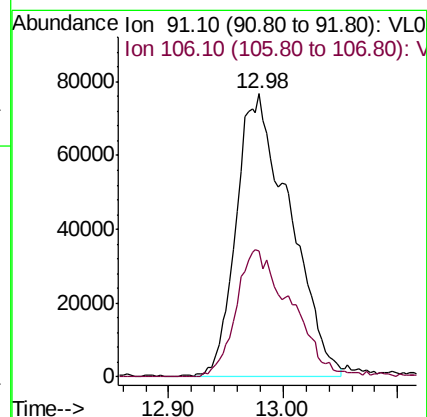
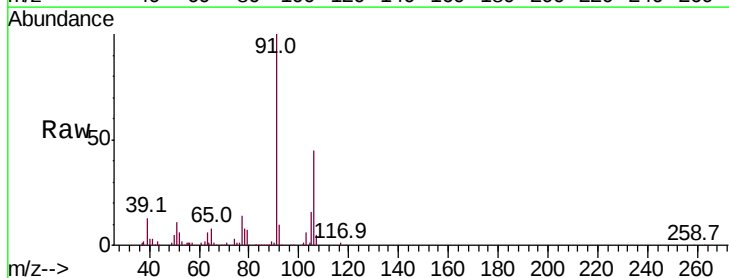
Acq: 25 Jan 2022 1:40

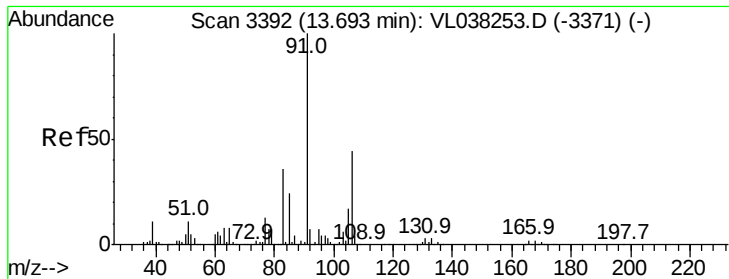
Tgt Ion: 91 Resp: 248850

Ion Ratio Lower Upper

91 100

106 0.0 34.8 52.2#





#60

o-Xylene

Concen: 0.394 ppbv

RT: 13.70

Delta R.T.

Lab File:

Acq: 25 Jan 2022

Instrument :

MSVOA_1

ClientSampleId :

SG-3

1.40

Tot Ion:

Ion Ratio

91 100

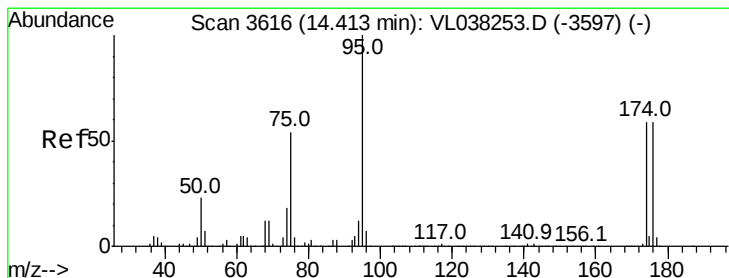
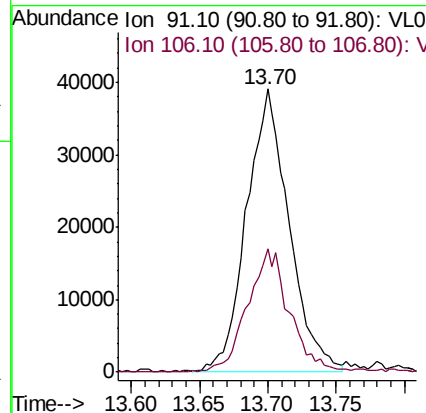
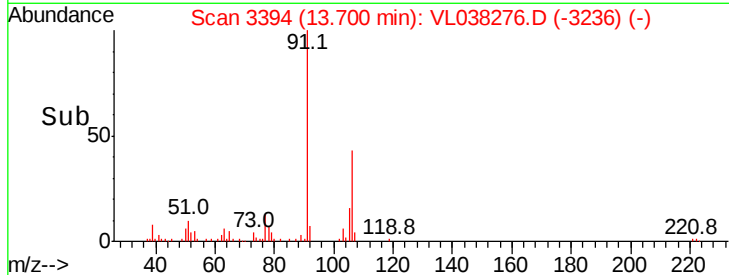
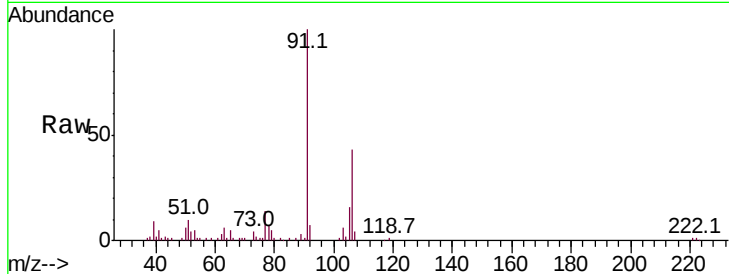
106 42.

Manual Integrations

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Reviewed By :Semsettin Yesilyurt 01/25/2022

Supervised By :Mahesh Dadoda 01/26/2022



#68

1-Bromo-4-Fluorobenzene

Concen: 9.975 ppbv

RT: 14.42 min Scan# 3619

Delta R.T. 0.01 min

Lab File: VL038276.D

Acq: 25 Jan 2022 1:40

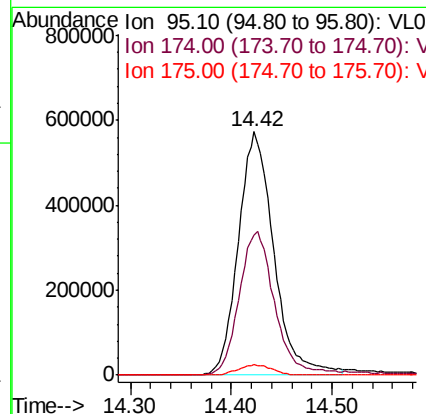
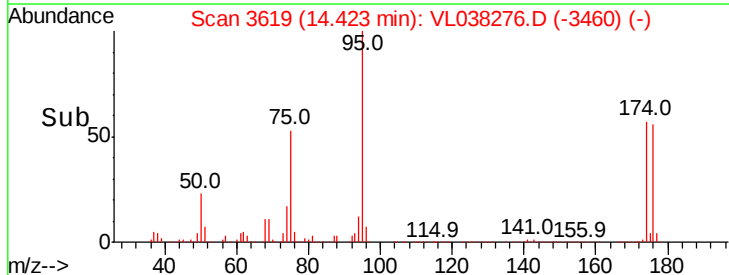
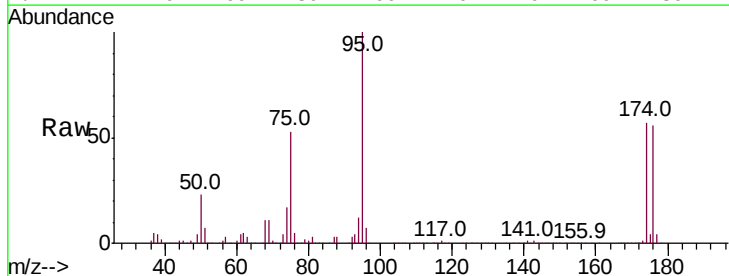
Tgt Ion: 95 Resp: 1396189

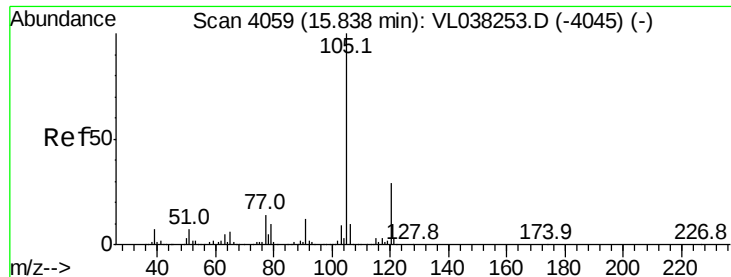
Ion Ratio Lower Upper

95 100

174 61.5 48.3 72.5

175 4.4 3.5 5.3





#72

4-Ethyltoluene

Concen: 0.106 ppbv m

RT: 15.85

Delta R.T. MSVOA_L

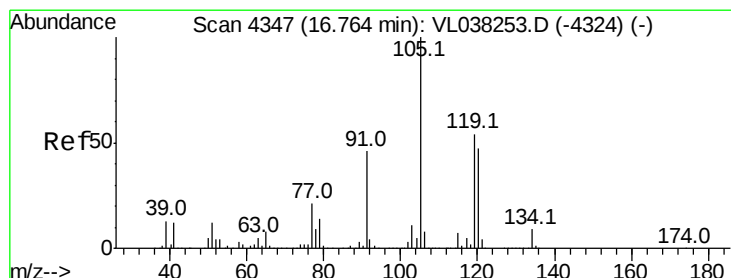
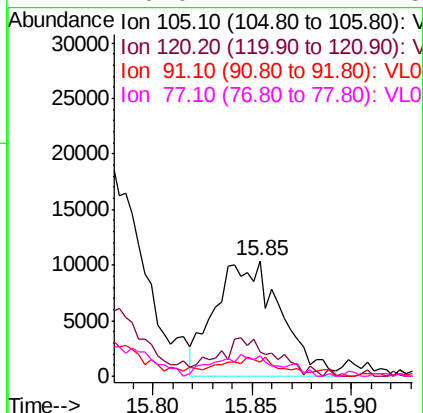
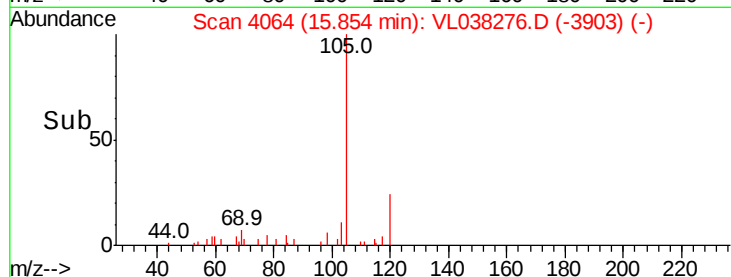
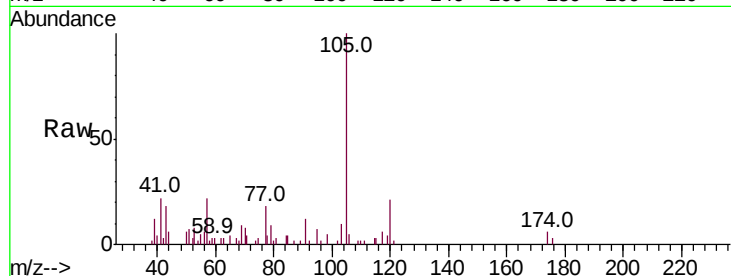
Lab File: ClientSampleId :

Acq: 25 Jan 2022 1:40

Manual Integrations
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Reviewed By :Semsettin Yesilyurt 01/25/2022
Supervised By :Mahesh Dadoda 01/26/2022

Tot Ion	Ion	Ratio		
105	100			
120	0.			
91	0.			
77	0.0	11.7	17.5	#



#74

1,2,4-Trimethylbenzene

Concen: 0.239 ppbv m

RT: 16.77 min Scan# 4348

Delta R.T. 0.00 min

Lab File: VL038276.D

Acq: 25 Jan 2022 1:40

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
105	100		50923		
120	38.9	37.2	55.8		
91	14.3	36.6	55.0		
77	20.7	16.9	25.3		

