

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL121621\
 Data File : VL038194.D
 Acq On : 16 Dec 2021 18:11
 Operator : SY/AP
 Sample : M5136-01
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA L
 ClientSampleId :
 INFLUENT

Manual Integrations
 APPROVED

Reviewed By :Amit Patel 12/20/2021
 Supervised By :Mahesh Dadoda 12/20/2021

Quant Time: Dec 17 06:27:51 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL111821A
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument:
 QLast Update : Thu Nov 18 13:16:09 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	932444	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	2402094	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	2120864	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.41	95	1594496	10.42	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	104.20%

Target Compounds

						Ovalue
2) Dichlorodifluoromethane	3.06	85	34918	0.227	ppbv	93
3) Chlorodifluoromethane	3.00	51	50543m	0.258	ppbv	
4) Chloromethane	3.15	50	20810	0.312	ppbv	95
7) Chloroethane	3.56	64	37150	1.601	ppbv #	88
9) Propene	3.03	41	54965	0.762	ppbv #	76
11) Trichlorofluoromethane	3.95	101	68167m	0.465	ppbv	
12) 1,1,2-Trichlorotrifluoroet	4.49	101	101612	0.981	ppbv	99
13) Ethanol	3.60	45	532183	76.363	ppbv	87
15) Acetone	3.86	43	348173	4.307	ppbv	98
17) tert-Butyl alcohol	4.30	59	33211m	0.339	ppbv	
18) 1,1-Dichloroethene	4.29	96	75745	1.594	ppbv	98
19) Isopropyl Alcohol	3.97	45	459617	7.868	ppbv #	97
20) Methylene Chloride	4.35	84	134884	2.979	ppbv	95
24) 1,1-Dichloroethane	5.01	63	1442768	14.805	ppbv	99
26) Hexane	5.69	57	80052	0.618	ppbv #	72
29) Chloroform	5.76	83	20303m	0.106	ppbv	
32) 1,1,1-Trichloroethane	6.52	97	8231173	42.493	ppbv	95
34) 2-Butanone	5.26	43	68414	0.706	ppbv	95
35) Carbon Tetrachloride	7.02	117	11164m	0.066	ppbv	
36) Benzene	6.90	78	31542	0.132	ppbv	99
38) Trichloroethene	7.84	130	12840	0.142	ppbv #	76
41) Tetrahydrofuran	6.07	42	34672m	0.577	ppbv	
52) Tetrachloroethene	11.23	164	29878	0.337	ppbv	87
53) Toluene	9.81	91	88802	0.322	ppbv	97
58) Ethyl Benzene	12.71	91	35802	0.102	ppbv	93
59) m/p-Xylene	12.97	91	120734m	0.409	ppbv	
60) o-Xylene	13.69	91	45114	0.165	ppbv	98
74) 1,2,4-Trimethylbenzene	16.75	105	43911m	0.147	ppbv	

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

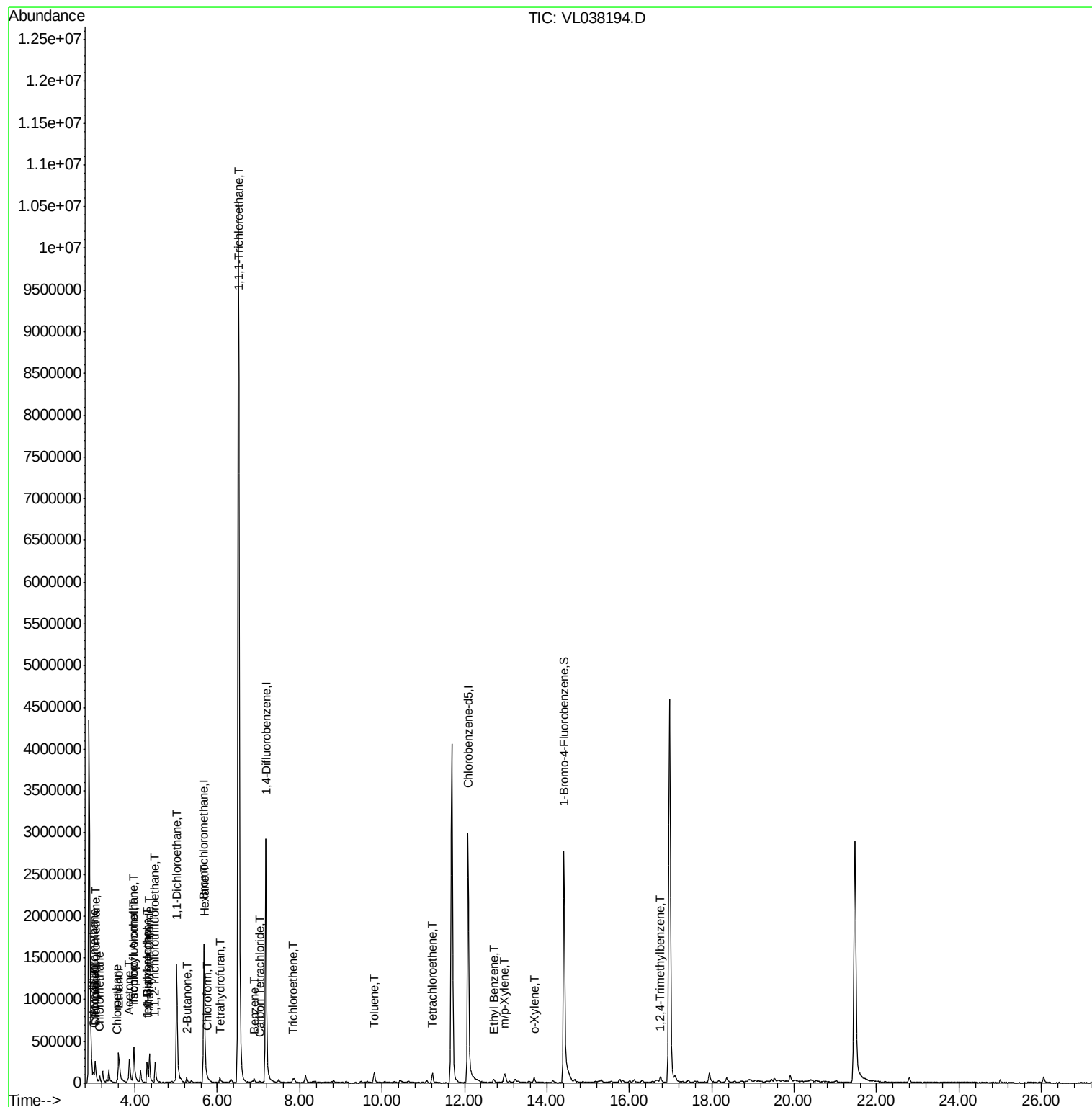
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL121621\
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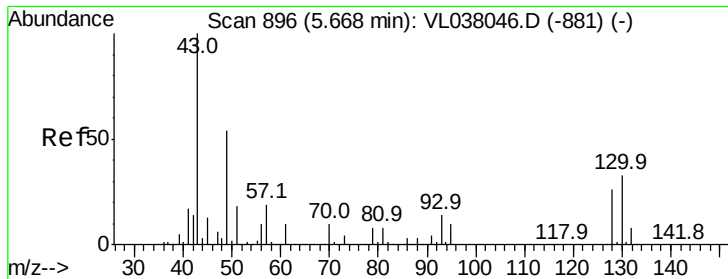
Instrument :
MSVOA_L
ClientSampleId :
INFLUENT

Quant Time: Dec 17 06:27:51 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL111821
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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 Instrument: MSVOA_L

Delta R.T. ClientSampleId:

Lab File: INFLUENT

Acq: 16 Dec 2021 18:11

Tot Ion:

Ion Ratio

49 100

128 47.

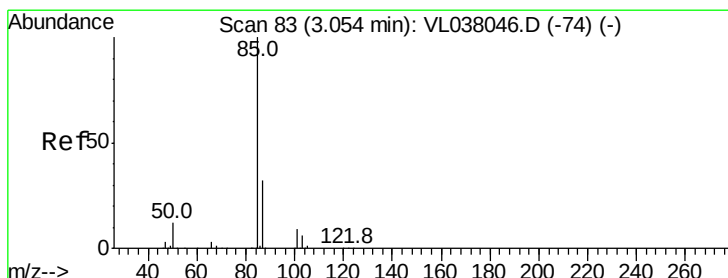
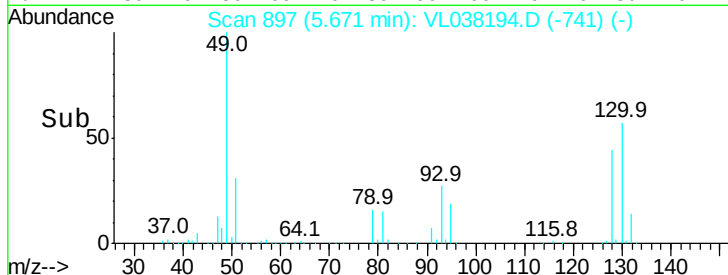
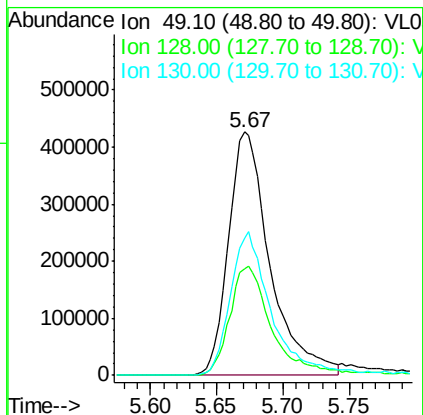
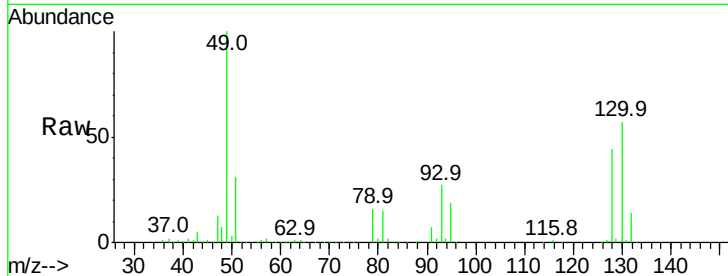
130 59.

Manual Integrations

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Supervised By :Mahesh Dadoda 12/20/2021



#2

Dichlorodifluoromethane

Concen: 0.227 ppbv

RT: 3.06 min Scan# 84

Delta R.T. 0.00 min

Lab File: VL038194.D

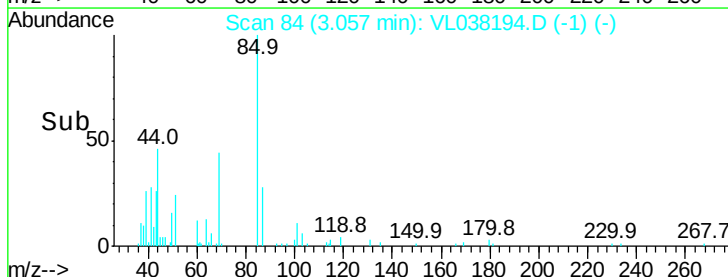
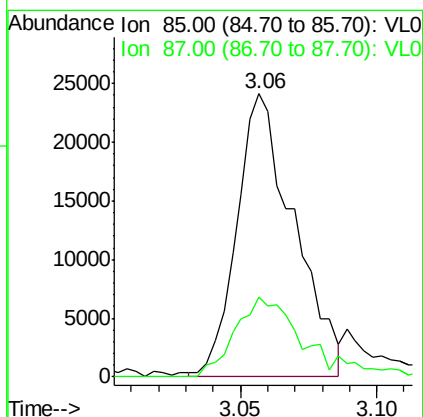
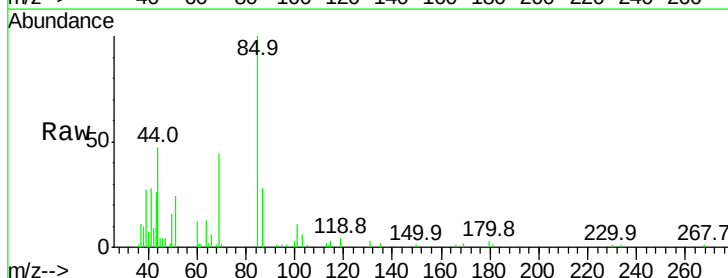
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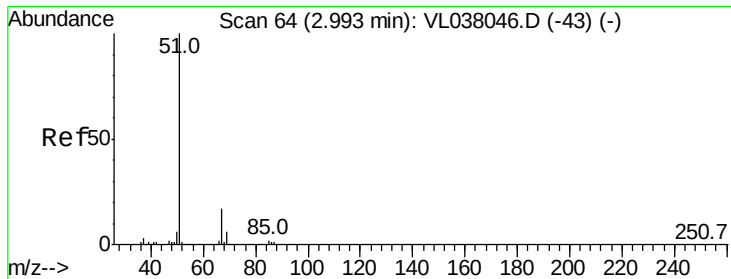
Tgt Ion: 85 Resp: 34918

Ion Ratio Lower Upper

85 100

87 28.5 25.8 38.6





#3

Chlorodifluoromethane

Concen: 0.258 ppbv m

RT: 3.00 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 16 Dec 2021 18:11 INFLUENT

Tot Ion:

Ion Ratio

51 100

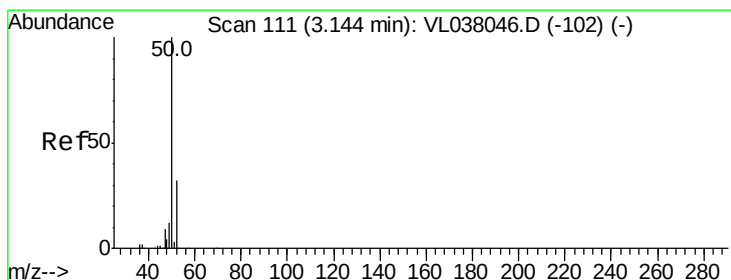
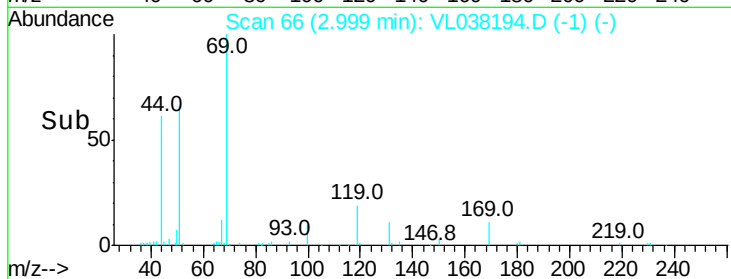
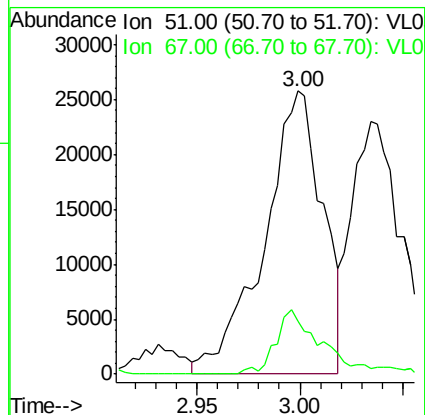
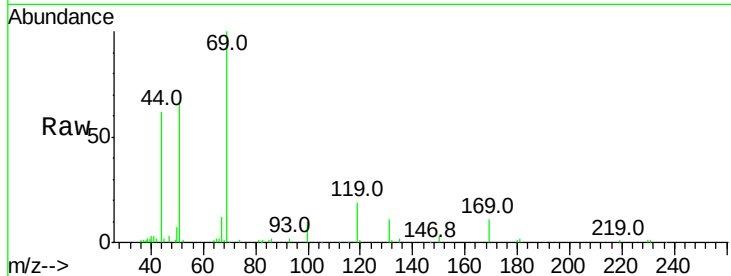
67 18.

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#4

Chloromethane

Concen: 0.312 ppbv

RT: 3.15 min Scan# 113

Delta R.T. 0.01 min

Lab File: VL038194.D

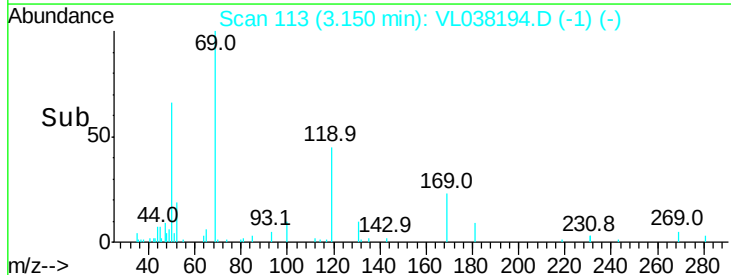
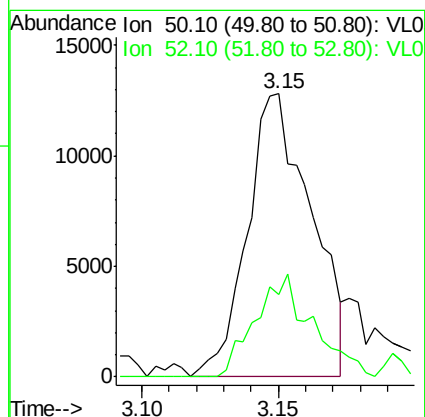
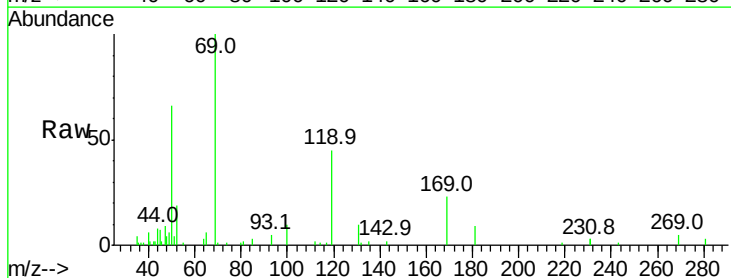
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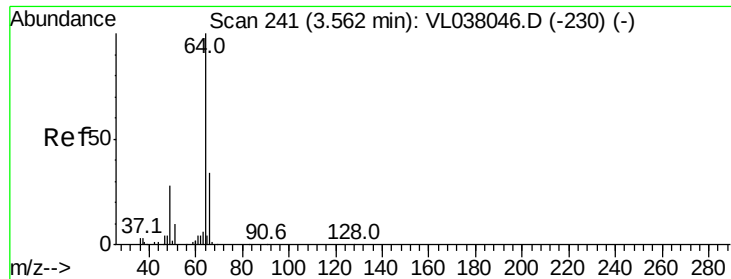
Tgt Ion: 50 Resp: 20810

Ion Ratio Lower Upper

50 100

52 28.9 25.4 38.0





#7

Chloroethane

Concen: 1.601 ppbv

RT: 3.56 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 16 Dec 2021 18:11 INFLUENT

Tot Ion:

Ion Ratio

64 100

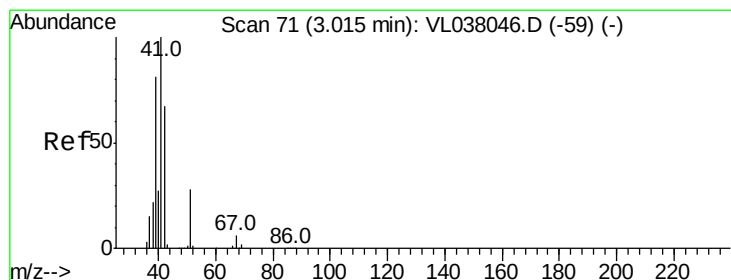
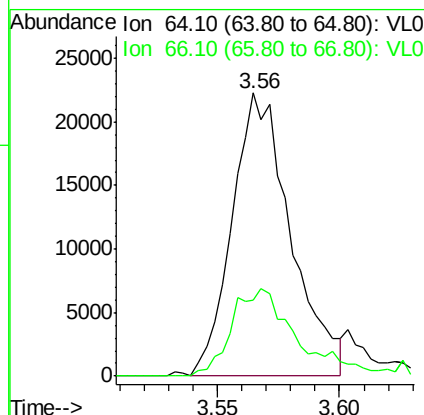
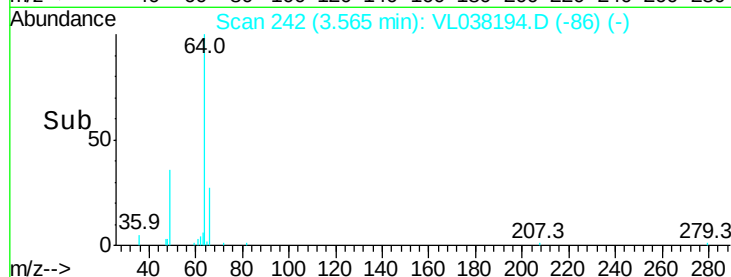
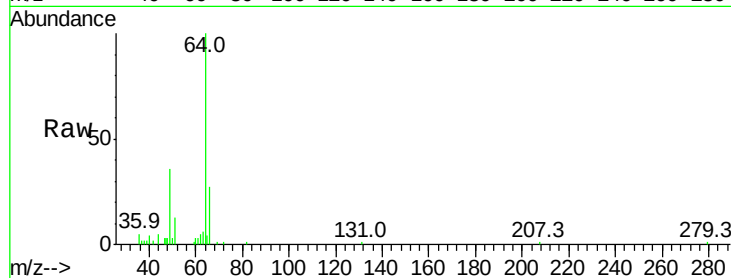
66 26.

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Supervised By :Mahesh Dadoda 12/20/2021



#9

Propene

Concen: 0.762 ppbv

RT: 3.03 min Scan# 75

Delta R.T. 0.01 min

Lab File: VL038194.D

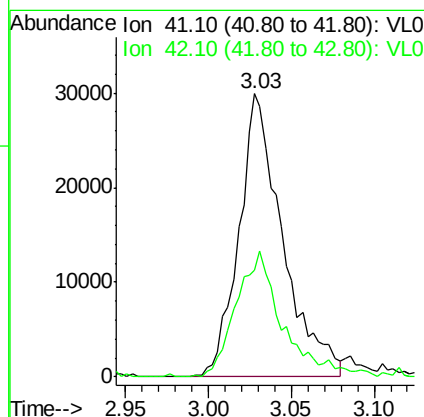
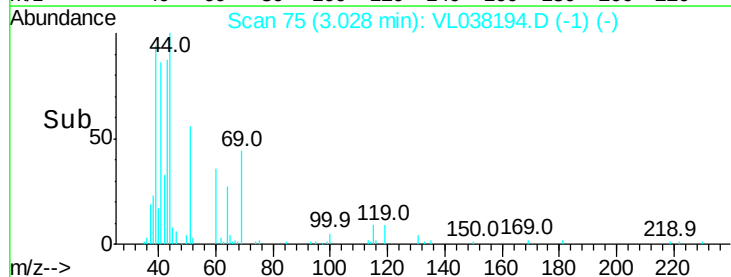
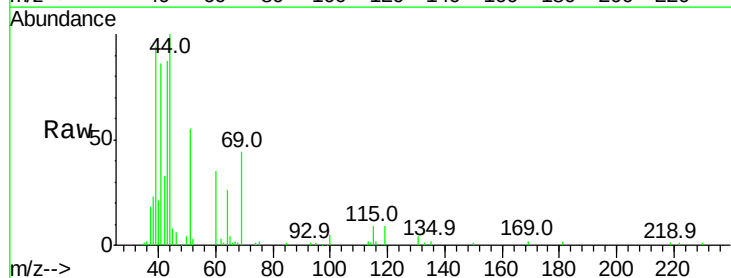
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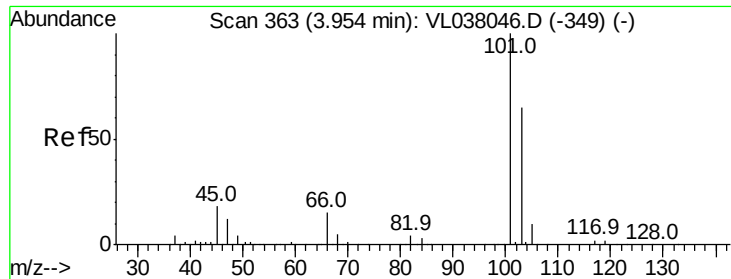
Tgt Ion: 41 Resp: 54965

Ion Ratio Lower Upper

41 100

42 47.9 53.8 80.8#



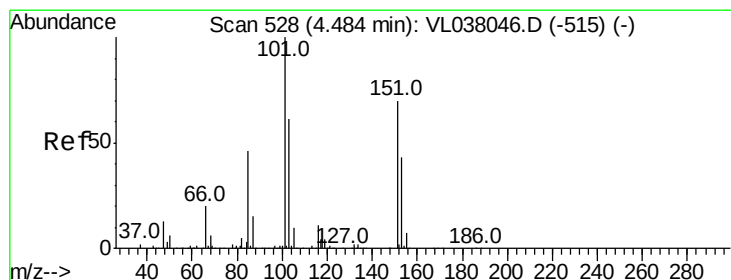
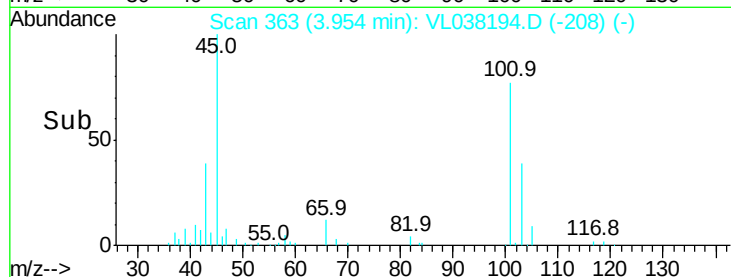
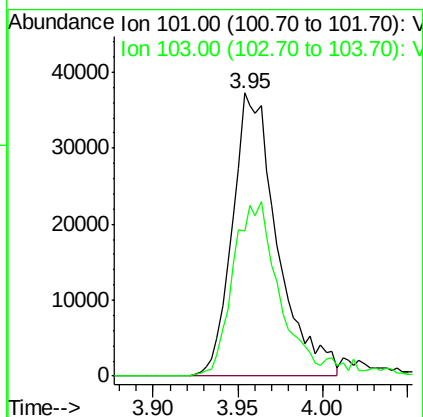
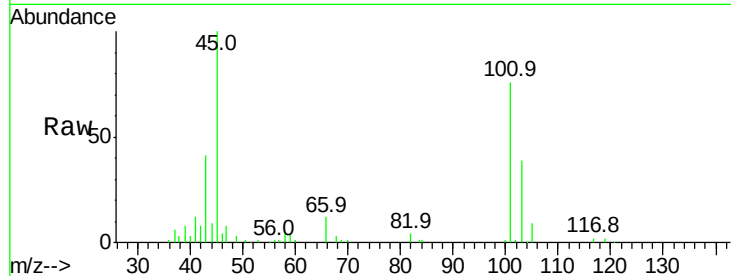


#11
 Trichlorofluoromethane
 Concen: 0.465 ppbv m
 RT: 3.95
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId:
 Acq: 16 Dec 2021 18:11

Tot Ion:1
 Ion Rati
 101 100
 103 51.

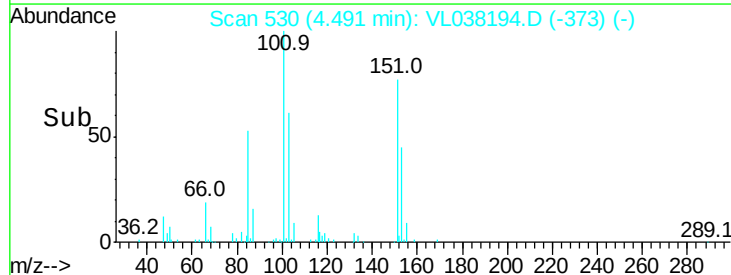
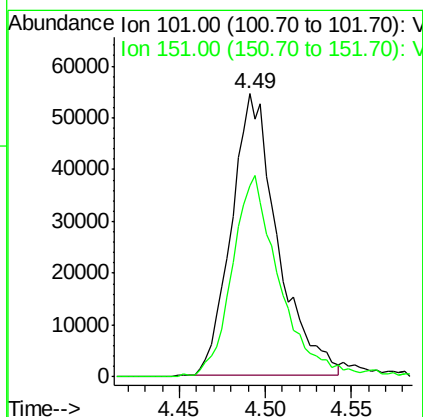
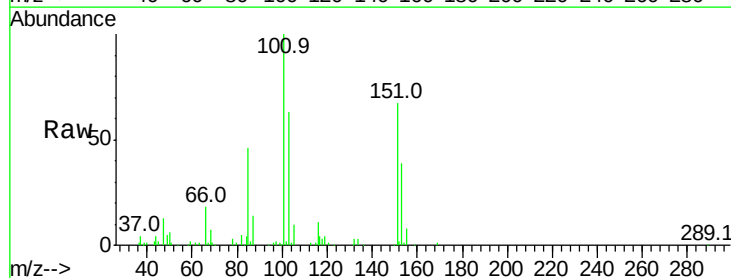
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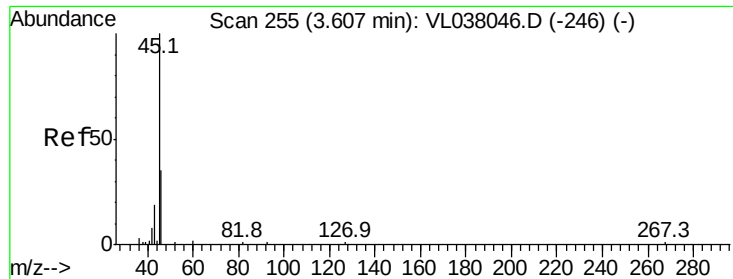
Reviewed By :Amit Patel 12/20/2021
 Supervised By :Mahesh Dadoda 12/20/2021



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.981 ppbv
 RT: 4.49 min Scan# 530
 Delta R.T. 0.01 min
 Lab File: VL038194.D
 Acq: 16 Dec 2021 18:11

Tgt Ion:101 Resp: 101612
 Ion Ratio Lower Upper
 101 100
 151 74.6 59.0 88.4



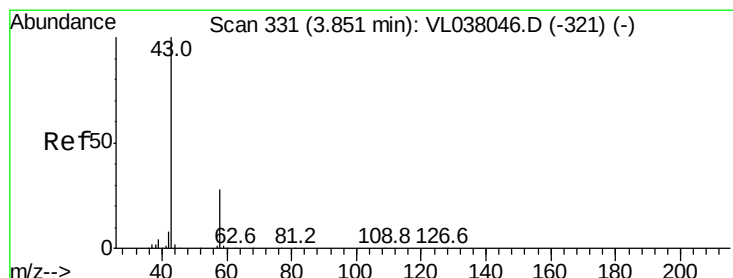
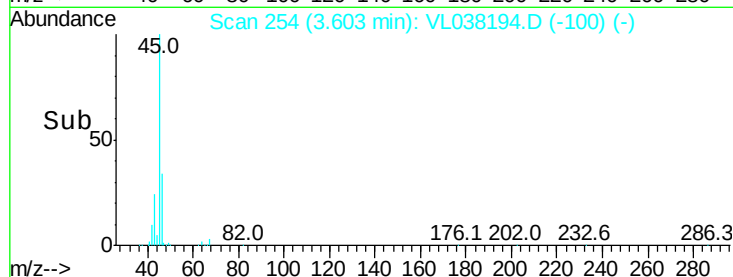
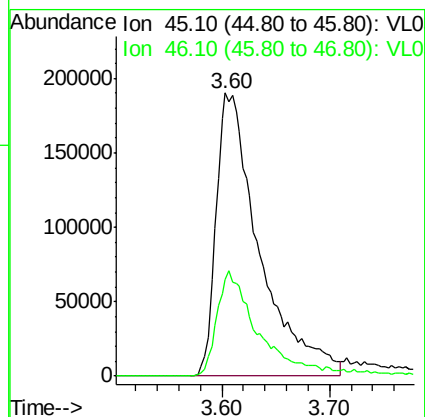
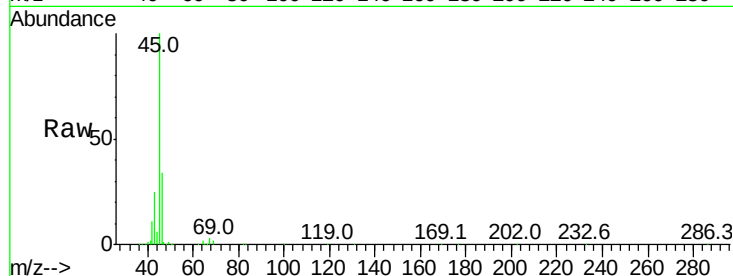


#13
Ethanol
Concen: 76.363 ppbv
RT: 3.60
Delta R.T. MSVOA_L
Lab File: ClientSampleId :
Acq: 16 Dec 2021 18:11

Tot Ion:
Ion Ratio
45 100
46 35.

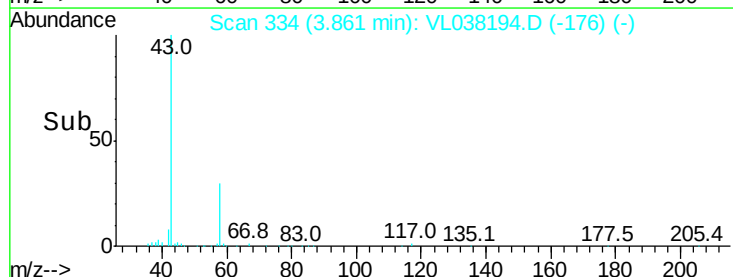
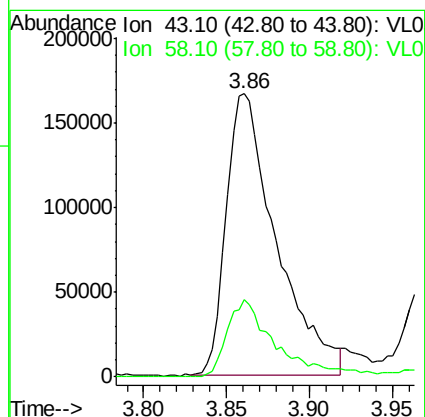
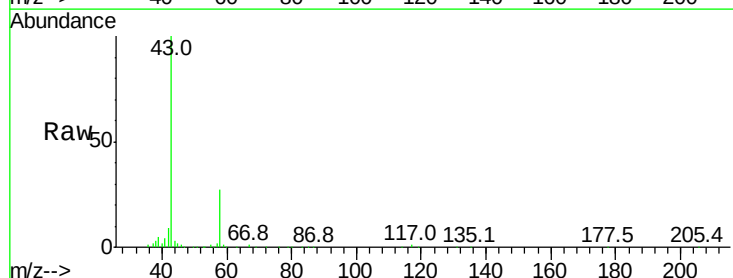
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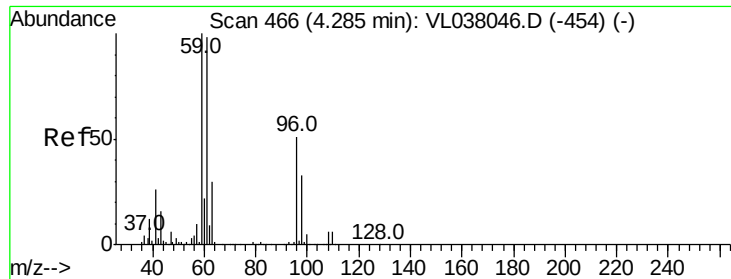
Reviewed By :Amit Patel 12/20/2021
Supervised By :Mahesh Dadoda 12/20/2021



#15
Acetone
Concen: 4.307 ppbv
RT: 3.86 min Scan# 334
Delta R.T. 0.01 min
Lab File: VL038194.D
Acq: 16 Dec 2021 18:11

Tgt Ion: 43 Resp: 348173
Ion Ratio Lower Upper
43 100
58 27.0 22.4 33.6





#17

tert-Butyl alcohol

Concen: 0.339 ppbv m

RT: 4.30 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 16 Dec 2021 18:11 INFLUENT

Tot Ion:

Ion Ratio

59 100

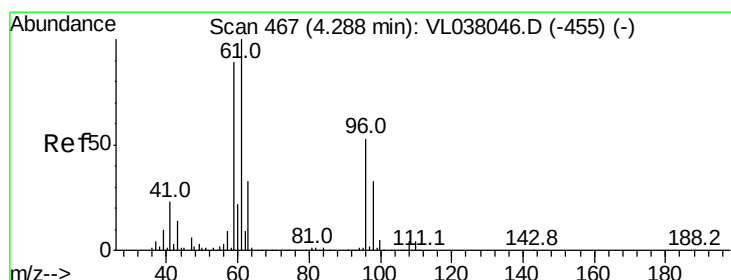
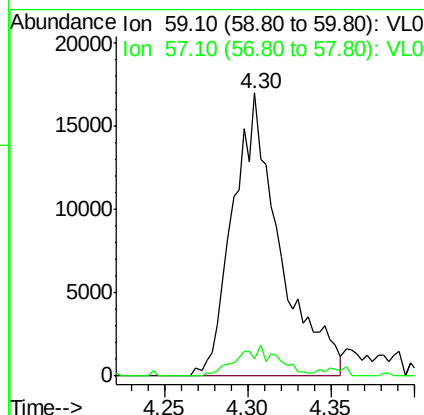
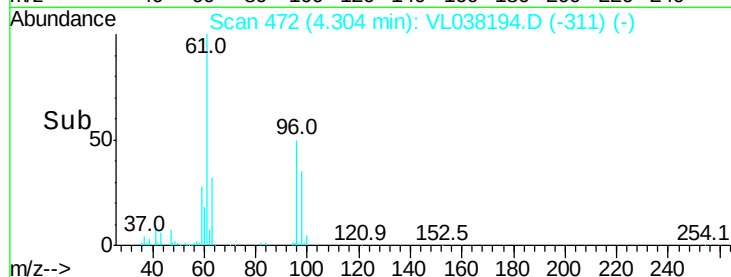
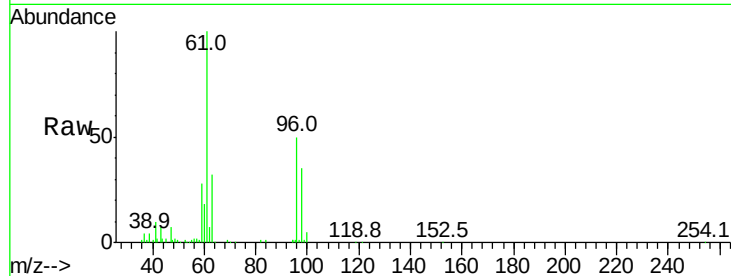
57 10.

Manual Integrations

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Supervised By :Mahesh Dadoda 12/20/2021



#18

1,1-Dichloroethene

Concen: 1.594 ppbv

RT: 4.29 min Scan# 469

Delta R.T. 0.01 min

Lab File: VL038194.D

Acq: 16 Dec 2021 18:11

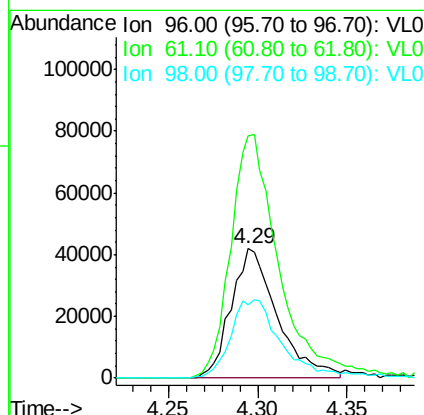
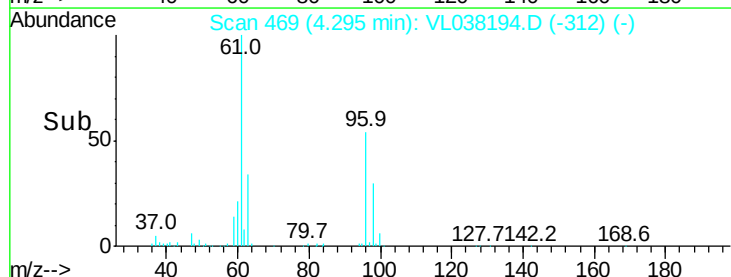
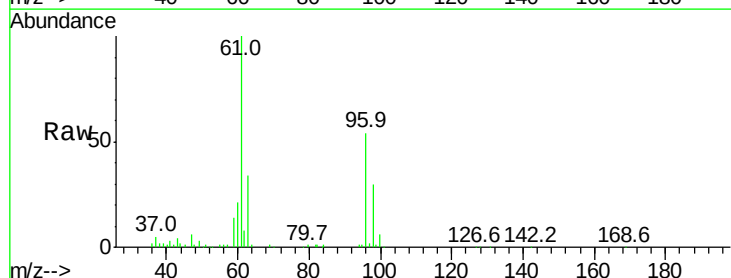
Tgt Ion: 96 Resp: 75745

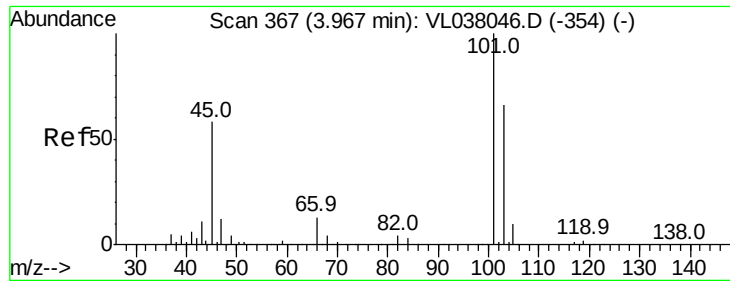
Ion Ratio Lower Upper

96 100

61 186.2 149.8 224.8

98 56.8 50.2 75.2





#19

Isopropyl Alcohol

Concen: 7.868 ppbv

RT: 3.97

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 16 Dec 2021 18:11

Tot Ion:

Ion Ratio

45 100

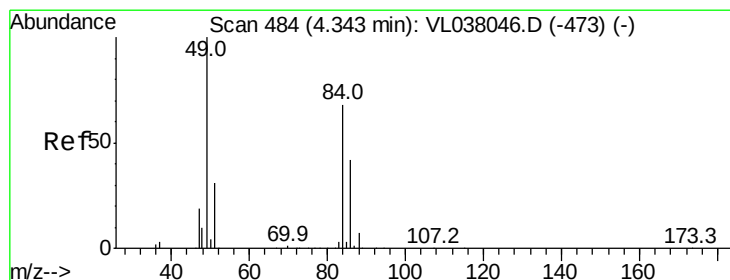
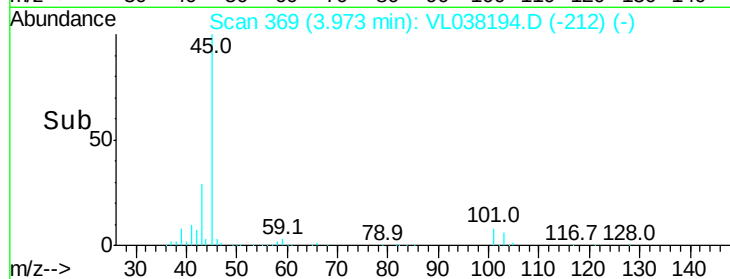
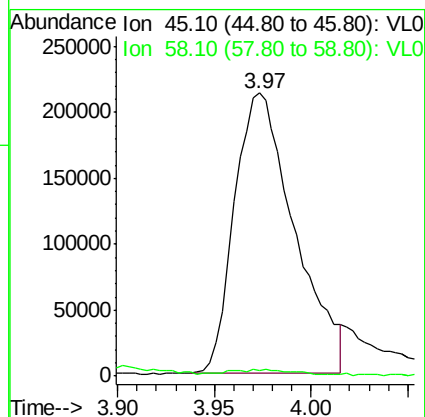
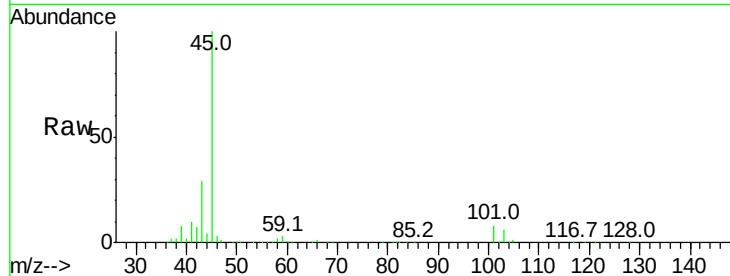
58 2.

Manual Integrations

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Reviewed By :Amit Patel 12/20/2021

Supervised By :Mahesh Dadoda 12/20/2021



#20

Methylene Chloride

Concen: 2.979 ppbv

RT: 4.35 min Scan# 486

Delta R.T. 0.01 min

Lab File: VL038194.D

Acq: 16 Dec 2021 18:11

Tgt Ion: 84 Resp: 134884

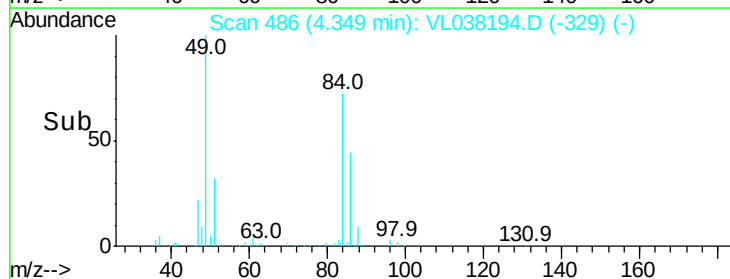
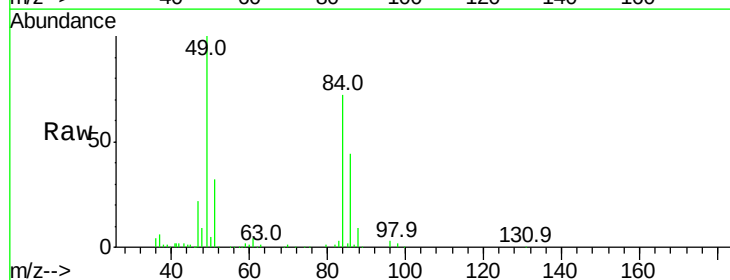
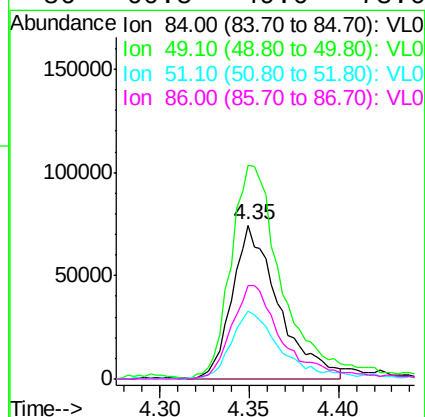
Ion Ratio Lower Upper

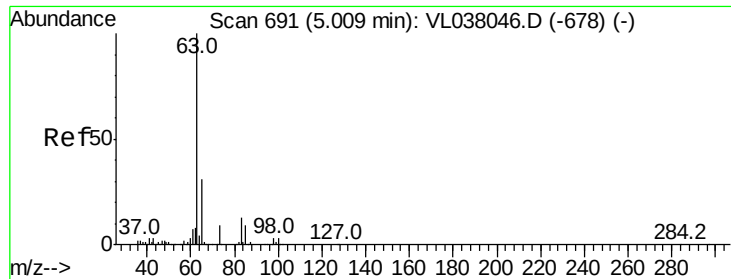
84 100

49 139.0 118.2 177.2

51 43.8 36.8 55.2

86 60.5 49.0 73.6



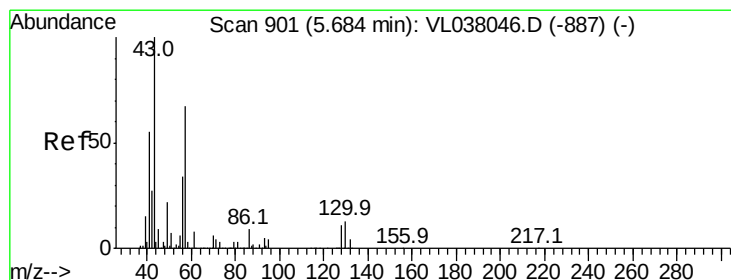
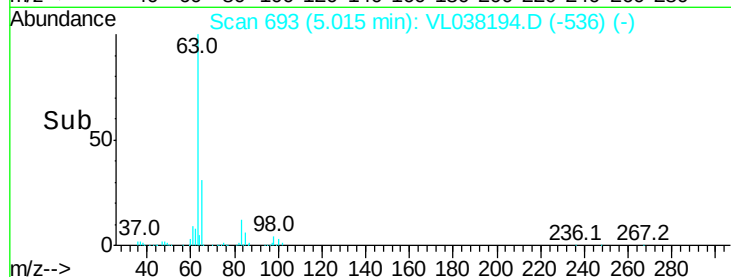
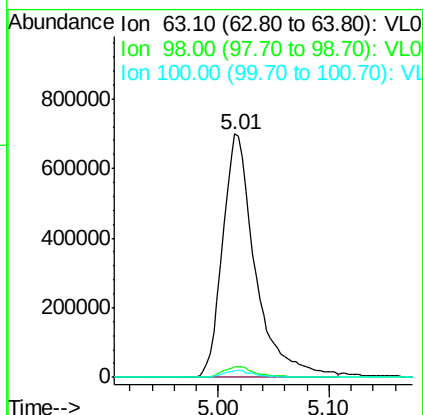
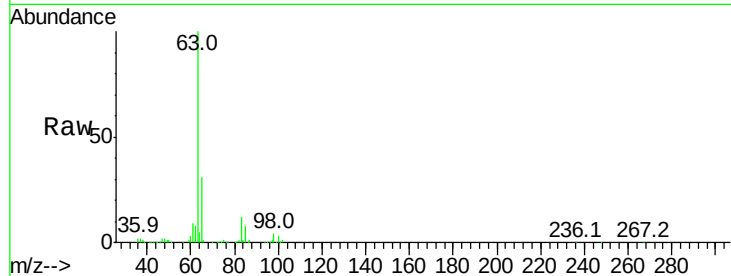


#24
 1,1-Dichloroethane
 Concen: 14.805 ppbv
 RT: 5.01
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId:
 Acq: 16 Dec 2021 18:11

Tot Ion:
 Ion Ratio
 63 100
 98 4.
 100 2.

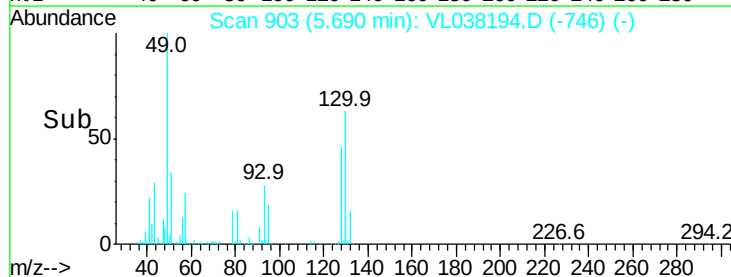
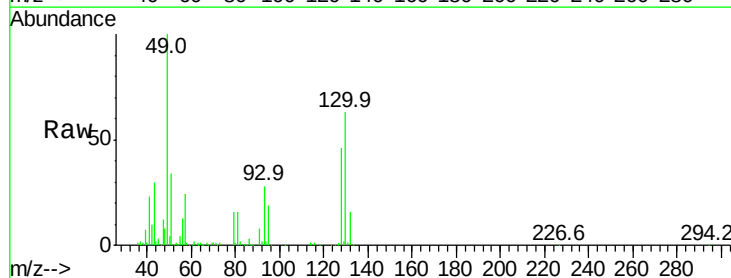
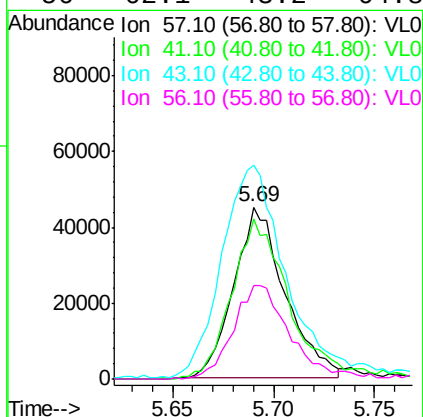
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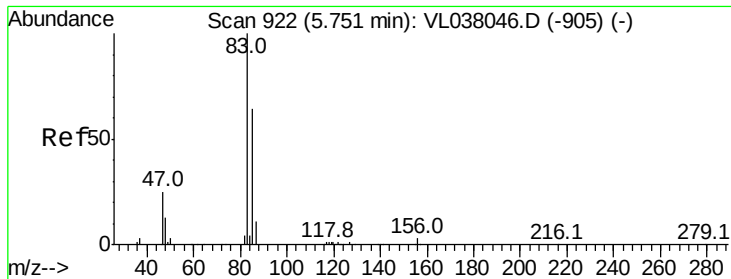
Reviewed By :Amit Patel 12/20/2021
 Supervised By :Mahesh Dadoda 12/20/2021



#26
 Hexane
 Concen: 0.618 ppbv
 RT: 5.69 min Scan# 903
 Delta R.T. 0.01 min
 Lab File: VL038194.D
 Acq: 16 Dec 2021 18:11

Tgt Ion: 57 Resp: 80052
 Ion Ratio Lower Upper
 57 100
 41 108.9 71.4 107.2#
 43 161.3 174.6 261.8#
 56 62.1 43.2 64.8





#29

Chloroform

Concen: 0.106 ppbv m

RT: 5.76 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 16 Dec 2021 18:11 INFLUENT

Tot Ion:

Ion Ratio

83 100

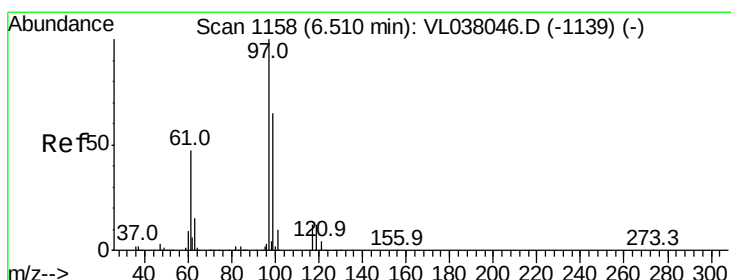
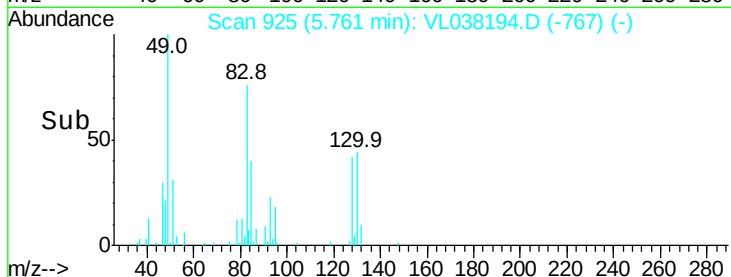
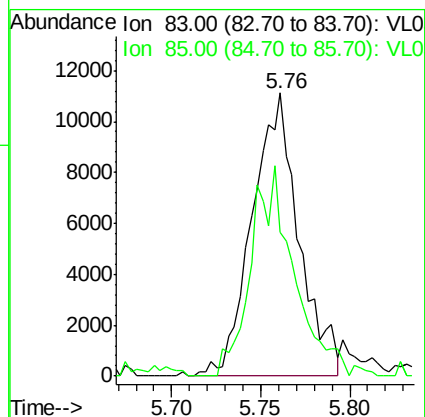
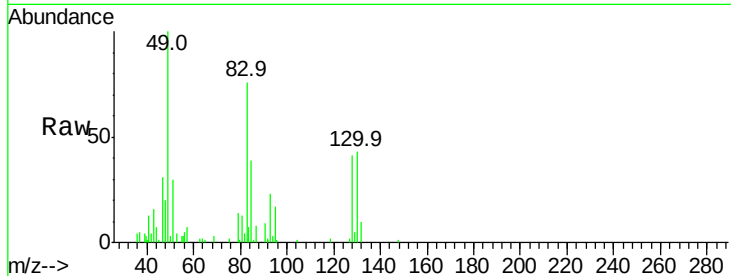
85 51.

Manual Integrations

APPROVED

Reviewed By :Amit Patel 12/20/2021

Supervised By :Mahesh Dadoda 12/20/2021



#32

1,1,1-Trichloroethane

Concen: 42.493 ppbv

RT: 6.52 min Scan# 1160

Delta R.T. 0.01 min

Lab File: VL038194.D

Acq: 16 Dec 2021 18:11

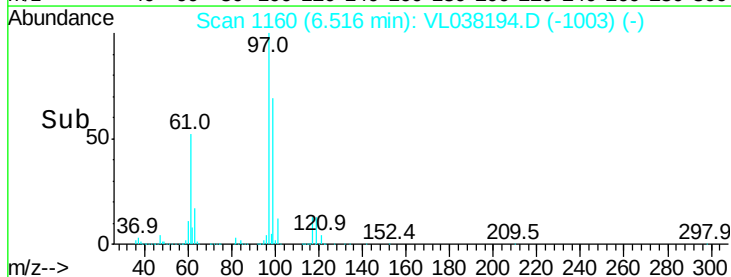
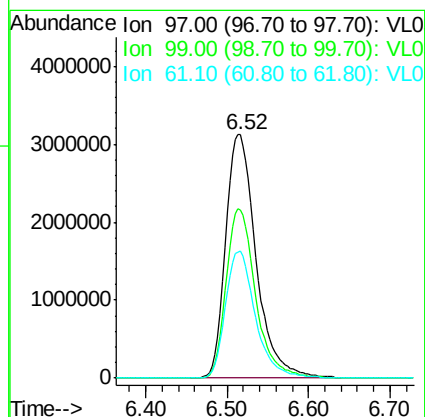
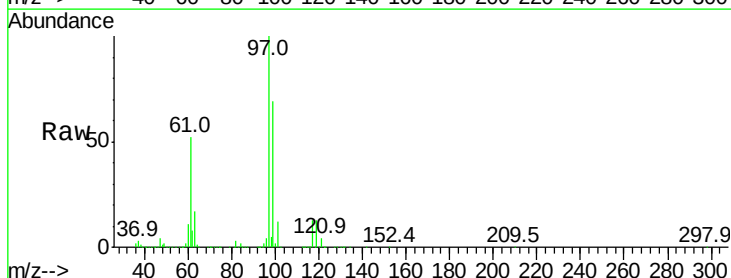
Tgt Ion: 97 Resp: 8231173

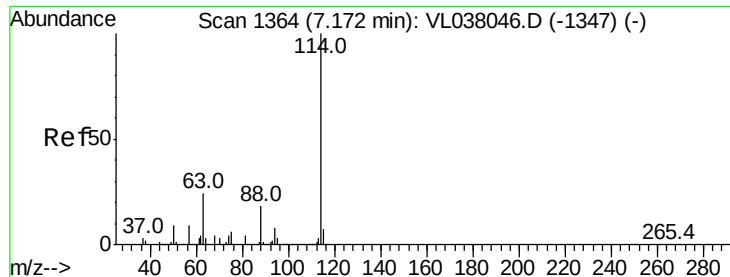
Ion Ratio Lower Upper

97 100

99 67.6 52.2 78.4

61 51.6 37.7 56.5



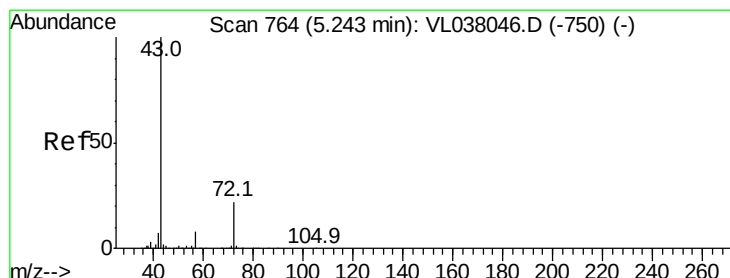
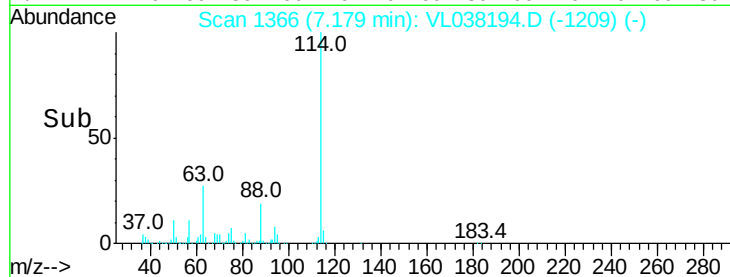
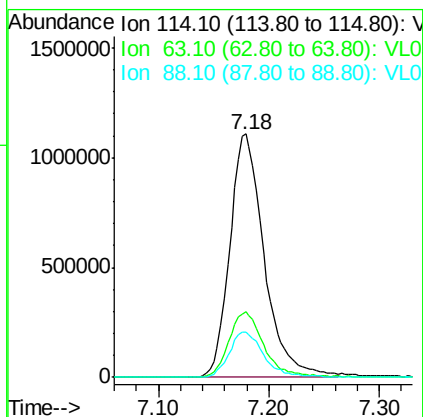
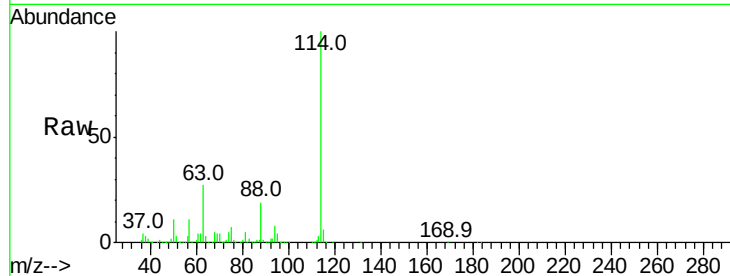


#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.18
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId:
 Acq: 16 Dec 2021 18:11

Tot Ion:1
 Ion Rati
 114 100
 63 27.
 88 19.

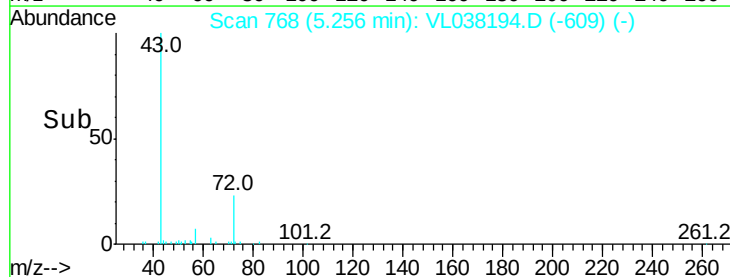
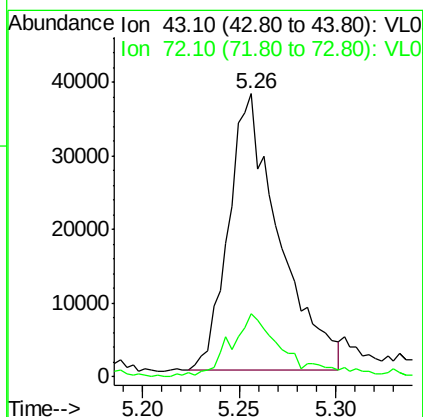
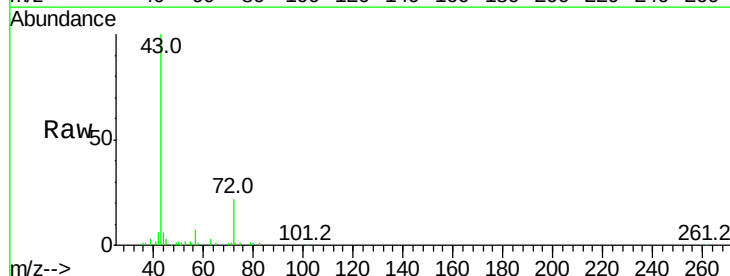
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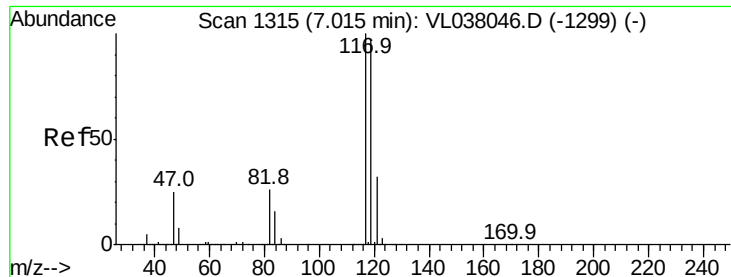
Reviewed By :Amit Patel 12/20/2021
 Supervised By :Mahesh Dadoda 12/20/2021



#34
 2-Butanone
 Concen: 0.706 ppbv
 RT: 5.26 min Scan# 768
 Delta R.T. 0.01 min
 Lab File: VL038194.D
 Acq: 16 Dec 2021 18:11

Tgt Ion: 43 Resp: 68414
 Ion Ratio Lower Upper
 43 100
 72 25.8 18.8 28.2





#35

Carbon Tetrachloride

Concen: 0.066 ppbv m

RT: 7.02 Instrument:

Delta R.T. MSVOA_L

Lab File: ClientSampleId:

Acq: 16 Dec 2021 18:11 INFLUENT

Tot Ion:1

Ion Ratio

117 100

119 87.

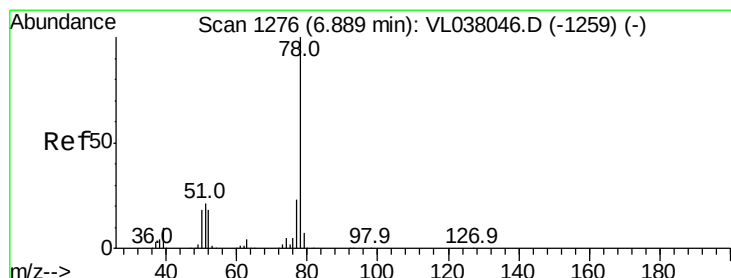
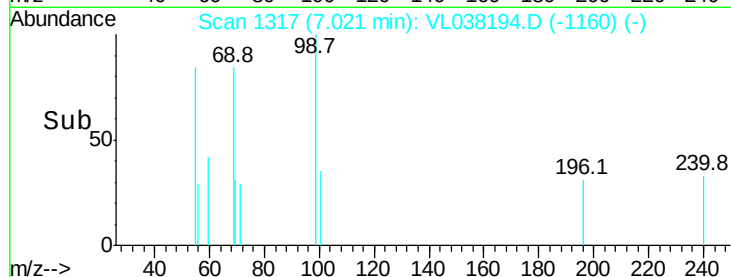
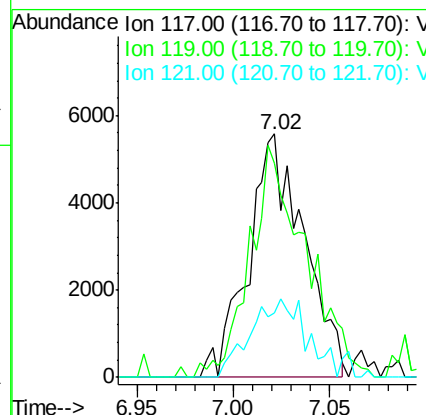
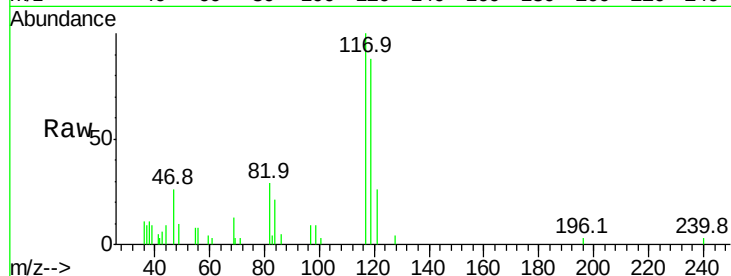
121 26.

Manual Integrations

APPROVED

Reviewed By :Amit Patel 12/20/2021

Supervised By :Mahesh Dadoda 12/20/2021



#36

Benzene

Concen: 0.132 ppbv

RT: 6.90 min Scan# 1279

Delta R.T. 0.01 min

Lab File: VL038194.D

Acq: 16 Dec 2021 18:11

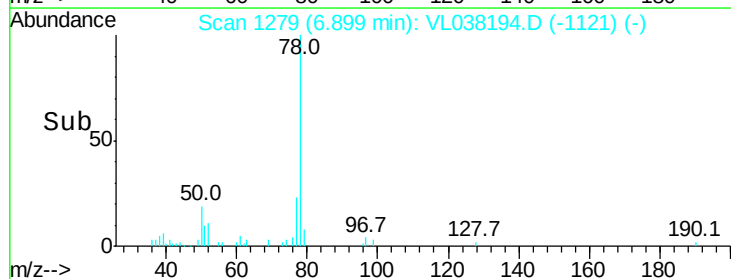
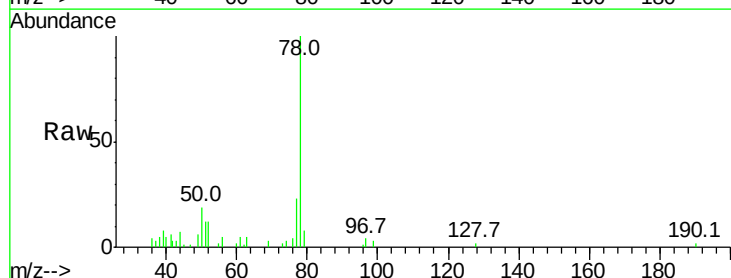
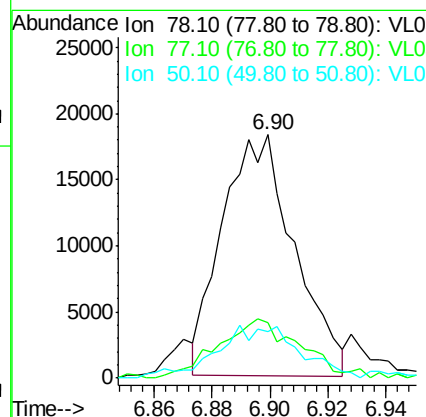
Tgt Ion: 78 Resp: 31542

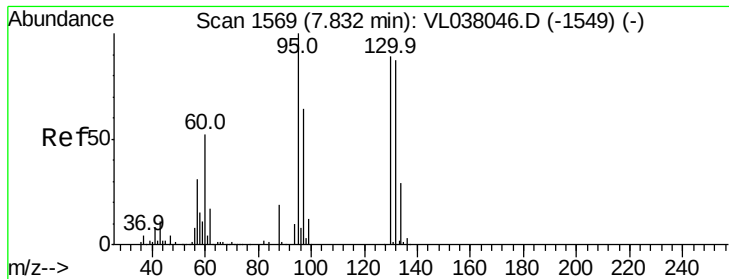
Ion Ratio Lower Upper

78 100

77 23.2 18.2 27.4

50 18.2 14.7 22.1



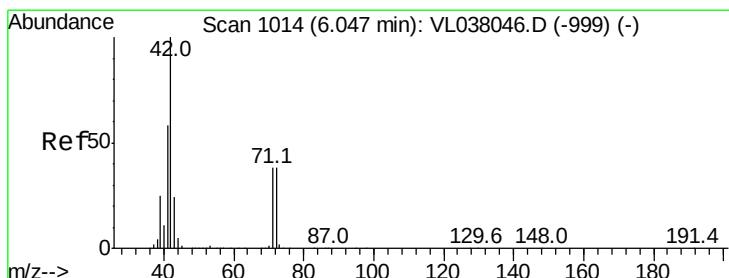
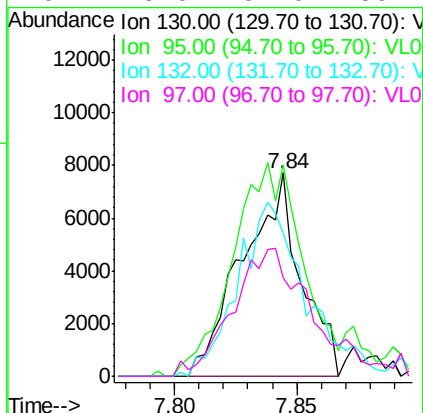
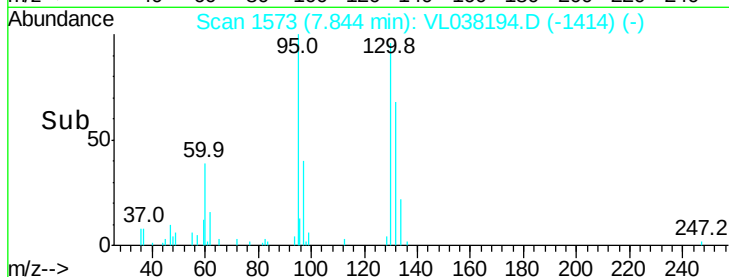
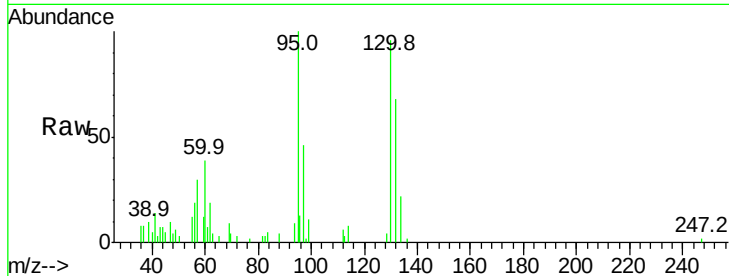


#38
 Trichloroethene
 Concen: 0.142 ppbv
 RT: 7.84
 Instrument: MSVOA_1
 Delta R.T.:
 Lab File: ClientSampleId:
 Acq: 16 Dec 2021 18:11

Tot Ion: 1
 Ion Ratio
 130 100
 95 95.
 132 70.
 97 45.0 57.0 85.4#

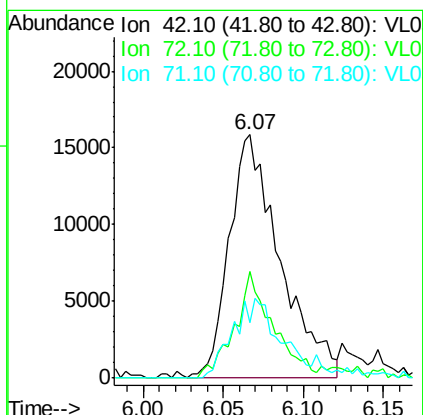
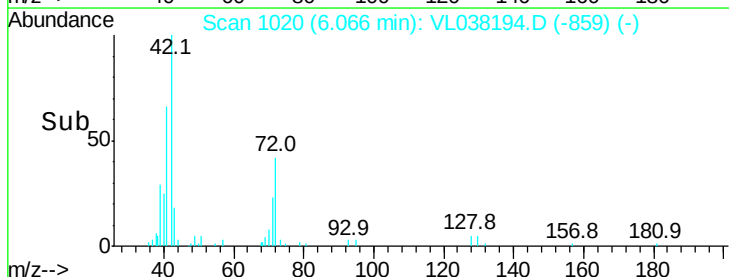
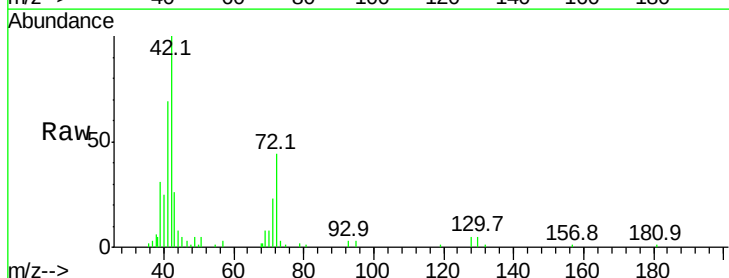
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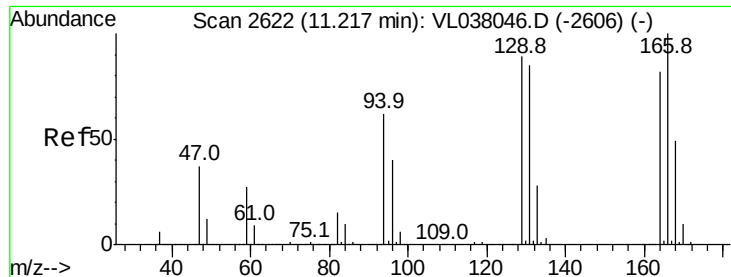
Reviewed By :Amit Patel 12/20/2021
 Supervised By :Mahesh Dadoda 12/20/2021



#41
 Tetrahydrofuran
 Concen: 0.577 ppbv m
 RT: 6.07 min Scan# 1020
 Delta R.T. 0.02 min
 Lab File: VL038194.D
 Acq: 16 Dec 2021 18:11

Tgt Ion: 42 Resp: 34672
 Ion Ratio Lower Upper
 42 100
 72 36.3 31.7 47.5
 71 34.7 30.6 46.0





#52

Tetrachloroethene

Concen: 0.337 ppbv

RT: 11.23

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 16 Dec 2021 18:11 INFLUENT

Tot Ion:1

Ion Ratio

164 100

166 109.

129 87.

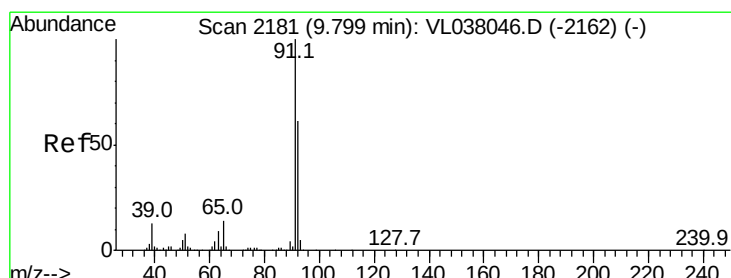
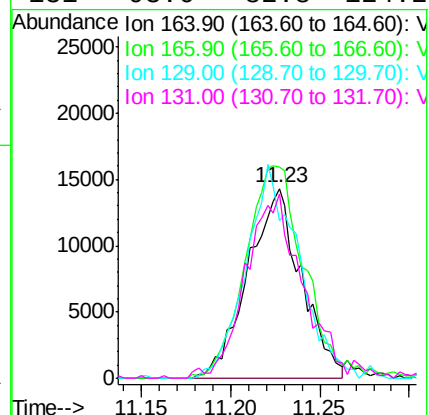
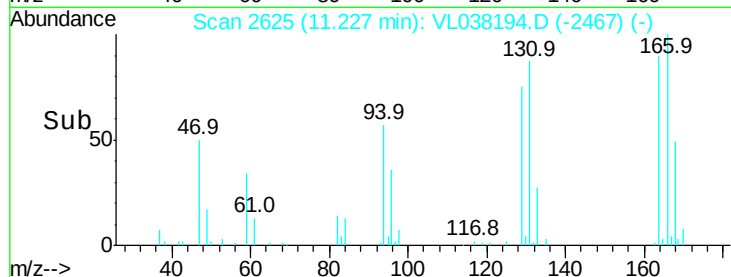
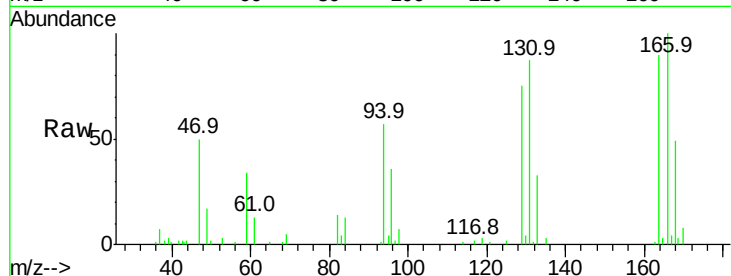
131 93.6 82.8 124.2

Manual Integrations

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Reviewed By :Amit Patel 12/20/2021

Supervised By :Mahesh Dadoda 12/20/2021



#53

Toluene

Concen: 0.322 ppbv

RT: 9.81 min Scan# 2183

Delta R.T. 0.01 min

Lab File: VL038194.D

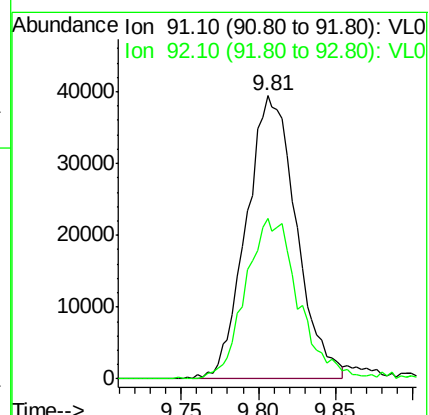
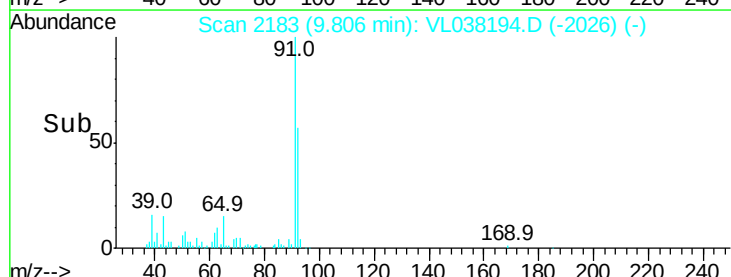
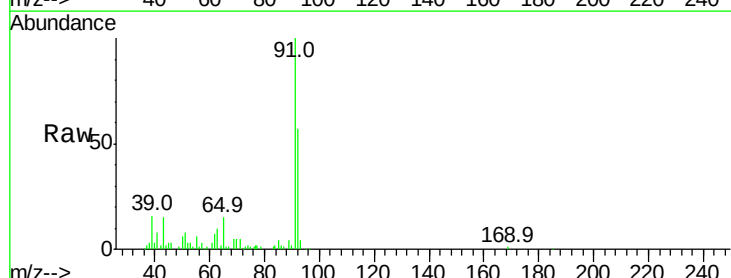
Acq: 16 Dec 2021 18:11

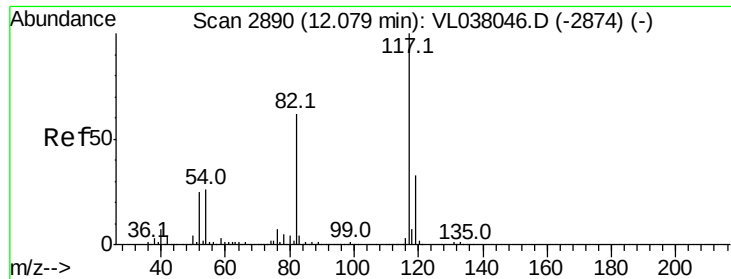
Tgt Ion: 91 Resp: 88802

Ion Ratio Lower Upper

91 100

92 59.6 49.7 74.5





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.09

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 16 Dec 2021 18:11

Tot Ion:1

Ion Rati

117 100

82 72.

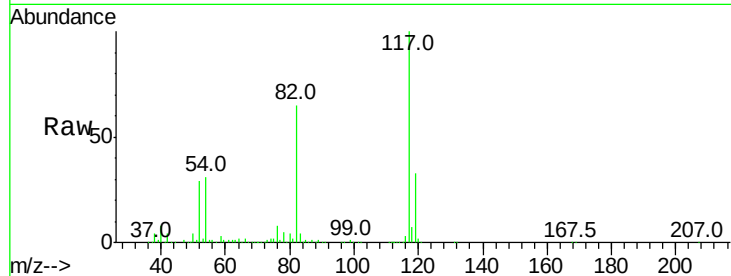
119 34.

Manual Integrations

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Reviewed By :Amit Patel 12/20/2021

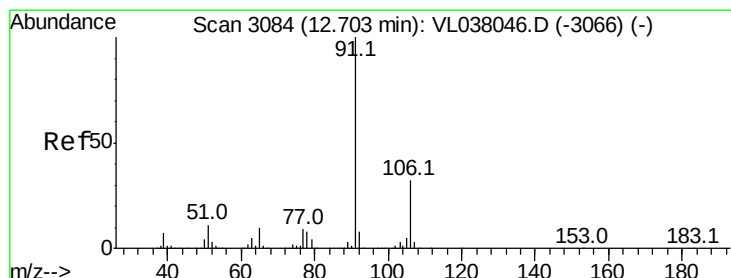
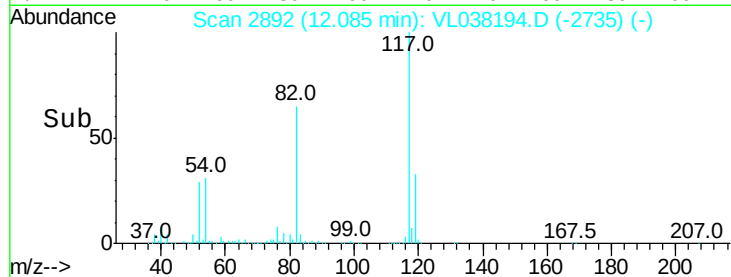
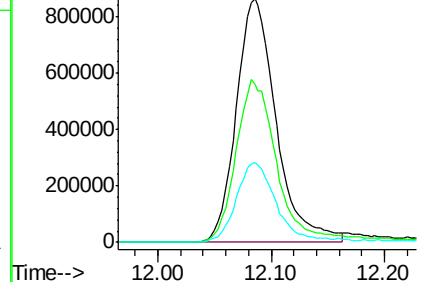
Supervised By :Mahesh Dadoda 12/20/2021



Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V



#58

Ethyl Benzene

Concen: 0.102 ppbv

RT: 12.71 min Scan# 3086

Delta R.T. 0.01 min

Lab File: VL038194.D

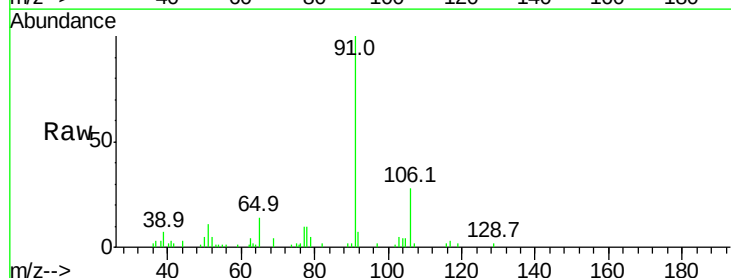
Acq: 16 Dec 2021 18:11

Tgt Ion: 91 Resp: 35802

Ion Ratio Lower Upper

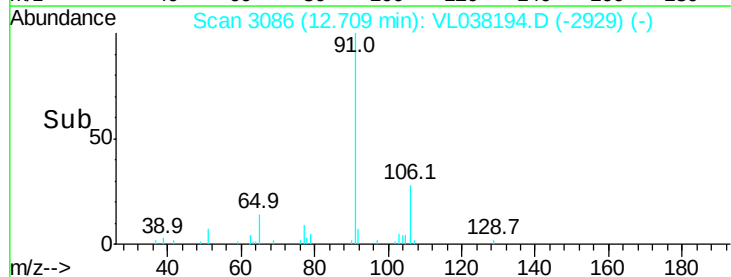
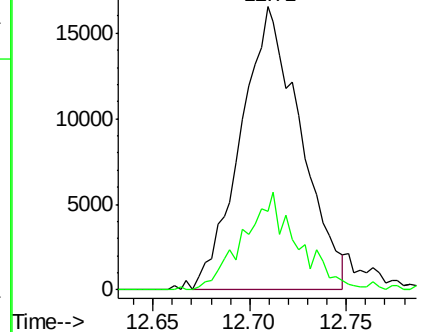
91 100

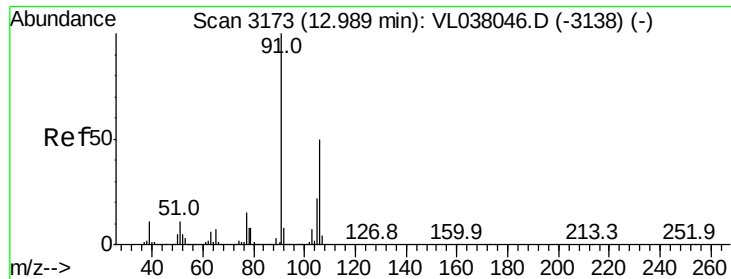
106 28.3 25.8 38.6



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



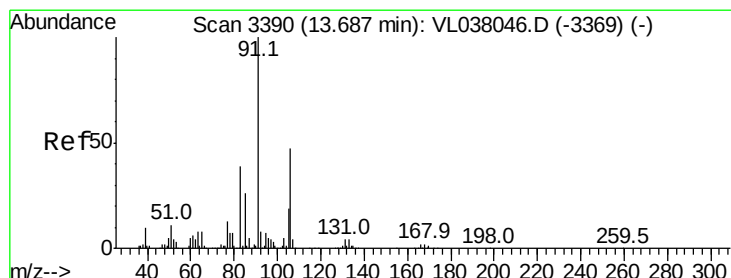
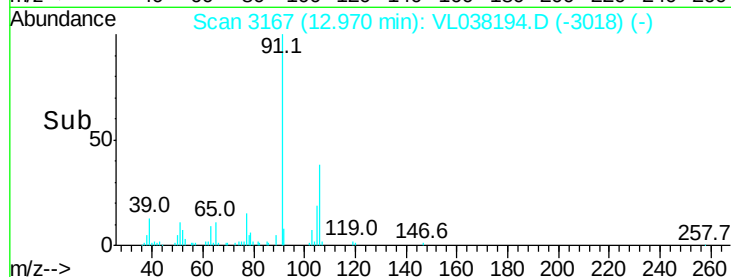
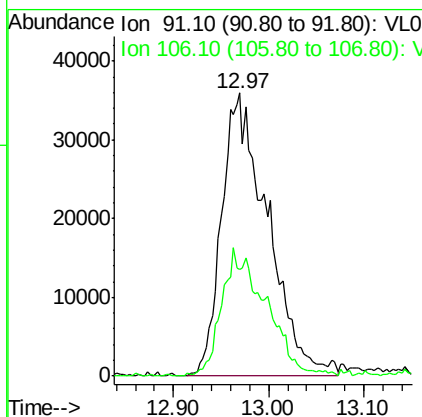
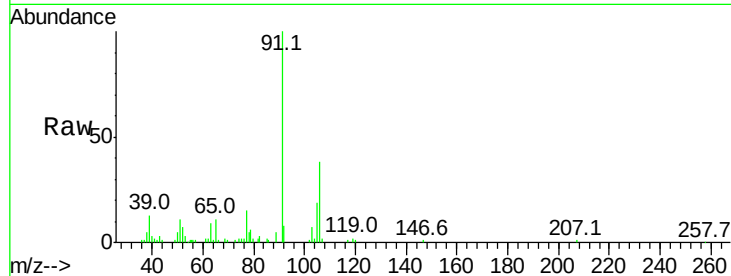


#59
m/p-Xylene
Concen: 0.409 ppbv m
RT: 12.97
Instrument: MSVOA_1
Delta R.T.:
Lab File: ClientSampleId:
Acq: 16 Dec 2021 18:11

Tot Ion:
Ion Ratio
91 100
106 0.

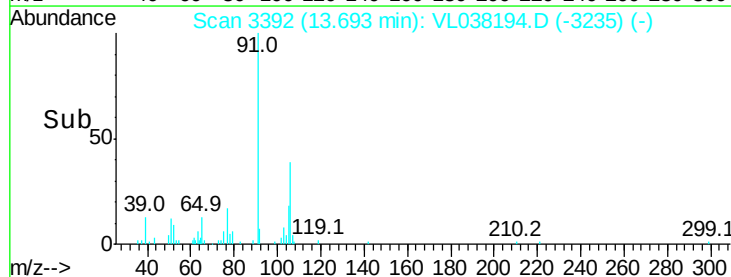
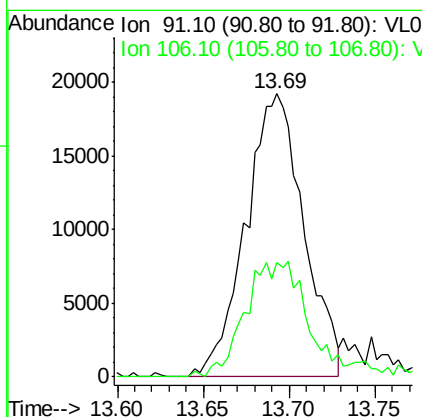
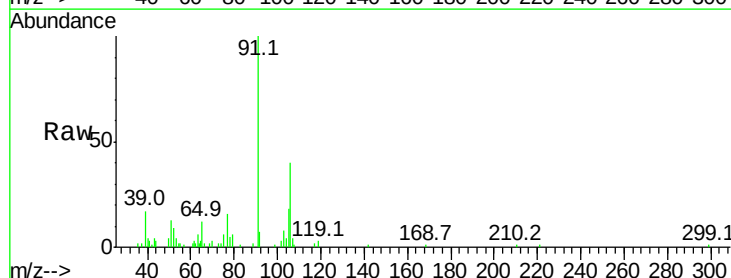
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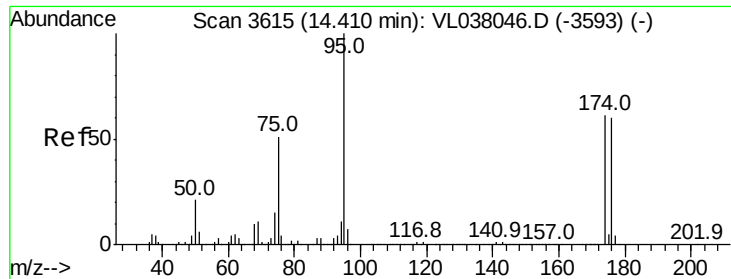
Reviewed By :Amit Patel 12/20/2021
Supervised By :Mahesh Dadoda 12/20/2021



#60
o-Xylene
Concen: 0.165 ppbv
RT: 13.69 min Scan# 3392
Delta R.T. 0.01 min
Lab File: VL038194.D
Acq: 16 Dec 2021 18:11

Tgt Ion: 91 Resp: 45114
Ion Ratio Lower Upper
91 100
106 47.1 24.2 72.6





#68

1-Bromo-4-Fluorobenzene

Concen: 10.423 ppbv

RT: 14.41

Delta R.T. MSVOA_L

Lab File: ClientSampleId :

Acq: 16 Dec 2021 18:11

Tot Ion:

Ion Ratio

95 100

174 64.

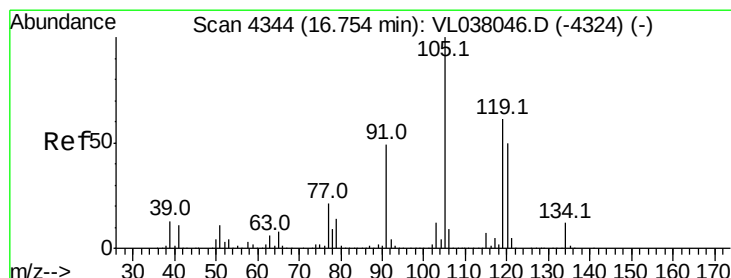
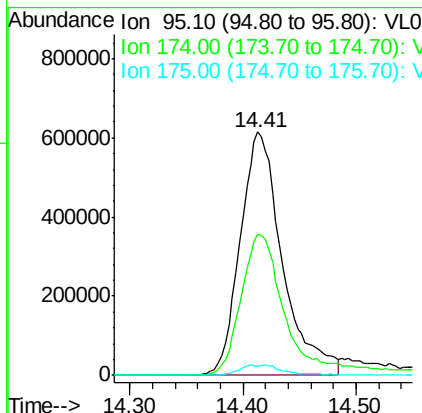
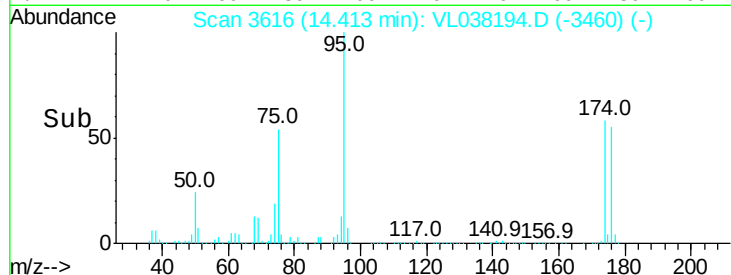
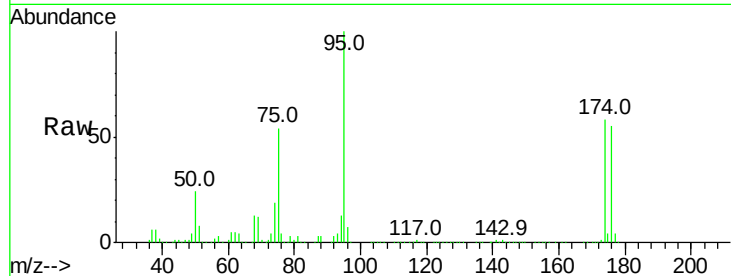
175 4.

Manual Integrations

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Reviewed By :Amit Patel 12/20/2021

Supervised By :Mahesh Dadoda 12/20/2021



#74

1,2,4-Trimethylbenzene

Concen: 0.147 ppbv m

RT: 16.75 min Scan# 4344

Delta R.T. -0.00 min

Lab File: VL038194.D

Acq: 16 Dec 2021 18:11

Tgt Ion:105 Resp: 43911

Ion Ratio Lower Upper

105 100

120 29.1 40.1 60.1#

91 8.6 39.8 59.8#

77 16.9 16.6 25.0

