

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL060121\
 Data File : VL037092.D
 Acq On : 2 Jun 2021 5:32
 Operator : SY/AP
 Sample : M2548-07
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-4A

Manual Integrations
 APPROVED

MMDadoda
 6/7/2021 2:59:36 PM

Quant Time: Jun 02 07:11:47 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL051821AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue May 18 2021
 QLast Update : Tue May 18 12:00:15 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1327905	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.16	114	4035425	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.07	117	3545228	10.00	ppbv	0.00

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	14.39	95	2698011	10.13	ppbv	0.00	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.30%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.04	85	74311	0.330	ppbv	89
3) Chlorodifluoromethane	2.98	51	104724	0.430	ppbv #	87
4) Chloromethane	3.13	50	44377	0.536	ppbv	89
9) Propene	3.01	41	59811m	0.687	ppbv	
11) Trichlorofluoromethane	3.94	101	73812	0.354	ppbv	93
13) Ethanol	3.59	45	5255942	452.204	ppbv	95
15) Acetone	3.83	43	1861008	13.683	ppbv	94
17) tert-Butyl alcohol	4.30	59	21800m	0.175	ppbv	
19) Isopropyl Alcohol	3.96	45	761212	10.411	ppbv #	38
20) Methylene Chloride	4.33	84	221680	3.041	ppbv	98
26) Hexane	5.67	57	323375	1.937	ppbv #	48
29) Chloroform	5.73	83	43997	0.187	ppbv	86
34) 2-Butanone	5.24	43	80216	0.546	ppbv	93
35) Carbon Tetrachloride	7.00	117	12870m	0.048	ppbv	
36) Benzene	6.87	78	35892	0.103	ppbv	93
50) 4-Methyl-2-Pentanone	8.74	43	41742m	0.172	ppbv	
53) Toluene	9.78	91	319832	0.773	ppbv	98
59) m/p-Xylene	12.95	91	45746m	0.111	ppbv	
69) p-Isopropyltoluene	17.64	119	61628m	0.103	ppbv	

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

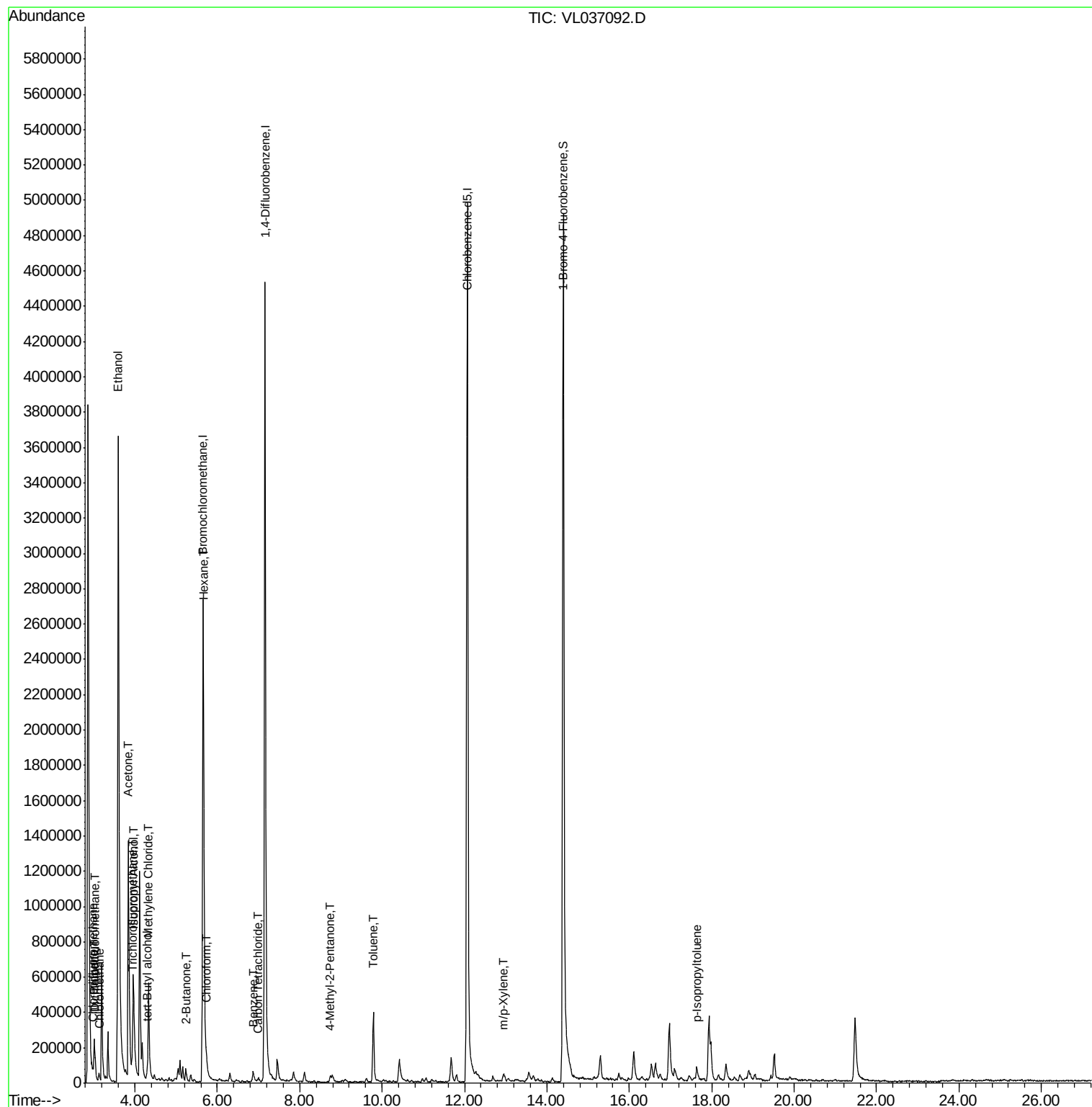
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL060121\
Data File : VL037092.D
Acq On : 2 Jun 2021 5:32
Operator : SY/AP
Sample : M2548-07
Misc : 400mL/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

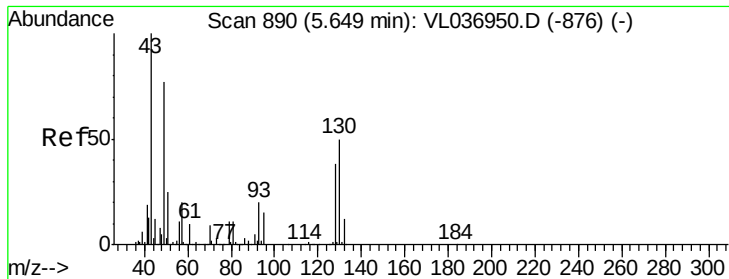
Instrument :
MSVOA_L
ClientSampleId :
IA-4A

Manual Integrations
APPROVED

MMDadoda
6/7/2021 2:59:36 PM

Quant Time: Jun 02 07:11:47 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL051821AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue May
QLast Update : Tue May 18 12:00:15 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 891

Delta R.T. 0.00 min

Lab File: VL037092.D

Acq: 2 Jun 2021 5:32

Instrument :

MSVOA_L

ClientSampleId :

IA-4A

Tot Ion: 49 Resp: 1327905

Ion Ratio Lower Upper

49 100

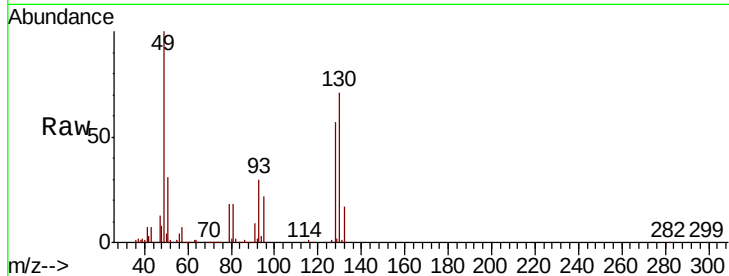
128 59.1 26.9 80.7

130 75.2 33.8 101.4

Manual Integrations
APPROVED

MMDadoda

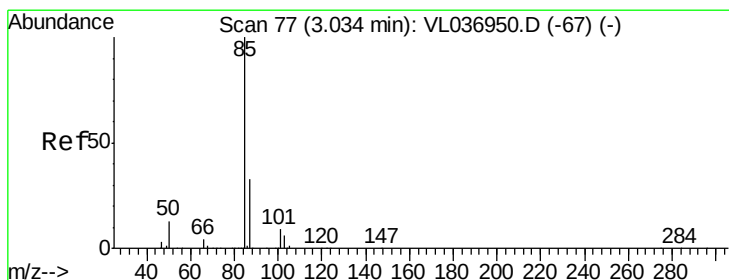
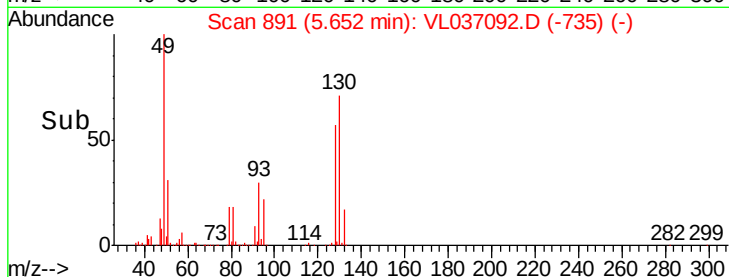
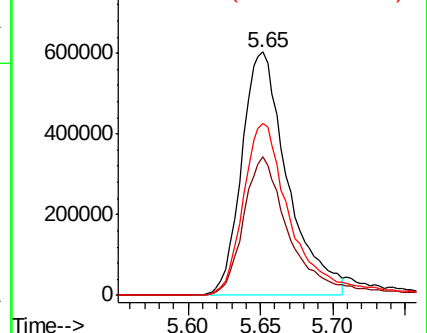
6/7/2021 2:59:36 PM



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: 0.330 ppbv

RT: 3.04 min Scan# 78

Delta R.T. 0.00 min

Lab File: VL037092.D

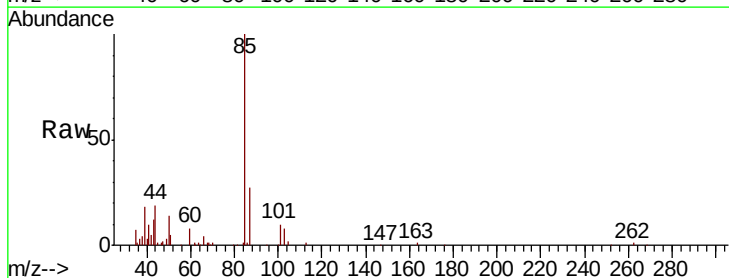
Acq: 2 Jun 2021 5:32

Tgt Ion: 85 Resp: 74311

Ion Ratio Lower Upper

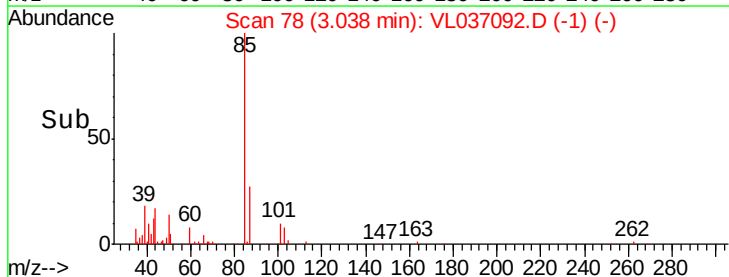
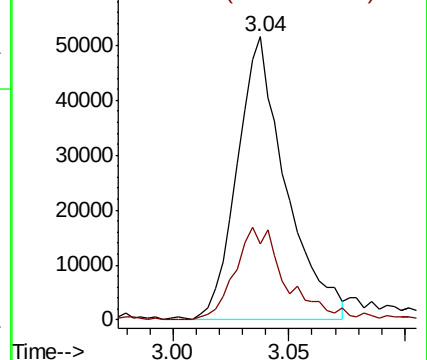
85 100

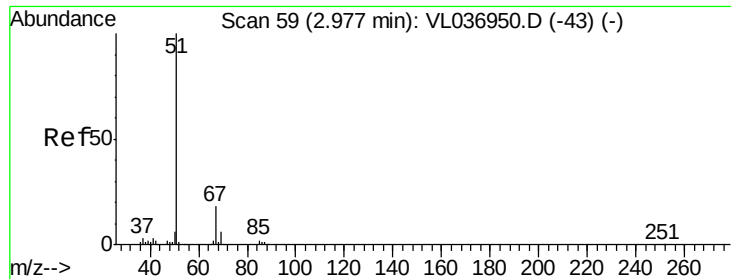
87 27.2 26.6 39.8



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.430 ppbv

RT: 2.98 min Scan# 59

Delta R.T. -0.00 min

Lab File: VL037092.D

Acq: 2 Jun 2021 5:32

Instrument :

MSVOA_L

ClientSampleId :

IA-4A

Tot Ion: 51 Resp: 104724

Ion Ratio Lower Upper

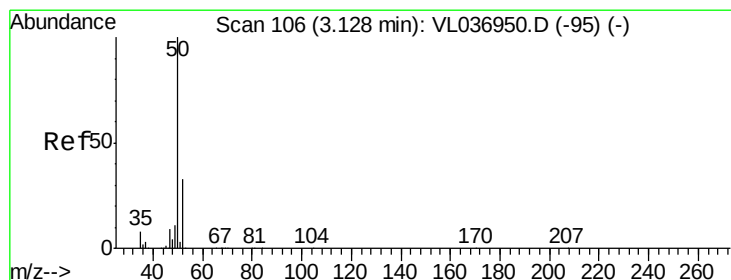
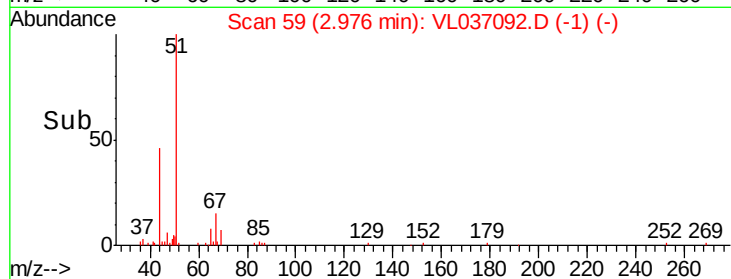
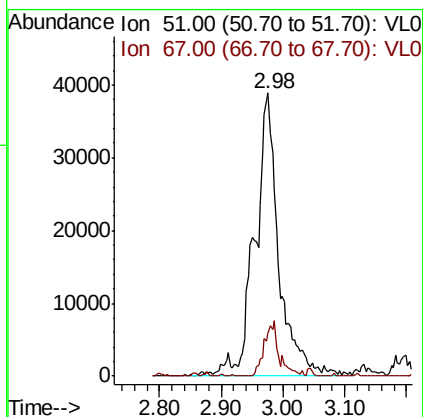
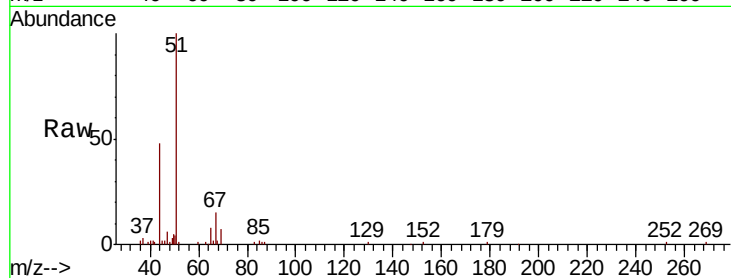
51 100

67 12.5 14.6 21.8#

Manual Integrations
APPROVED

MMDadoda

6/7/2021 2:59:36 PM



#4

Chloromethane

Concen: 0.536 ppbv

RT: 3.13 min Scan# 107

Delta R.T. 0.00 min

Lab File: VL037092.D

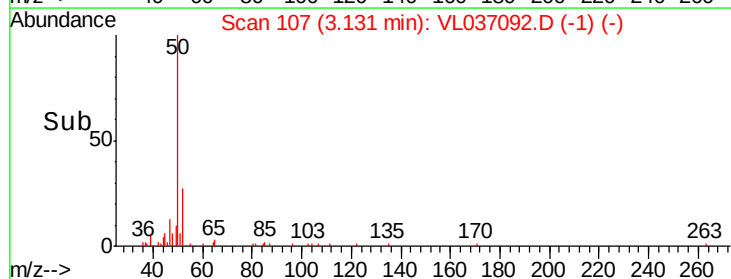
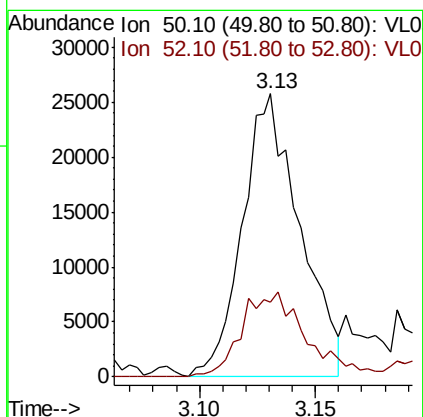
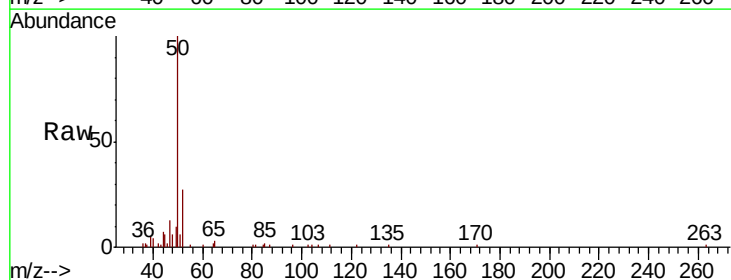
Acq: 2 Jun 2021 5:32

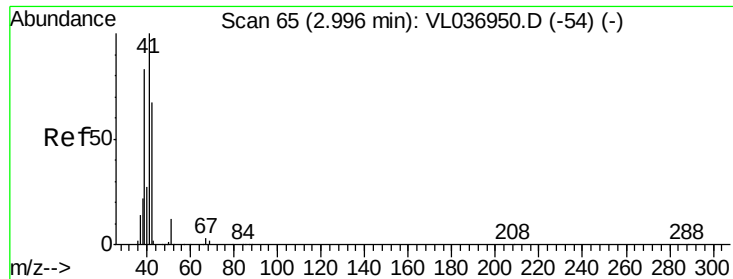
Tgt Ion: 50 Resp: 44377

Ion Ratio Lower Upper

50 100

52 26.6 26.1 39.1





#9

Propene

Concen: 0.687 ppbv m

RT: 3.01 min Scan# 69

Delta R.T. 0.01 min

Lab File: VL037092.D

Acq: 2 Jun 2021 5:32

Instrument :

MSVOA_L

ClientSampleId :

IA-4A

Tot Ion: 41 Resp: 59811

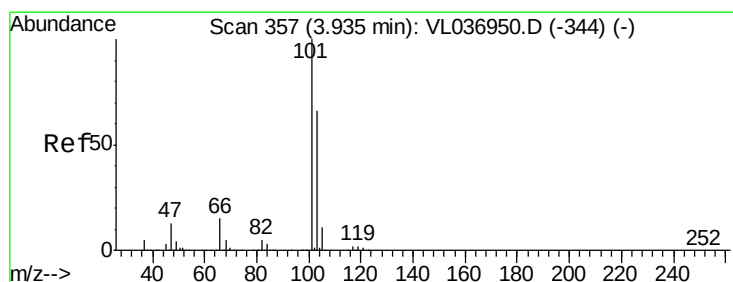
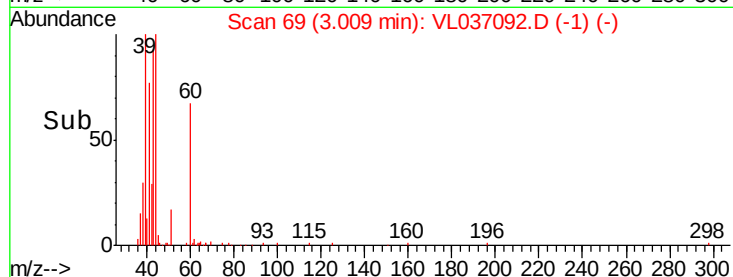
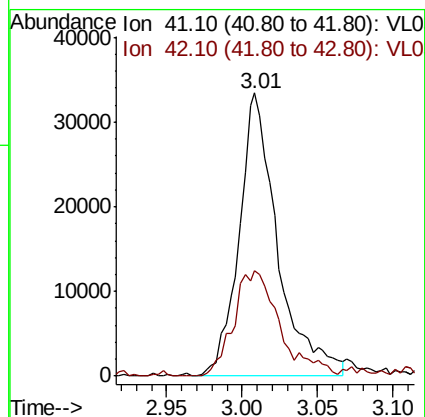
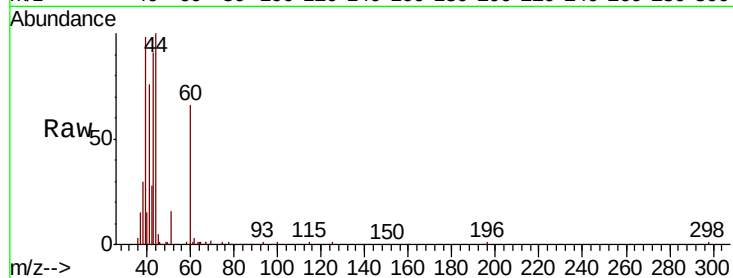
Ion Ratio Lower Upper

41 100

42 266.5 53.9 80.9#

Manual Integrations
APPROVED

MMDadoda
6/7/2021 2:59:36 PM



#11

Trichlorofluoromethane

Concen: 0.354 ppbv

RT: 3.94 min Scan# 358

Delta R.T. 0.00 min

Lab File: VL037092.D

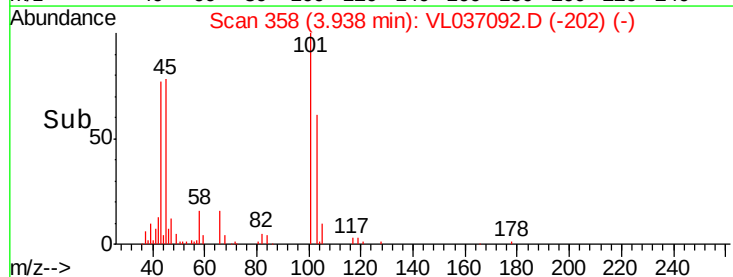
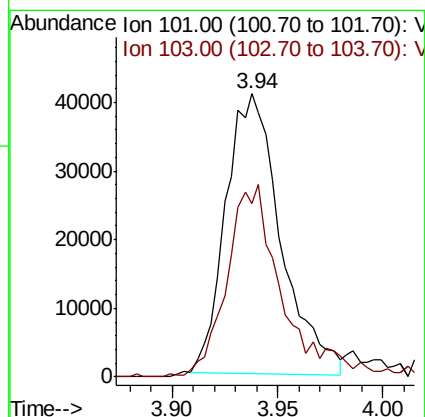
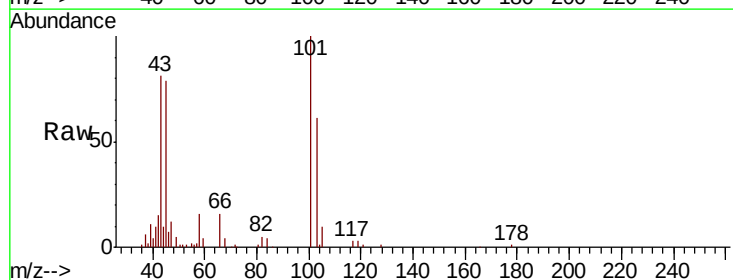
Acq: 2 Jun 2021 5:32

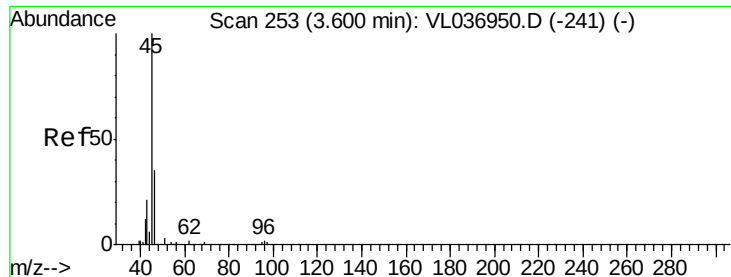
Tgt Ion: 101 Resp: 73812

Ion Ratio Lower Upper

101 100

103 60.0 52.6 79.0





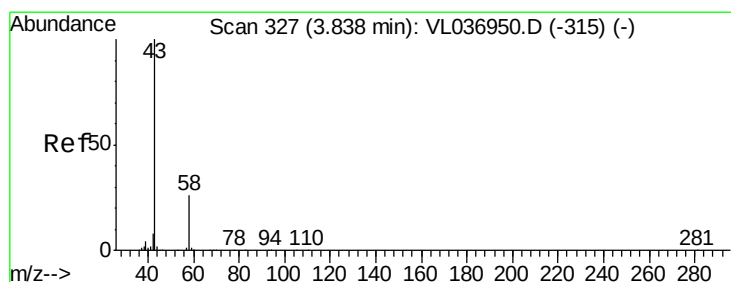
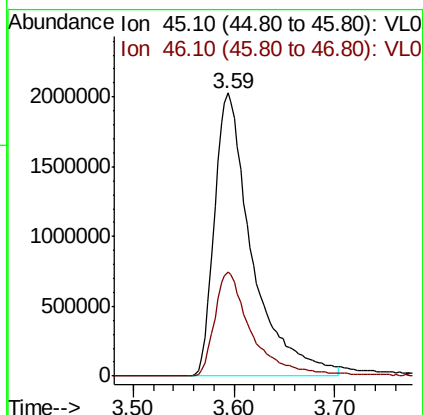
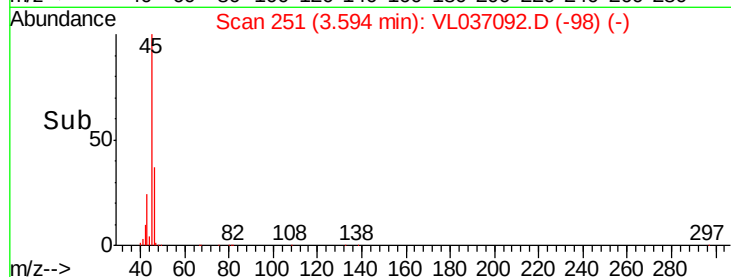
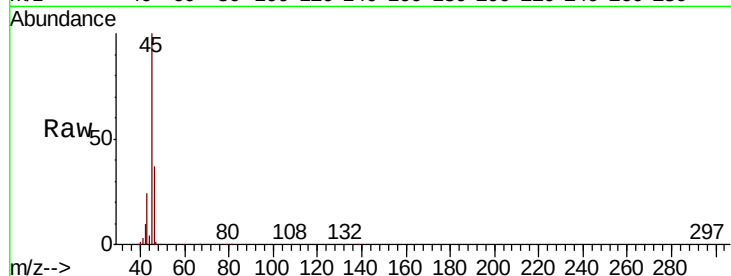
#13
Ethanol
Concen: 452.204 ppbv
RT: 3.59 min Scan# 251
Delta R.T. -0.01 min
Lab File: VL037092.D
Acq: 2 Jun 2021 5:32

Instrument :
MSVOA_L
ClientSampled :
IA-4A

Tot Ion: 45 Resp: 5255942
Ion Ratio Lower Upper
45 100
46 37.5 16.3 65.3

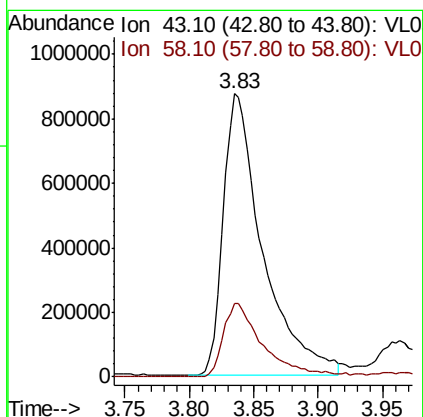
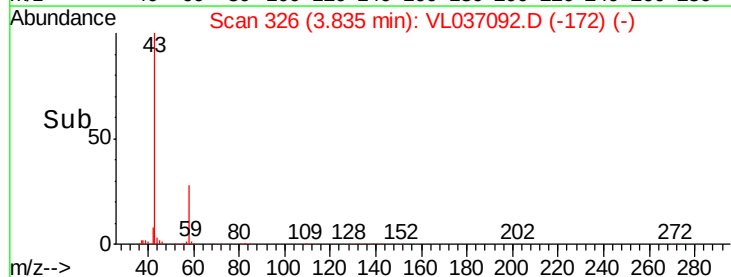
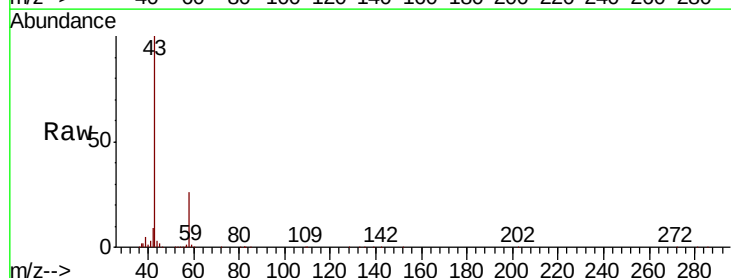
Manual Integrations
APPROVED

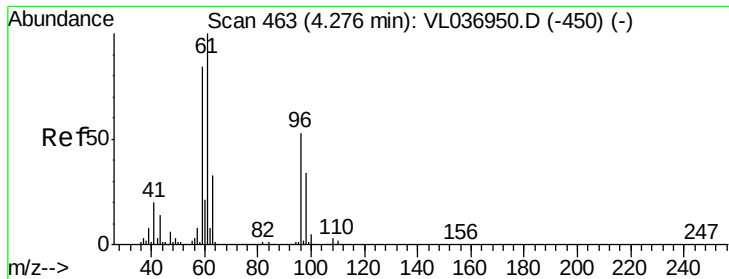
MMDadoda
6/7/2021 2:59:36 PM



#15
Acetone
Concen: 13.683 ppbv
RT: 3.83 min Scan# 326
Delta R.T. -0.00 min
Lab File: VL037092.D
Acq: 2 Jun 2021 5:32

Tgt Ion: 43 Resp: 1861008
Ion Ratio Lower Upper
43 100
58 26.8 24.0 36.0





#17

tert-Butyl alcohol

Concen: 0.175 ppbv m

RT: 4.30 min Scan# 470

Delta R.T. 0.02 min

Lab File: VL037092.D

Acq: 2 Jun 2021 5:32

Instrument :

MSVOA_L

ClientSampled :

IA-4A

Tot Ion: 59 Resp: 21800

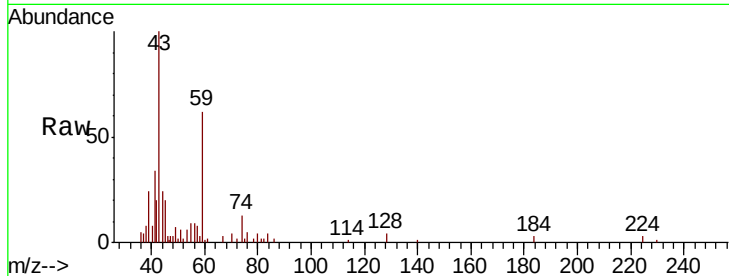
Ion Ratio Lower Upper

59 100

57 0.0 8.3 12.5#

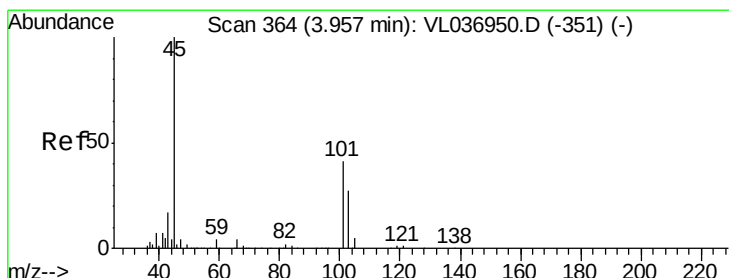
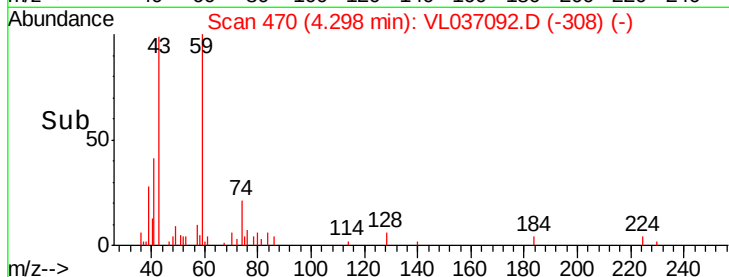
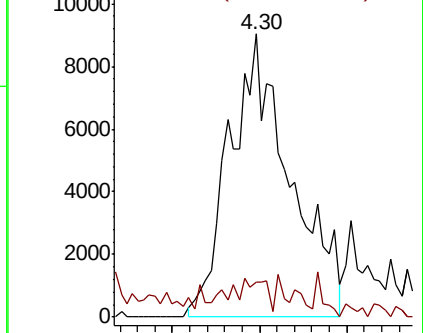
Manual Integrations
APPROVED

MMDadoda
6/7/2021 2:59:36 PM



Abundance Ion 59.10 (58.80 to 59.80): VL0

Ion 57.10 (56.80 to 57.80): VL0



#19

Isopropyl Alcohol

Concen: 10.411 ppbv

RT: 3.96 min Scan# 366

Delta R.T. 0.01 min

Lab File: VL037092.D

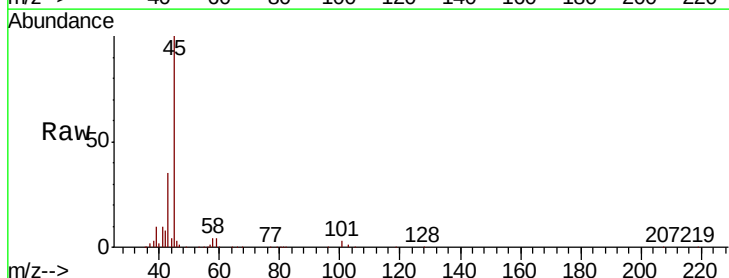
Acq: 2 Jun 2021 5:32

Tgt Ion: 45 Resp: 761212

Ion Ratio Lower Upper

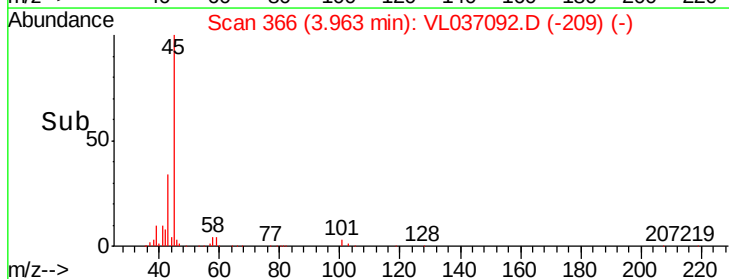
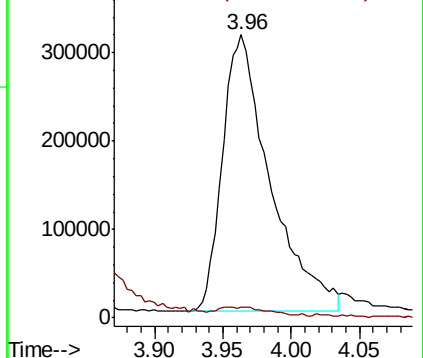
45 100

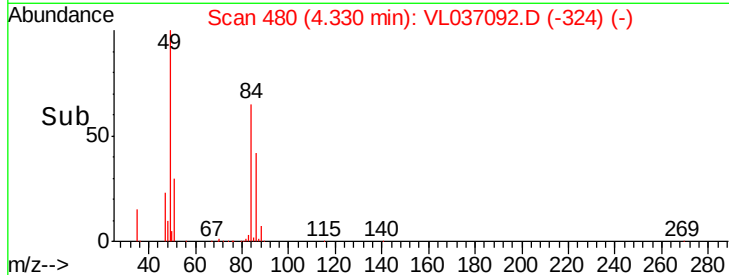
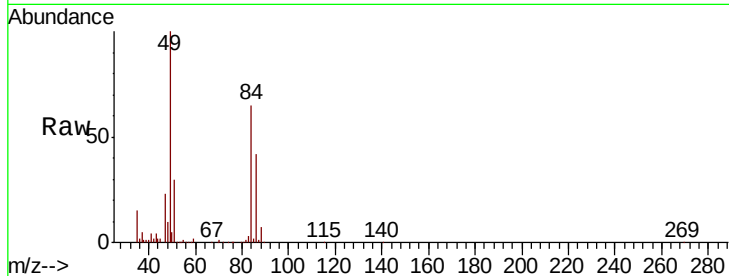
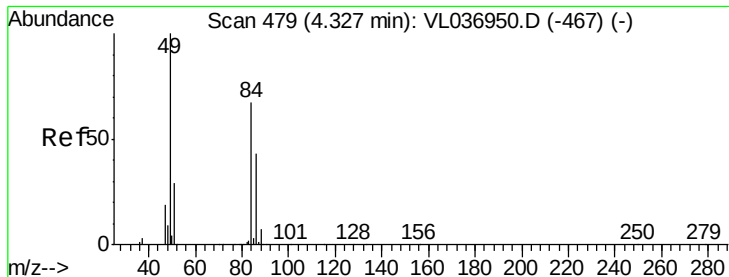
58 5.6 37.2 55.8#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0





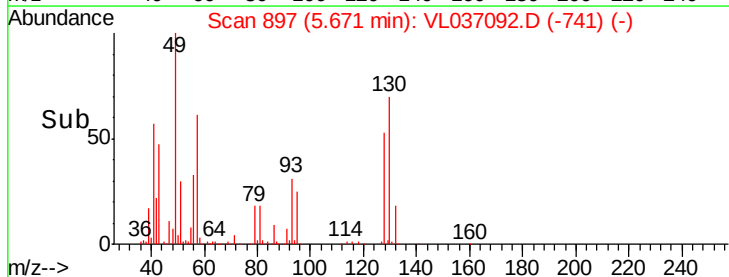
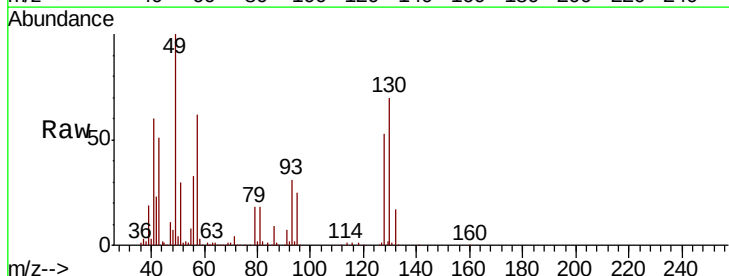
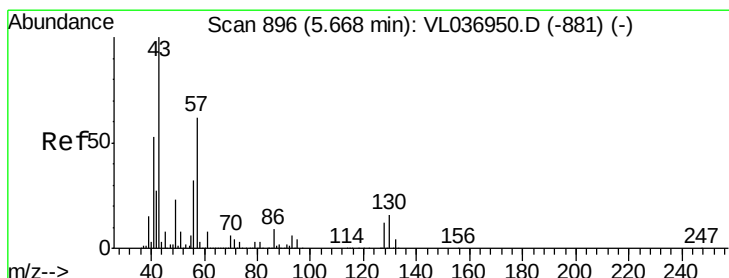
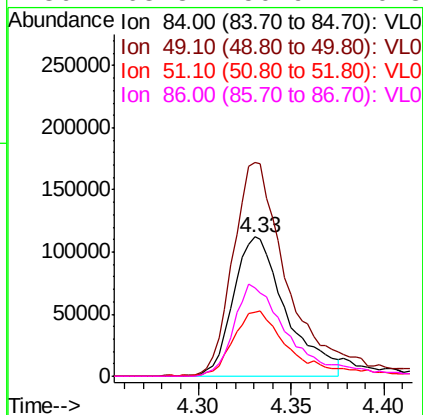
#20
Methvlene Chloride
Concen: 3.041 ppbv
RT: 4.33 min Scan# 480
Delta R.T. 0.00 min
Lab File: VL037092.D
Acq: 2 Jun 2021 5:32

Tot Ion	Ion	Ratio	Resp	Lower	Upper
84	100				
49	152.2	119.8	179.6		
51	45.3	35.1	52.7		
86	63.8	50.9	76.3		

Instrument :
MSVOA_L
ClientSampled :
IA-4A

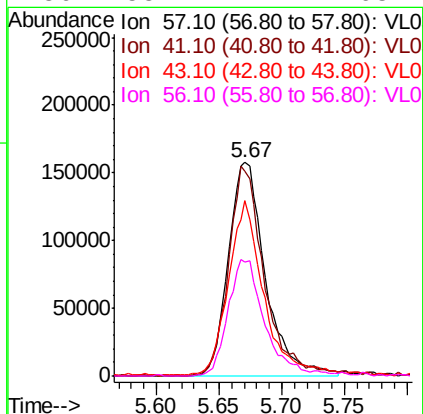
Manual Integrations
APPROVED

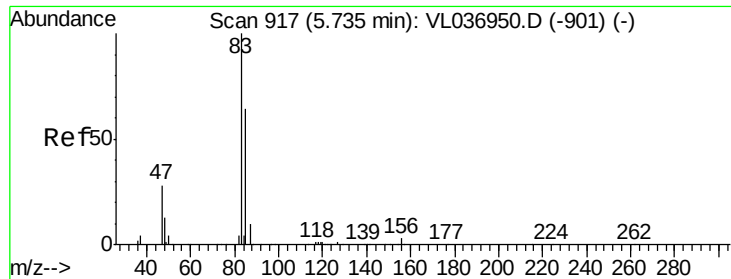
MMDadoda
6/7/2021 2:59:36 PM



#26
Hexane
Concen: 1.937 ppbv
RT: 5.67 min Scan# 897
Delta R.T. 0.00 min
Lab File: VL037092.D
Acq: 2 Jun 2021 5:32

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
57	100				
41	96.4	70.5	105.7		
43	79.3	165.8	248.8		
56	55.2	42.2	63.4		





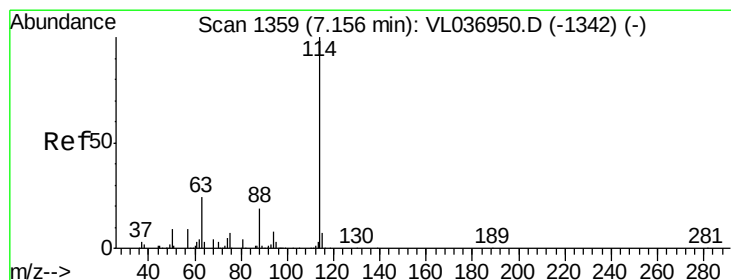
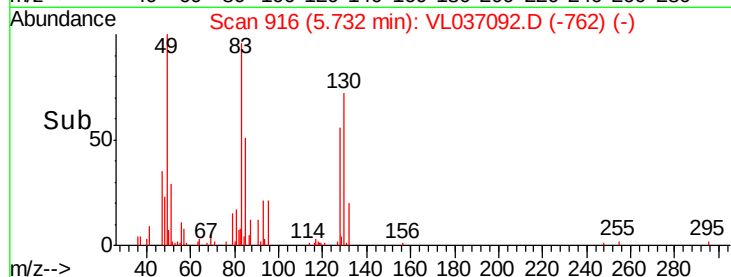
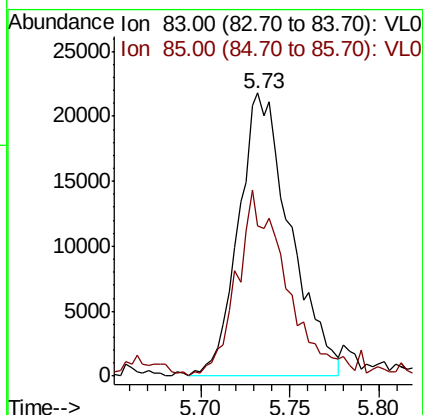
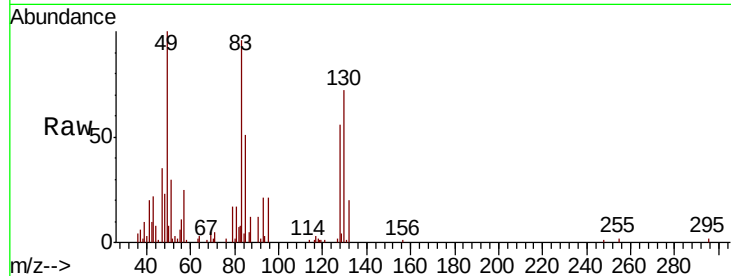
#29
Chloroform
Concen: 0.187 ppbv
RT: 5.73 min Scan# 916
Delta R.T. -0.00 min
Lab File: VL037092.D
Acq: 2 Jun 2021 5:32

Instrument :
MSVOA_L
ClientSampled :
IA-4A

Tot Ion	83	Resp	43997
Ion Ratio	100	Lower	Upper
85	52.9	51.1	76.7

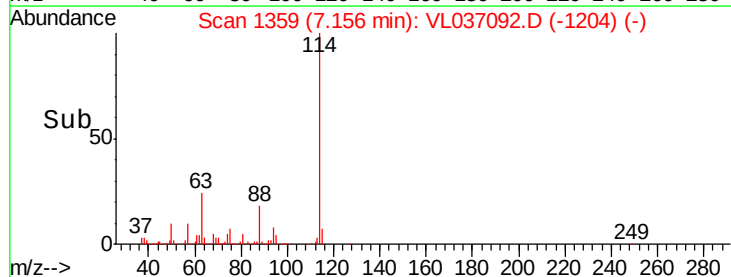
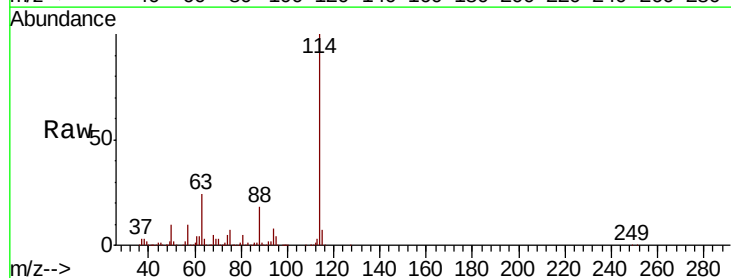
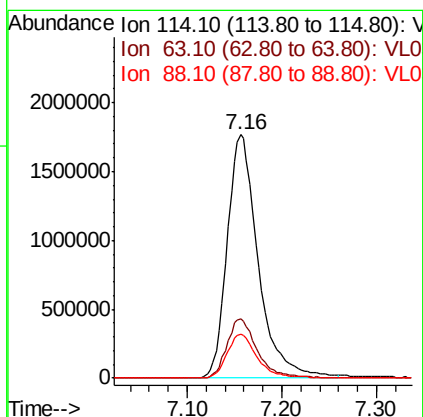
Manual Integrations
APPROVED

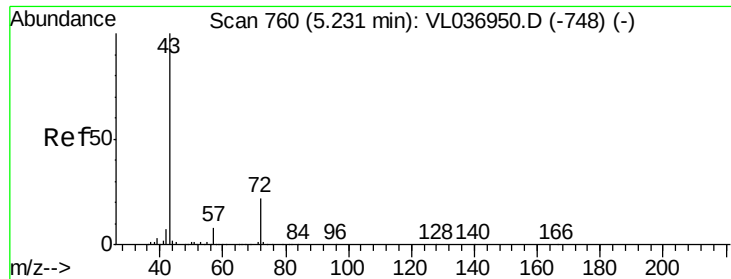
MMDadoda
6/7/2021 2:59:36 PM



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.16 min Scan# 1359
Delta R.T. -0.00 min
Lab File: VL037092.D
Acq: 2 Jun 2021 5:32

Tgt Ion	114	Resp	4035425
Ion Ratio	100	Lower	Upper
63	24.3	19.6	29.4
88	17.8	14.6	21.8





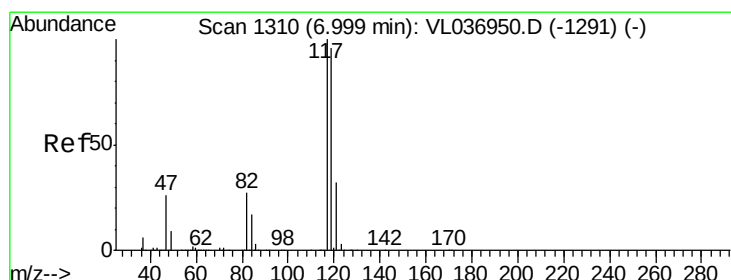
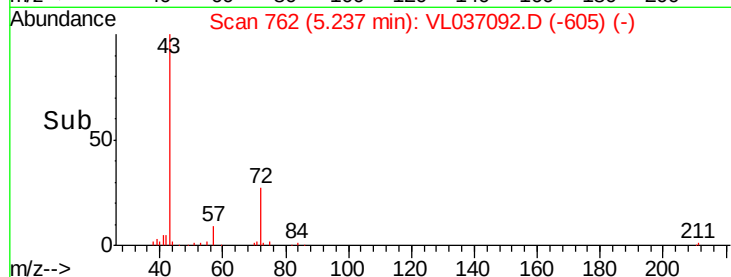
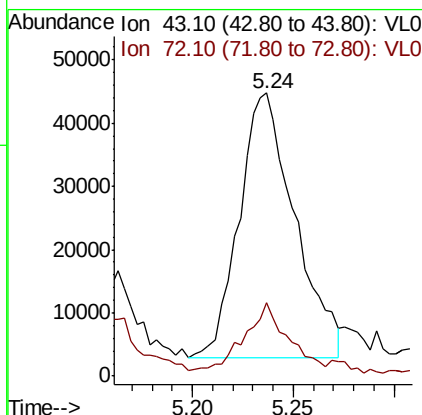
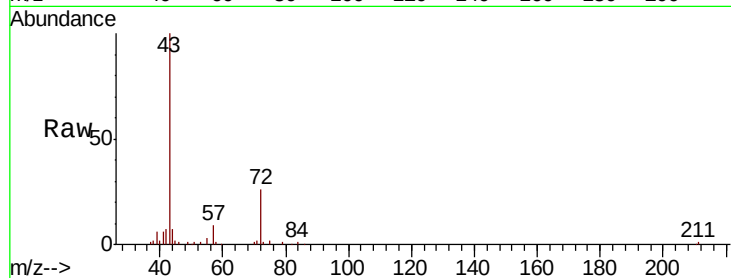
#34
2-Butanone
Concen: 0.546 ppbv
RT: 5.24 min Scan# 762
Delta R.T. 0.01 min
Lab File: VL037092.D
Acq: 2 Jun 2021 5:32

Instrument :
MSVOA_L
ClientSampled :
IA-4A

Tot Ion	43	72	Ratio	Lower	Upper
80216	100	27.4		19.0	28.4

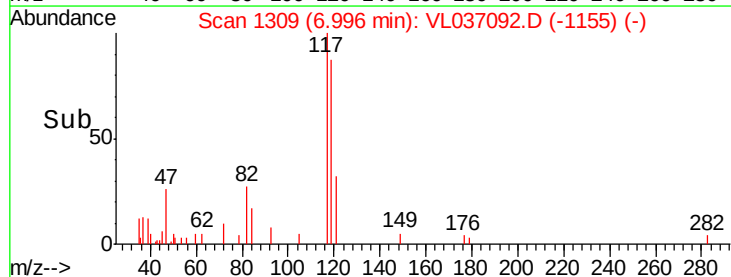
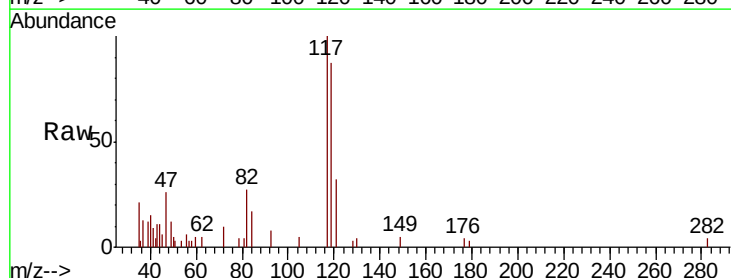
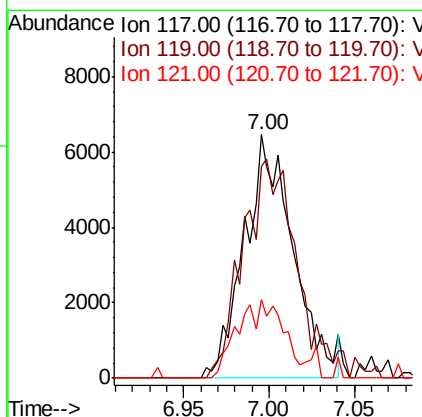
Manual Integrations
APPROVED

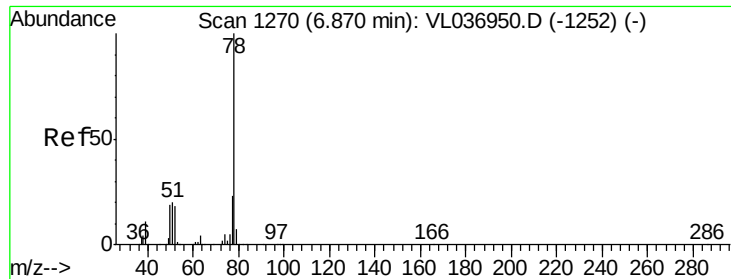
MMDadoda
6/7/2021 2:59:36 PM



#35
Carbon Tetrachloride
Concen: 0.048 ppbv m
RT: 7.00 min Scan# 1309
Delta R.T. -0.00 min
Lab File: VL037092.D
Acq: 2 Jun 2021 5:32

Tgt Ion	117	119	121	Ratio	Lower	Upper
12870	100	86.7	32.5		76.6	38.6





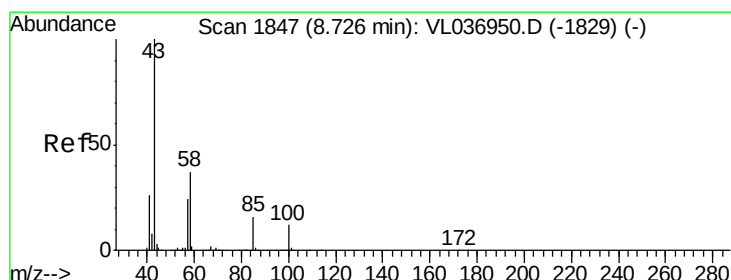
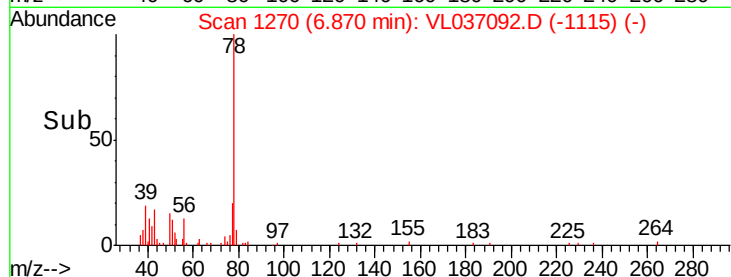
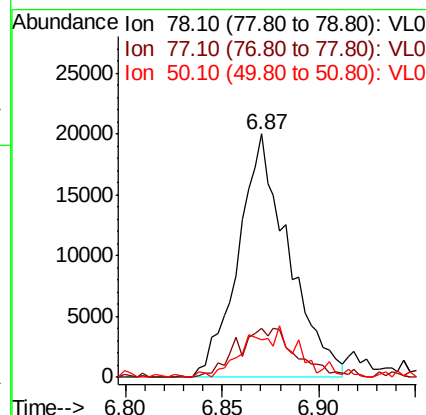
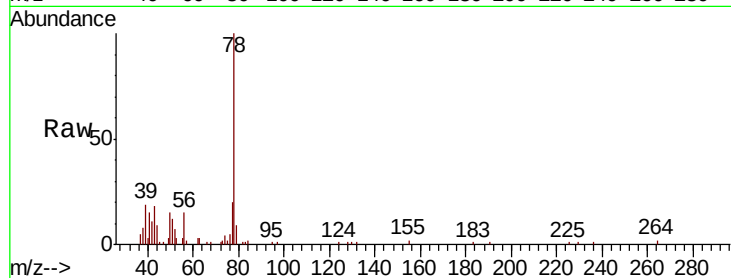
#36
Benzene
Concen: 0.103 ppbv
RT: 6.87 min Scan# 1270
Delta R.T. -0.00 min
Lab File: VL037092.D
Acq: 2 Jun 2021 5:32

Instrument :
MSVOA_L
ClientSampled :
IA-4A

Tot Ion	Ratio	Lower	Upper
78	100		
77	20.0	18.6	28.0
50	15.5	15.0	22.4

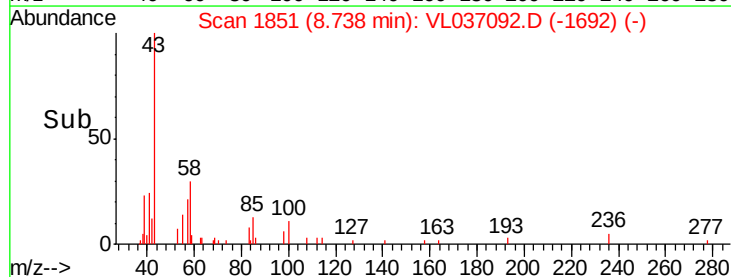
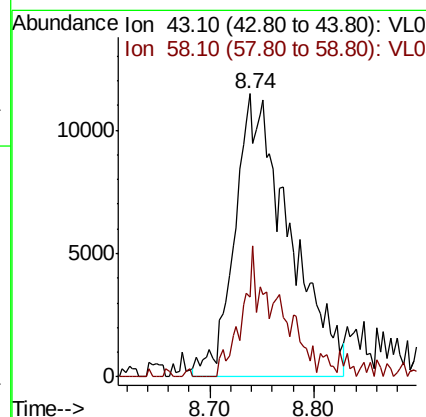
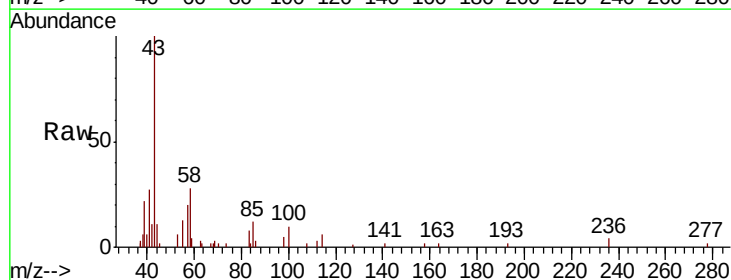
Manual Integrations
APPROVED

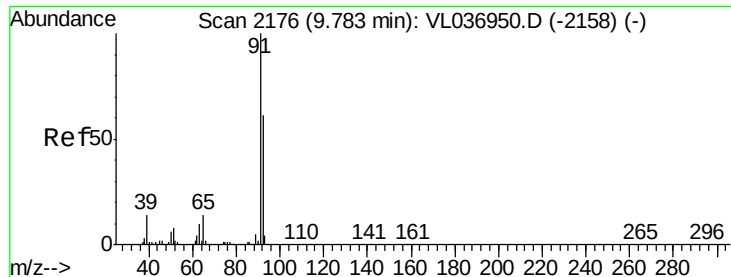
MMDadoda
6/7/2021 2:59:36 PM



#50
4-Methyl-2-Pentanone
Concen: 0.172 ppbv m
RT: 8.74 min Scan# 1851
Delta R.T. 0.01 min
Lab File: VL037092.D
Acq: 2 Jun 2021 5:32

Tgt Ion	Ratio	Lower	Upper
43	100		
58	30.2	29.4	44.2





#53

Toluene

Concen: 0.773 ppbv

RT: 9.78 min Scan# 2176

Delta R.T. -0.00 min

Lab File: VL037092.D

Acq: 2 Jun 2021 5:32

Instrument :

MSVOA_L

ClientSampled :

IA-4A

Tot Ion: 91 Resp: 319832

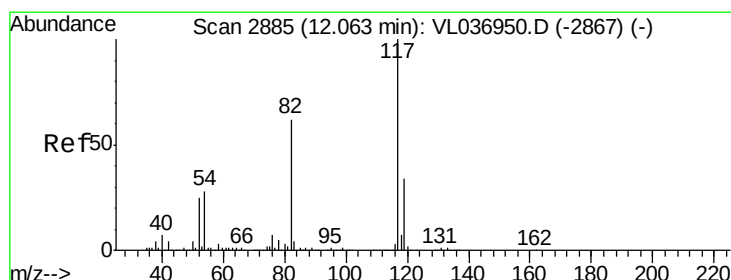
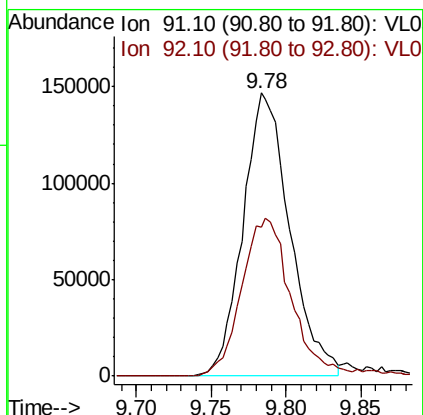
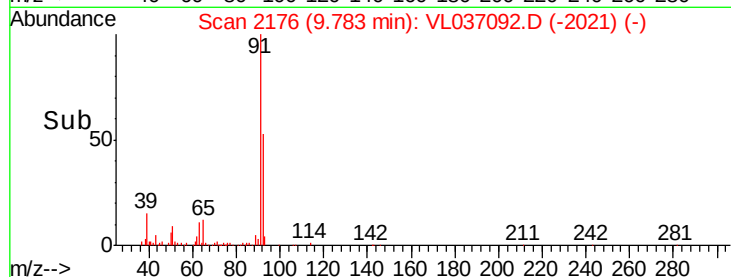
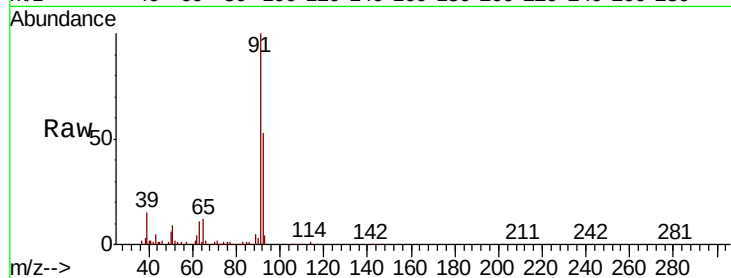
Ion Ratio Lower Upper

91 100

92 60.2 49.5 74.3

Manual Integrations
APPROVED

MMDadoda
6/7/2021 2:59:36 PM



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.07 min Scan# 2886

Delta R.T. 0.00 min

Lab File: VL037092.D

Acq: 2 Jun 2021 5:32

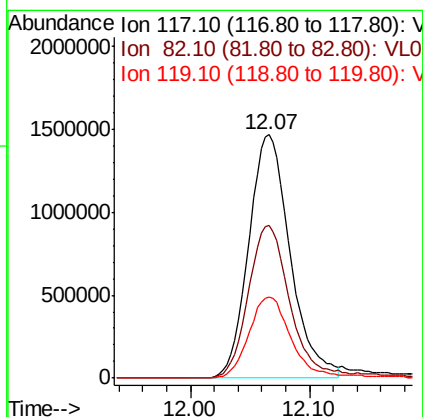
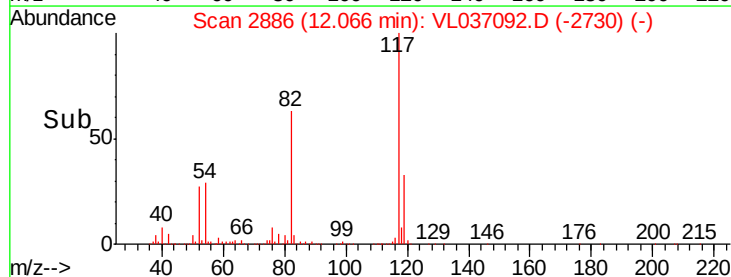
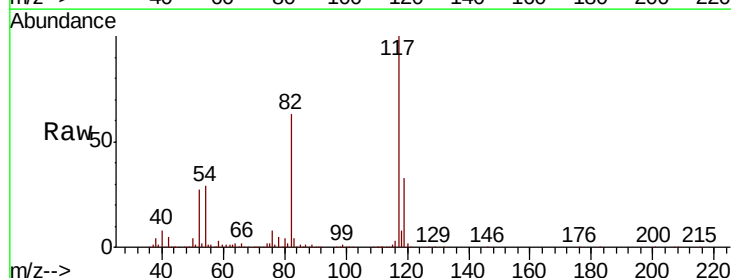
Tgt Ion: 117 Resp: 3545228

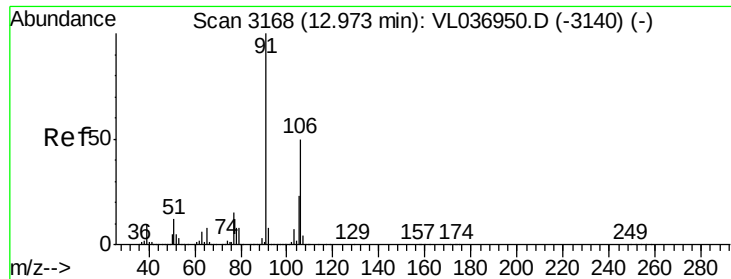
Ion Ratio Lower Upper

117 100

82 65.6 52.6 79.0

119 35.0 46.6 70.0#





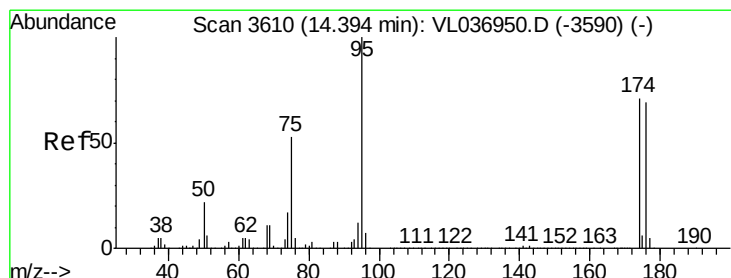
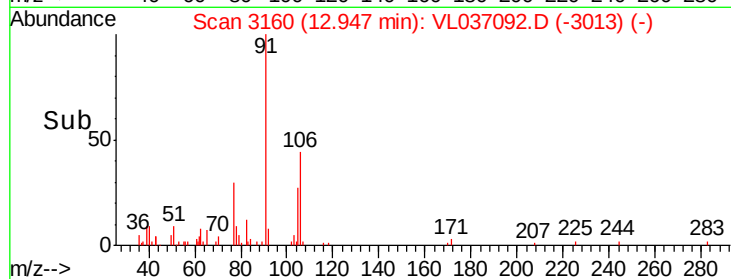
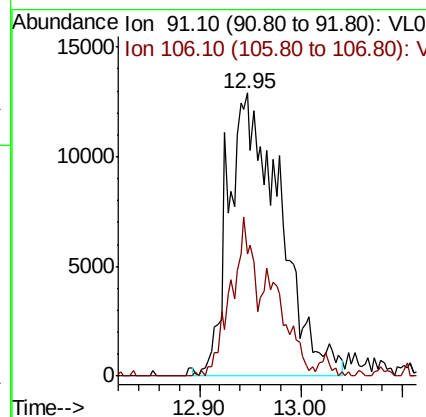
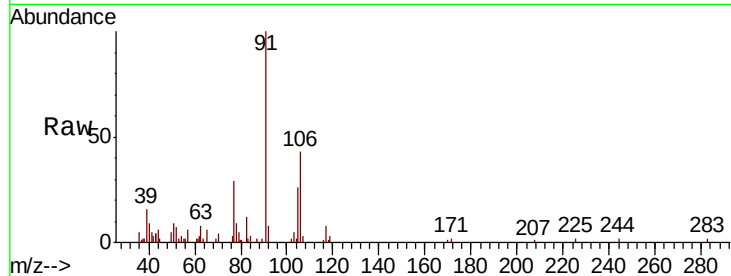
#59
m/p-Xylene
Concen: 0.111 ppbv m
RT: 12.95 min Scan# 3160
Delta R.T. -0.03 min
Lab File: VL037092.D
Acq: 2 Jun 2021 5:32

Instrument :
MSVOA_L
ClientSampled :
IA-4A

Tot Ion: 91 Resp: 45746
Ion Ratio Lower Upper
91 100
106 0.0 37.4 56.2#

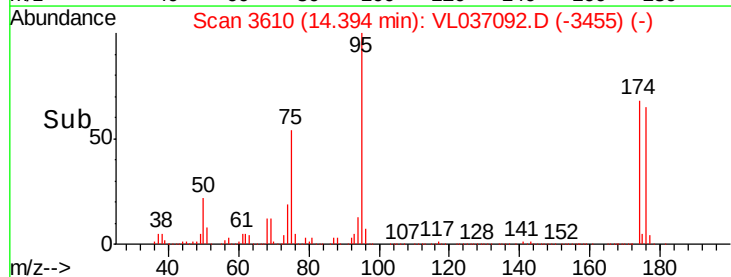
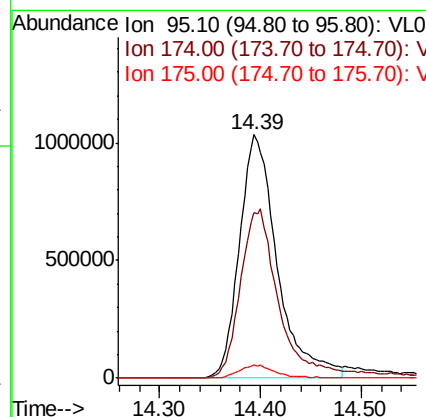
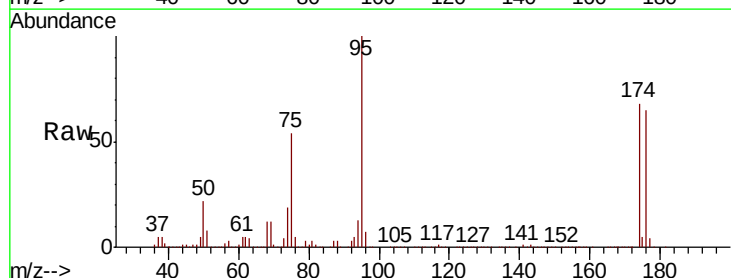
Manual Integrations
APPROVED

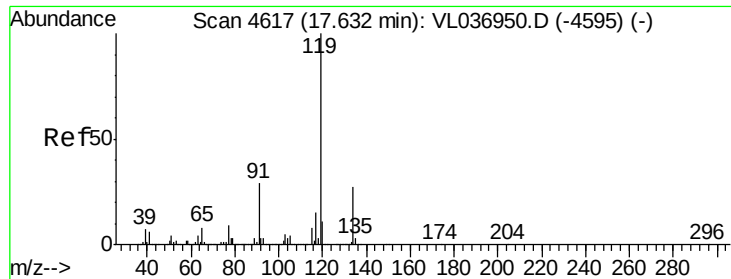
MMDadoda
6/7/2021 2:59:36 PM



#68
1-Bromo-4-Fluorobenzene
Concen: 10.131 ppbv
RT: 14.39 min Scan# 3610
Delta R.T. -0.00 min
Lab File: VL037092.D
Acq: 2 Jun 2021 5:32

Tgt Ion: 95 Resp: 2698011
Ion Ratio Lower Upper
95 100
174 73.8 58.4 87.6
175 5.4 4.4 6.6





#69
 p-Isopropyltoluene
 Concen: 0.103 ppbv m
 RT: 17.64 min Scan# 4619
 Delta R.T. 0.01 min
 Lab File: VL037092.D
 Acq: 2 Jun 2021 5:32

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-4A

Tot Ion:	119	Resp:	61628
Ion Ratio	Lower	Upper	
119	100		
134	25.8	21.2	31.8
91	31.8	22.2	33.4

Manual Integrations
 APPROVED

MMDadoda
 6/7/2021 2:59:36 PM

