

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL060121\
 Data File : VL037088.D
 Acq On : 2 Jun 2021 2:54
 Operator : SY/AP
 Sample : M2548-05
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-2A

Manual Integrations
 APPROVED

MMDadoda
 6/7/2021 2:59:28 PM

Quant Time: Jun 06 21:33:13 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
 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	1382401	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.16	114	3982133	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.07	117	3583135	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.40	95	2632349	9.78	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.80%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.03	85	146448	0.624	ppbv	98
3) Chlorodifluoromethane	2.98	51	102162	0.403	ppbv #	86
4) Chloromethane	3.13	50	50957m	0.591	ppbv	
9) Propene	3.01	41	111861m	1.233	ppbv	
11) Trichlorofluoromethane	3.94	101	76689	0.353	ppbv	87
13) Ethanol	3.59	45	6577707	543.615	ppbv	94
15) Acetone	3.83	43	4505361	31.819	ppbv	96
17) tert-Butyl alcohol	4.29	59	37528m	0.289	ppbv	
19) Isopropyl Alcohol	3.96	45	702123	9.225	ppbv #	1
20) Methylene Chloride	4.33	84	290866	3.832	ppbv	100
26) Hexane	5.67	57	488946	2.813	ppbv #	48
29) Chloroform	5.73	83	61318m	0.250	ppbv	
34) 2-Butanone	5.23	43	194430	1.341	ppbv	91
35) Carbon Tetrachloride	6.99	117	13600m	0.051	ppbv	
36) Benzene	6.87	78	34784	0.101	ppbv	93
44) 2,2,4-Trimethylpentane	7.85	57	61352m	0.104	ppbv	
50) 4-Methyl-2-Pentanone	8.74	43	51714m	0.216	ppbv	
53) Toluene	9.79	91	511733	1.254	ppbv	100
59) m/p-Xylene	12.94	91	54175m	0.130	ppbv	

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

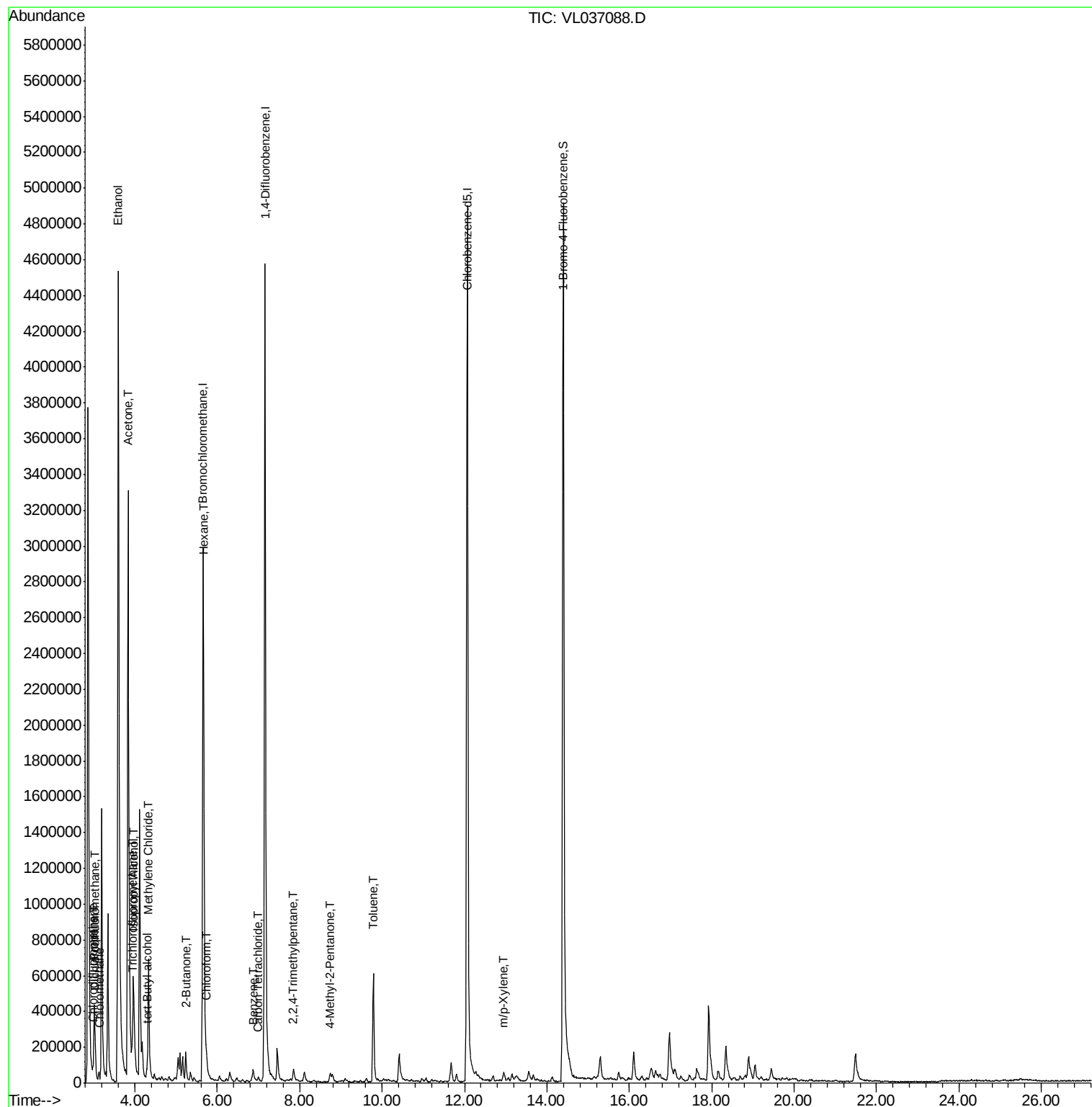
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL060121\
Data File : VL037088.D
Acq On : 2 Jun 2021 2:54
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Misc : 400mL/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

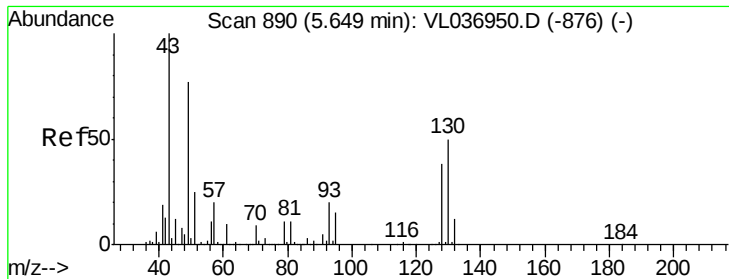
Instrument :
MSVOA_L
ClientSampleId :
IA-2A

Manual Integrations
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6/7/2021 2:59:28 PM

Quant Time: Jun 06 21:33:13 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# 890

Delta R.T. -0.00 min

Lab File: VL037088.D

Acq: 2 Jun 2021 2:54

Instrument :

MSVOA_L

ClientSampleId :

IA-2A

Tot Ion: 49 Resp: 1382401

Ion Ratio Lower Upper

49 100

128 57.6 26.9 80.7

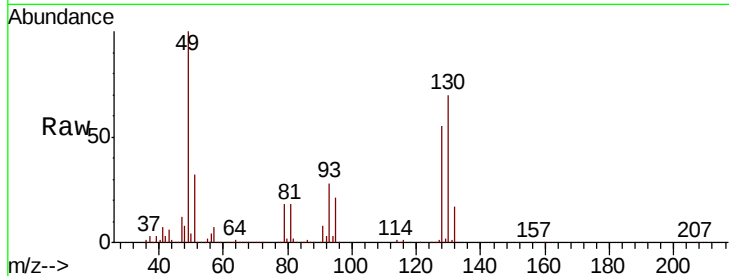
130 73.0 33.8 101.4

Manual Integrations

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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

800000

600000

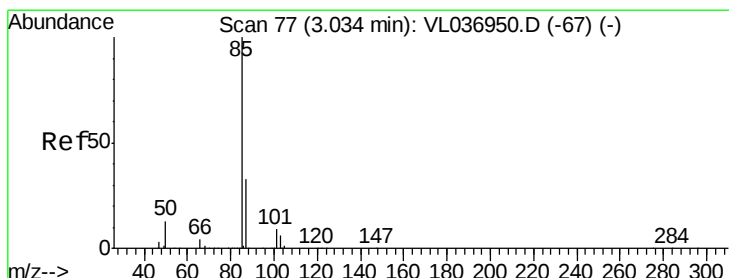
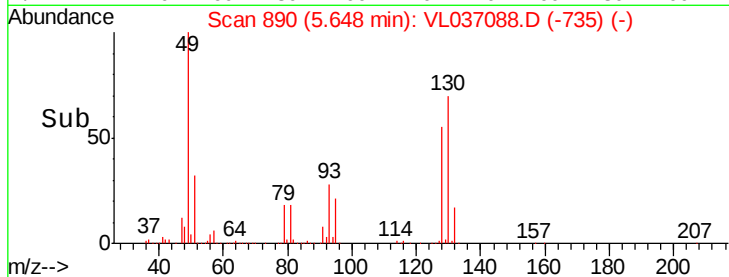
400000

200000

0

5.55 5.60 5.65 5.70 5.75

Time-->



#2

Dichlorodifluoromethane

Concen: 0.624 ppbv

RT: 3.03 min Scan# 77

Delta R.T. -0.00 min

Lab File: VL037088.D

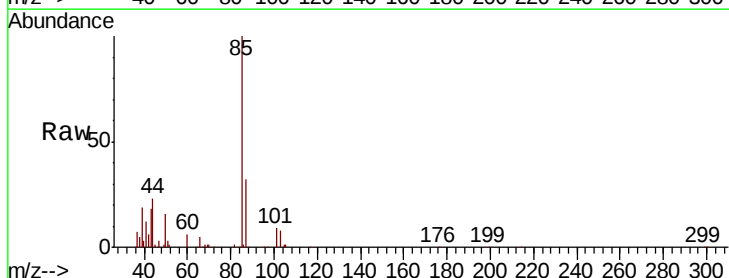
Acq: 2 Jun 2021 2:54

Tgt Ion: 85 Resp: 146448

Ion Ratio Lower Upper

85 100

87 32.1 26.6 39.8



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

100000

80000

60000

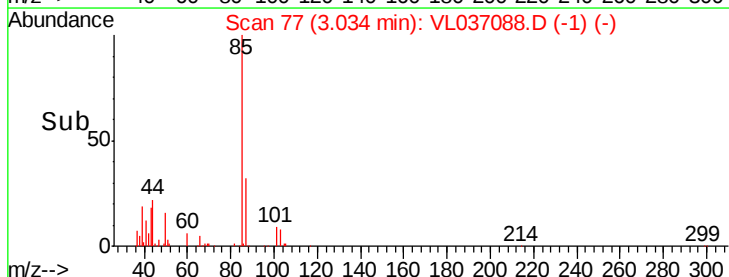
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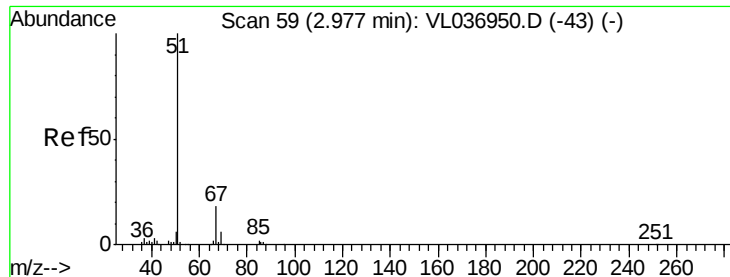
20000

0

2.95 3.00 3.05 3.10

Time-->





#3

Chlorodifluoromethane

Concen: 0.403 ppbv

RT: 2.98 min Scan# 59

Delta R.T. -0.00 min

Lab File: VL037088.D

Acq: 2 Jun 2021 2:54

Instrument :

MSVOA_L

ClientSampleId :

IA-2A

Tot Ion: 51 Resp: 102162

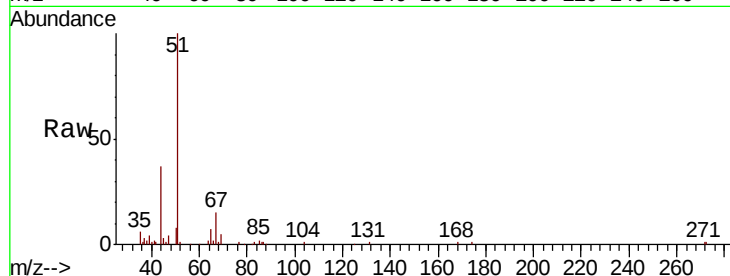
Ion Ratio Lower Upper

51 100

67 11.8 14.6 21.8#

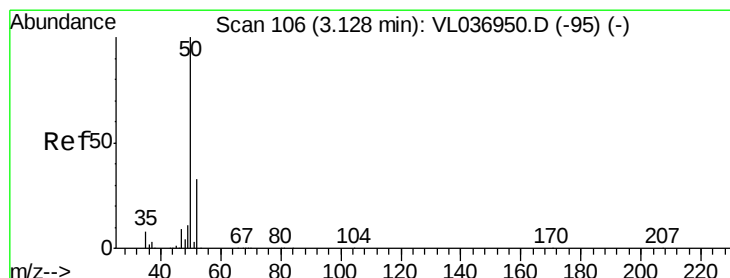
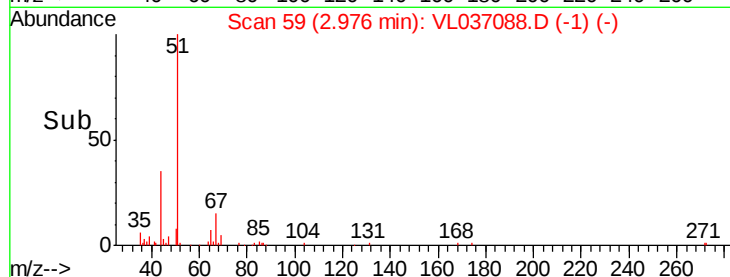
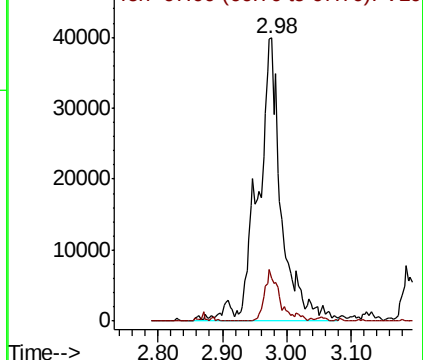
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.591 ppbv m

RT: 3.13 min Scan# 107

Delta R.T. 0.00 min

Lab File: VL037088.D

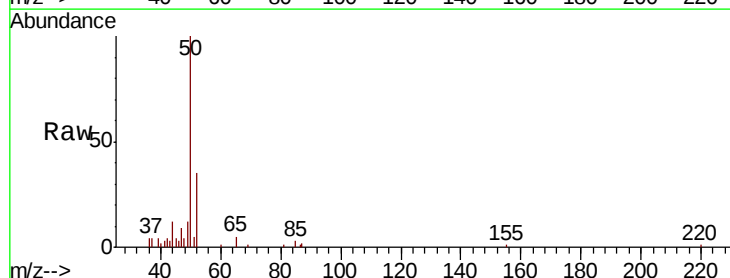
Acq: 2 Jun 2021 2:54

Tgt Ion: 50 Resp: 50957

Ion Ratio Lower Upper

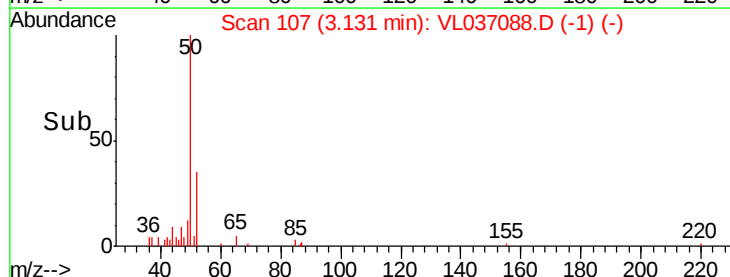
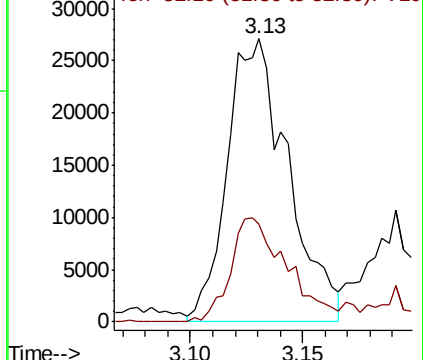
50 100

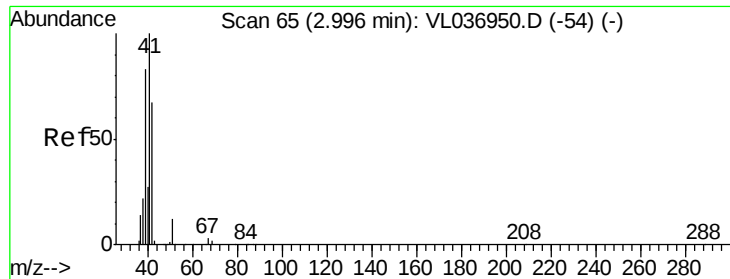
52 34.6 26.1 39.1



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 1.233 ppbv m

RT: 3.01 min Scan# 68

Delta R.T. 0.01 min

Lab File: VL037088.D

Acq: 2 Jun 2021 2:54

Instrument :

MSVOA_L

ClientSampleId :

IA-2A

Tot Ion: 41 Resp: 111861

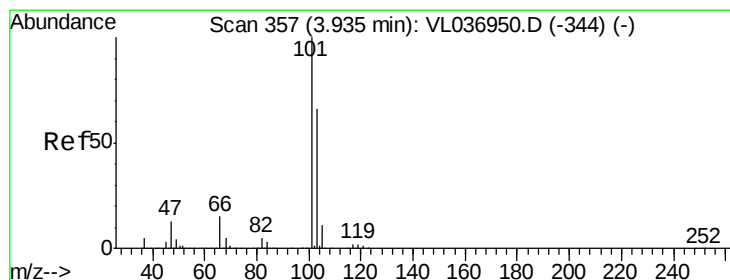
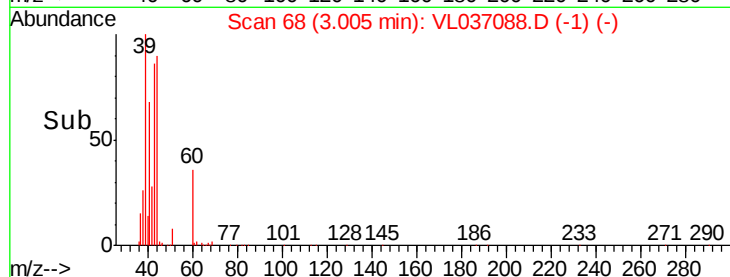
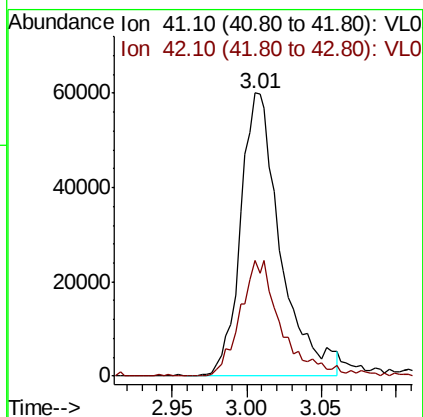
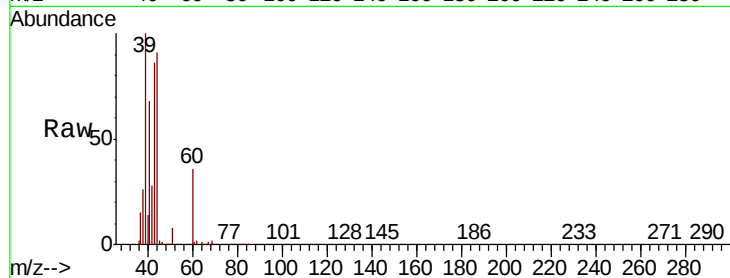
Ion Ratio Lower Upper

41 100

42 324.4 53.9 80.9#

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#11

Trichlorofluoromethane

Concen: 0.353 ppbv

RT: 3.94 min Scan# 358

Delta R.T. 0.00 min

Lab File: VL037088.D

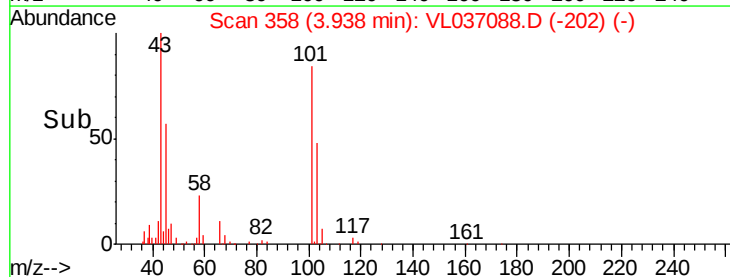
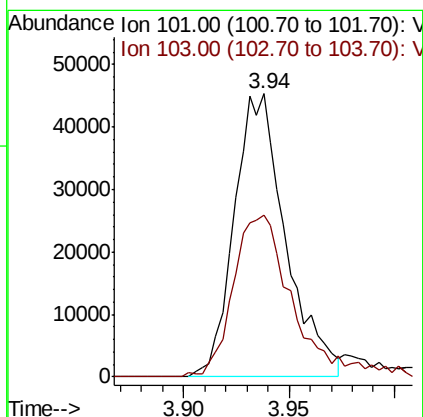
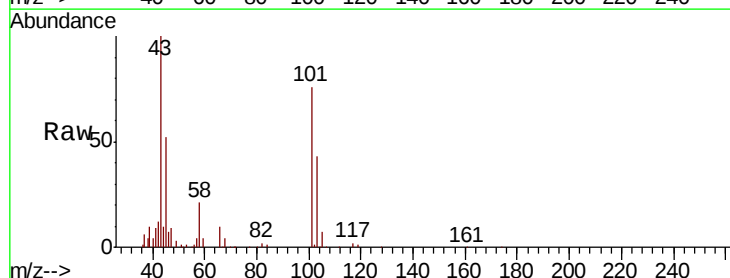
Acq: 2 Jun 2021 2:54

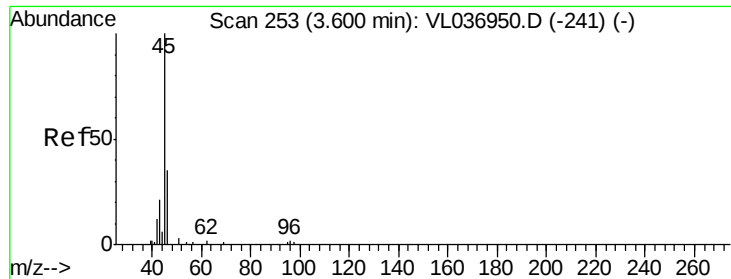
Tgt Ion: 101 Resp: 76689

Ion Ratio Lower Upper

101 100

103 55.4 52.6 79.0





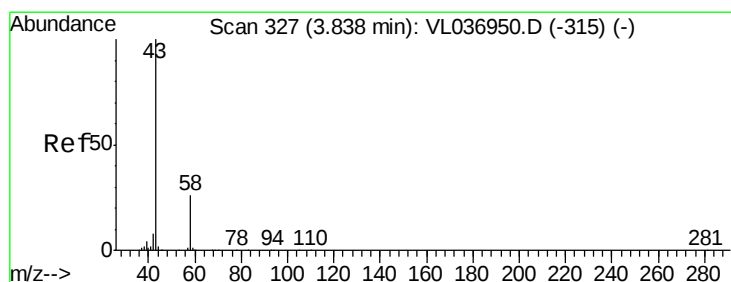
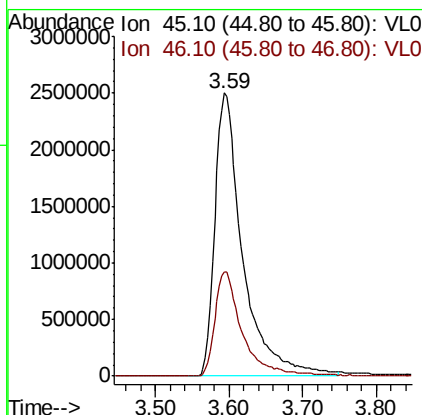
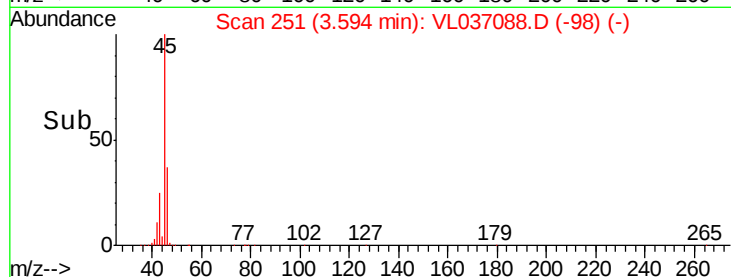
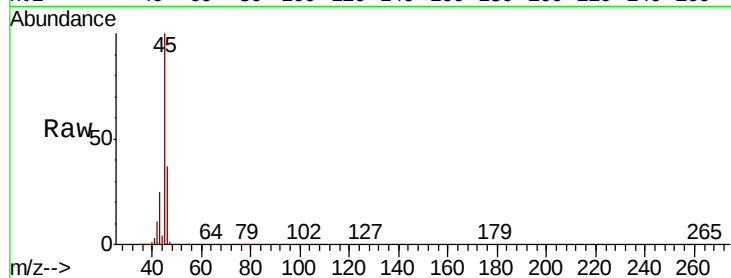
#13
Ethanol
Concen: 543.615 ppbv
RT: 3.59 min Scan# 251
Delta R.T. -0.01 min
Lab File: VL037088.D
Acq: 2 Jun 2021 2:54

Instrument :
MSVOA_L
ClientSampled :
IA-2A

Tot Ion: 45 Resp: 6577707
Ion Ratio Lower Upper
45 100
46 37.0 16.3 65.3

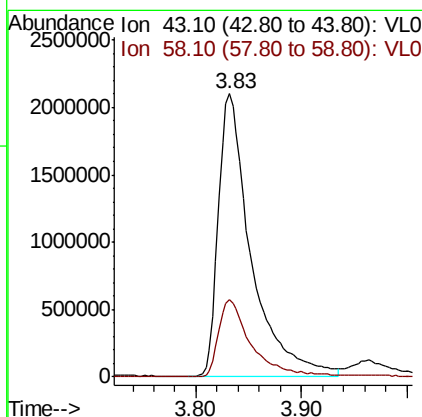
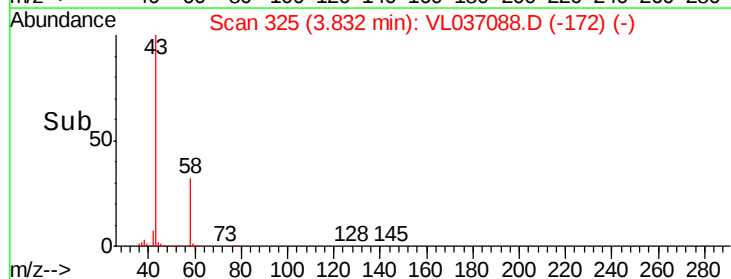
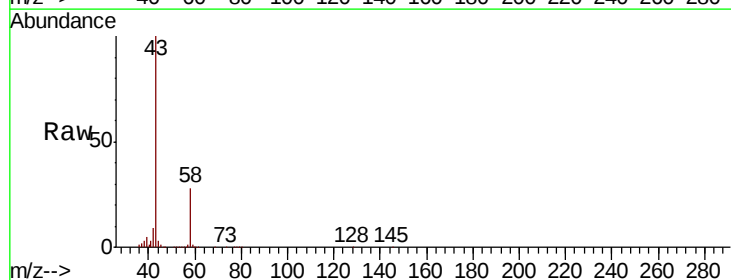
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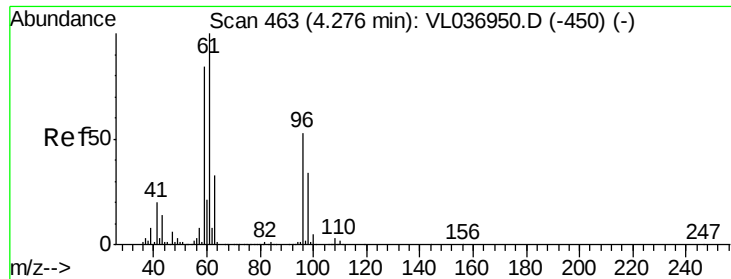
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#15
Acetone
Concen: 31.819 ppbv
RT: 3.83 min Scan# 325
Delta R.T. -0.01 min
Lab File: VL037088.D
Acq: 2 Jun 2021 2:54

Tgt Ion: 43 Resp: 4505361
Ion Ratio Lower Upper
43 100
58 27.7 24.0 36.0





#17

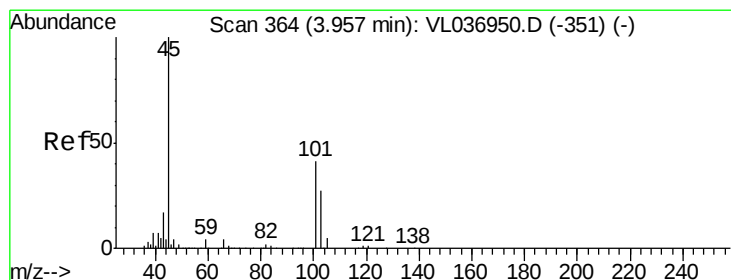
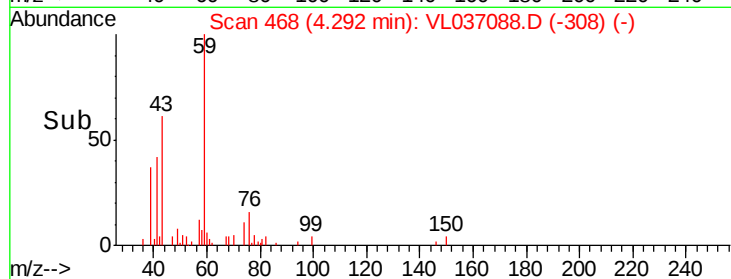
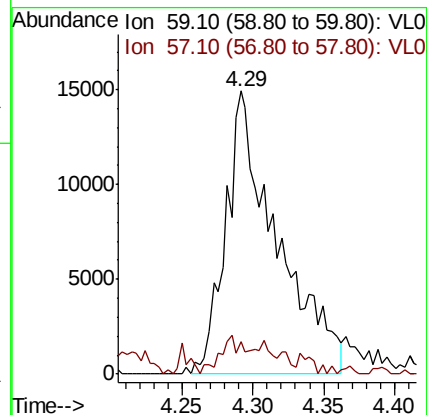
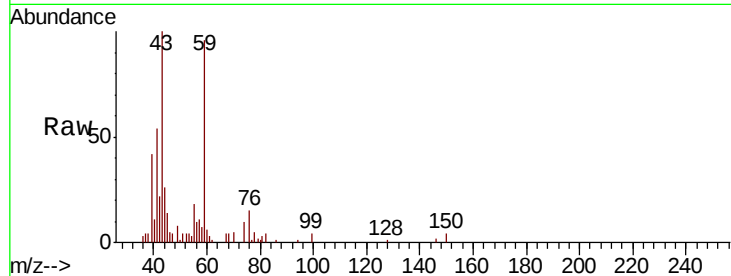
tert-Butyl alcohol
 Concen: 0.289 ppbv
 RT: 4.29 min Scan# 468
 Delta R.T. 0.02 min
 Lab File: VL037088.D
 Acq: 2 Jun 2021 2:54

Instrument :
 MSVOA_L
 ClientSampled :
 IA-2A

Tot Ion	59	Resp	37528
Ion Ratio	Lower	Upper	
59	100		
57	0.0	8.3	12.5#

Manual Integrations
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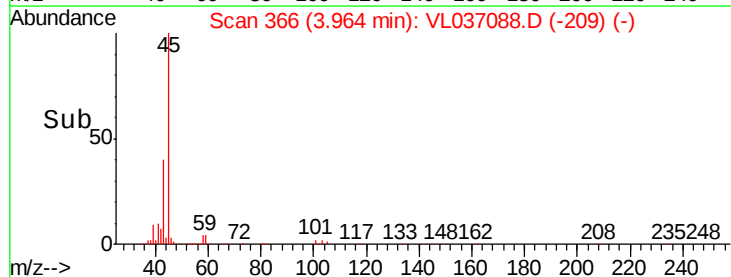
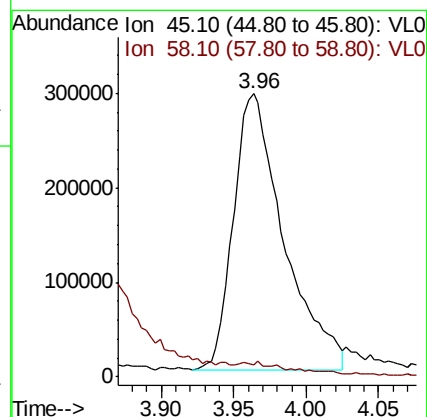
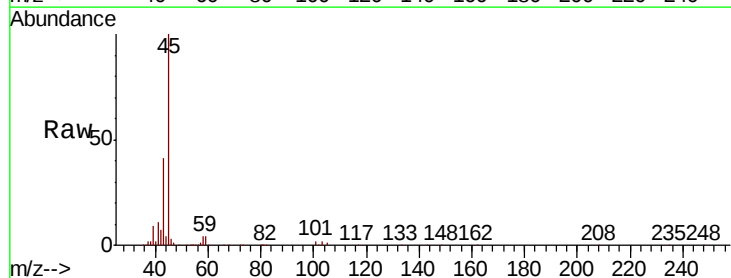
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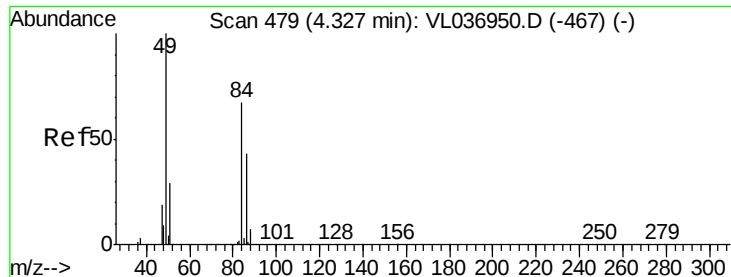


#19

Isopropyl Alcohol
 Concen: 9.225 ppbv
 RT: 3.96 min Scan# 366
 Delta R.T. 0.01 min
 Lab File: VL037088.D
 Acq: 2 Jun 2021 2:54

Tgt Ion	45	Resp	702123
Ion Ratio	Lower	Upper	
45	100		
58	185.7	37.2	55.8#





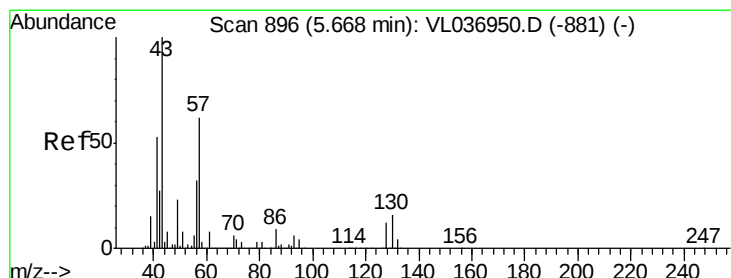
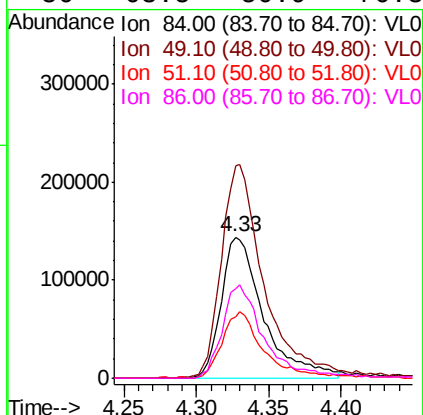
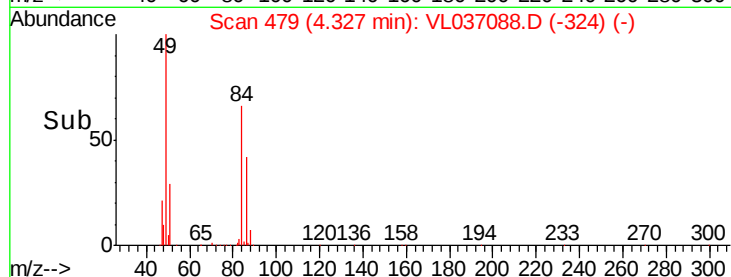
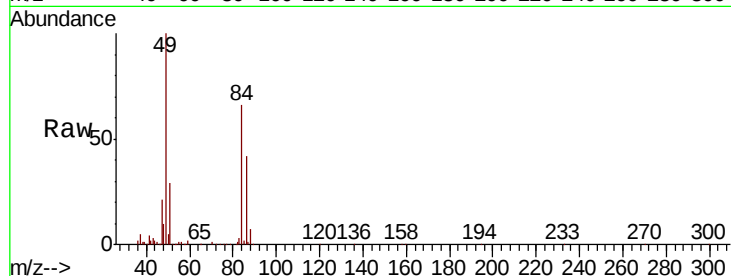
#20
Methvlene Chloride
Concen: 3.832 ppbv
RT: 4.33 min Scan# 479
Delta R.T. -0.00 min
Lab File: VL037088.D
Acq: 2 Jun 2021 2:54

Instrument :
MSVOA_L
ClientSampled :
IA-2A

Tot Ion	84	Resp	290866
Ion Ratio	Lower	Upper	
84	100		
49	149.9	119.8	179.6
51	42.8	35.1	52.7
86	63.5	50.9	76.3

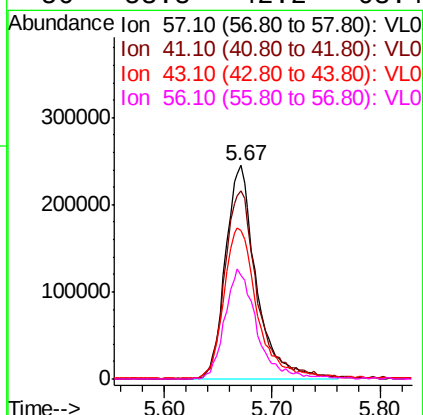
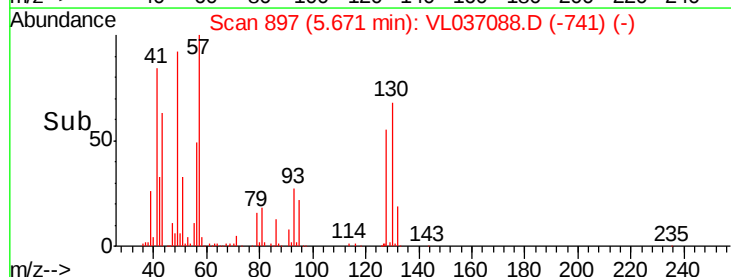
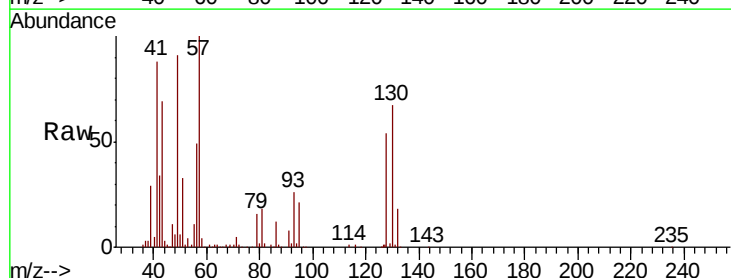
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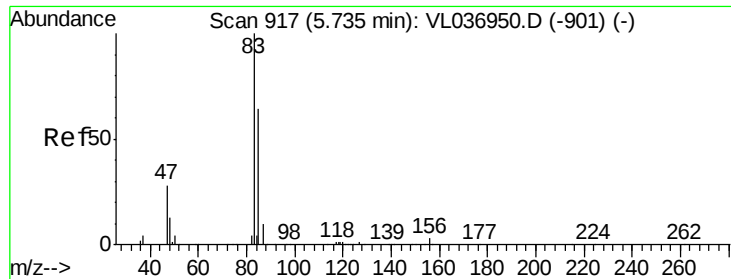
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#26
Hexane
Concen: 2.813 ppbv
RT: 5.67 min Scan# 897
Delta R.T. 0.00 min
Lab File: VL037088.D
Acq: 2 Jun 2021 2:54

Tgt Ion	57	Resp	488946
Ion Ratio	Lower	Upper	
57	100		
41	93.3	70.5	105.7
43	76.8	165.8	248.8#
56	53.8	42.2	63.4





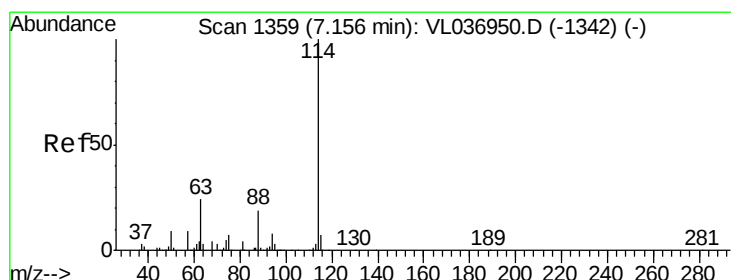
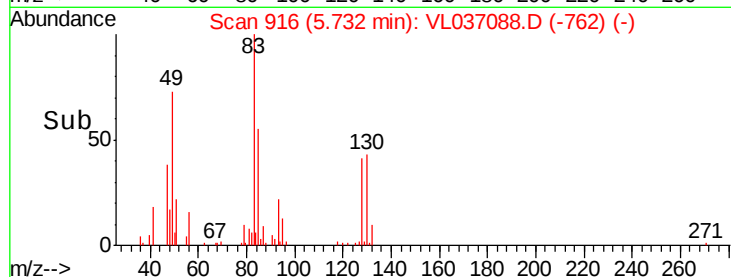
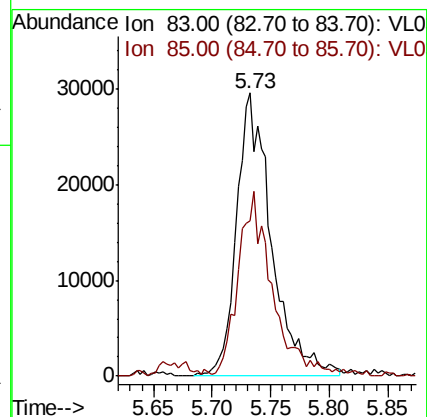
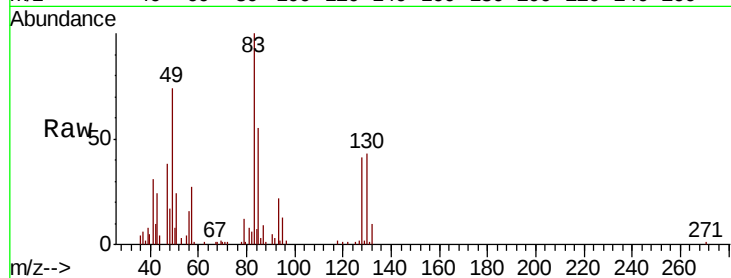
#29
Chloroform
Concen: 0.250 ppbv m
RT: 5.73 min Scan# 916
Delta R.T. -0.00 min
Lab File: VL037088.D
Acq: 2 Jun 2021 2:54

Instrument :
MSVOA_L
ClientSampled :
IA-2A

Tot Ion	83	Resp	61318
Ion Ratio	100	Lower	Upper
85	54.9	51.1	76.7

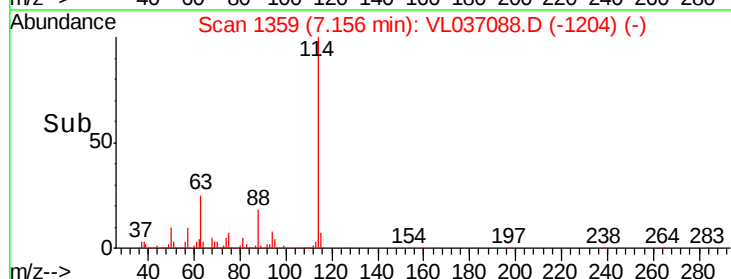
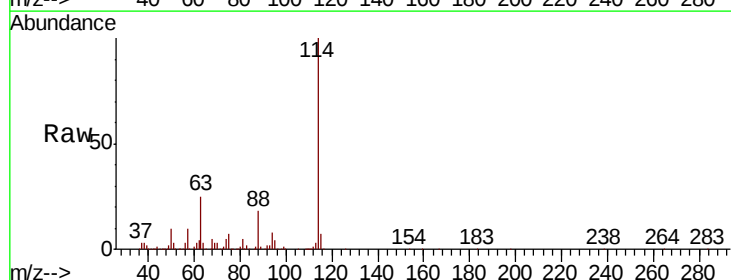
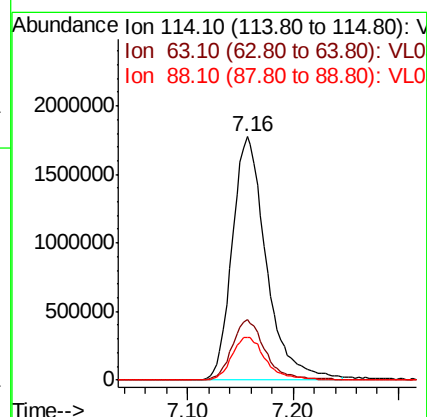
Manual Integrations
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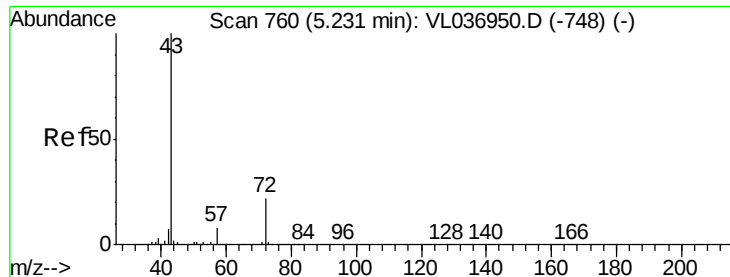
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#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.16 min Scan# 1359
Delta R.T. -0.00 min
Lab File: VL037088.D
Acq: 2 Jun 2021 2:54

Tgt Ion	114	Resp	3982133
Ion Ratio	100	Lower	Upper
63	24.3	19.6	29.4
88	18.0	14.6	21.8





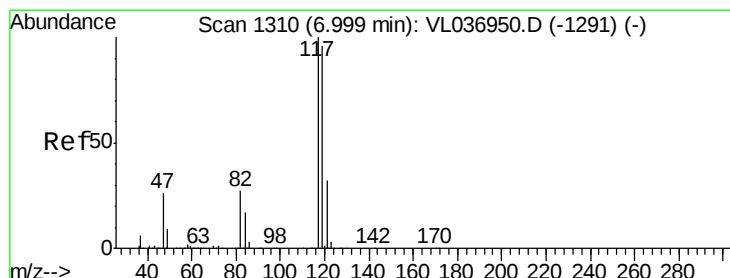
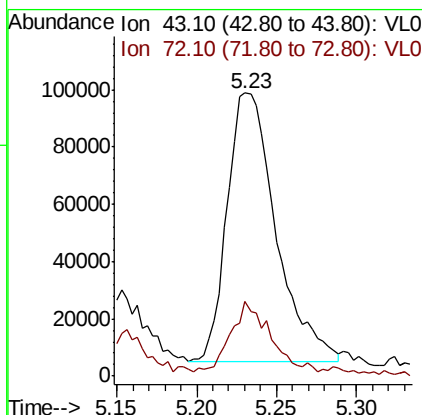
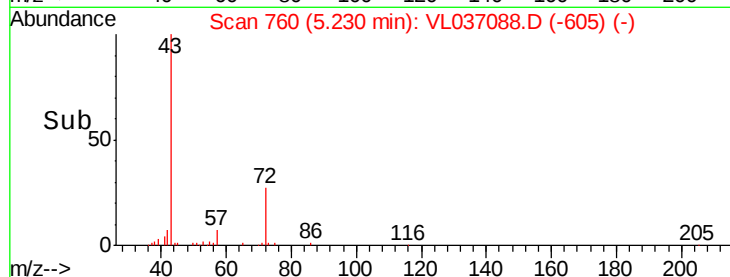
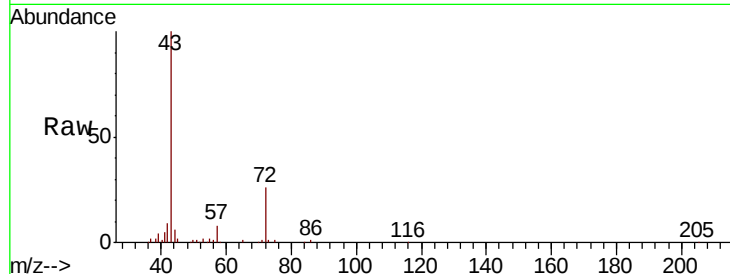
#34
2-Butanone
Concen: 1.341 ppbv
RT: 5.23 min Scan# 760
Delta R.T. -0.00 min
Lab File: VL037088.D
Acq: 2 Jun 2021 2:54

Instrument :
MSVOA_L
ClientSampleId :
IA-2A

Tot Ion	43	Resp	194430
Ion Ratio	43	100	Lower Upper
	72	28.0	19.0 28.4

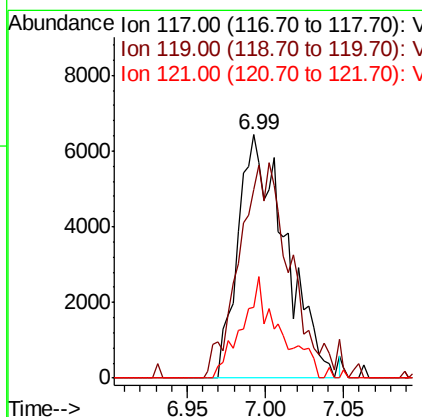
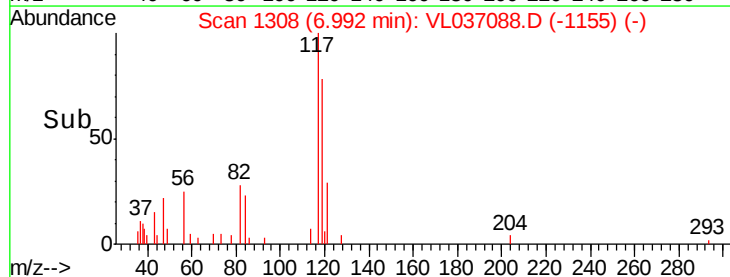
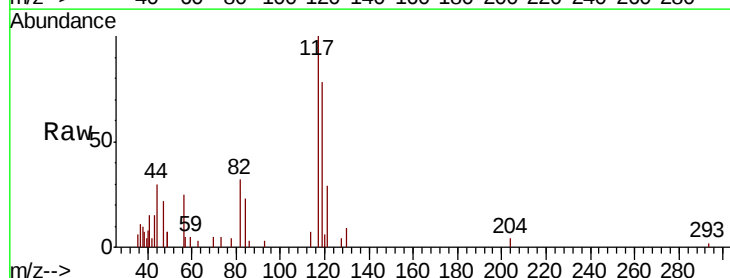
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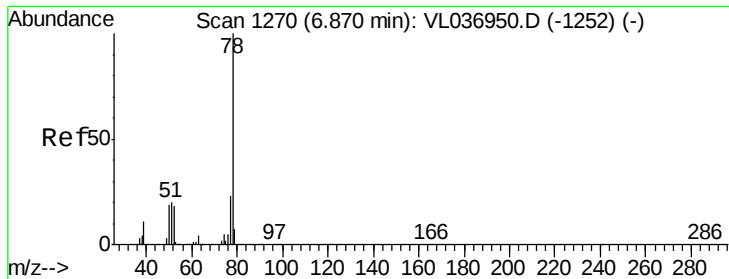
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#35
Carbon Tetrachloride
Concen: 0.051 ppbv m
RT: 6.99 min Scan# 1308
Delta R.T. -0.01 min
Lab File: VL037088.D
Acq: 2 Jun 2021 2:54

Tgt Ion	117	Resp	13600
Ion Ratio	117	100	Lower Upper
	119	77.6	76.6 114.8
	121	29.0	25.8 38.6





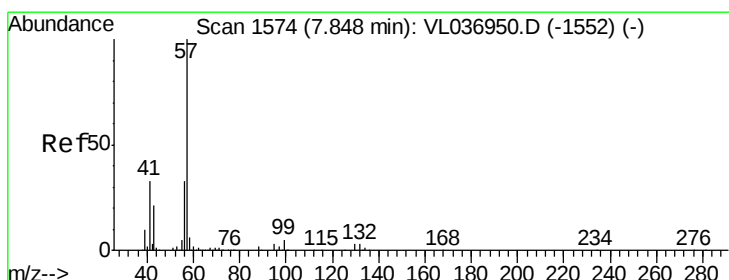
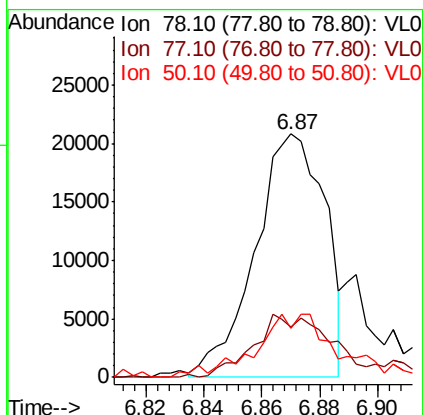
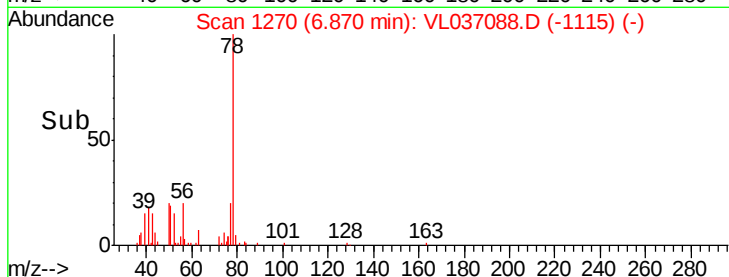
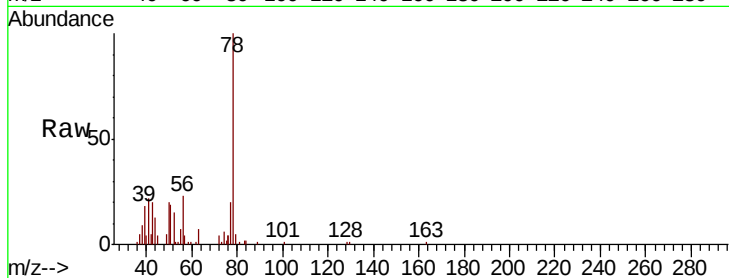
#36
Benzene
Concen: 0.101 ppbv
RT: 6.87 min Scan# 1270
Delta R.T. -0.00 min
Lab File: VL037088.D
Acq: 2 Jun 2021 2:54

Instrument :
MSVOA_L
ClientSampled :
IA-2A

Tot Ion	Ratio	Lower	Upper
78	100		
77	19.5	18.6	28.0
50	15.9	15.0	22.4

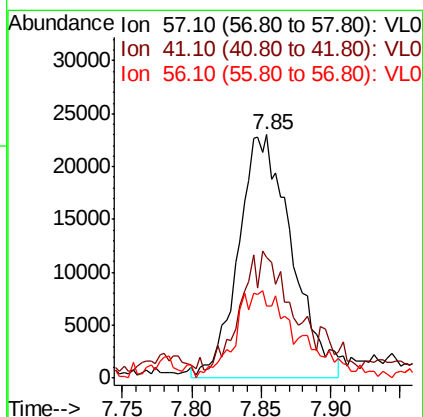
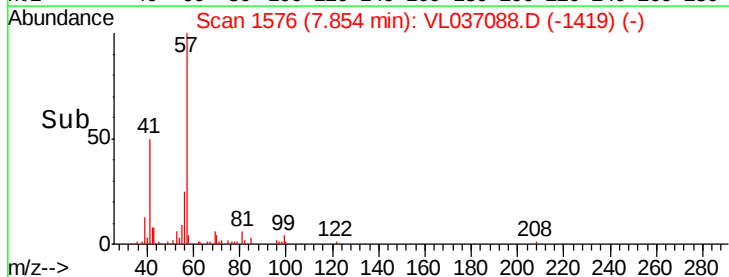
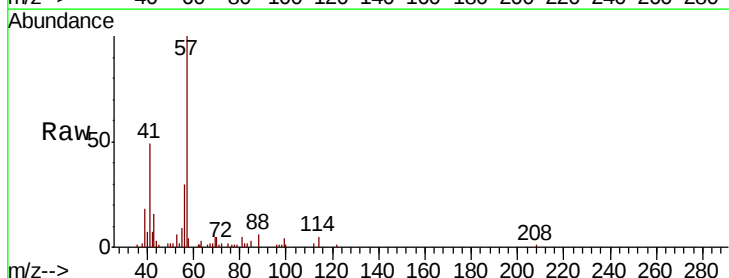
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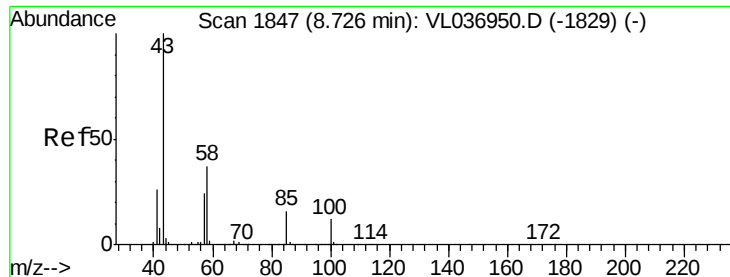
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#44
2,2,4-Trimethylpentane
Concen: 0.104 ppbv m
RT: 7.85 min Scan# 1576
Delta R.T. 0.01 min
Lab File: VL037088.D
Acq: 2 Jun 2021 2:54

Tgt Ion	Ratio	Lower	Upper
57	100		
41	61.7	27.0	40.4#
56	42.9	25.4	38.2#





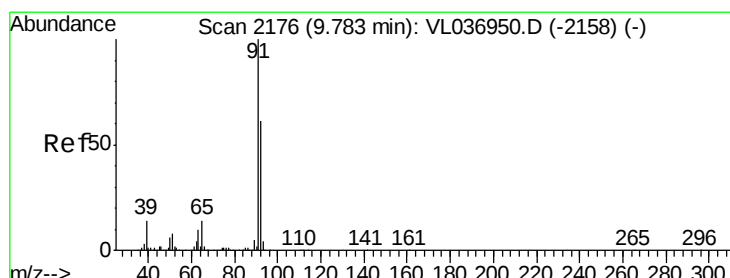
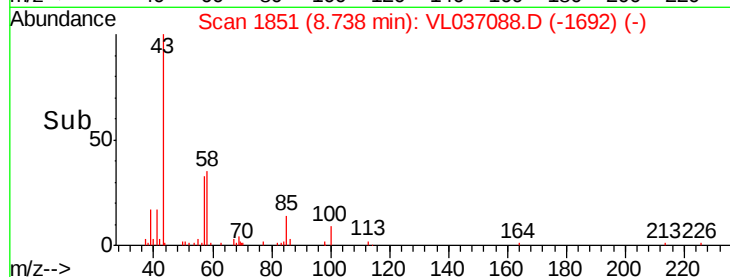
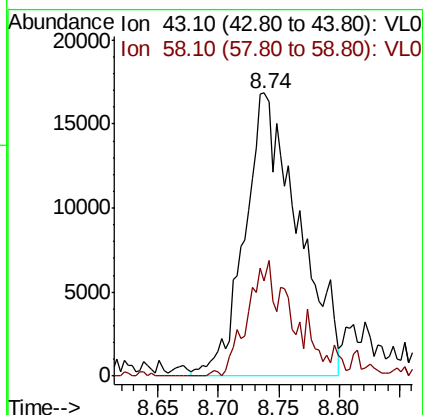
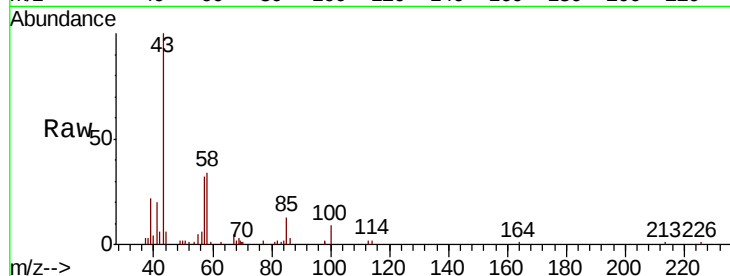
#50
4-Methyl-2-pentanone
Concen: 0.216 ppbv m
RT: 8.74 min Scan# 1851
Delta R.T. 0.01 min
Lab File: VL037088.D
Acq: 2 Jun 2021 2:54

Instrument :
MSVOA_L
ClientSampleId :
IA-2A

Tot Ion	Ratio	Lower	Upper
43	100		
58	37.7	29.4	44.2

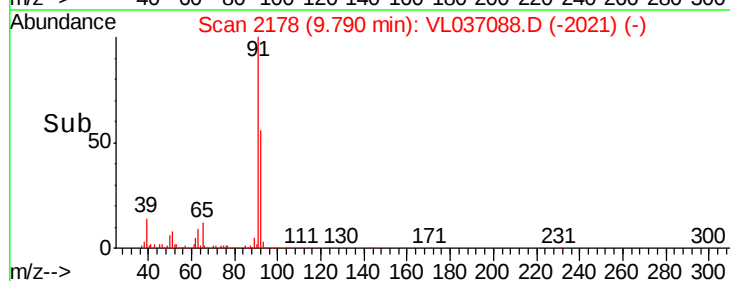
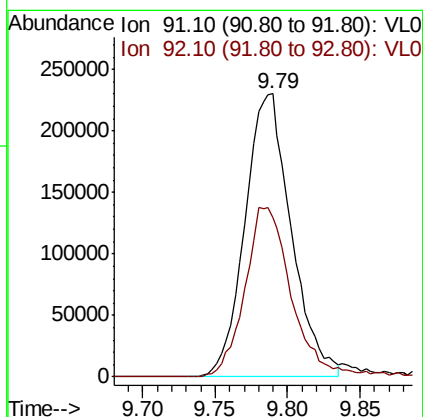
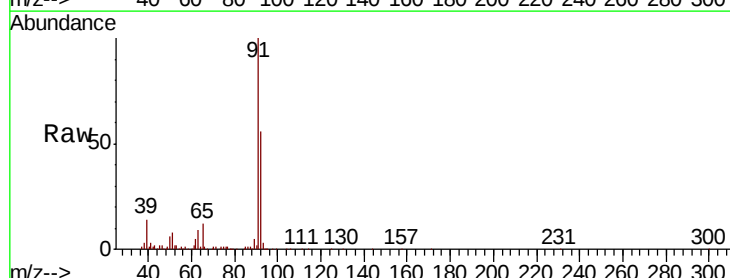
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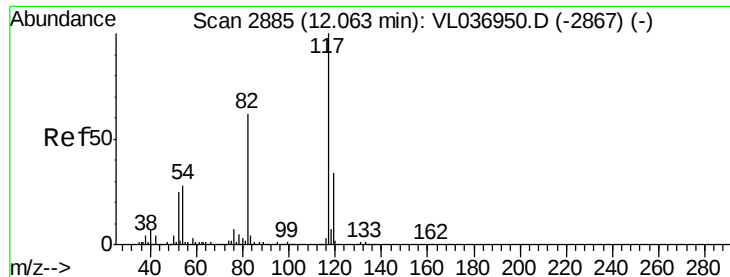
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#53
Toluene
Concen: 1.254 ppbv
RT: 9.79 min Scan# 2178
Delta R.T. 0.01 min
Lab File: VL037088.D
Acq: 2 Jun 2021 2:54

Tgt Ion	Ratio	Lower	Upper
91	100		
92	61.8	49.5	74.3





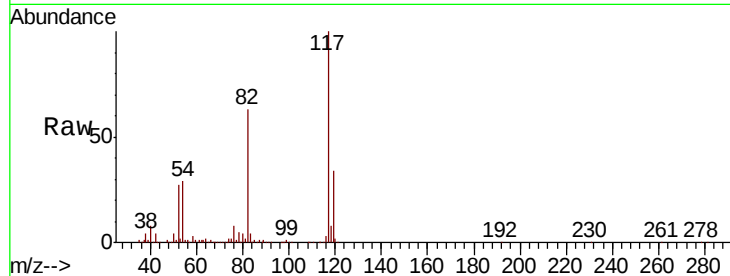
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.07 min Scan# 2886
Delta R.T. 0.00 min
Lab File: VL037088.D
Acq: 2 Jun 2021 2:54

Instrument :
MSVOA_L
ClientSampled :
IA-2A

Tot Ion	Ratio	Lower	Upper
117	100		
82	63.1	52.6	79.0
119	34.1	46.6	70.0#

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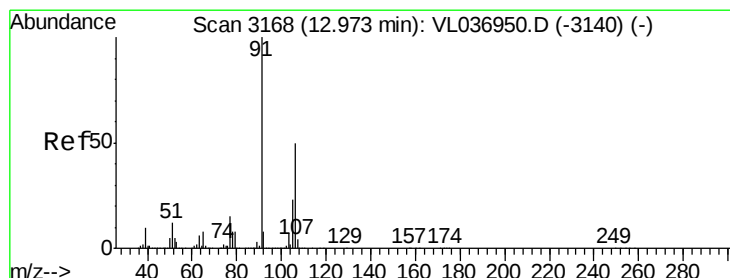
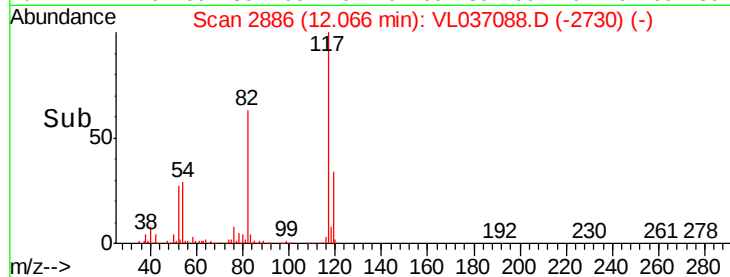
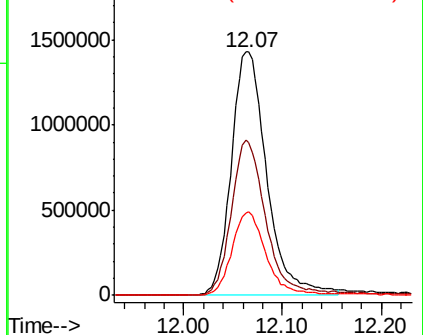


Abundance

Ion 117.10 (116.80 to 117.80): V

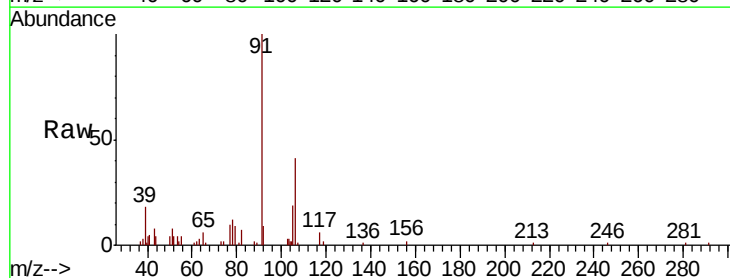
Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V



#59
m/p-Xylene
Concen: 0.130 ppbv m
RT: 12.94 min Scan# 3158
Delta R.T. -0.03 min
Lab File: VL037088.D
Acq: 2 Jun 2021 2:54

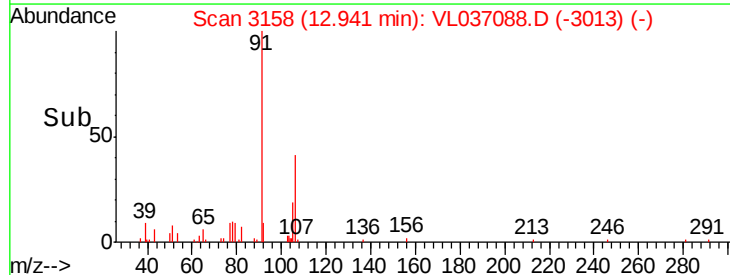
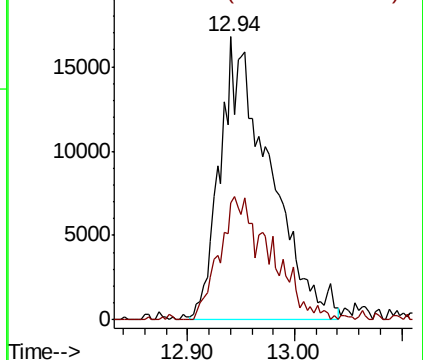
Tgt Ion	Ratio	Lower	Upper
91	100		
106	0.0	37.4	56.2#

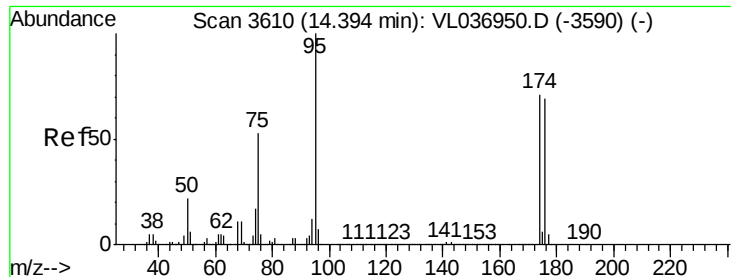


Abundance

Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





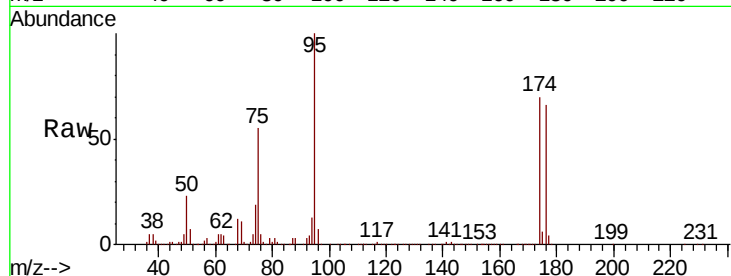
#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.779 ppbv
 RT: 14.40 min Scan# 3611
 Delta R.T. 0.00 min
 Lab File: VL037088.D
 Acq: 2 Jun 2021 2:54

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-2A

Tot Ion	Ratio	Lower	Upper
95	100		
174	75.8	58.4	87.6
175	5.3	4.4	6.6

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Abundance Ion 95.10 (94.80 to 95.80): VL037088.D (-3455) (-)

Ion 174.00 (173.70 to 174.70): VL037088.D (-3455) (-)

Ion 175.00 (174.70 to 175.70): VL037088.D (-3455) (-)

