

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL100521\
 Data File : VL037778.D
 Acq On : 5 Oct 2021 17:57
 Operator : SY/AP
 Sample : M4012-06DUP
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 C0P28DUP

Manual Integrations
 APPROVED

MMDadoda
 10/11/2021 7:36:18 PM

Quant Time: Oct 06 06:05:39 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL100421AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Oct 0
 QLast Update : Mon Oct 04 17:43:54 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1287313	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.16	114	3707741	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.06	117	3180278	10.00	ppbv	-0.03

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	14.39	95	2157585	9.70	ppbv	-0.02	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.00%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.04	85	39908	0.194	ppbv #	88
3) Chlorodifluoromethane	2.98	51	57469	0.232	ppbv	94
4) Chloromethane	3.13	50	37212m	0.411	ppbv	
9) Propene	3.01	41	52031	0.572	ppbv	98
10) Heptane	8.10	43	26158m	0.127	ppbv	
11) Trichlorofluoromethane	3.94	101	40866m	0.223	ppbv	
13) Ethanol	3.59	45	306666m	41.202	ppbv	
15) Acetone	3.83	43	1576049	13.638	ppbv	98
17) tert-Butyl alcohol	4.29	59	72101m	0.606	ppbv	
19) Isopropyl Alcohol	3.96	45	167418m	2.329	ppbv	
20) Methylene Chloride	4.33	84	567417	9.718	ppbv	94
26) Hexane	5.67	57	249687	1.564	ppbv #	44
34) 2-Butanone	5.23	43	210078	1.403	ppbv #	89
35) Carbon Tetrachloride	6.99	117	12660m	0.060	ppbv	
36) Benzene	6.87	78	60419	0.191	ppbv #	93
44) 2,2,4-Trimethylpentane	7.84	57	122396	0.230	ppbv #	84
50) 4-Methyl-2-Pentanone	8.74	43	23966m	0.123	ppbv	
52) Tetrachloroethene	11.20	164	42789	0.347	ppbv #	78
53) Toluene	9.78	91	194836	0.555	ppbv	100
58) Ethyl Benzene	12.68	91	150064m	0.351	ppbv	
59) m/p-Xylene	12.94	91	599007m	1.634	ppbv	
60) o-Xylene	13.66	91	154757m	0.441	ppbv	
74) 1,2,4-Trimethylbenzene	16.73	105	53863m	0.142	ppbv	

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

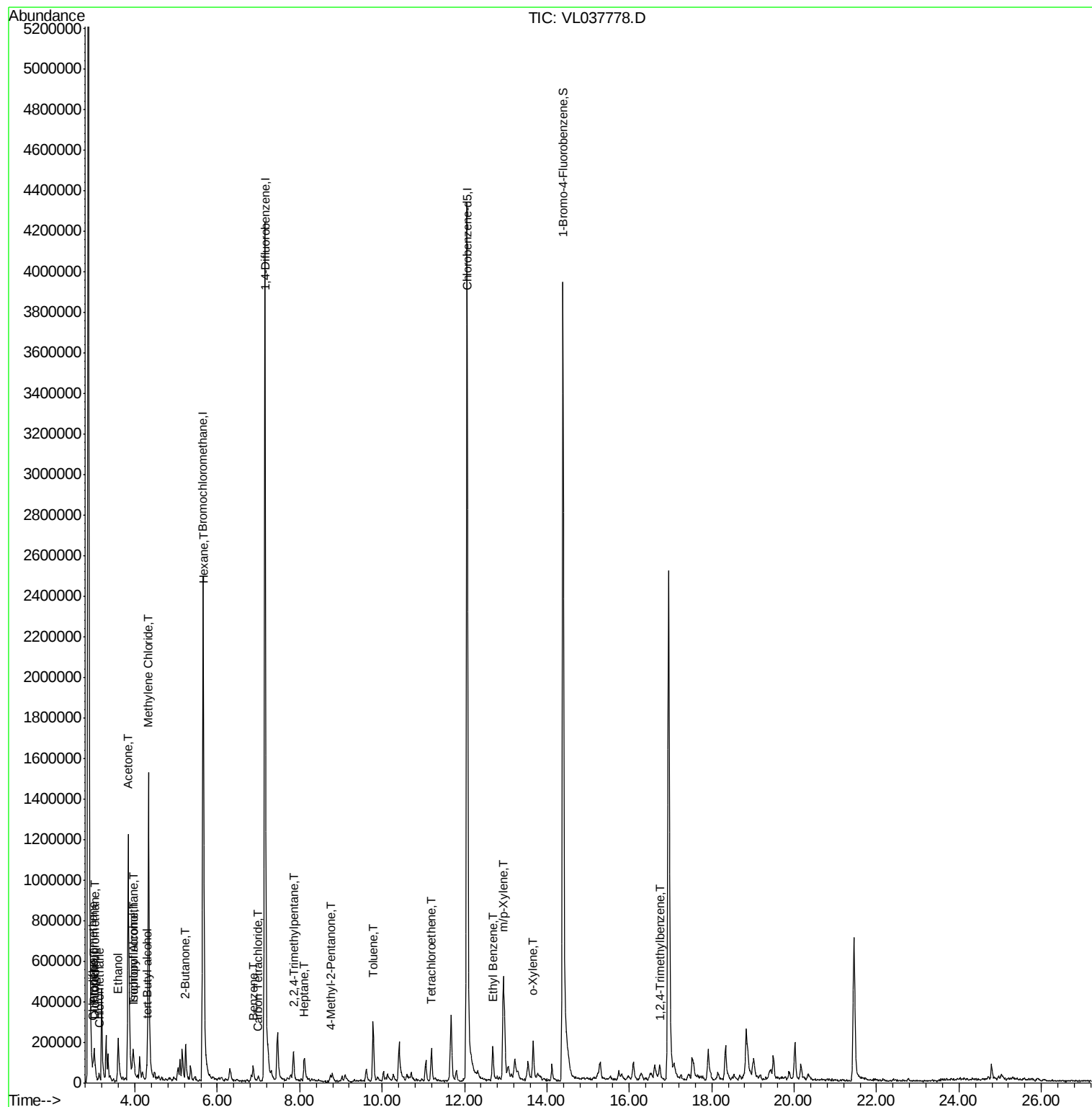
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA_L\DATA\VL100521\
Data File : VL037778.D
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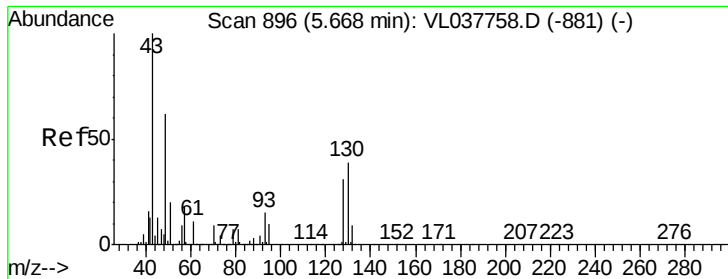
Instrument :
MSVOA_L
ClientSampleId :
C0P28DUP

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Quant Time: Oct 06 06:05:39 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_L\METHODS\VL100421AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Oct
QLast Update : Mon Oct 04 17:43:54 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 890

Delta R.T. -0.02 min

Lab File: VL037778.D

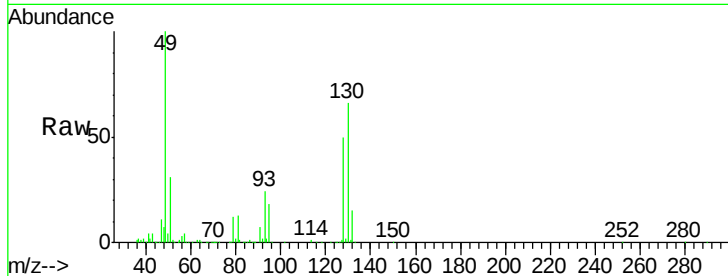
Acq: 5 Oct 2021 17:57

Instrument :

MSVOA_L

ClientSampleId :

C0P28DUP



Tgt Ion: 49 Resp: 1287313

Ion Ratio Lower Upper

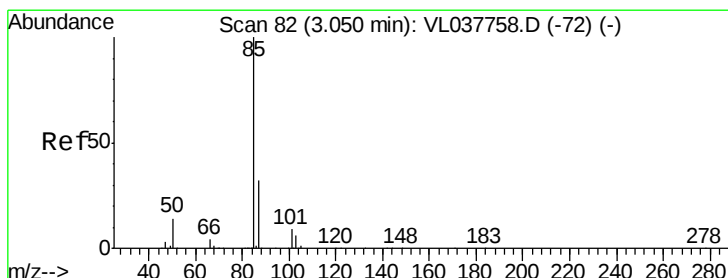
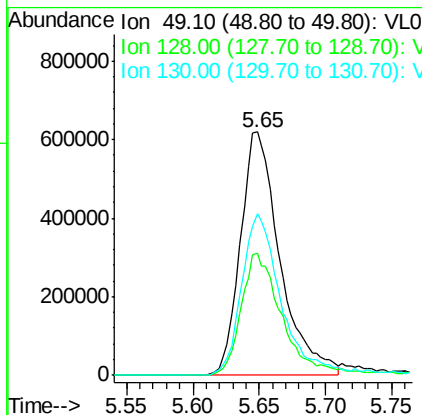
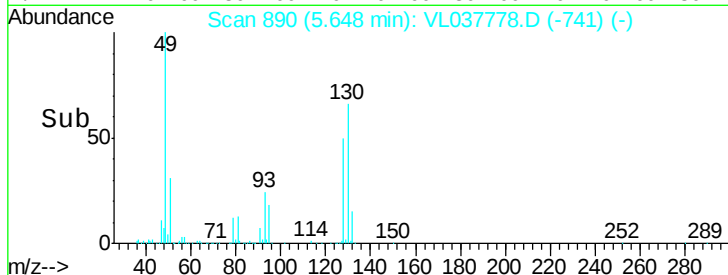
49 100

128 53.4 27.1 81.3

130 68.5 33.2 99.6

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#2

Dichlorodifluoromethane

Concen: 0.194 ppbv

RT: 3.04 min Scan# 79

Delta R.T. -0.01 min

Lab File: VL037778.D

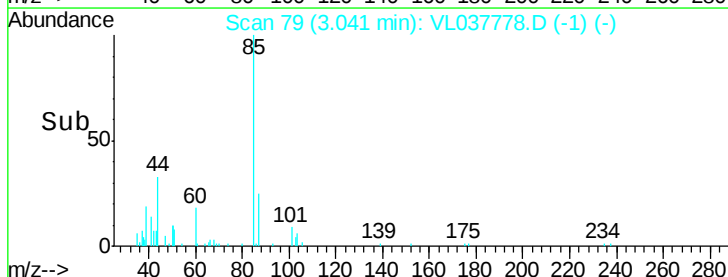
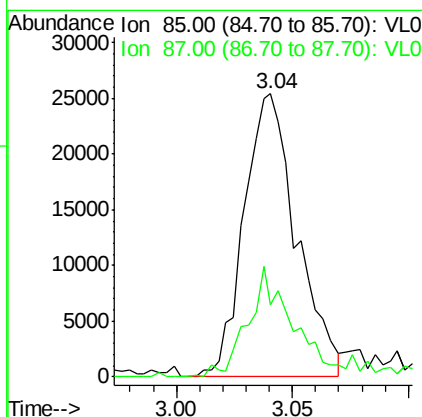
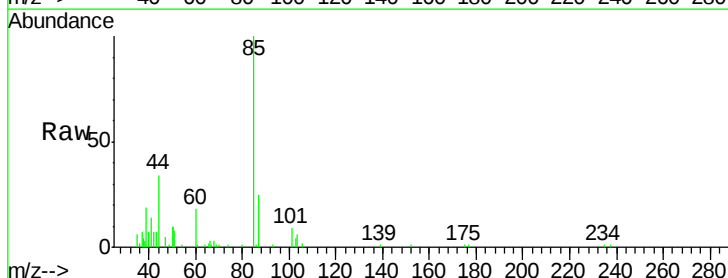
Acq: 5 Oct 2021 17:57

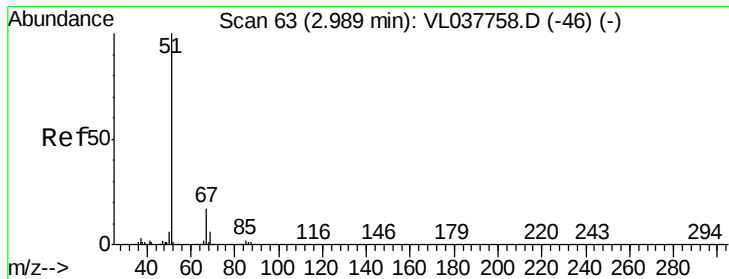
Tgt Ion: 85 Resp: 39908

Ion Ratio Lower Upper

85 100

87 25.4 25.7 38.5#





#3

Chlorodifluoromethane

Concen: 0.232 ppbv

RT: 2.98 min Scan# 60

Delta R.T. -0.01 min

Lab File: VL037778.D

Acq: 5 Oct 2021 17:57

Instrument :

MSVOA_L

ClientSampleId :

C0P28DUP

Tgt Ion: 51 Resp: 57469

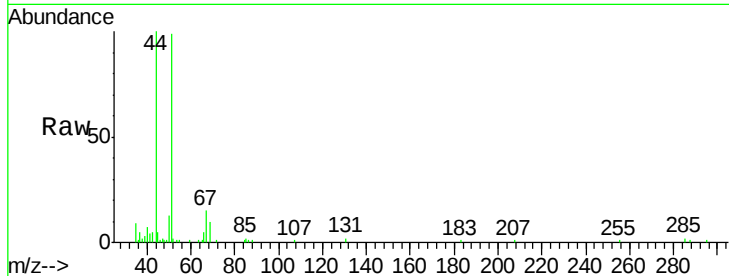
Ion Ratio Lower Upper

51 100

67 14.1 13.5 20.3

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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0

2.98

30000

25000

20000

15000

10000

5000

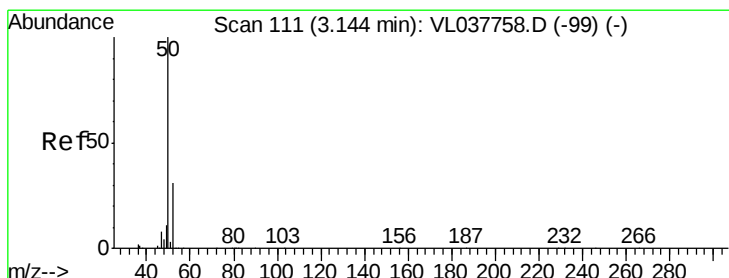
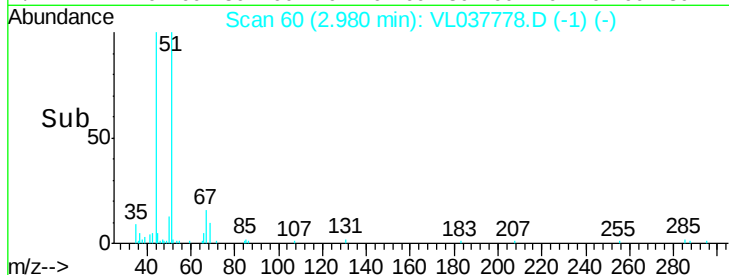
0

2.90

3.00

3.10

Time-->



#4

Chloromethane

Concen: 0.411 ppbv m

RT: 3.13 min Scan# 107

Delta R.T. -0.01 min

Lab File: VL037778.D

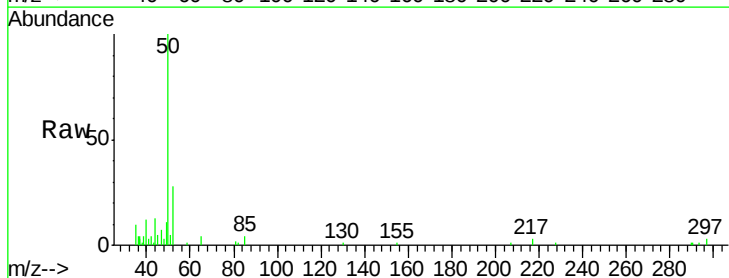
Acq: 5 Oct 2021 17:57

Tgt Ion: 50 Resp: 37212

Ion Ratio Lower Upper

50 100

52 28.0 24.4 36.6



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0

3.13

25000

20000

15000

10000

5000

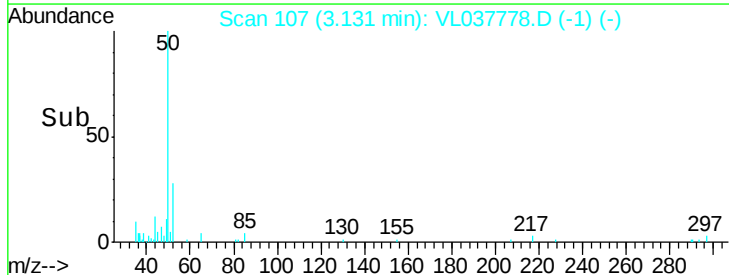
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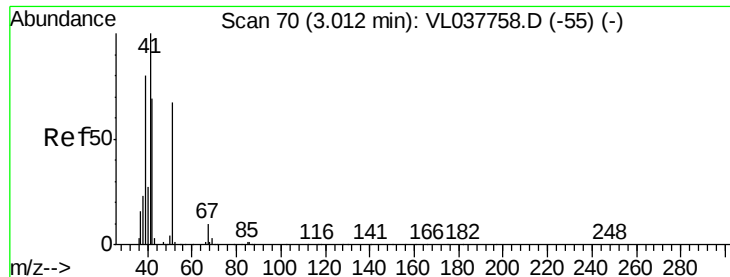
3.10

3.15

3.20

Time-->





#9

Propene

Concen: 0.572 ppbv

RT: 3.01 min Scan# 68

Delta R.T. -0.01 min

Lab File: VL037778.D

Acq: 5 Oct 2021 17:57

Instrument :

MSVOA_L

ClientSampleId :

C0P28DUP

Tgt Ion: 41 Resp: 52031

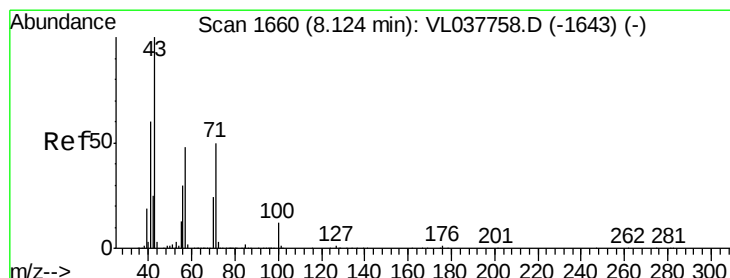
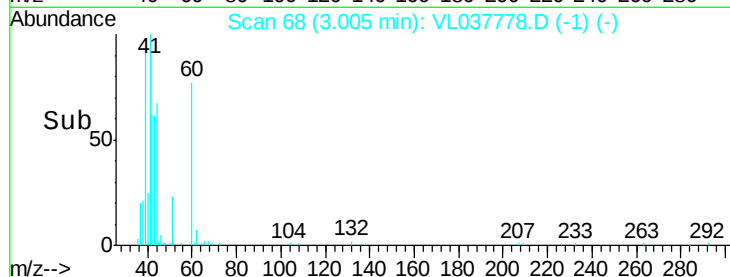
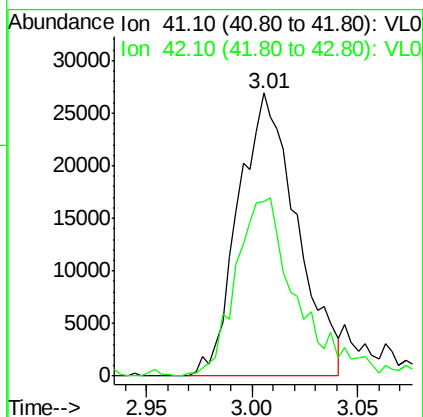
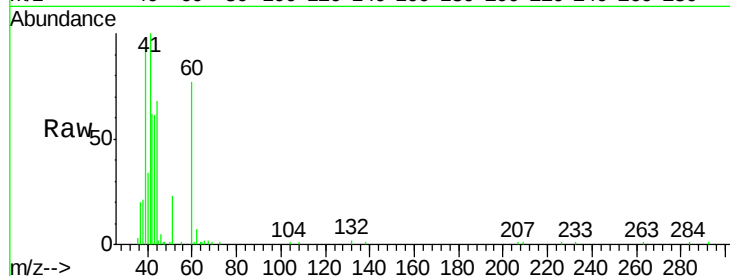
Ion Ratio Lower Upper

41 100

42 66.3 54.2 81.2

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#10

Heptane

Concen: 0.127 ppbv m

RT: 8.10 min Scan# 1652

Delta R.T. -0.03 min

Lab File: VL037778.D

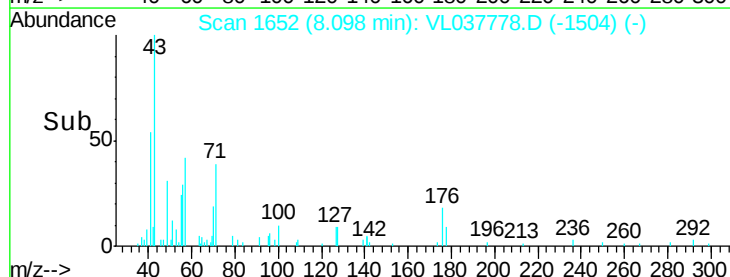
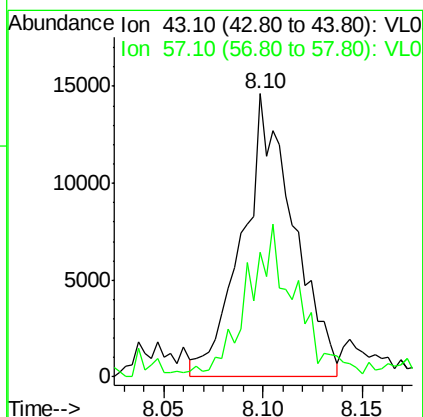
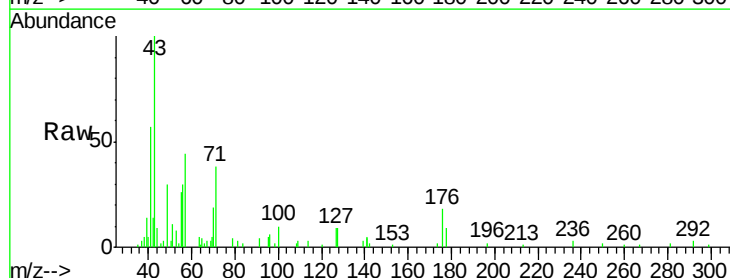
Acq: 5 Oct 2021 17:57

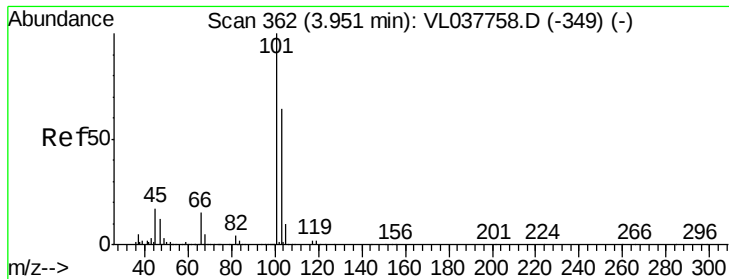
Tgt Ion: 43 Resp: 26158

Ion Ratio Lower Upper

43 100

57 0.0 40.0 60.0#





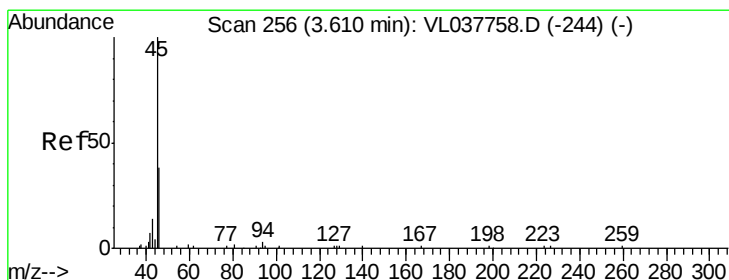
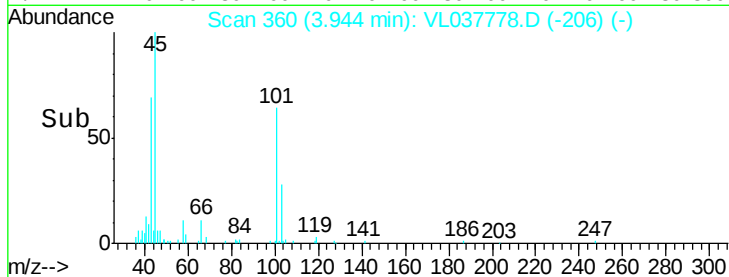
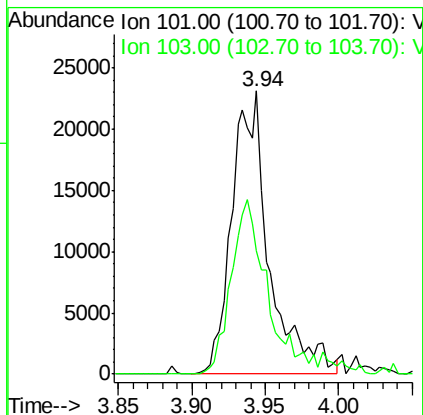
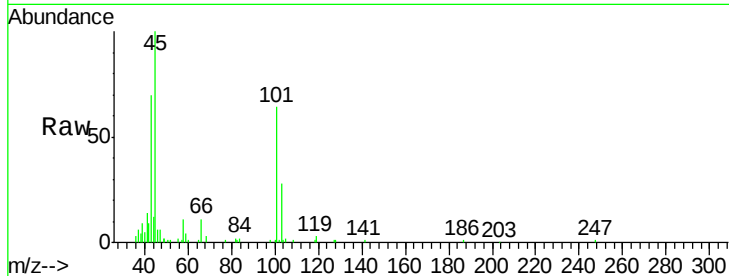
#11
 Trichlorofluoromethane
 Concen: 0.223 ppbv m
 RT: 3.94 min Scan# 360
 Delta R.T. -0.01 min
 Lab File: VL037778.D
 Acq: 5 Oct 2021 17:57

Instrument :
 MSVOA_L
 ClientSampleID :
 C0P28DUP

Tgt Ion: 101 Resp: 40866
 Ion Ratio Lower Upper
 101 100
 103 43.4 51.5 77.3#

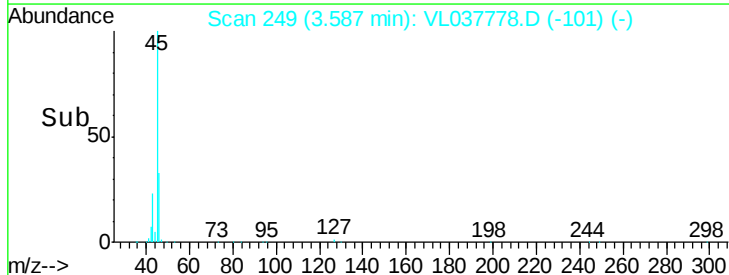
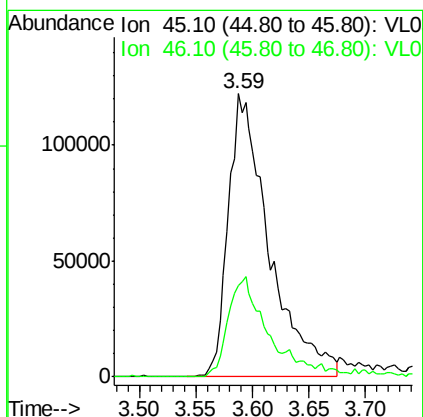
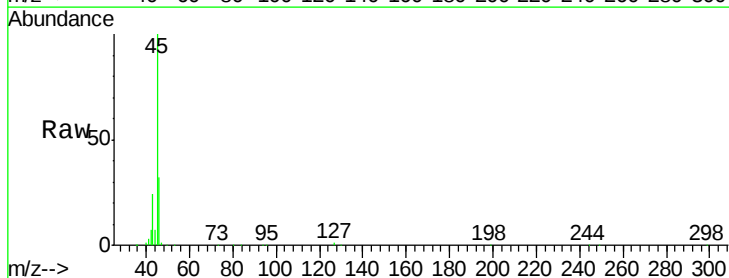
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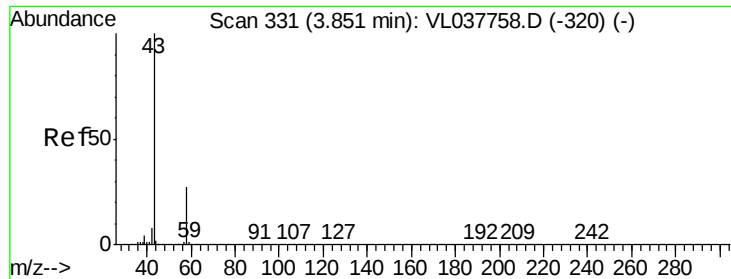
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#13
 Ethanol
 Concen: 41.202 ppbv m
 RT: 3.59 min Scan# 249
 Delta R.T. -0.02 min
 Lab File: VL037778.D
 Acq: 5 Oct 2021 17:57

Tgt Ion: 45 Resp: 306666
 Ion Ratio Lower Upper
 45 100
 46 35.3 20.2 81.0





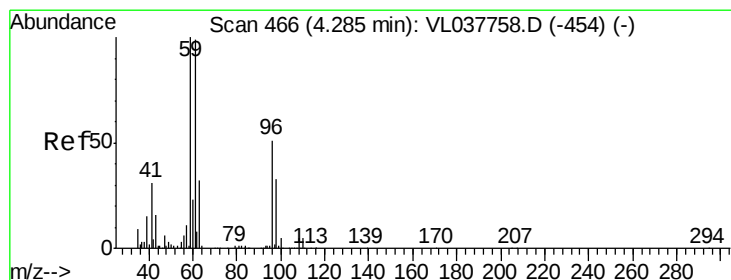
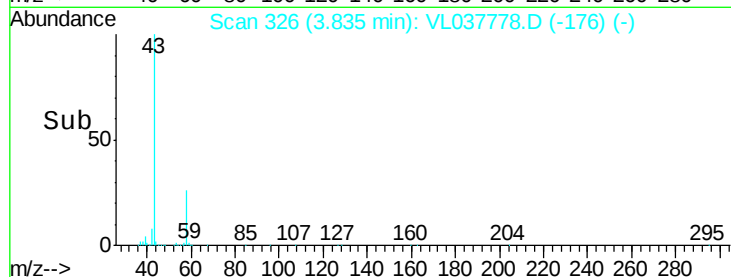
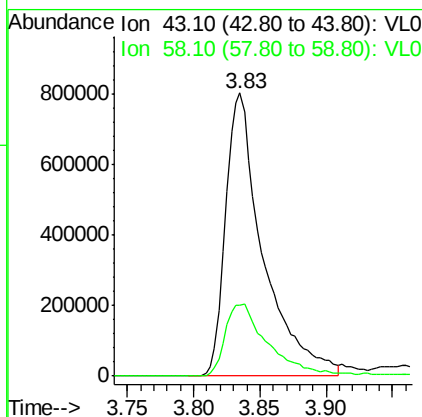
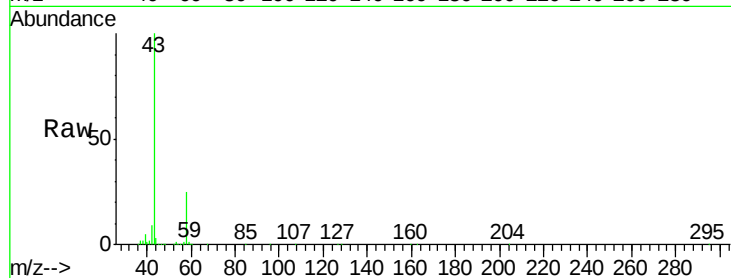
#15
Acetone
Concen: 13.638 ppbv
RT: 3.83 min Scan# 326
Delta R.T. -0.02 min
Lab File: VL037778.D
Acq: 5 Oct 2021 17:57

Instrument :
MSVOA_L
ClientSampleId :
C0P28DUP

Tgt Ion: 43 Resp: 1576049
Ion Ratio Lower Upper
43 100
58 29.8 23.0 34.6

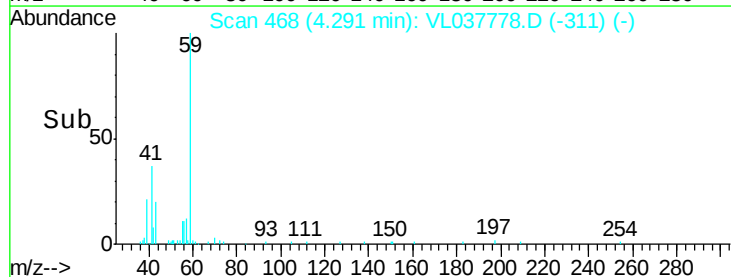
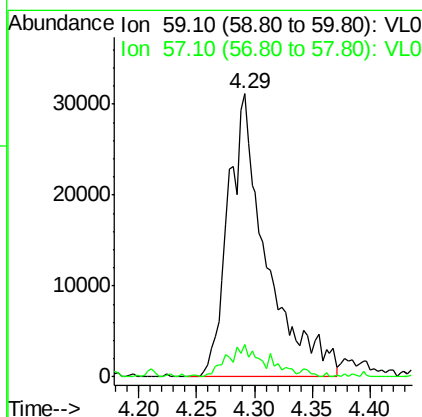
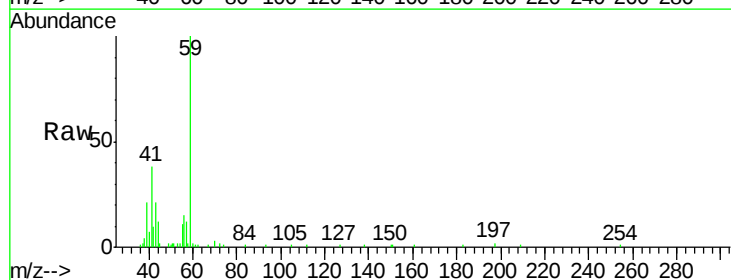
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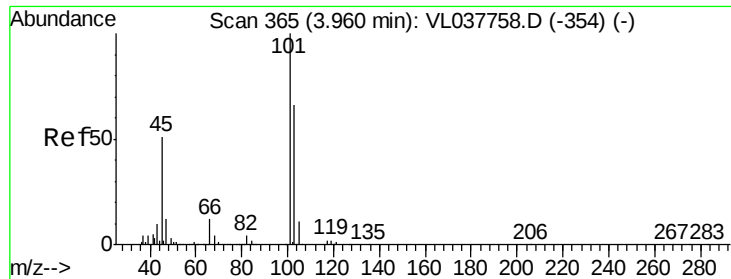
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#17
tert-Butyl alcohol
Concen: 0.606 ppbv m
RT: 4.29 min Scan# 468
Delta R.T. 0.01 min
Lab File: VL037778.D
Acq: 5 Oct 2021 17:57

Tgt Ion: 59 Resp: 72101
Ion Ratio Lower Upper
59 100
57 0.0 8.6 13.0#





#19

Isopropyl Alcohol

Concen: 2.329 ppbv m

RT: 3.96 min Scan# 364

Delta R.T. -0.00 min

Lab File: VL037778.D

Acq: 5 Oct 2021 17:57

Instrument :

MSVOA_L

ClientSampleId :

C0P28DUP

Tgt Ion: 45 Resp: 167418

Ion Ratio Lower Upper

45 100

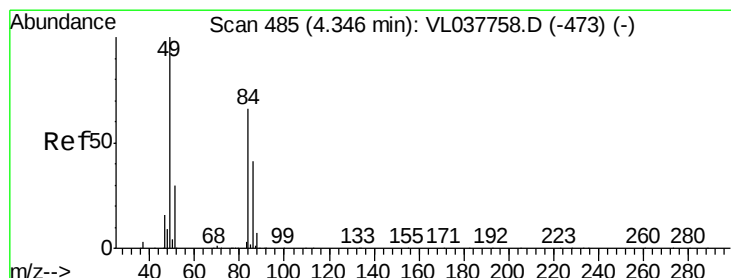
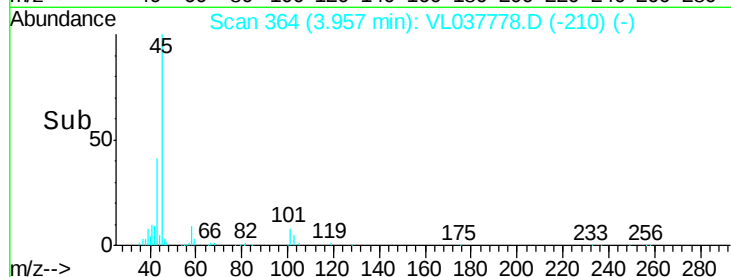
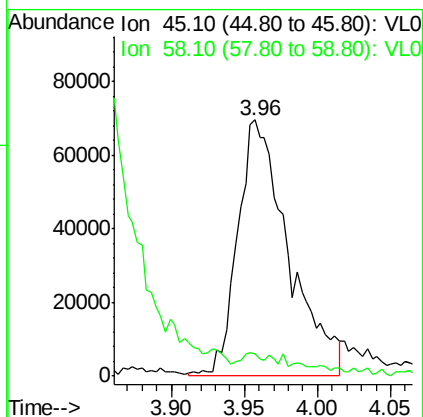
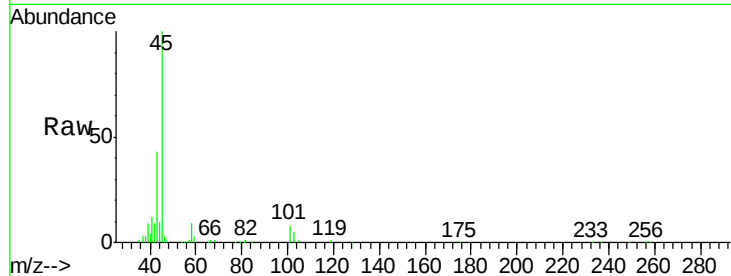
58 10.5 1.1 1.7#

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#20

Methylene Chloride

Concen: 9.718 ppbv

RT: 4.33 min Scan# 480

Delta R.T. -0.02 min

Lab File: VL037778.D

Acq: 5 Oct 2021 17:57

Tgt Ion: 84 Resp: 567417

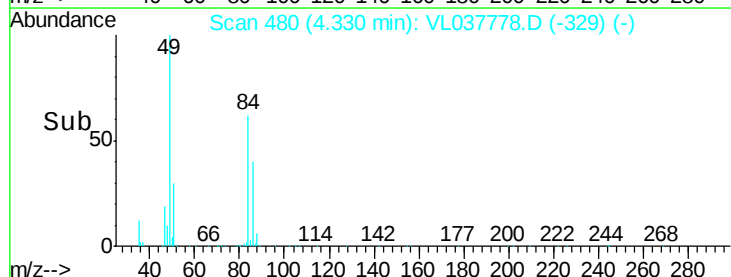
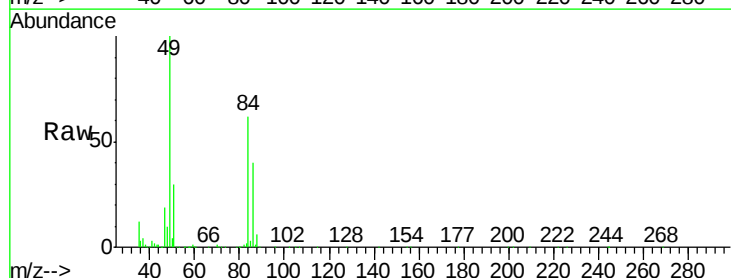
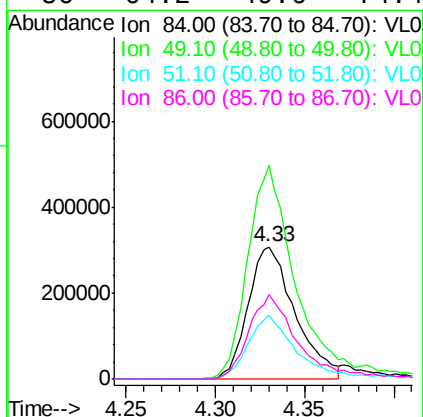
Ion Ratio Lower Upper

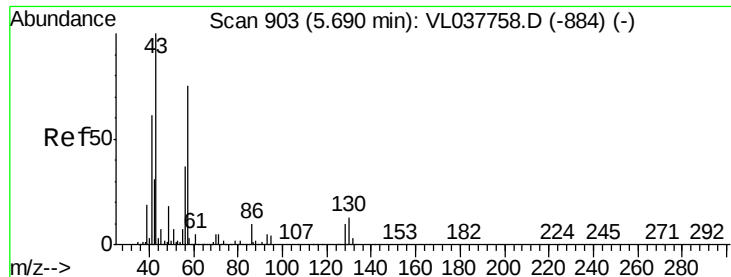
84 100

49 161.2 120.7 181.1

51 48.4 36.2 54.4

86 64.2 49.6 74.4





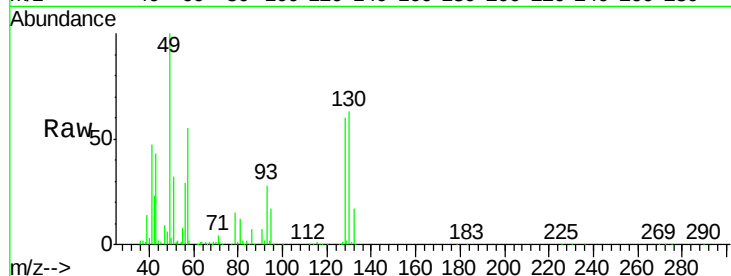
#26
Hexane
Concen: 1.564 ppbv
RT: 5.67 min Scan# 896
Delta R.T. -0.02 min
Lab File: VL037778.D
Acq: 5 Oct 2021 17:57

Instrument :
MSVOA_L
ClientSampleId :
C0P28DUP

Tgt Ion	Ratio	Lower	Upper
57	100		
41	102.7	69.6	104.4
43	84.0	171.4	257.0#
56	62.5	42.0	63.0

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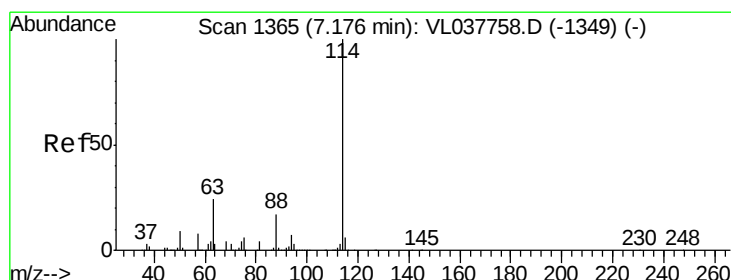
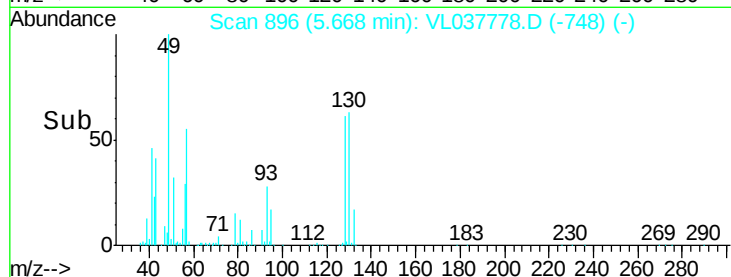
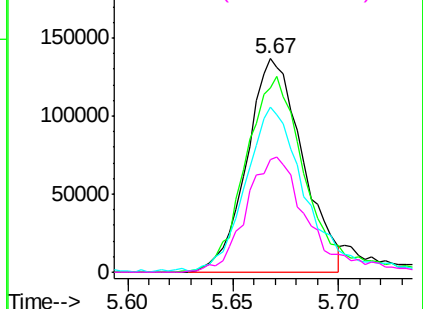
Abundance

Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

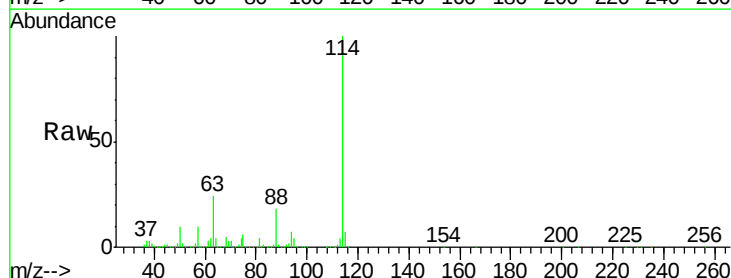
Ion 43.10 (42.80 to 43.80): VL0

Ion 56.10 (55.80 to 56.80): VL0



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.16 min Scan# 1359
Delta R.T. -0.02 min
Lab File: VL037778.D
Acq: 5 Oct 2021 17:57

Tgt Ion	Ratio	Lower	Upper
114	100		
63	24.5	19.4	29.2
88	18.3	14.4	21.6

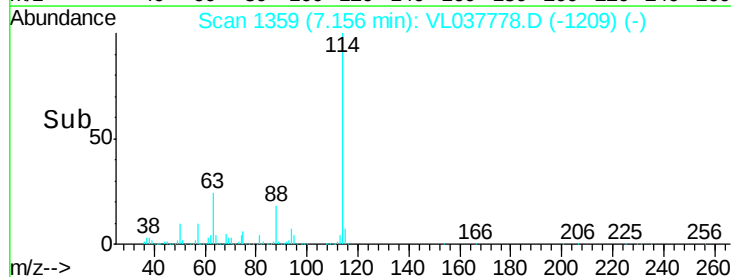
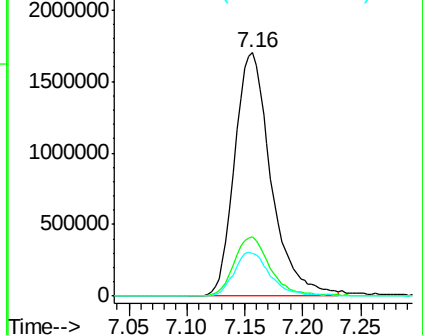


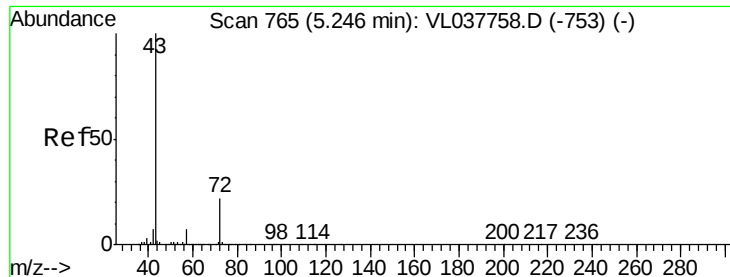
Abundance

Ion 114.10 (113.80 to 114.80): VL0

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0





#34

2-Butanone

Concen: 1.403 ppbv

RT: 5.23 min Scan# 759

Delta R.T. -0.02 min

Lab File: VL037778.D

Acq: 5 Oct 2021 17:57

Instrument :

MSVOA_L

ClientSampleId :

C0P28DUP

Tgt Ion: 43 Resp: 210078

Ion Ratio Lower Upper

43 100

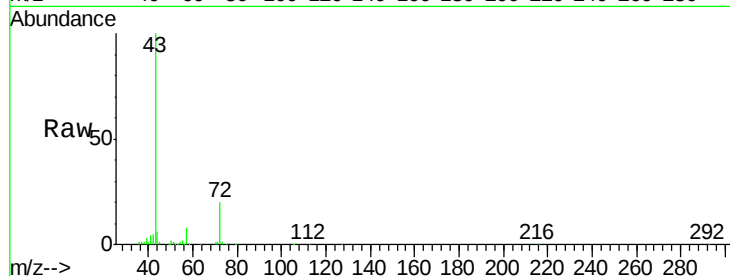
72 28.2 18.2 27.2#

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Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0

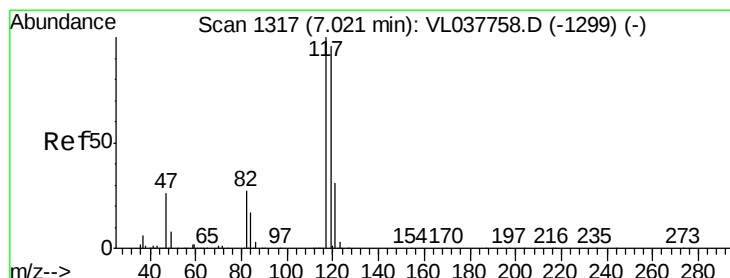
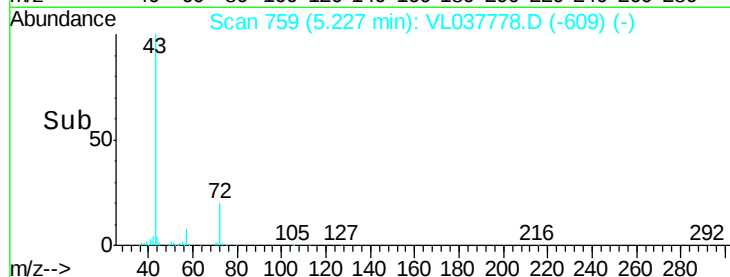
5.23

100000

50000

0

Time-->



#35

Carbon Tetrachloride

Concen: 0.060 ppbv m

RT: 6.99 min Scan# 1308

Delta R.T. -0.03 min

Lab File: VL037778.D

Acq: 5 Oct 2021 17:57

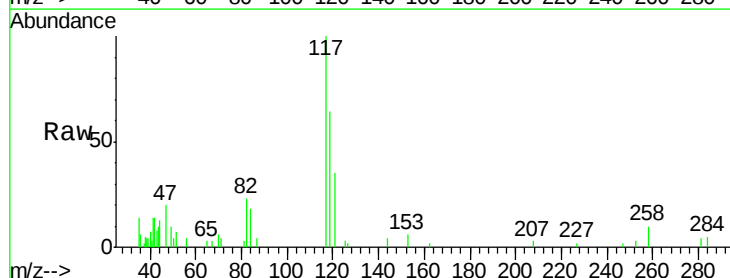
Tgt Ion: 117 Resp: 12660

Ion Ratio Lower Upper

117 100

119 63.6 76.5 114.7#

121 35.4 24.9 37.3



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

Ion 121.00 (120.70 to 121.70): V

6.99

10000

8000

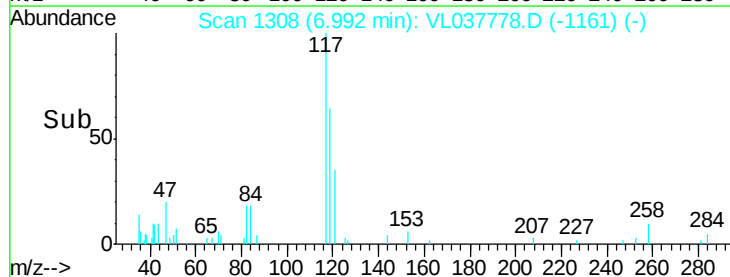
6000

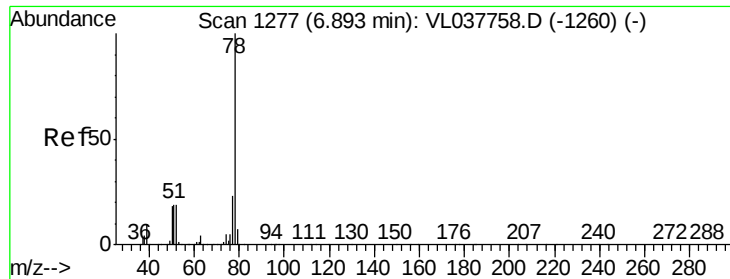
4000

2000

0

Time-->





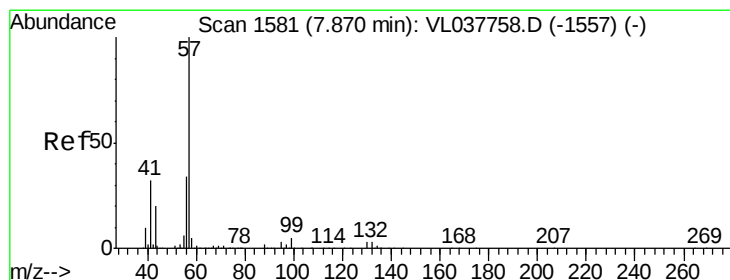
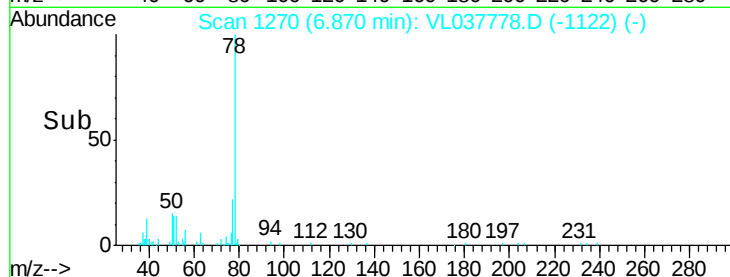
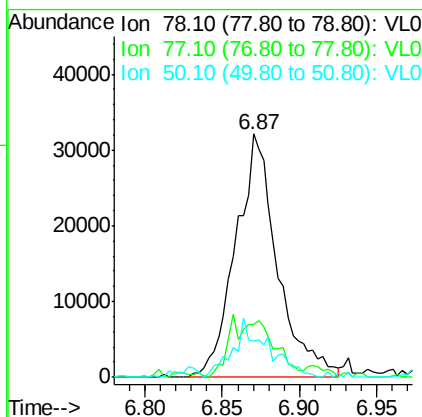
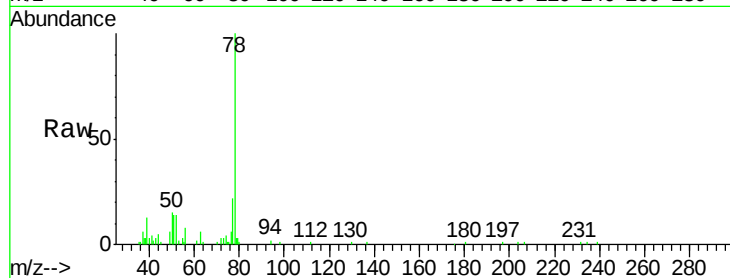
#36
Benzene
Concen: 0.191 ppbv
RT: 6.87 min Scan# 1270
Delta R.T. -0.02 min
Lab File: VL037778.D
Acq: 5 Oct 2021 17:57

Instrument :
MSVOA_L
ClientSampleId :
C0P28DUP

Tgt Ion	Ratio	Lower	Upper
78	100		
77	21.6	18.8	28.2
50	13.1	14.7	22.1#

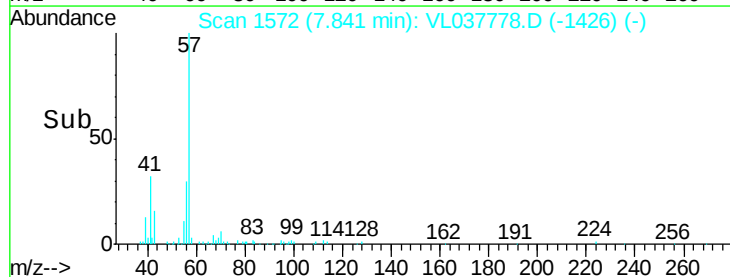
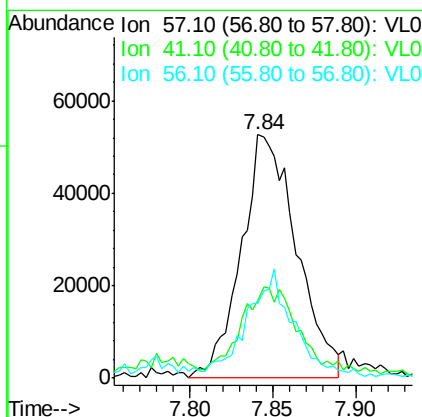
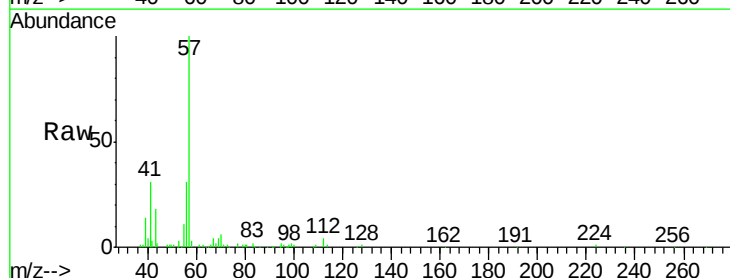
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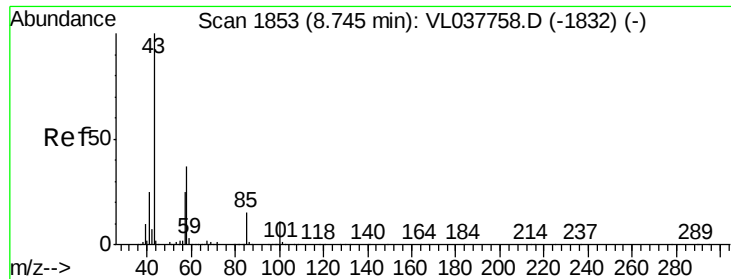
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#44
2,2,4-Trimethylpentane
Concen: 0.230 ppbv
RT: 7.84 min Scan# 1572
Delta R.T. -0.03 min
Lab File: VL037778.D
Acq: 5 Oct 2021 17:57

Tgt Ion	Ratio	Lower	Upper
57	100		
41	41.3	25.6	38.4#
56	40.7	25.5	38.3#





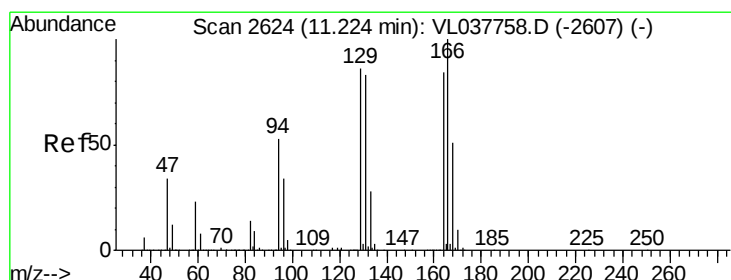
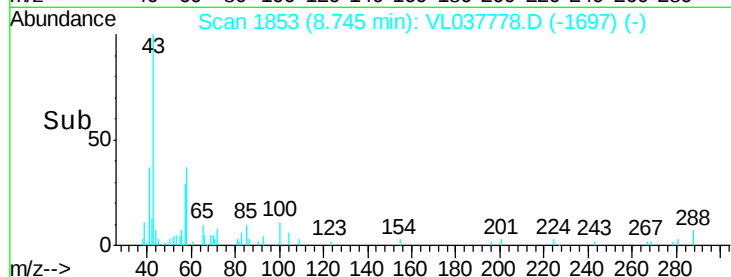
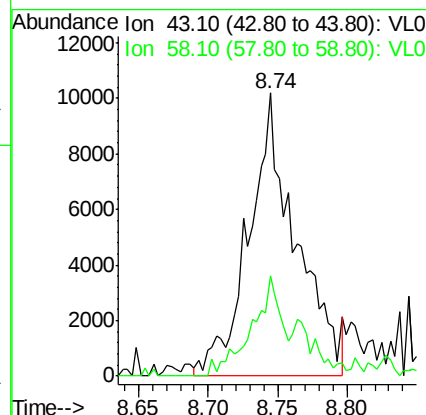
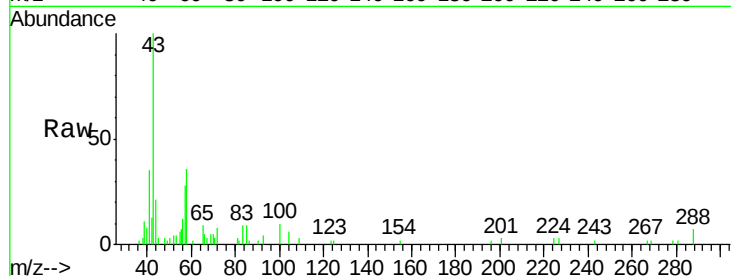
#50
4-Methyl-2-Pentanone
Concen: 0.123 ppbv
RT: 8.74 min Scan# 1853
Delta R.T. -0.00 min
Lab File: VL037778.D
Acq: 5 Oct 2021 17:57

Instrument :
MSVOA_L
ClientSampleId :
C0P28DUP

Tgt Ion: 43 Resp: 23966
Ion Ratio Lower Upper
43 100
58 0.0 29.4 44.0#

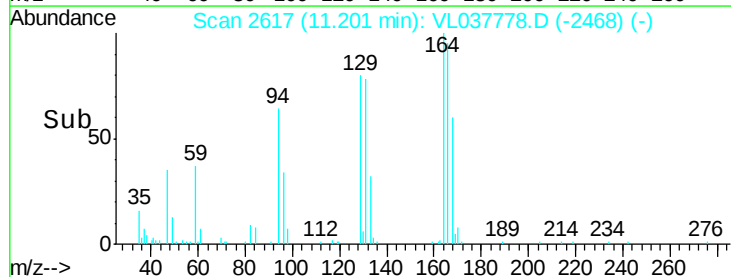
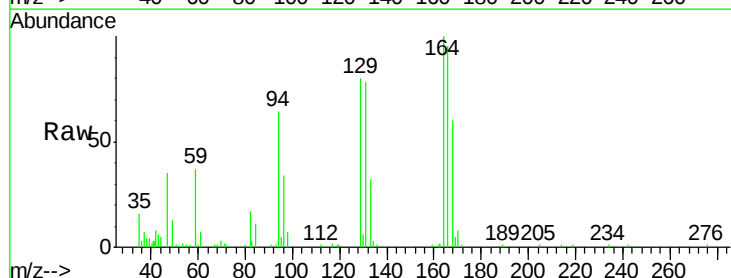
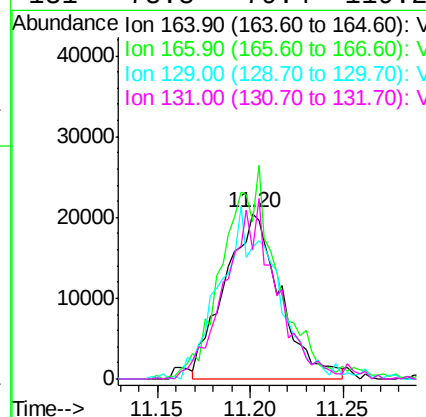
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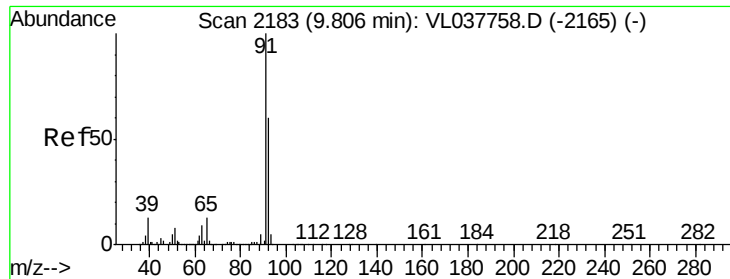
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#52
Tetrachloroethene
Concen: 0.347 ppbv
RT: 11.20 min Scan# 2617
Delta R.T. -0.02 min
Lab File: VL037778.D
Acq: 5 Oct 2021 17:57

Tgt Ion: 164 Resp: 42789
Ion Ratio Lower Upper
164 100
166 92.0 95.4 143.2#
129 81.8 82.2 123.4#
131 78.8 79.4 119.2#





#53

Toluene

Concen: 0.555 ppbv

RT: 9.78 min Scan# 2176

Delta R.T. -0.02 min

Lab File: VL037778.D

Acq: 5 Oct 2021 17:57

Instrument :

MSVOA_L

ClientSampleId :

C0P28DUP

Tgt Ion: 91 Resp: 194836

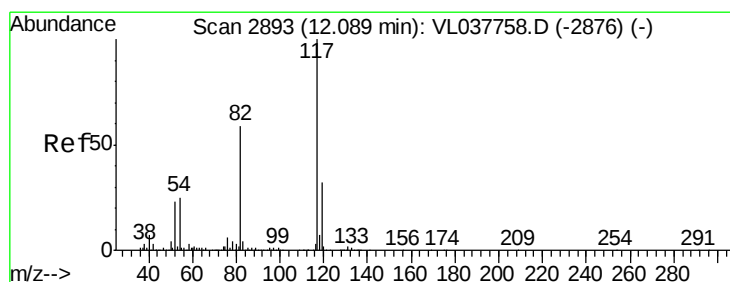
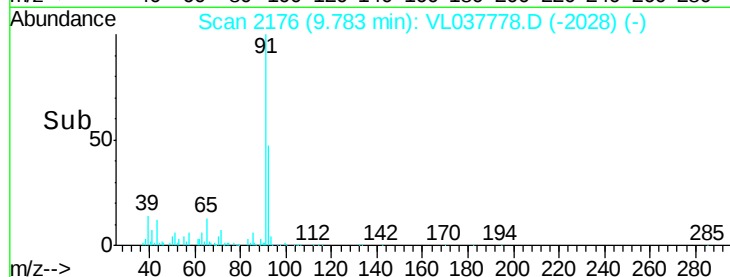
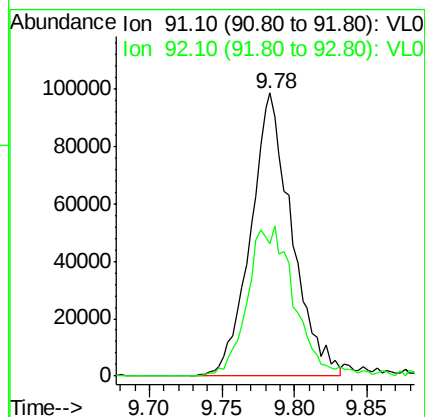
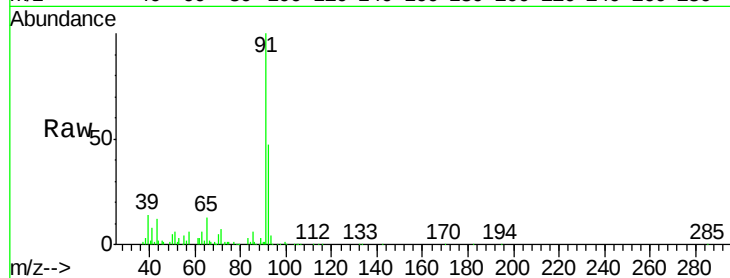
Ion Ratio Lower Upper

91 100

92 60.9 48.4 72.6

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.06 min Scan# 2884

Delta R.T. -0.03 min

Lab File: VL037778.D

Acq: 5 Oct 2021 17:57

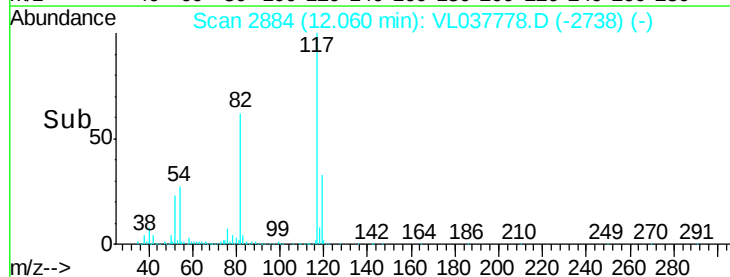
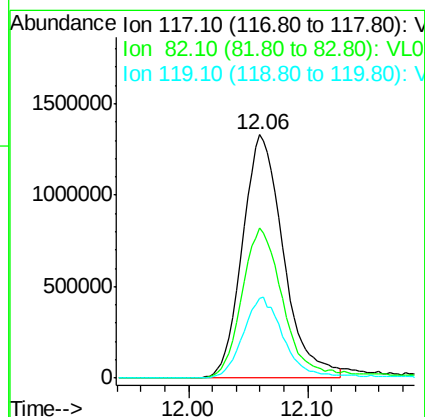
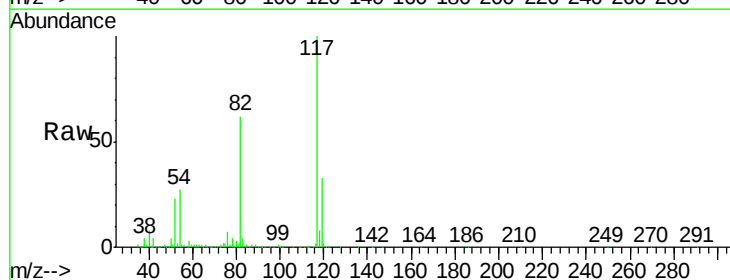
Tgt Ion: 117 Resp: 3180278

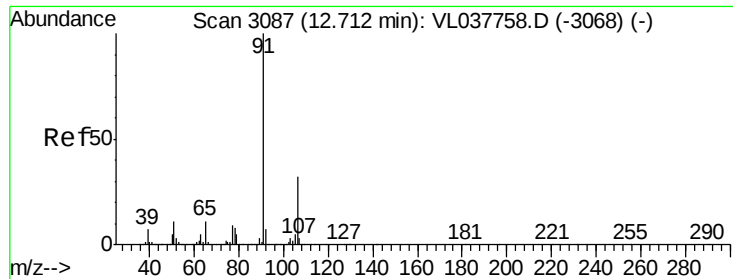
Ion Ratio Lower Upper

117 100

82 65.4 52.2 78.2

119 34.2 26.0 39.0





#58

Ethyl Benzene

Concen: 0.351 ppbv m

RT: 12.68 min Scan# 3078

Delta R.T. -0.03 min

Lab File: VL037778.D

Acq: 5 Oct 2021 17:57

Instrument :

MSVOA_L

ClientSampled :

C0P28DUP

Tgt Ion: 91 Resp: 150064

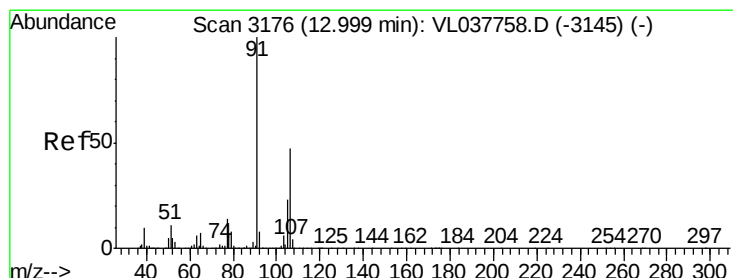
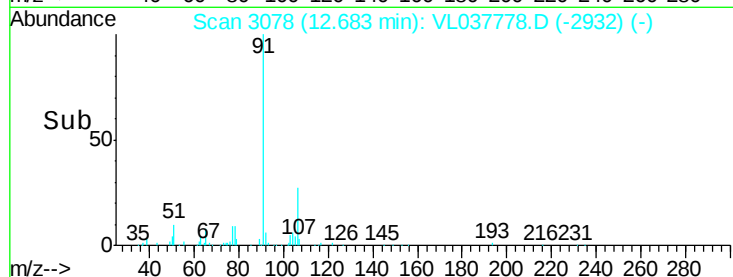
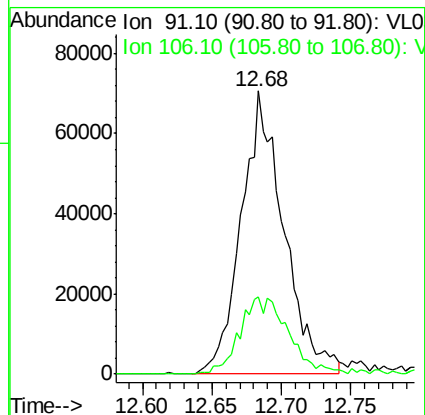
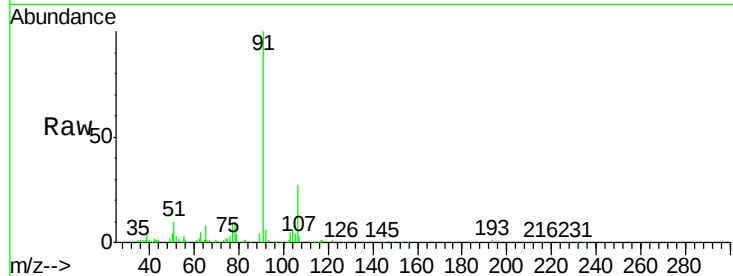
Ion Ratio Lower Upper

91 100

106 27.1 25.3 37.9

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#59

m/p-Xylene

Concen: 1.634 ppbv m

RT: 12.94 min Scan# 3158

Delta R.T. -0.06 min

Lab File: VL037778.D

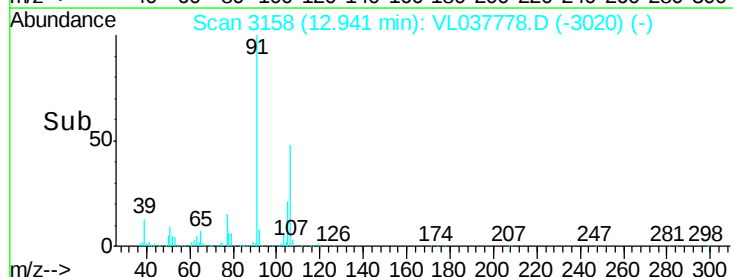
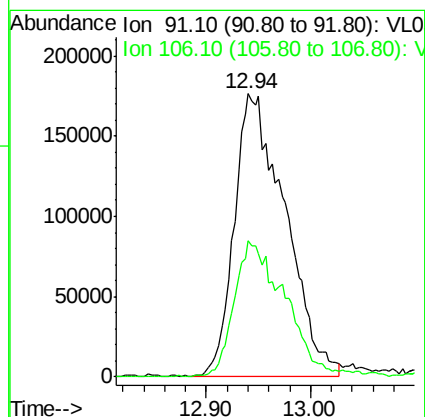
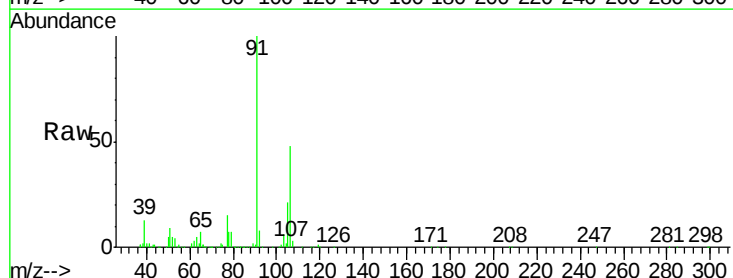
Acq: 5 Oct 2021 17:57

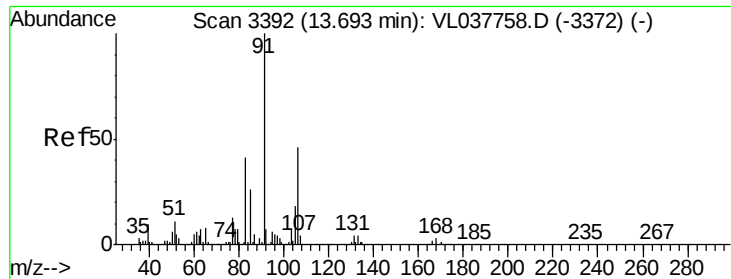
Tgt Ion: 91 Resp: 599007

Ion Ratio Lower Upper

91 100

106 0.0 36.7 55.1#





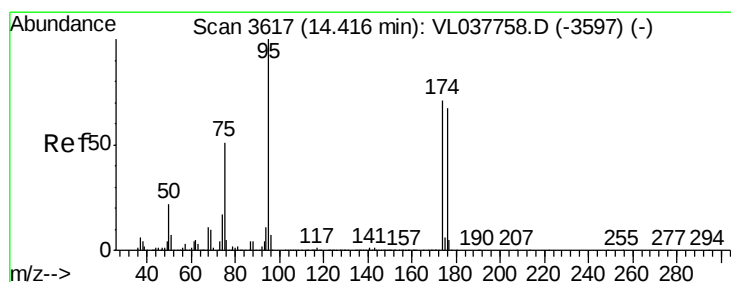
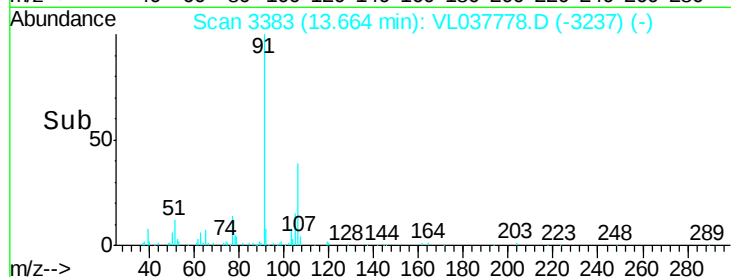
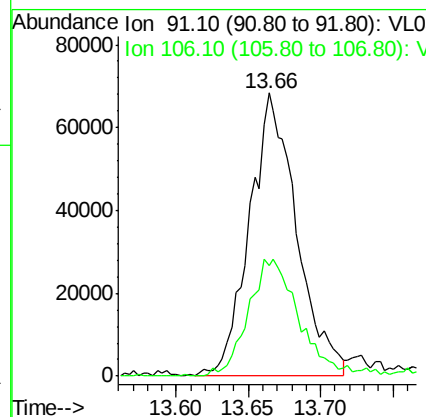
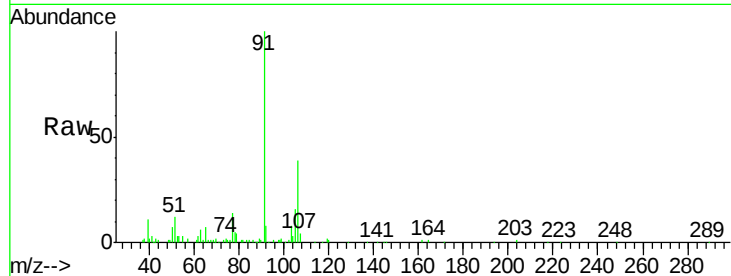
#60
o-Xylene
Concen: 0.441 ppbv m
RT: 13.66 min Scan# 3383
Delta R.T. -0.03 min
Lab File: VL037778.D
Acq: 5 Oct 2021 17:57

Instrument :
MSVOA_L
ClientSampleId :
C0P28DUP

Tgt Ion: 91 Resp: 154757
Ion Ratio Lower Upper
91 100
106 45.1 23.5 70.5

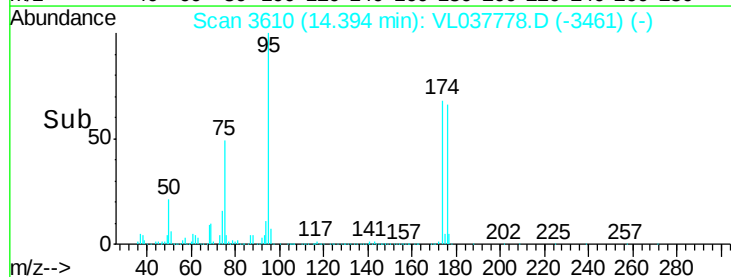
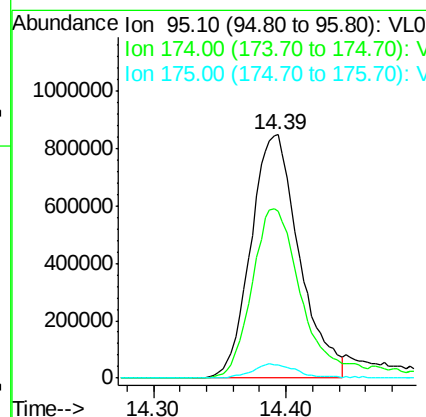
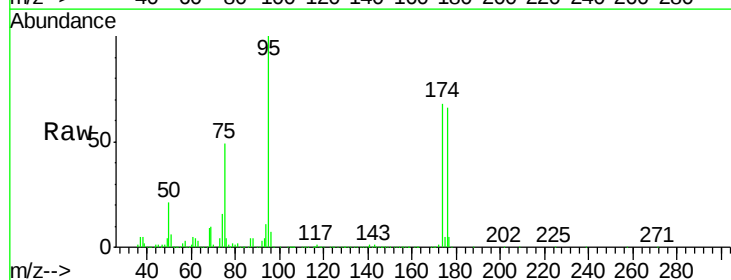
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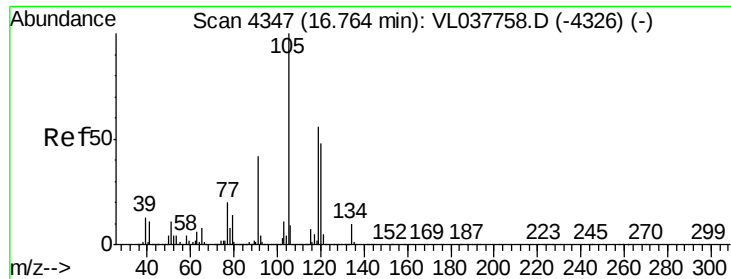
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#68
1-Bromo-4-Fluorobenzene
Concen: 9.701 ppbv
RT: 14.39 min Scan# 3610
Delta R.T. -0.02 min
Lab File: VL037778.D
Acq: 5 Oct 2021 17:57

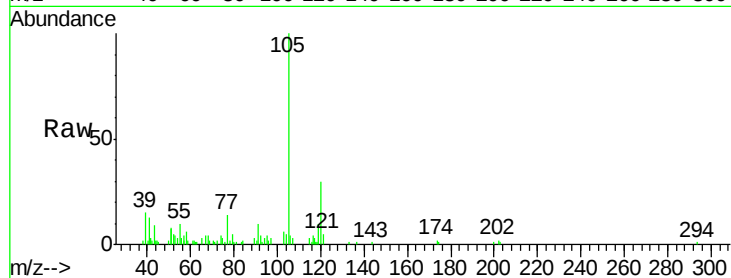
Tgt Ion: 95 Resp: 2157585
Ion Ratio Lower Upper
95 100
174 78.0 57.8 86.6
175 5.8 4.7 7.1





#74
 1,2,4-Trimethylbenzene
 Concen: 0.142 ppbv m
 RT: 16.73 min Scan# 4337
 Delta R.T. -0.03 min
 Lab File: VL037778.D
 Acq: 5 Oct 2021 17:57

Instrument :
 MSVOA_L
 ClientSampleId :
 C0P28DUP



Tgt Ion	Ratio	Resp Lower	Resp Upper
105	100		
120	29.9	38.4	57.6#
91	9.8	34.2	51.2#
77	14.2	15.8	23.8#

Manual Integrations
 APPROVED

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