

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL092721\
 Data File : VL037691.D
 Acq On : 27 Sep 2021 21:53
 Operator : SY/AP
 Sample : M3948-03 10X
 Misc : 400mL/MSVOA_L
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV3

Manual Integrations
 APPROVED

MMDadoda
 10/1/2021 11:05:28 AM

Quant Time: Sep 28 20:55:49 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL091621AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Sep 1
 QLast Update : Thu Sep 16 13:42:46 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1542008	10.00	ppbv	0.02
33) 1,4-Difluorobenzene	7.19	114	4662049	10.00	ppbv	0.03
55) Chlorobenzene-d5	12.09	117	4112445	10.00	ppbv	0.02

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.42	95	2929544	9.86	ppbv	0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.60%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Chlorodifluoromethane	3.00	51	29748m	0.102	ppbv	
9) Propene	3.02	41	78738m	0.767	ppbv	
13) Ethanol	3.61	45	3084082	307.317	ppbv	90
15) Acetone	3.85	43	6779877	42.318	ppbv	99
17) tert-Butyl alcohol	4.30	59	76360	0.562	ppbv #	92
19) Isopropyl Alcohol	3.98	45	697220	7.998	ppbv #	1
20) Methylene Chloride	4.36	84	52063m	0.681	ppbv	
26) Hexane	5.69	57	286140	1.552	ppbv #	47
29) Chloroform	5.76	83	53695m	0.199	ppbv	
32) 1,1,1-Trichloroethane	6.52	97	13781m	0.055	ppbv	
34) 2-Butanone	5.25	43	482991	2.549	ppbv	94
38) Trichloroethene	7.84	130	178789	1.101	ppbv	92
50) 4-Methyl-2-Pentanone	8.75	43	121681m	0.506	ppbv	
51) 2-Hexanone	10.14	43	138699m	1.307	ppbv	
52) Tetrachloroethene	11.23	164	389023	2.607	ppbv	94
53) Toluene	9.81	91	197673	0.457	ppbv	100
58) Ethyl Benzene	12.71	91	81117m	0.149	ppbv	
59) m/p-Xylene	12.97	91	242950m	0.511	ppbv	
60) o-Xylene	13.69	91	127671m	0.282	ppbv	
72) 4-Ethyltoluene	15.83	105	66679m	0.128	ppbv	
73) 1,3,5-Trimethylbenzene	16.00	105	74474m	0.154	ppbv	
74) 1,2,4-Trimethylbenzene	16.76	105	294957	0.578	ppbv #	71

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

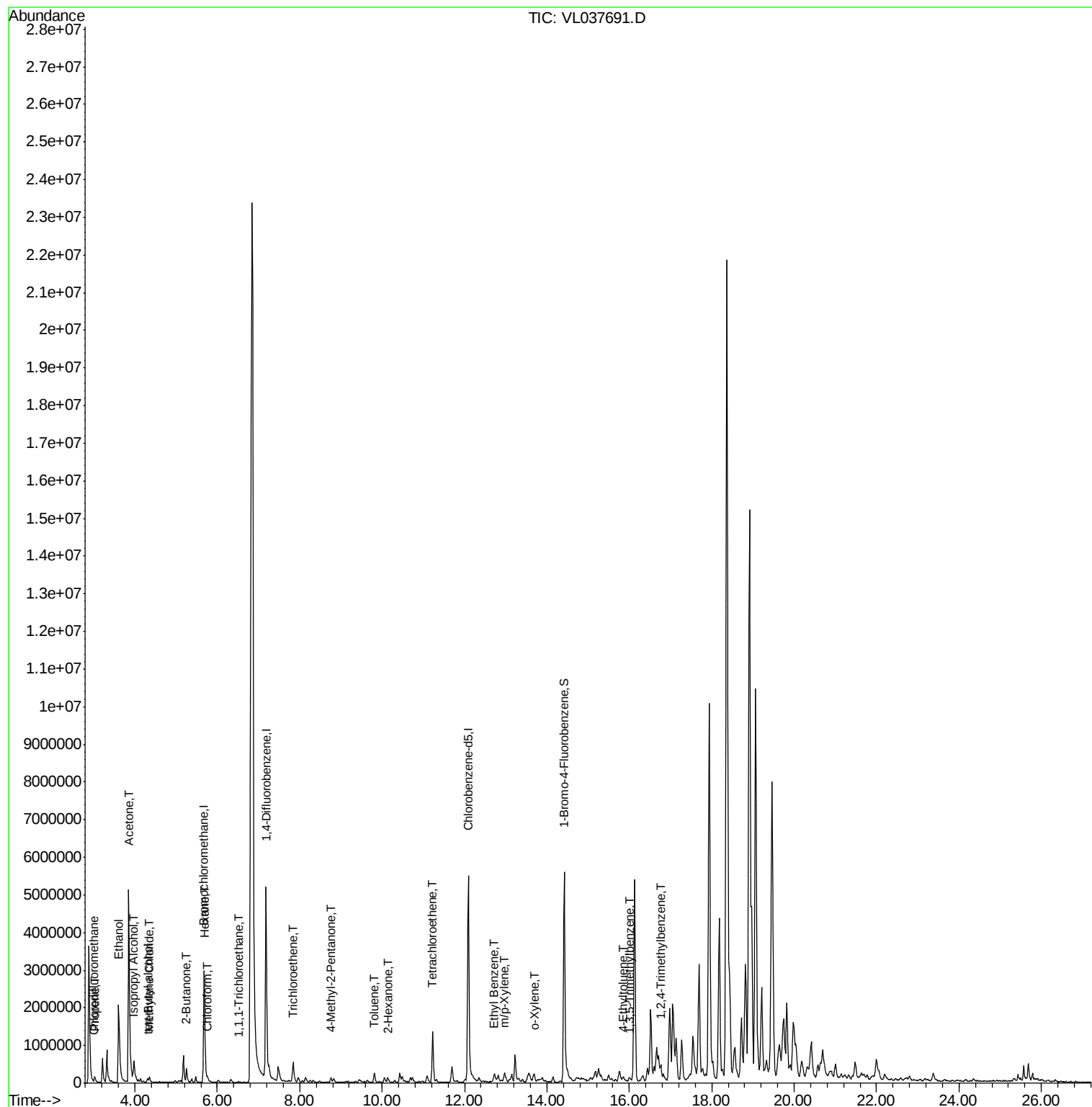
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA_L\DATA\VL092721\
Data File : VL037691.D
Acq On : 27 Sep 2021 21:53
Operator : SY/AP
Sample : M3948-03 10X
Misc : 400mL/MSVOA_L
ALS Vial : 9 Sample Multiplier: 1

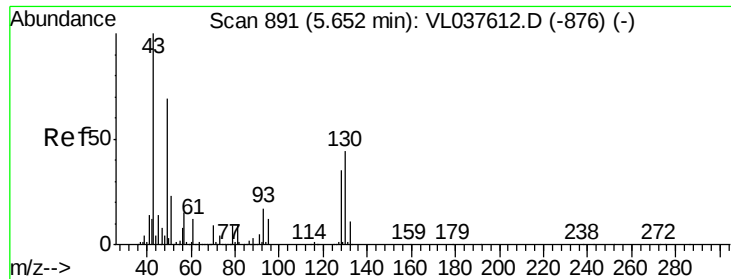
Instrument :
MSVOA_L
ClientSampleId :
SV3

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Quant Time: Sep 28 20:55:49 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_L\METHODS\VL091621AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Sep
QLast Update : Thu Sep 16 13:42:46 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 898

Delta R.T. 0.02 min

Lab File: VL037691.D

Acq: 27 Sep 2021 21:53

Instrument :

MSVOA_L

ClientSampled :

SV3

Tgt Ion: 49 Resp: 1542008

Ion Ratio Lower Upper

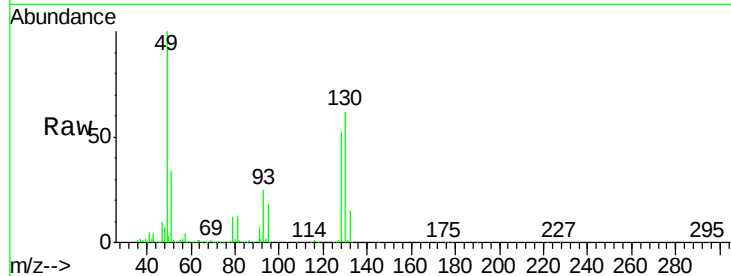
49 100

128 54.3 27.9 83.6

130 68.7 33.9 101.7

Manual Integrations
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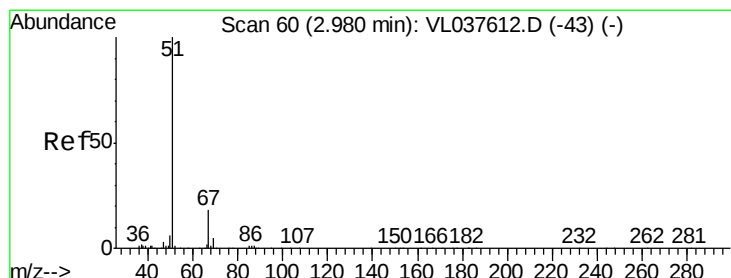
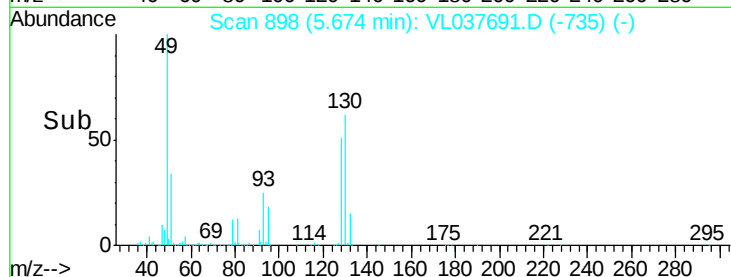
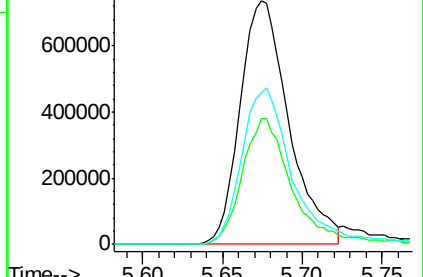
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Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#3

Chlorodifluoromethane

Concen: 0.102 ppbv m

RT: 3.00 min Scan# 65

Delta R.T. 0.02 min

Lab File: VL037691.D

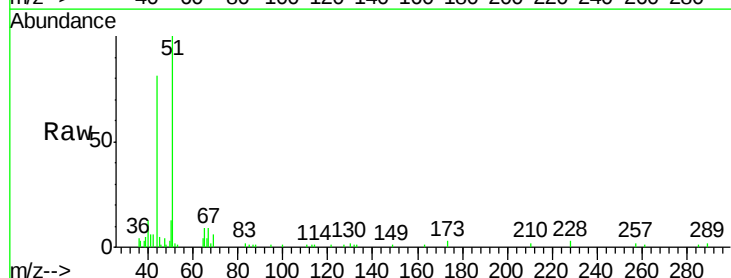
Acq: 27 Sep 2021 21:53

Tgt Ion: 51 Resp: 29748

Ion Ratio Lower Upper

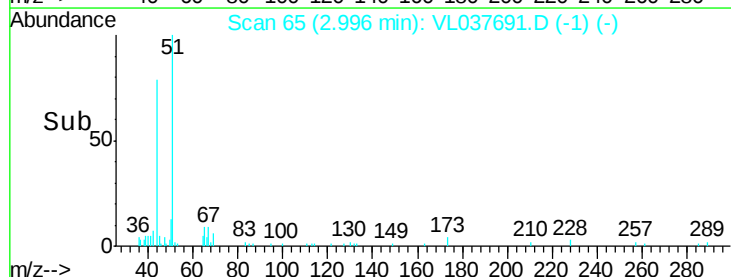
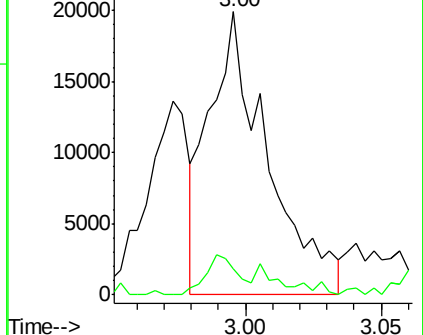
51 100

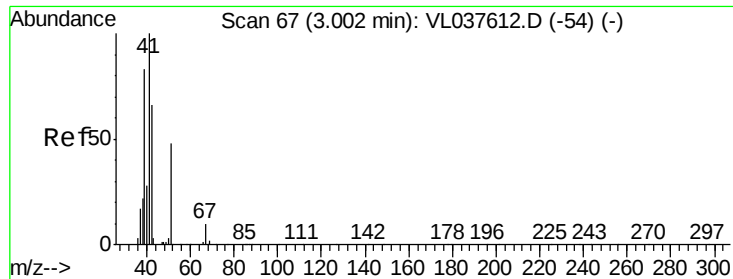
67 12.9 14.0 21.0#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0





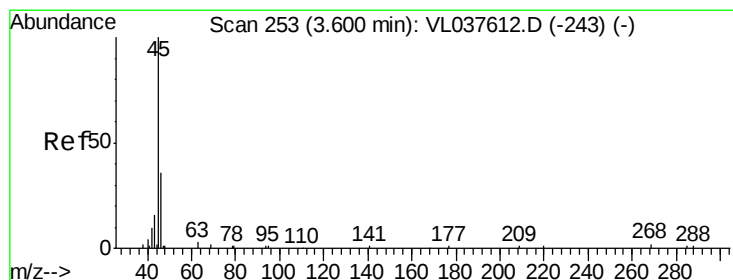
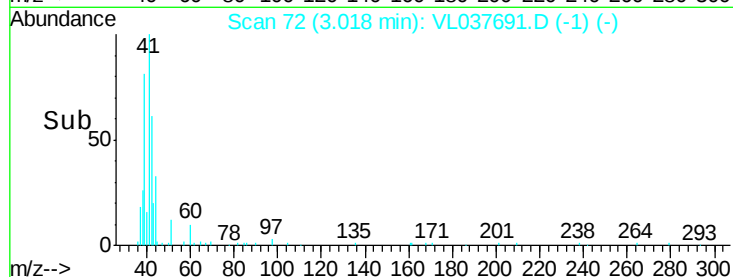
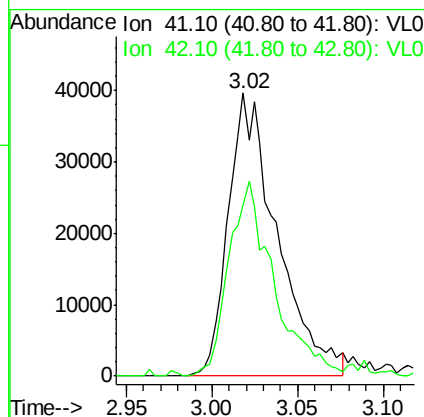
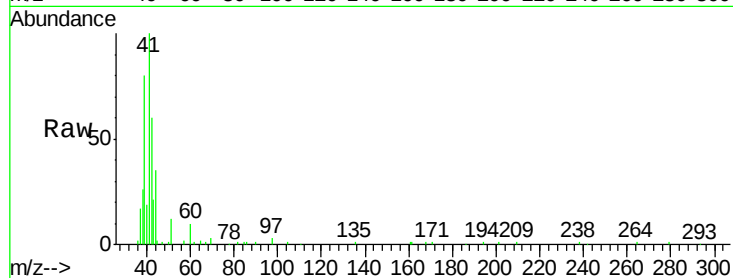
#9
 Propene
 Concen: 0.767 ppbv m
 RT: 3.02 min Scan# 72
 Delta R.T. 0.02 min
 Lab File: VL037691.D
 Acq: 27 Sep 2021 21:53

Instrument :
 MSVOA_L
 ClientSampled :
 SV3

Tgt Ion: 41 Resp: 78738
 Ion Ratio Lower Upper
 41 100
 42 0.0 57.2 85.8#

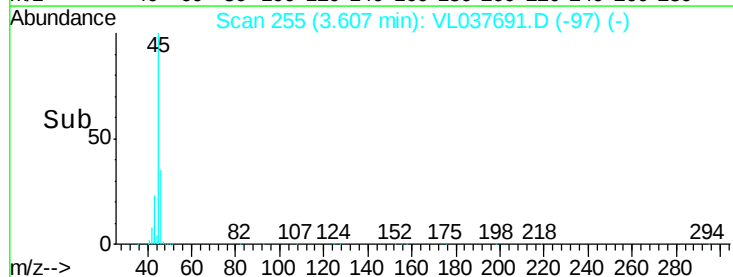
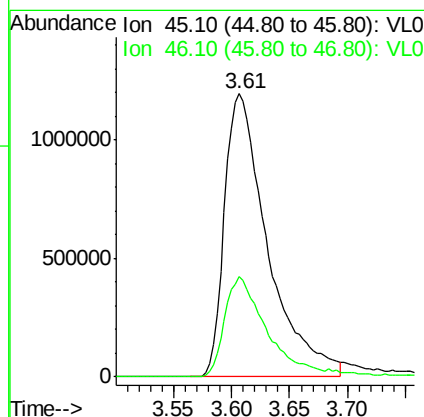
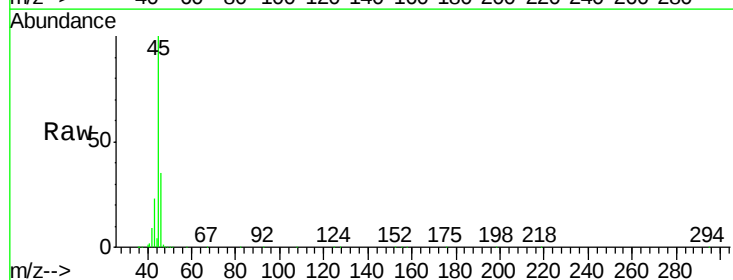
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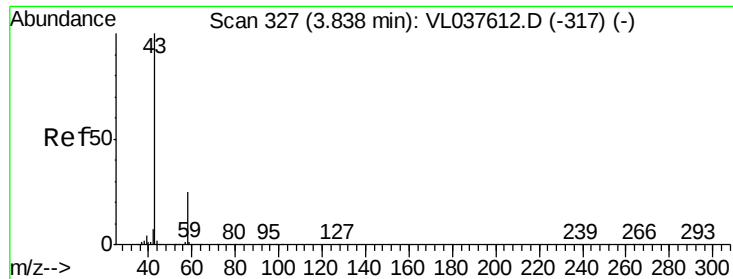
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#13
 Ethanol
 Concen: 307.317 ppbv
 RT: 3.61 min Scan# 255
 Delta R.T. 0.01 min
 Lab File: VL037691.D
 Acq: 27 Sep 2021 21:53

Tgt Ion: 45 Resp: 3084082
 Ion Ratio Lower Upper
 45 100
 46 36.4 17.2 68.8





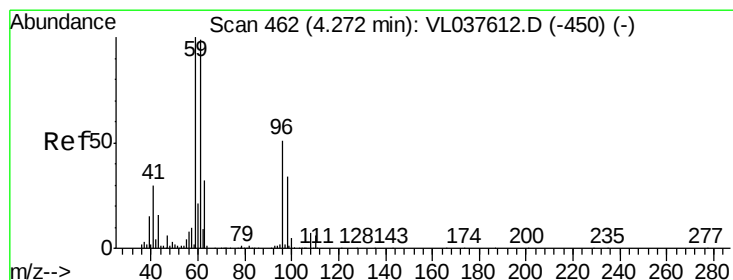
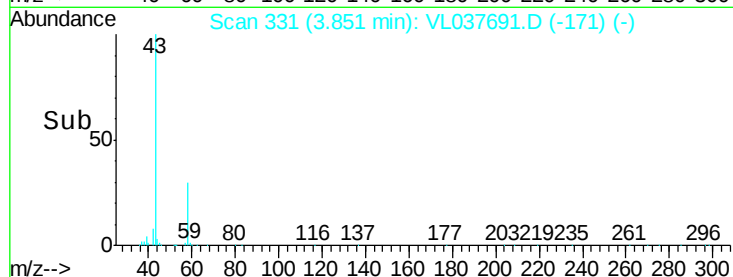
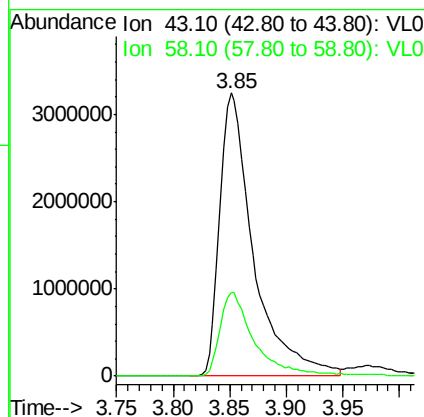
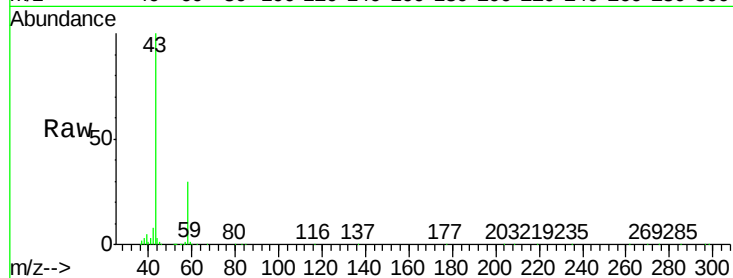
#15
Acetone
Concen: 42.318 ppbv
RT: 3.85 min Scan# 331
Delta R.T. 0.01 min
Lab File: VL037691.D
Acq: 27 Sep 2021 21:53

Instrument :
MSVOA_L
ClientSampled :
SV3

Tgt Ion: 43 Resp: 6779877
Ion Ratio Lower Upper
43 100
58 30.8 24.9 37.3

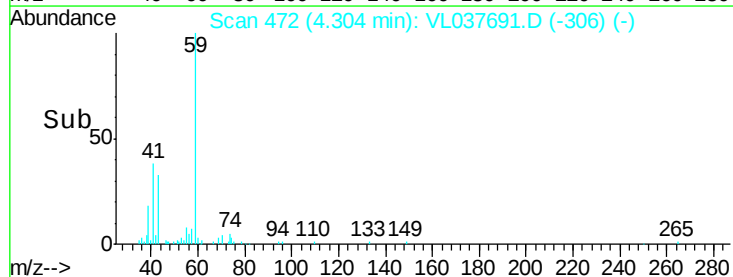
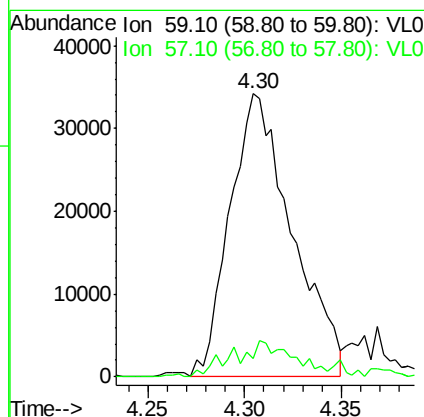
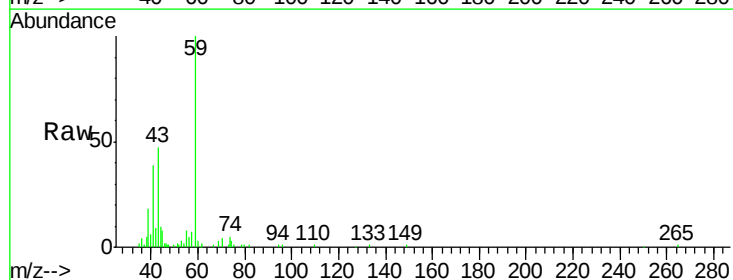
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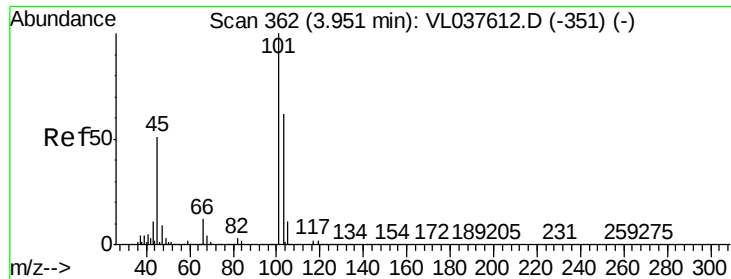
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#17
tert-Butyl alcohol
Concen: 0.562 ppbv
RT: 4.30 min Scan# 472
Delta R.T. 0.03 min
Lab File: VL037691.D
Acq: 27 Sep 2021 21:53

Tgt Ion: 59 Resp: 76360
Ion Ratio Lower Upper
59 100
57 13.5 8.4 12.6#





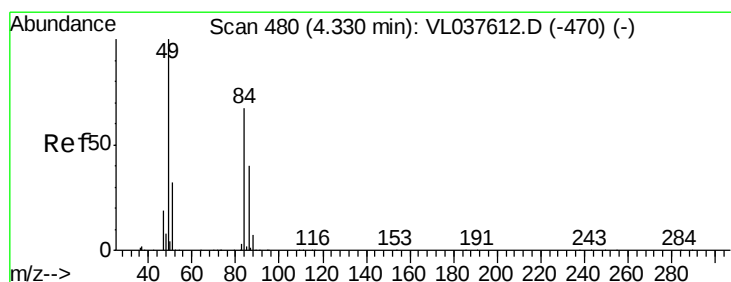
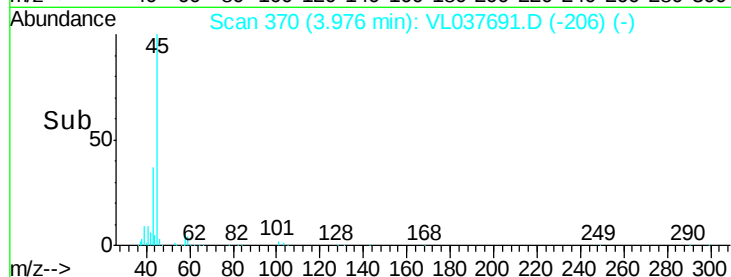
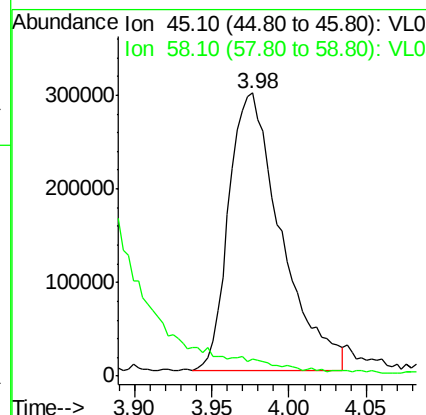
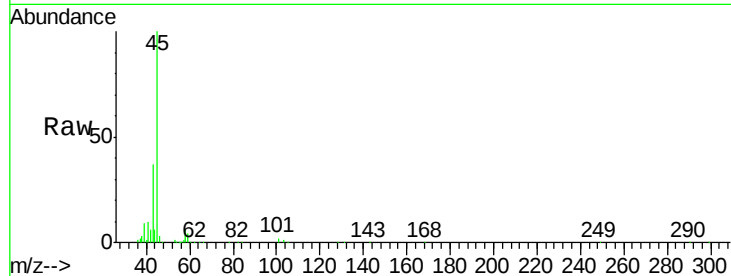
#19
Isopropyl Alcohol
Concen: 7.998 ppbv
RT: 3.98 min Scan# 370
Delta R.T. 0.03 min
Lab File: VL037691.D
Acq: 27 Sep 2021 21:53

Instrument :
MSVOA_L
ClientSampleId :
SV3

Tgt Ion: 45 Resp: 697220
Ion Ratio Lower Upper
45 100
58 302.2 2.9 4.3#

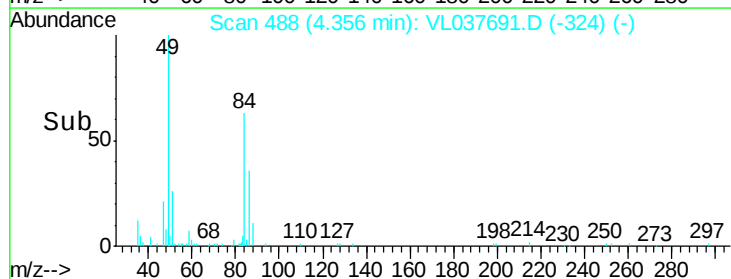
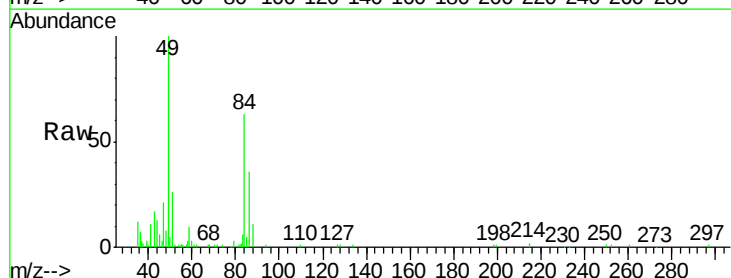
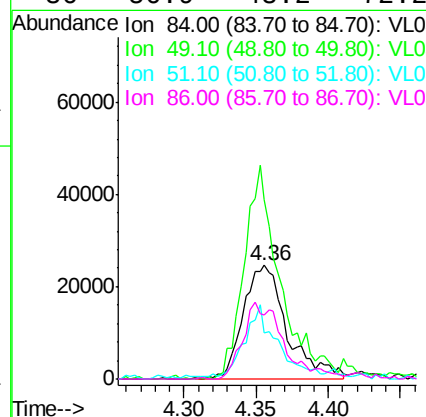
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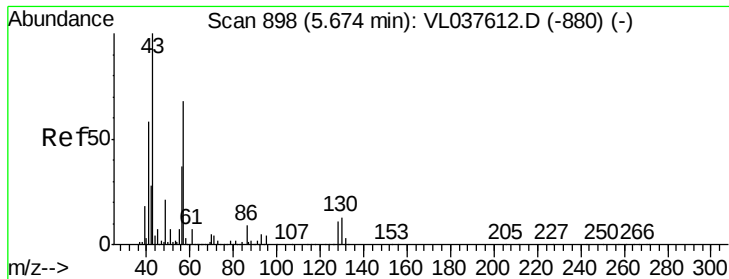
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#20
Methylene Chloride
Concen: 0.681 ppbv m
RT: 4.36 min Scan# 488
Delta R.T. 0.03 min
Lab File: VL037691.D
Acq: 27 Sep 2021 21:53

Tgt Ion: 84 Resp: 52063
Ion Ratio Lower Upper
84 100
49 158.5 120.0 180.0
51 41.1 38.0 57.0
86 56.9 48.2 72.2





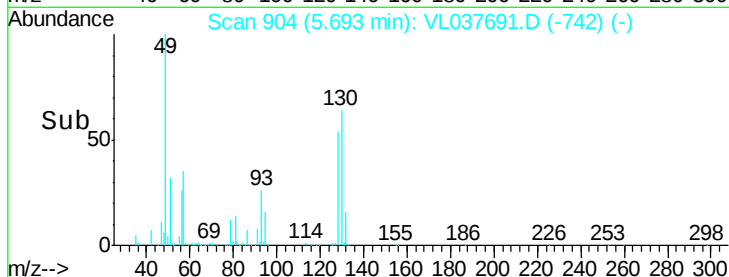
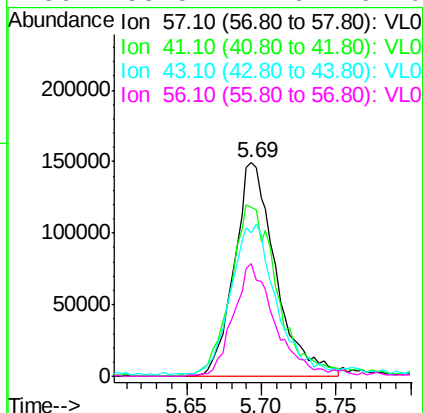
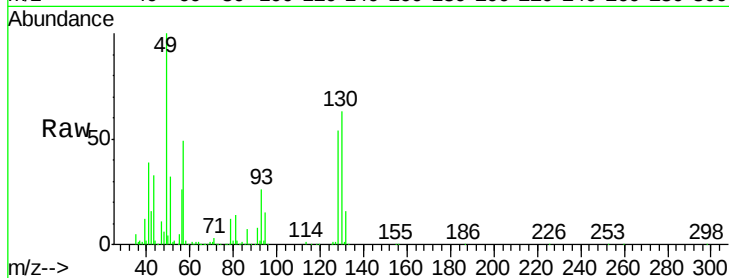
#26
Hexane
Concen: 1.552 ppbv
RT: 5.69 min Scan# 904
Delta R.T. 0.02 min
Lab File: VL037691.D
Acq: 27 Sep 2021 21:53

Instrument :
MSVOA_L
ClientSampled :
SV3

Tgt Ion	Ratio	Lower	Upper
57	100		
41	96.2	70.9	106.3
43	81.5	170.4	255.6#
56	55.5	42.6	64.0

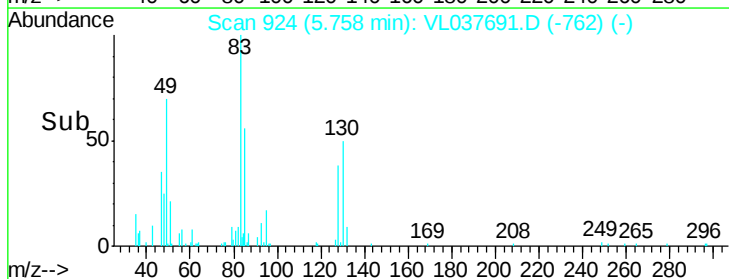
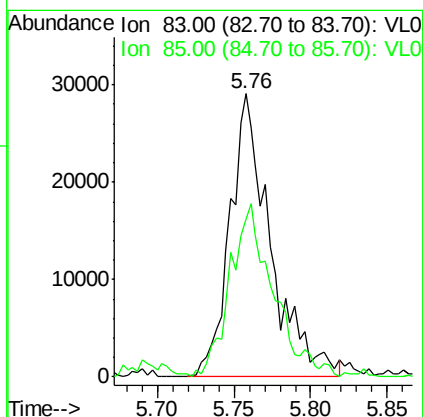
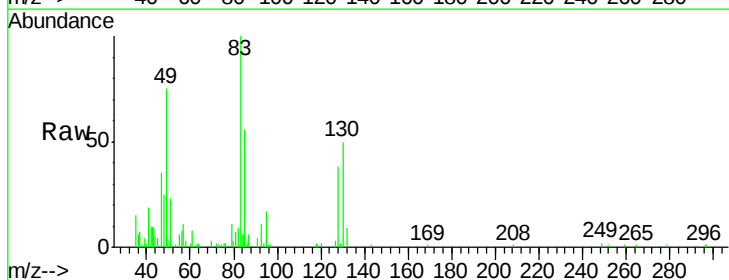
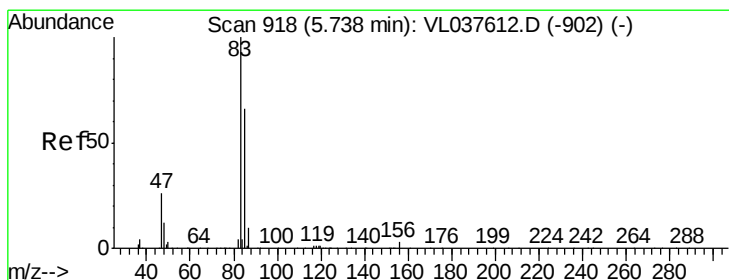
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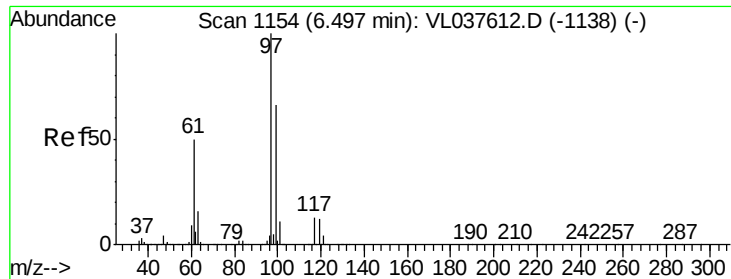
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#29
Chloroform
Concen: 0.199 ppbv m
RT: 5.76 min Scan# 924
Delta R.T. 0.02 min
Lab File: VL037691.D
Acq: 27 Sep 2021 21:53

Tgt Ion	Ratio	Lower	Upper
83	100		
85	56.0	52.6	79.0





#32

1,1,1-Trichloroethane

Concen: 0.055 ppbv m

RT: 6.52 min Scan# 1160

Delta R.T. 0.02 min

Lab File: VL037691.D

Acq: 27 Sep 2021 21:53

Instrument :

MSVOA_L

ClientSampled :

SV3

Tgt Ion: 97 Resp: 13781

Ion Ratio Lower Upper

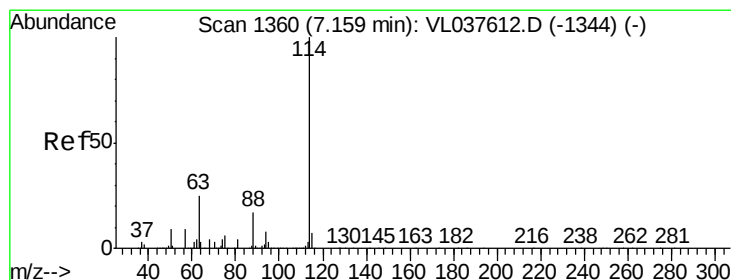
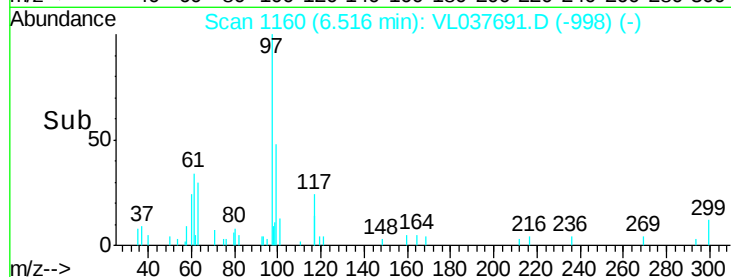
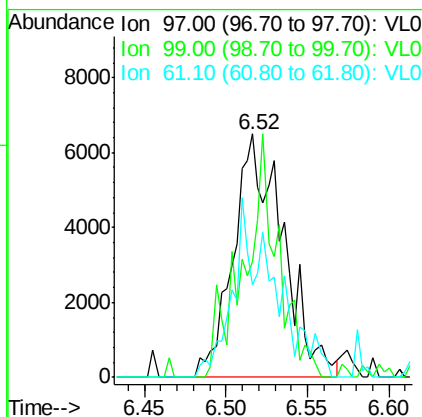
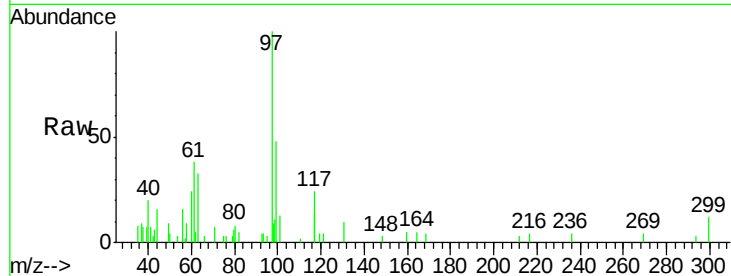
97 100

99 70.4 52.3 78.5

61 0.0 39.5 59.3#

Manual Integrations
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#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.19 min Scan# 1368

Delta R.T. 0.03 min

Lab File: VL037691.D

Acq: 27 Sep 2021 21:53

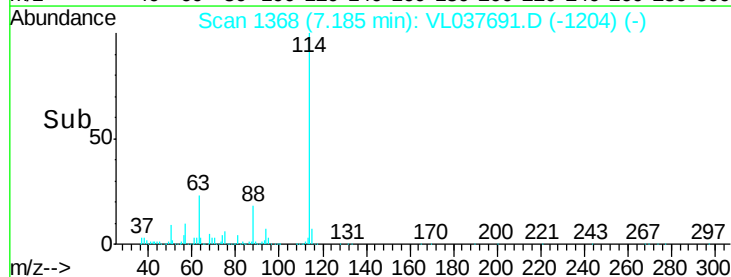
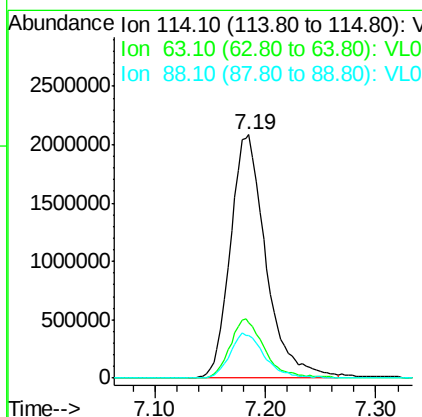
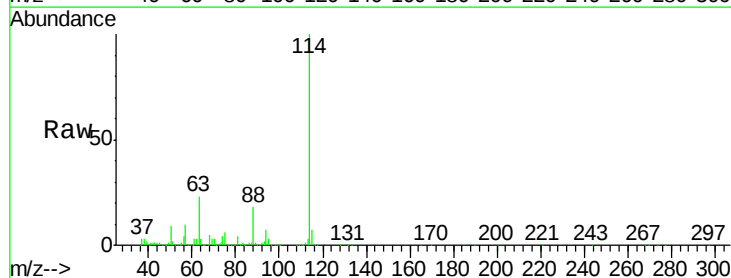
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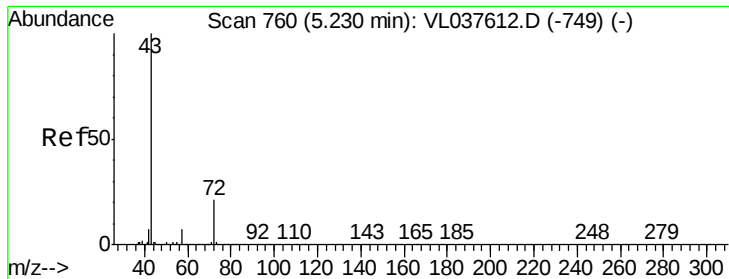
Ion Ratio Lower Upper

114 100

63 23.8 19.6 29.4

88 18.2 14.2 21.4





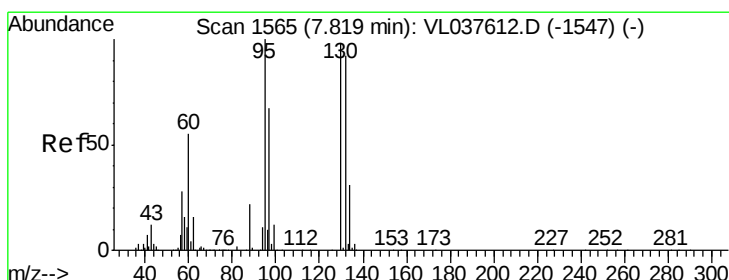
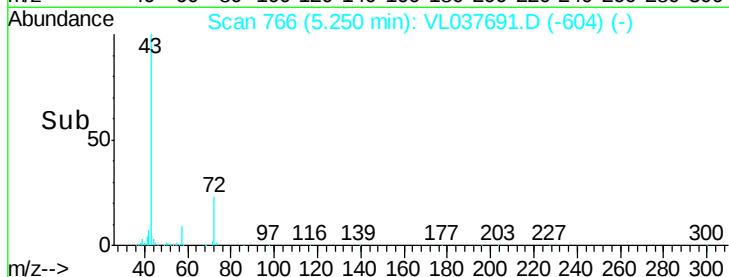
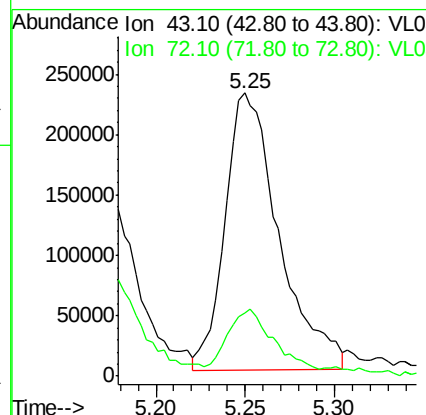
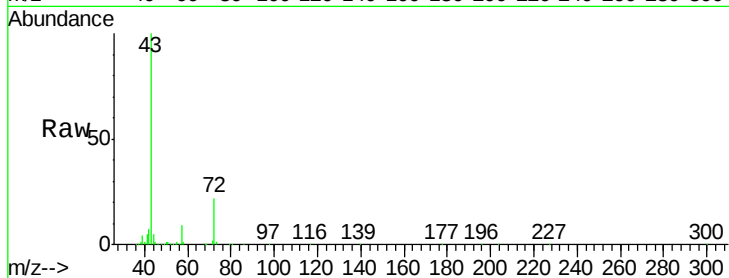
#34
2-Butanone
Concen: 2.549 ppbv
RT: 5.25 min Scan# 766
Delta R.T. 0.02 min
Lab File: VL037691.D
Acq: 27 Sep 2021 21:53

Instrument :
MSVOA_L
ClientSampled :
SV3

Tgt Ion: 43 Resp: 482991
Ion Ratio Lower Upper
43 100
72 25.9 18.4 27.6

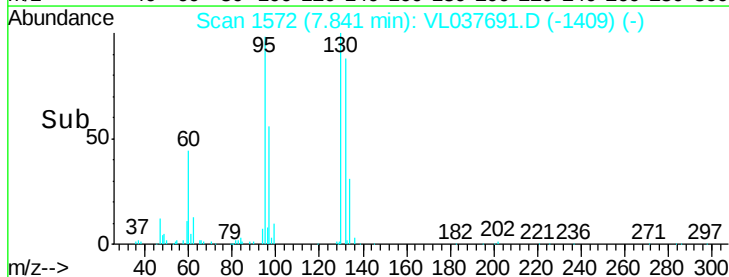
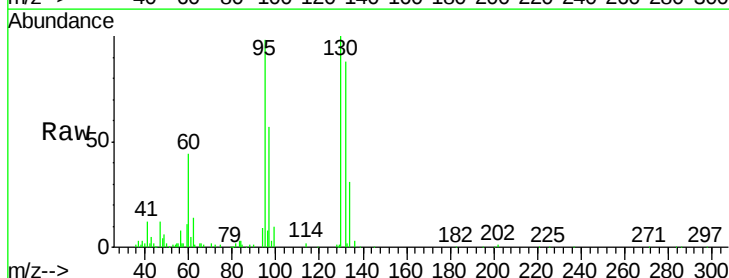
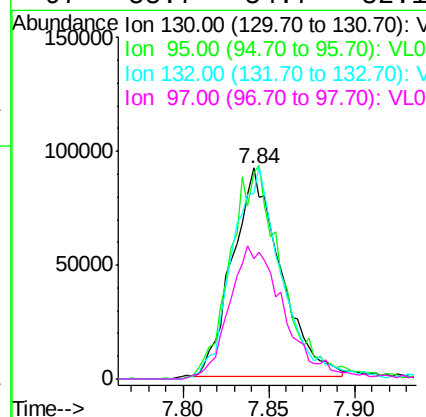
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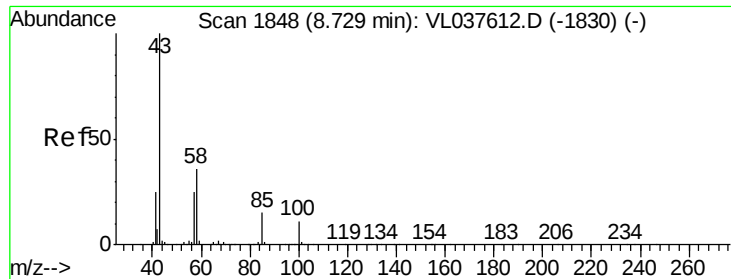
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#38
Trichloroethene
Concen: 1.101 ppbv
RT: 7.84 min Scan# 1572
Delta R.T. 0.02 min
Lab File: VL037691.D
Acq: 27 Sep 2021 21:53

Tgt Ion: 130 Resp: 178789
Ion Ratio Lower Upper
130 100
95 97.9 81.8 122.6
132 87.8 75.3 112.9
97 55.7 54.7 82.1





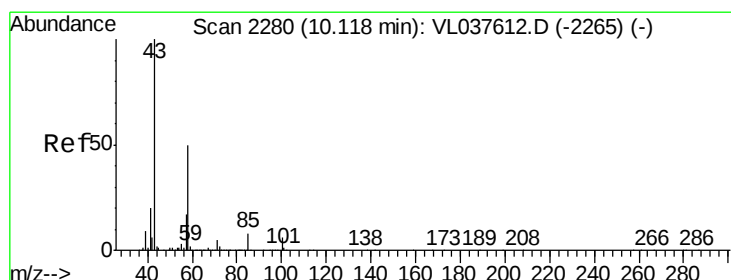
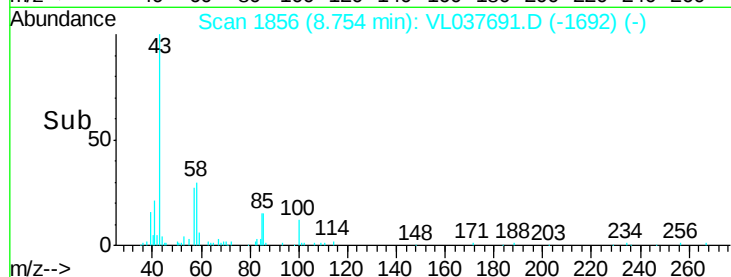
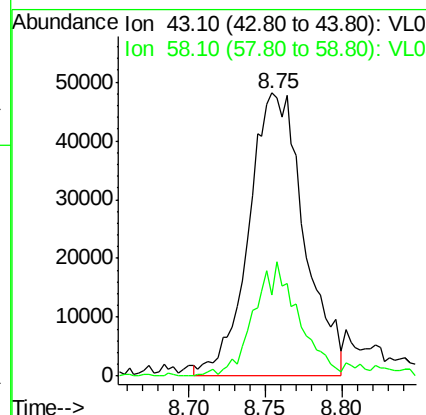
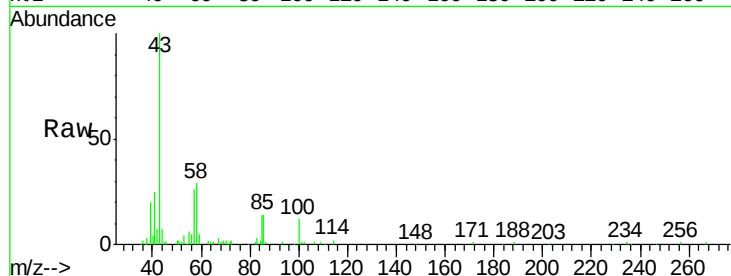
#50
4-Methyl-2-Pentanone
Concen: 0.506 ppbv m
RT: 8.75 min Scan# 1856
Delta R.T. 0.03 min
Lab File: VL037691.D
Acq: 27 Sep 2021 21:53

Instrument :
MSVOA_L
ClientSampled :
SV3

Tgt Ion: 43 Resp: 121681
Ion Ratio Lower Upper
43 100
58 35.6 29.4 44.2

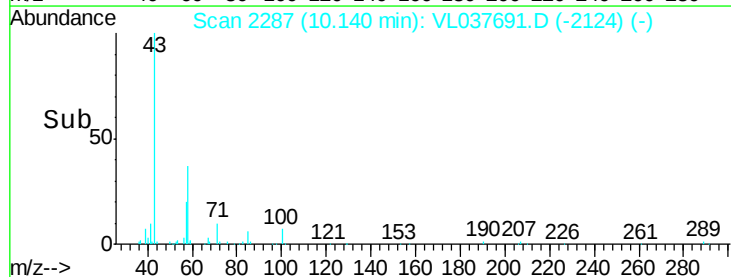
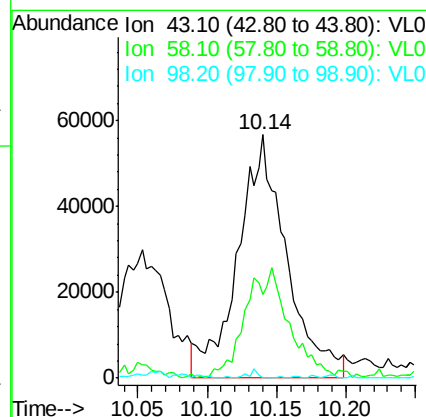
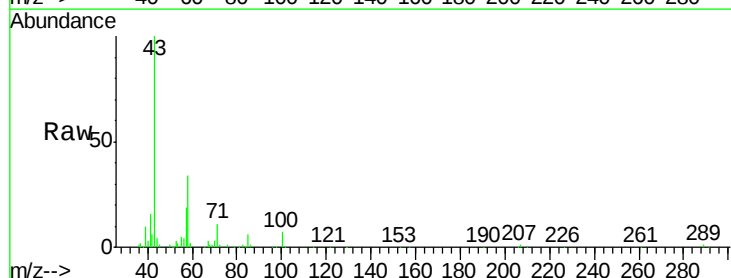
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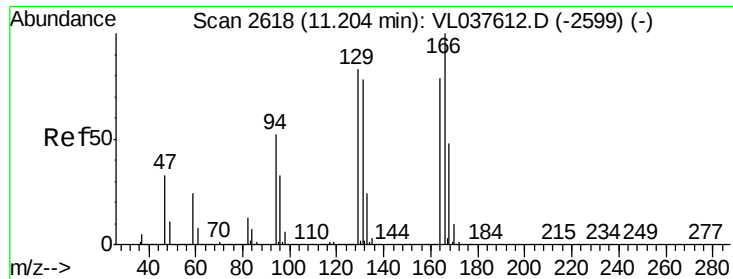
MMDadoda
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#51
2-Hexanone
Concen: 1.307 ppbv m
RT: 10.14 min Scan# 2287
Delta R.T. 0.02 min
Lab File: VL037691.D
Acq: 27 Sep 2021 21:53

Tgt Ion: 43 Resp: 138699
Ion Ratio Lower Upper
43 100
58 40.3 39.3 58.9
98 0.0 0.4 0.6#





#52

Tetrachloroethene

Concen: 2.607 ppbv

RT: 11.23 min Scan# 2626

Delta R.T. 0.03 min

Lab File: VL037691.D

Acq: 27 Sep 2021 21:53

Instrument :

MSVOA_L

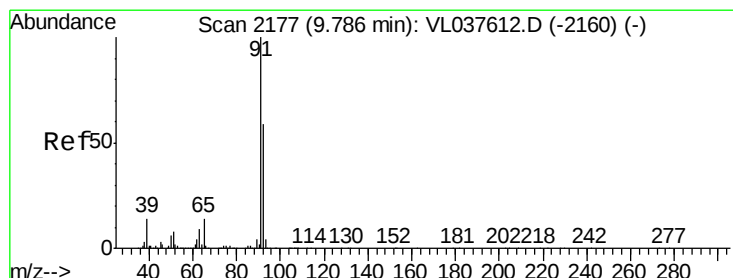
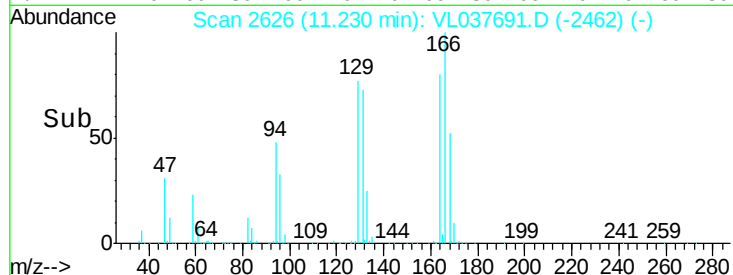
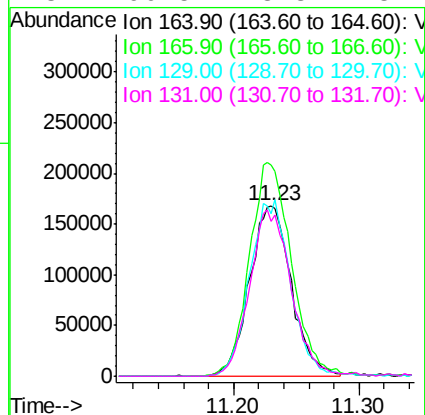
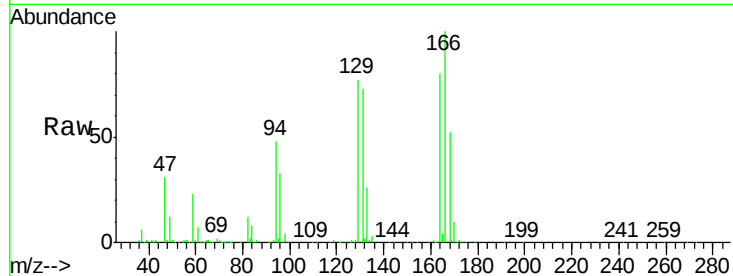
ClientSampled :

SV3

Tgt Ion:	164	Resp:	389023
Ion Ratio	Lower	Upper	
164	100		
166	124.3	101.2	151.8
129	95.6	84.0	126.0
131	90.5	78.8	118.2

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#53

Toluene

Concen: 0.457 ppbv

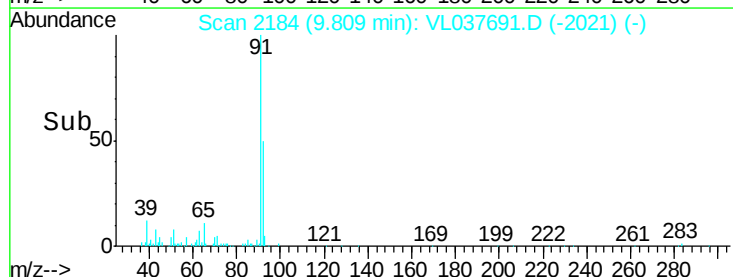
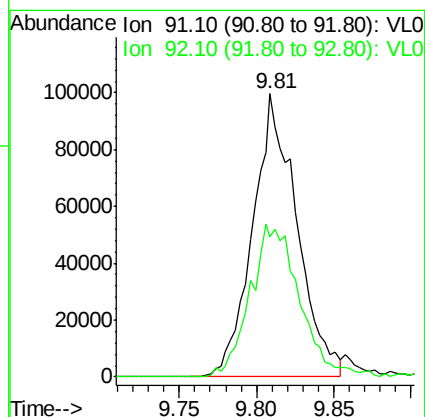
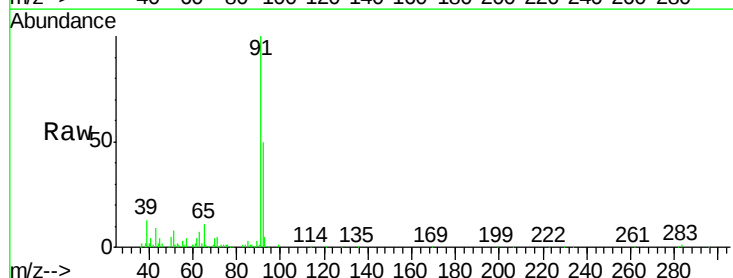
RT: 9.81 min Scan# 2184

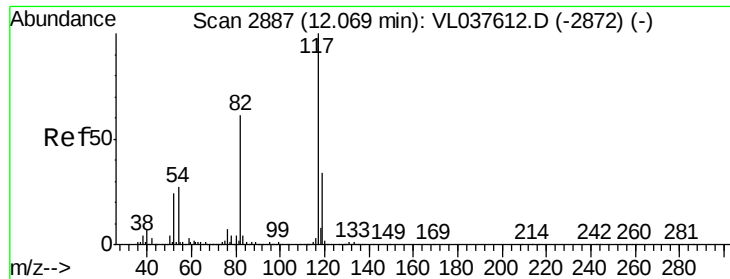
Delta R.T. 0.02 min

Lab File: VL037691.D

Acq: 27 Sep 2021 21:53

Tgt Ion:	91	Resp:	197673
Ion Ratio	Lower	Upper	
91	100		
92	61.2	48.9	73.3





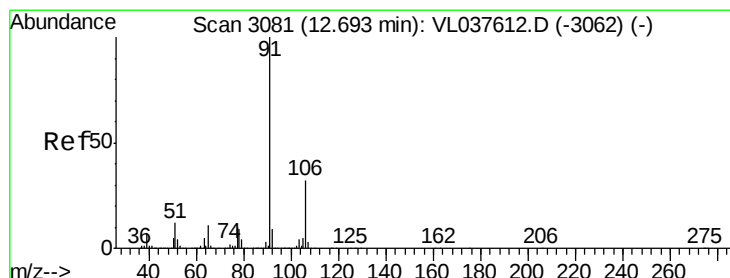
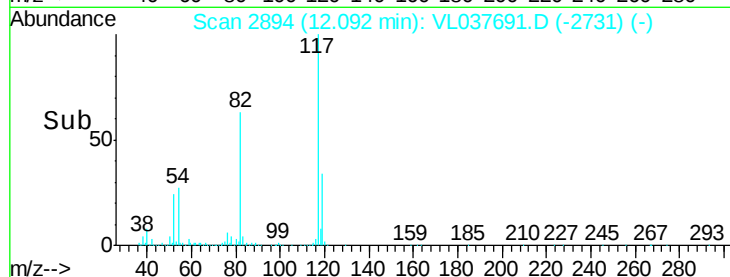
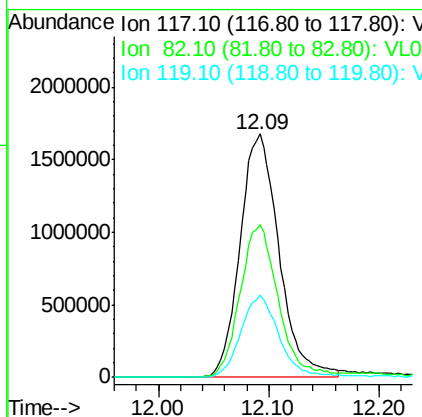
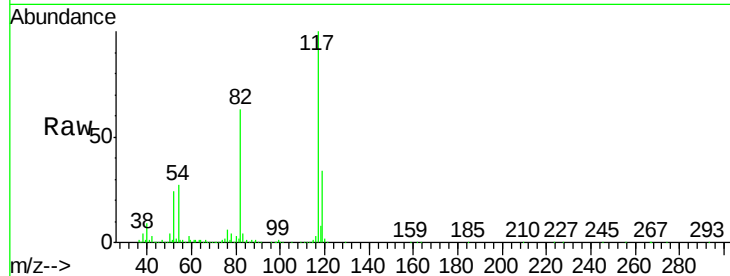
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.09 min Scan# 2894
Delta R.T. 0.02 min
Lab File: VL037691.D
Acq: 27 Sep 2021 21:53

Instrument :
MSVOA_L
ClientSampled :
SV3

Tgt Ion: 117 Resp: 4112445
Ion Ratio Lower Upper
117 100
82 61.7 50.6 75.8
119 34.0 26.2 39.2

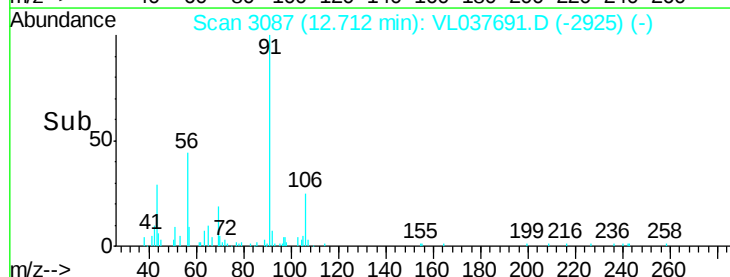
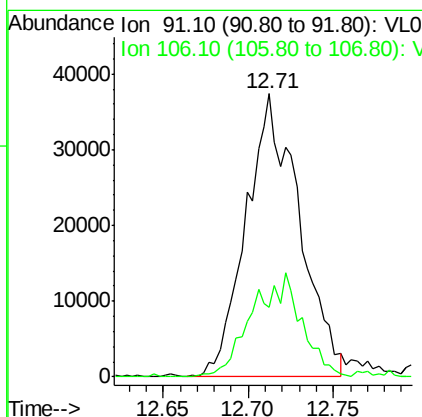
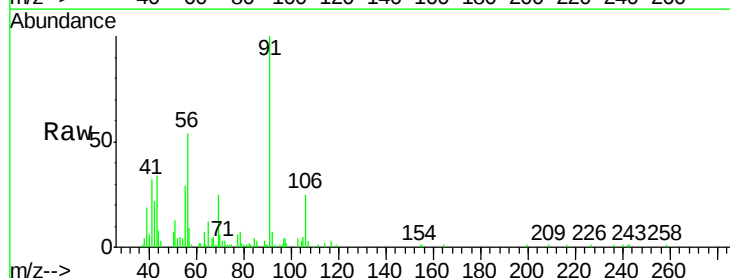
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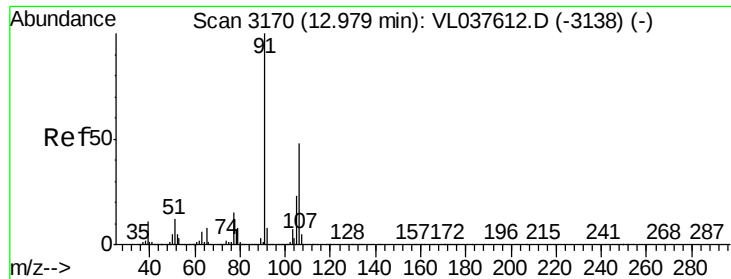
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#58
Ethyl Benzene
Concen: 0.149 ppbv m
RT: 12.71 min Scan# 3087
Delta R.T. 0.02 min
Lab File: VL037691.D
Acq: 27 Sep 2021 21:53

Tgt Ion: 91 Resp: 81117
Ion Ratio Lower Upper
91 100
106 24.8 25.3 37.9#





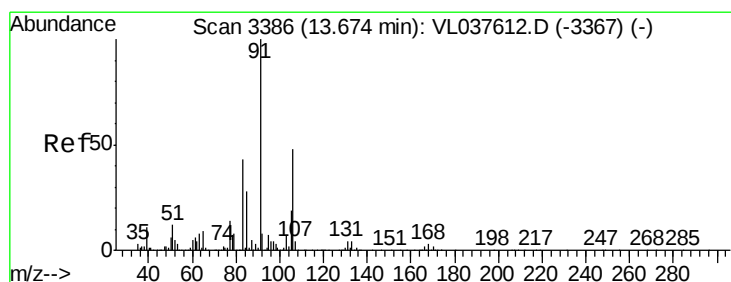
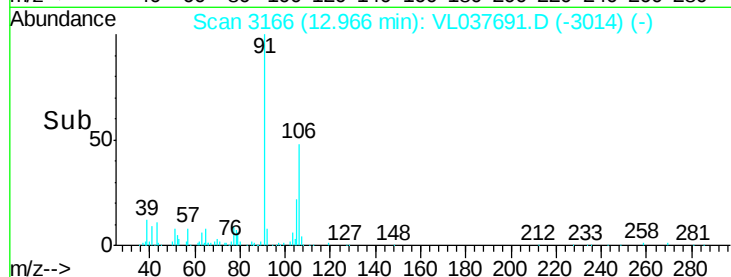
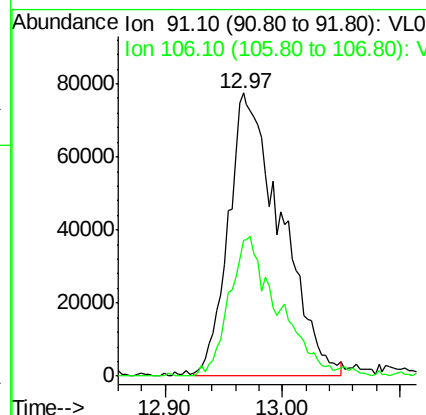
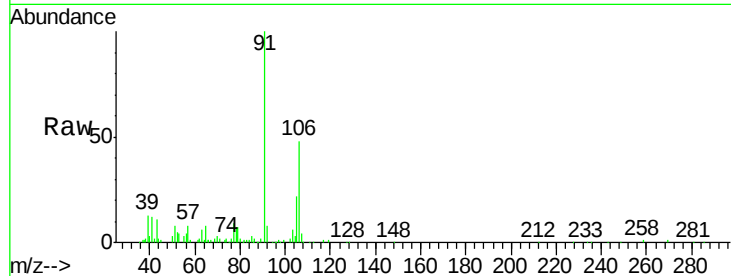
#59
m/p-Xylene
Concen: 0.511 ppbv m
RT: 12.97 min Scan# 3166
Delta R.T. -0.01 min
Lab File: VL037691.D
Acq: 27 Sep 2021 21:53

Instrument :
MSVOA_L
ClientSampled :
SV3

Tgt Ion: 91 Resp: 242950
Ion Ratio Lower Upper
91 100
106 0.0 36.6 55.0#

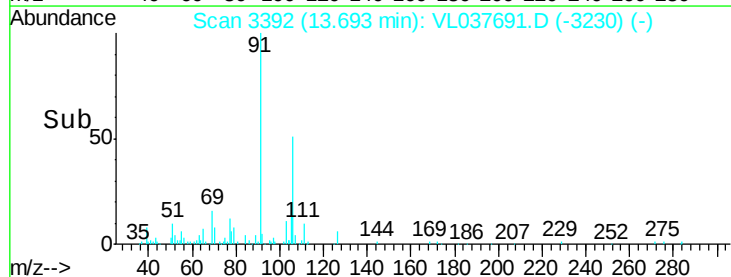
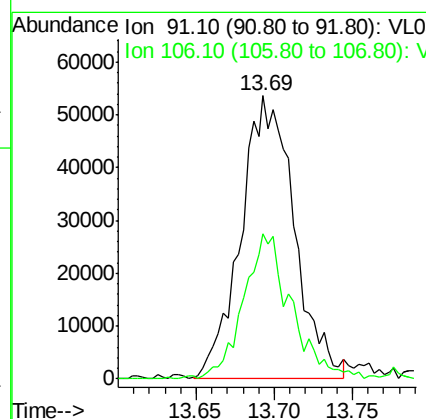
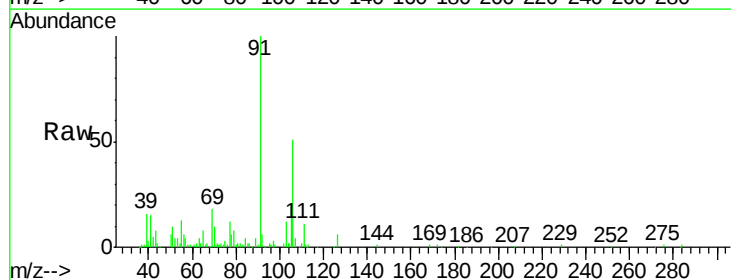
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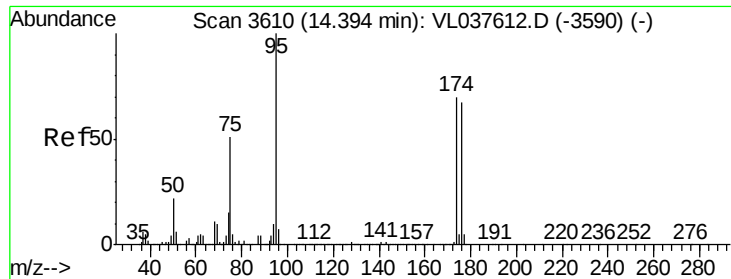
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#60
o-Xylene
Concen: 0.282 ppbv m
RT: 13.69 min Scan# 3392
Delta R.T. 0.02 min
Lab File: VL037691.D
Acq: 27 Sep 2021 21:53

Tgt Ion: 91 Resp: 127671
Ion Ratio Lower Upper
91 100
106 0.0 23.0 69.0#





#68

1-Bromo-4-Fluorobenzene

Concen: 9.857 ppbv

RT: 14.42 min Scan# 3617

Delta R.T. 0.02 min

Lab File: VL037691.D

Acq: 27 Sep 2021 21:53

Instrument :

MSVOA_L

ClientSampleId :

SV3

Tgt Ion: 95 Resp: 2929544

Ion Ratio Lower Upper

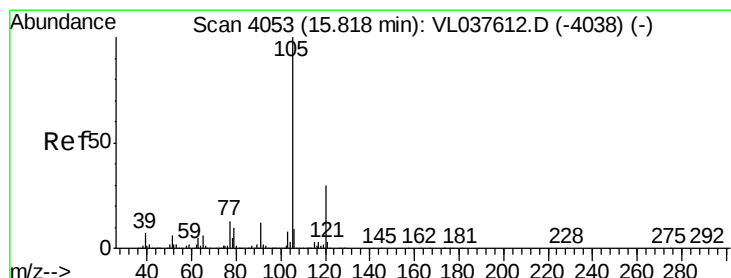
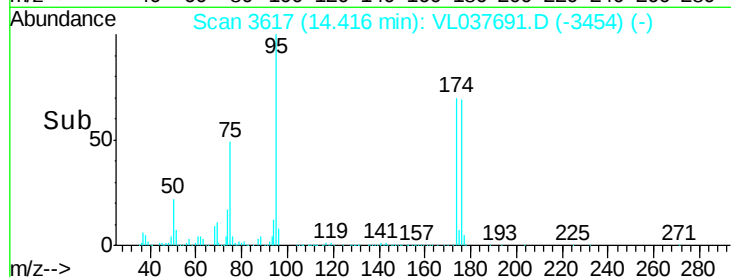
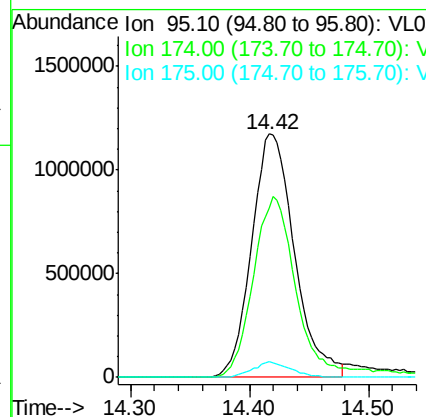
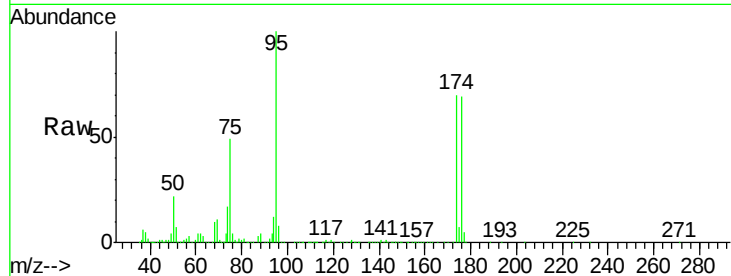
95 100

174 78.2 56.3 84.5

175 5.8 4.4 6.6

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#72

4-Ethyltoluene

Concen: 0.128 ppbv m

RT: 15.83 min Scan# 4058

Delta R.T. 0.02 min

Lab File: VL037691.D

Acq: 27 Sep 2021 21:53

Tgt Ion: 105 Resp: 66679

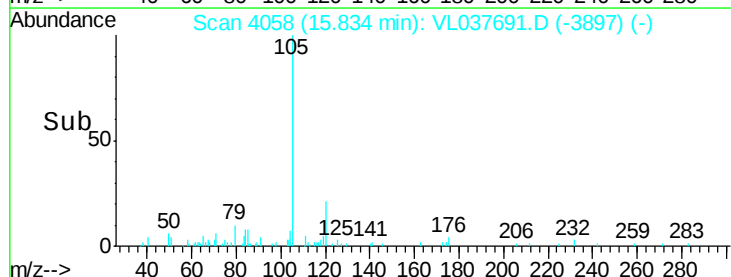
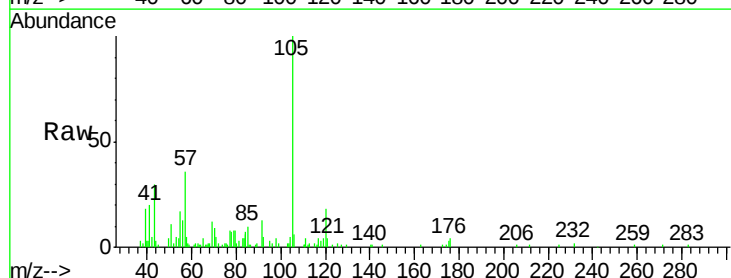
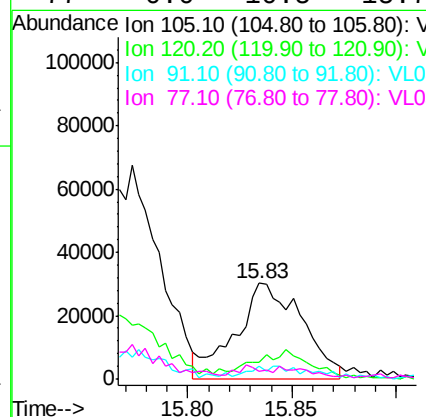
Ion Ratio Lower Upper

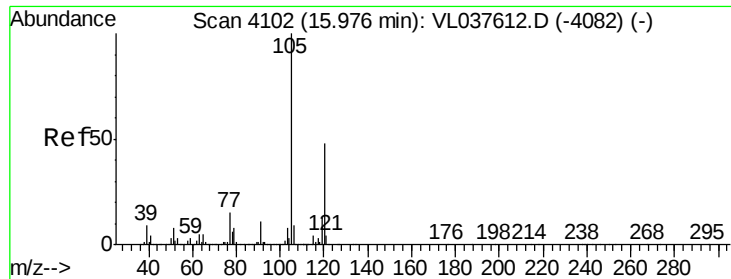
105 100

120 26.0 24.7 37.1

91 17.6 9.9 14.9#

77 0.0 10.5 15.7#





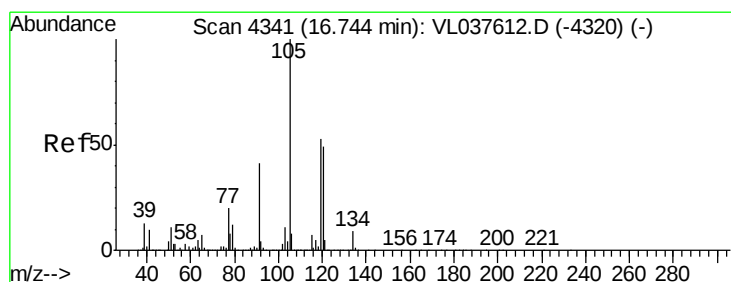
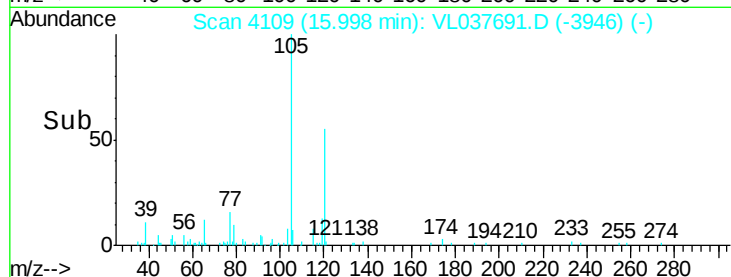
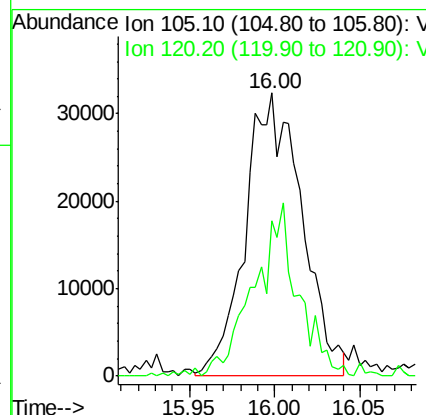
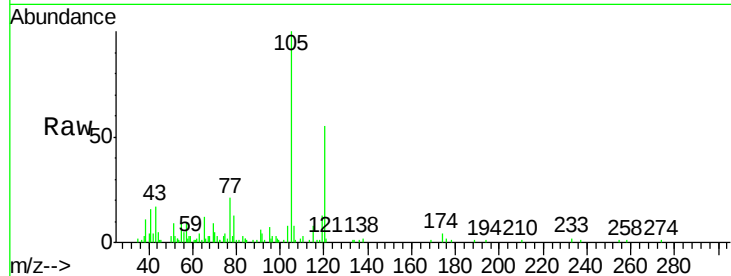
#73
 1,3,5-Trimethylbenzene
 Concen: 0.154 ppbv
 RT: 16.00 min Scan# 4109
 Delta R.T. 0.02 min
 Lab File: VL037691.D
 Acq: 27 Sep 2021 21:53

Instrument :
 MSVOA_L
 ClientSampleId :
 SV3

Tgt Ion	Ratio	Lower	Upper
105	100		
120	55.1	38.3	57.5

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#74
 1,2,4-Trimethylbenzene
 Concen: 0.578 ppbv
 RT: 16.76 min Scan# 4347
 Delta R.T. 0.02 min
 Lab File: VL037691.D
 Acq: 27 Sep 2021 21:53

Tgt Ion	Ratio	Lower	Upper
105	100		
120	39.1	39.4	59.0#
91	8.1	33.3	49.9#
77	12.5	15.7	23.5#

