

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL100721\
 Data File : VL037802.D
 Acq On : 7 Oct 2021 19:06
 Operator : SY/AP
 Sample : M4079-08DUP
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 C0P20DUP

Manual Integrations
 APPROVED

MMDadoda
 10/18/2021 5:16:58 PM

Quant Time: Oct 08 10:48:42 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	1394372	10.00	ppbv	-0.01
33) 1,4-Difluorobenzene	7.16	114	3920798	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.07	117	3031417	10.00	ppbv	-0.02

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.39	95	2248268	10.61	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	106.10%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.04	85	52460m	0.236	ppbv	
3) Chlorodifluoromethane	2.98	51	26447	0.099	ppbv	98
9) Propene	3.00	41	91995	0.933	ppbv	98
10) Heptane	8.11	43	24192m	0.108	ppbv	
11) Trichlorofluoromethane	3.94	101	36512m	0.184	ppbv	
13) Ethanol	3.60	45	152199m	18.879	ppbv	
15) Acetone	3.84	43	2761666	22.063	ppbv	93
17) tert-Butyl alcohol	4.30	59	46714m	0.362	ppbv	
19) Isopropyl Alcohol	3.97	45	45421m	0.583	ppbv	
20) Methylene Chloride	4.34	84	64816	1.025	ppbv	96
26) Hexane	5.68	57	75280	0.435	ppbv #	52
27) Carbon Disulfide	4.54	76	39572m	0.258	ppbv	
29) Chloroform	5.74	83	191578	0.775	ppbv	99
34) 2-Butanone	5.24	43	566286	3.578	ppbv	98
36) Benzene	6.87	78	30835m	0.092	ppbv	
51) 2-Hexanone	10.13	43	83527m	0.908	ppbv	
52) Tetrachloroethene	11.20	164	182941	1.404	ppbv	95
53) Toluene	9.78	91	62931m	0.170	ppbv	
58) Ethyl Benzene	12.69	91	105937	0.260	ppbv	89
59) m/p-Xylene	12.95	91	390208m	1.117	ppbv	
60) o-Xylene	13.67	91	140066	0.418	ppbv	97
74) 1,2,4-Trimethylbenzene	16.74	105	67851m	0.187	ppbv	
79) Naphthalene	22.18	128	32776m	0.148	ppbv	

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

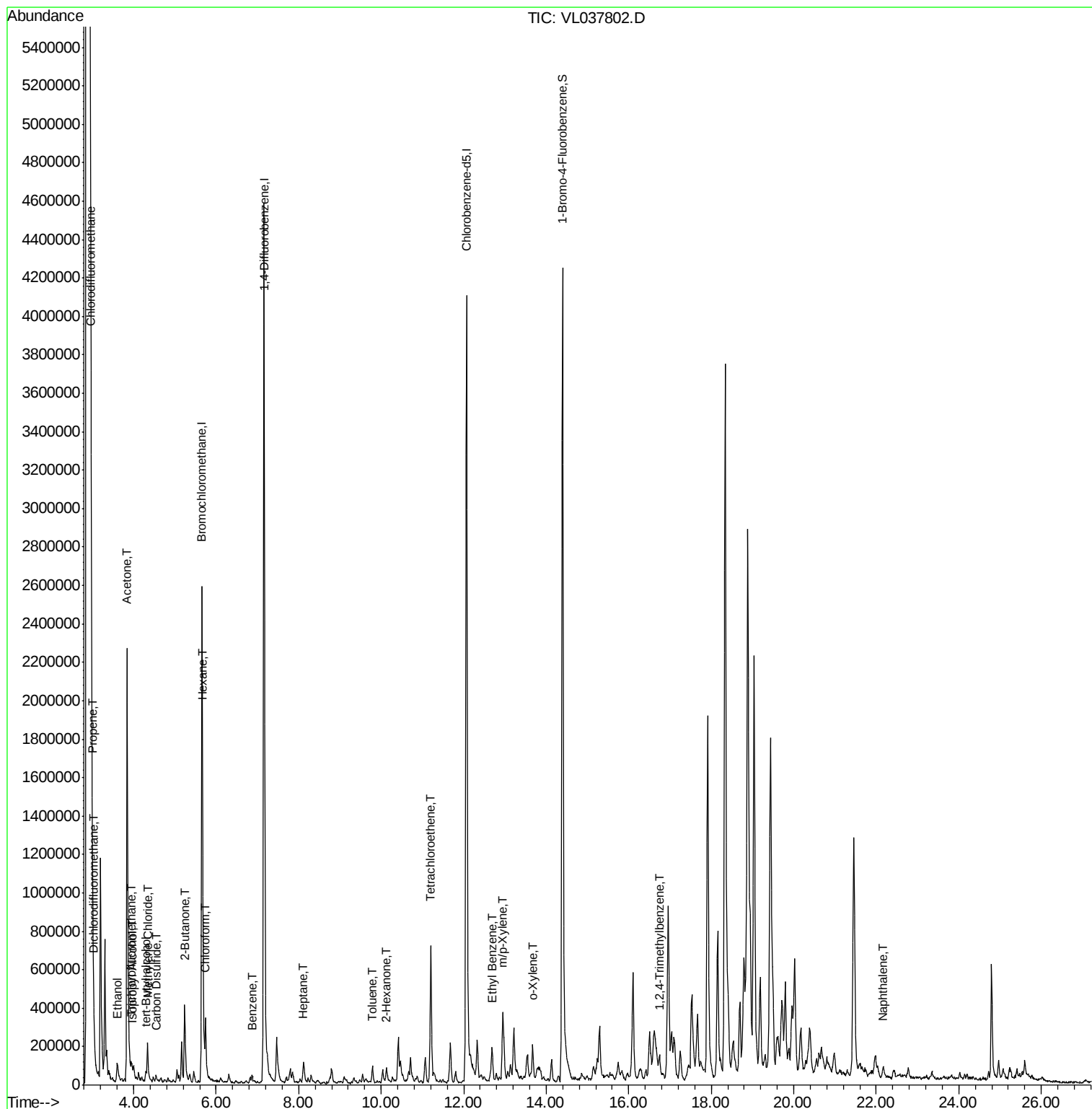
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA_L\DATA\VL100721\
Data File : VL037802.D
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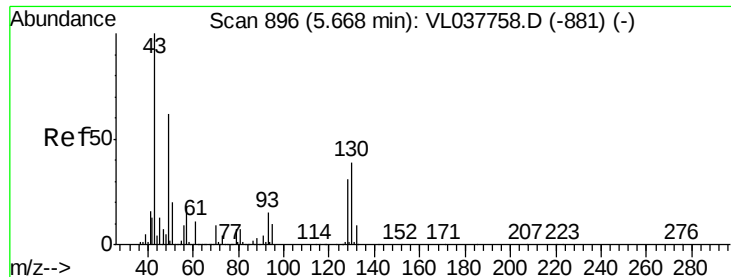
Instrument :
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Quant Time: Oct 08 10:48:42 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_L\METHODS\VL100421AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Oct
QLast Update : Mon Oct 04 17:43:54 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 892

Delta R.T. -0.01 min

Lab File: VL037802.D

Acq: 7 Oct 2021 19:06

Instrument :

MSVOA_L

ClientSampleId :

C0P20DUP

Tgt Ion: 49 Resp: 1394372

Ion Ratio Lower Upper

49 100

128 51.3 27.1 81.3

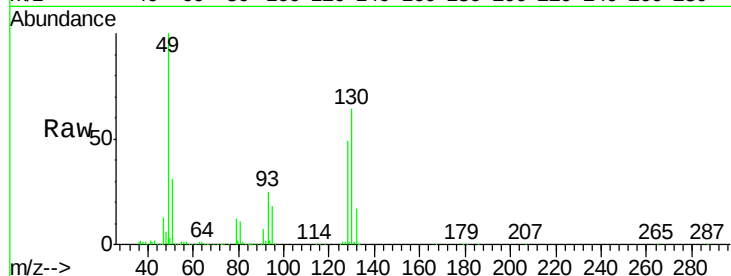
130 65.8 33.2 99.6

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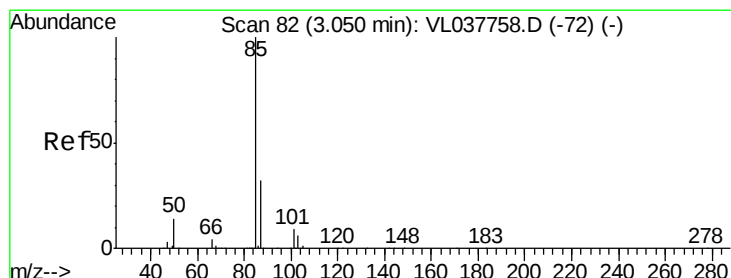
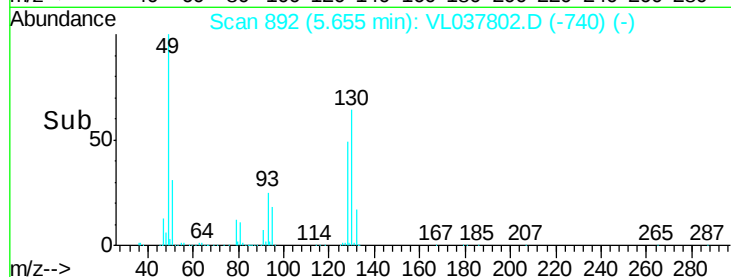
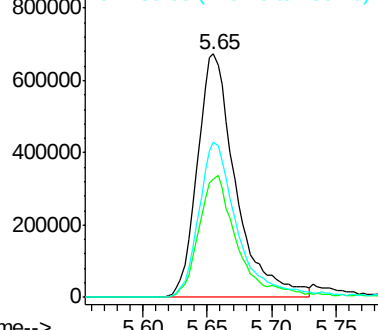
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Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.236 ppbv m

RT: 3.04 min Scan# 78

Delta R.T. -0.01 min

Lab File: VL037802.D

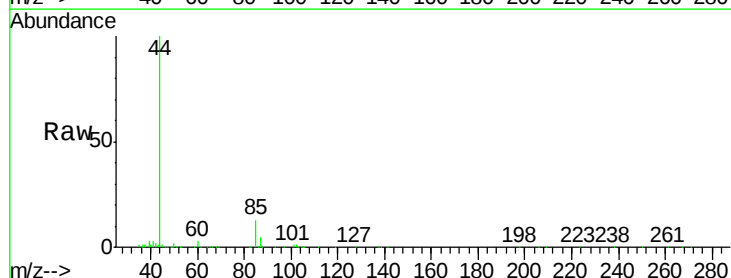
Acq: 7 Oct 2021 19:06

Tgt Ion: 85 Resp: 52460

Ion Ratio Lower Upper

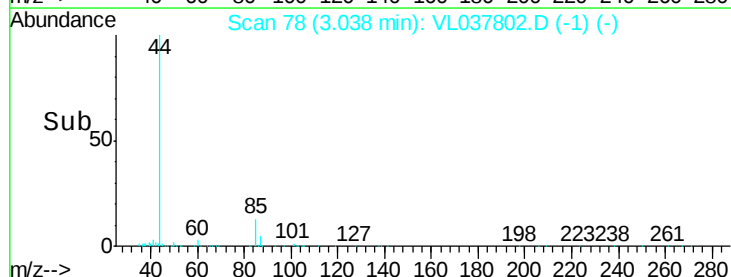
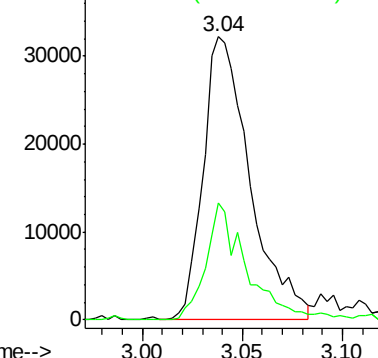
85 100

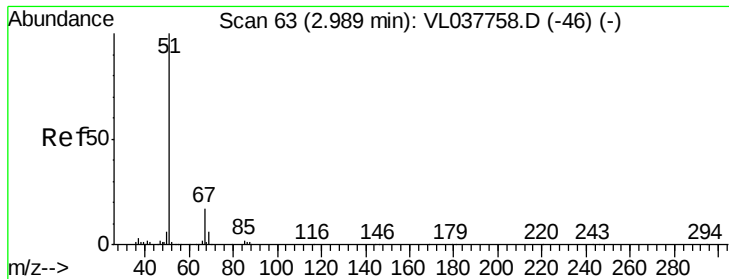
87 41.5 25.7 38.5#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.099 ppbv

RT: 2.98 min Scan# 59

Delta R.T. -0.01 min

Lab File: VL037802.D

Acq: 7 Oct 2021 19:06

Instrument :

MSVOA_L

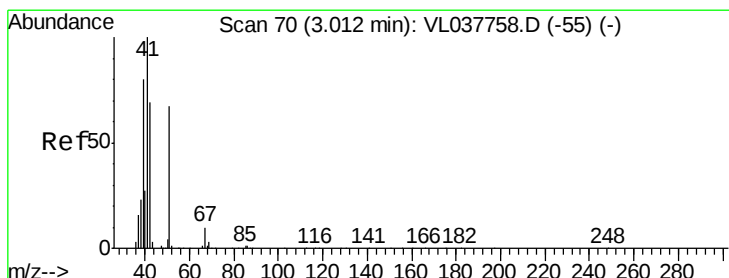
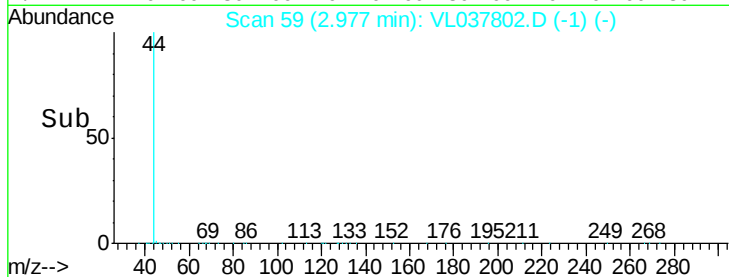
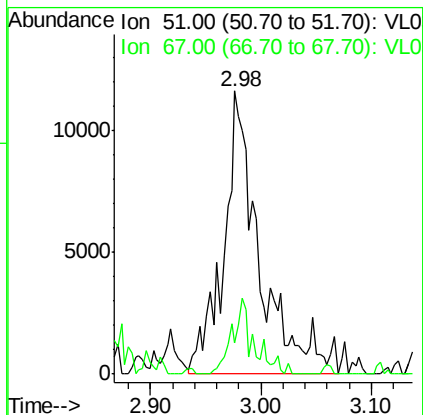
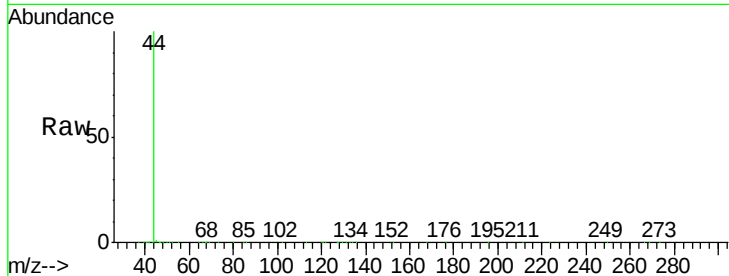
ClientSampleId :

C0P20DUP

Tgt Ion: 51 Resp: 26447
 Ion Ratio Lower Upper
 51 100
 67 16.0 13.5 20.3

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#9

Propene

Concen: 0.933 ppbv

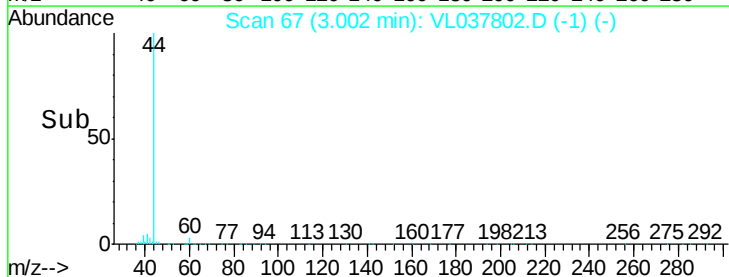
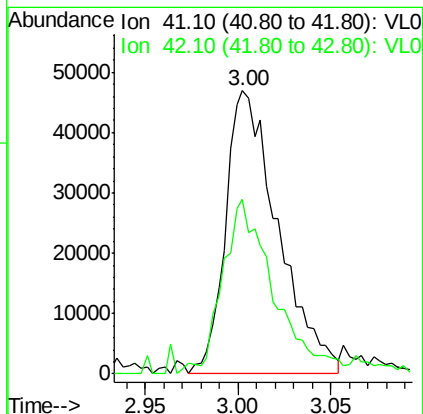
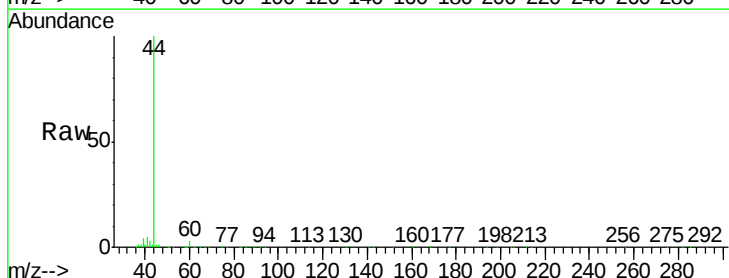
RT: 3.00 min Scan# 67

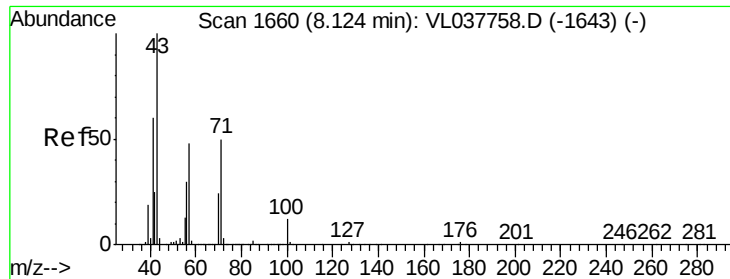
Delta R.T. -0.01 min

Lab File: VL037802.D

Acq: 7 Oct 2021 19:06

Tgt Ion: 41 Resp: 91995
 Ion Ratio Lower Upper
 41 100
 42 66.3 54.2 81.2





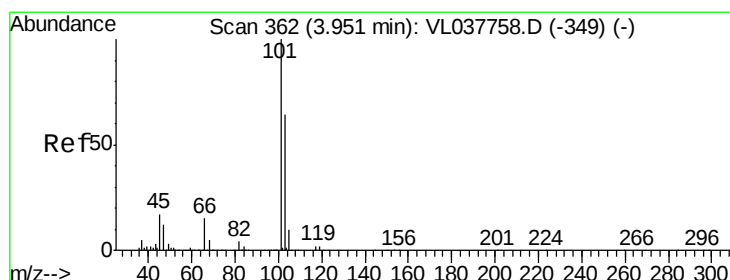
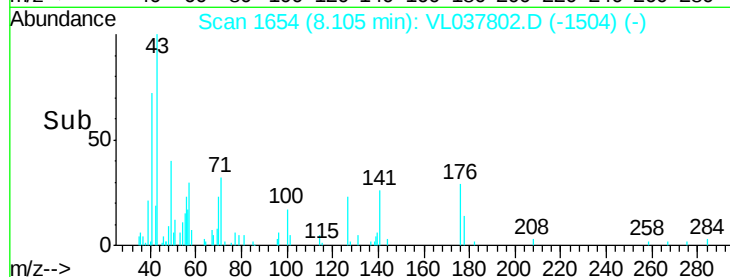
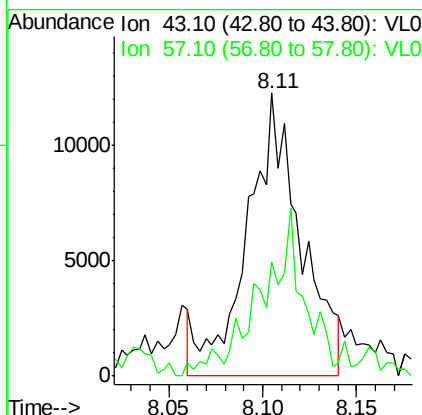
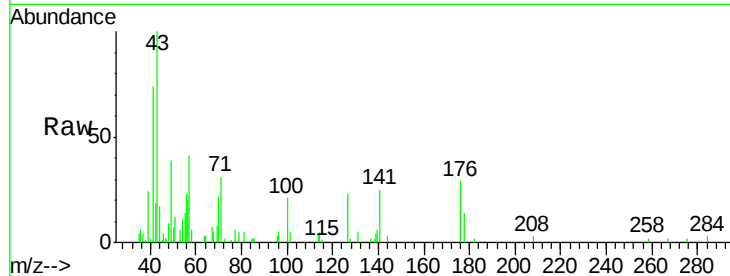
#10
Heptane
Concen: 0.108 ppbv m
RT: 8.11 min Scan# 1654
Delta R.T. -0.02 min
Lab File: VL037802.D
Acq: 7 Oct 2021 19:06

Instrument :
MSVOA_L
ClientSampleId :
C0P20DUP

Tgt Ion: 43 Resp: 24192
Ion Ratio Lower Upper
43 100
57 44.0 40.0 60.0

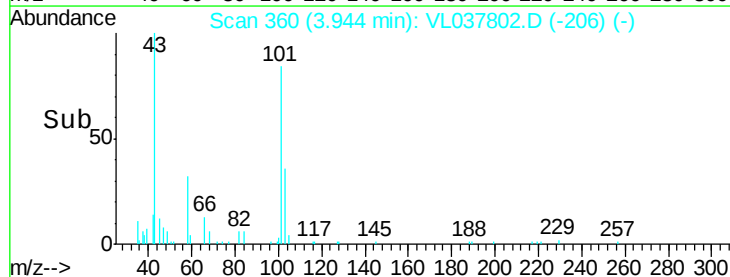
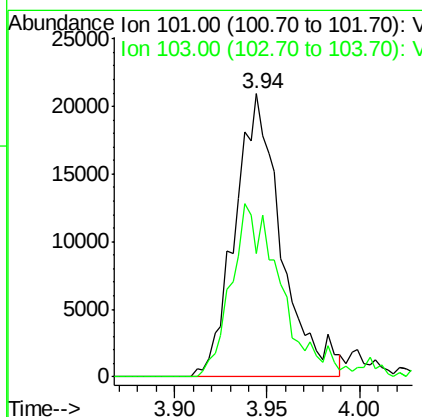
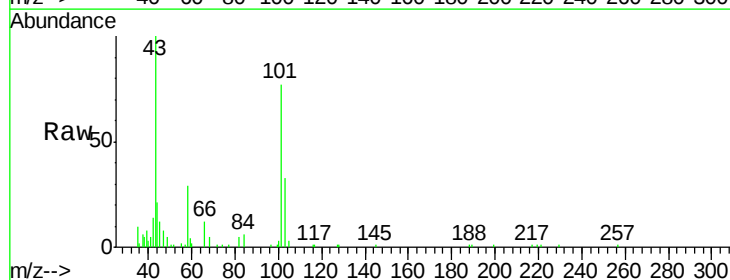
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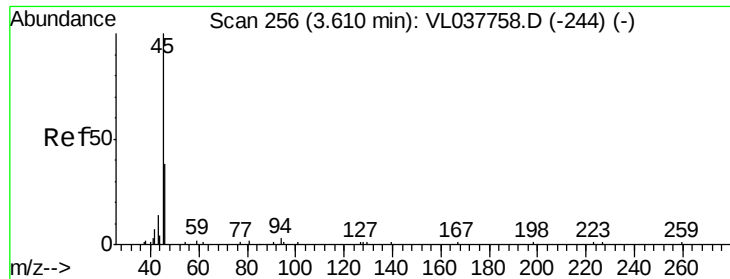
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#11
Trichlorofluoromethane
Concen: 0.184 ppbv m
RT: 3.94 min Scan# 360
Delta R.T. -0.01 min
Lab File: VL037802.D
Acq: 7 Oct 2021 19:06

Tgt Ion: 101 Resp: 36512
Ion Ratio Lower Upper
101 100
103 43.4 51.5 77.3#





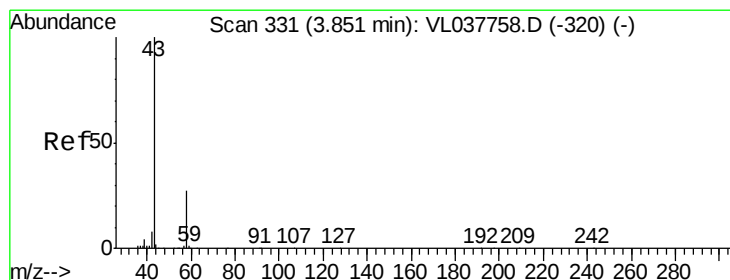
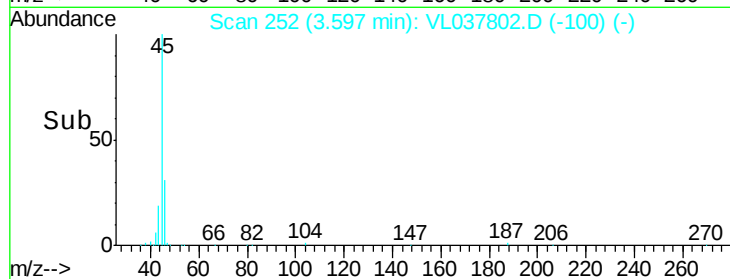
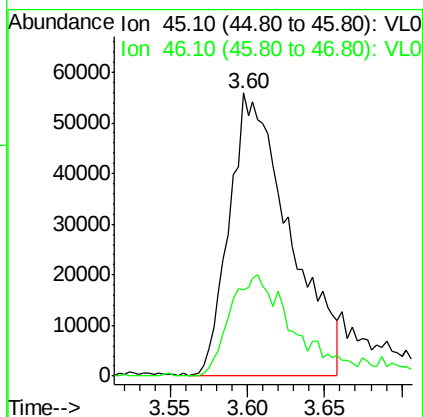
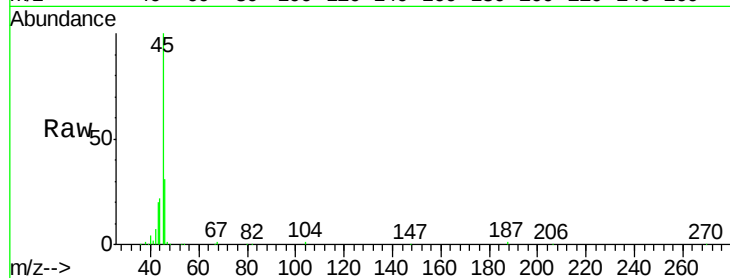
#13
Ethanol
Concen: 18.879 ppbv m
RT: 3.60 min Scan# 252
Delta R.T. -0.01 min
Lab File: VL037802.D
Acq: 7 Oct 2021 19:06

Instrument :
MSVOA_L
ClientSampleId :
C0P20DUP

Tgt Ion: 45 Resp: 152199
Ion Ratio Lower Upper
45 100
46 43.9 20.2 81.0

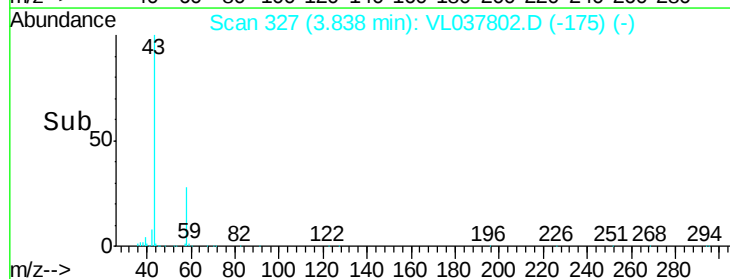
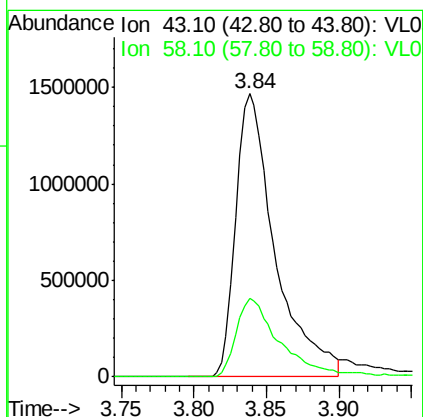
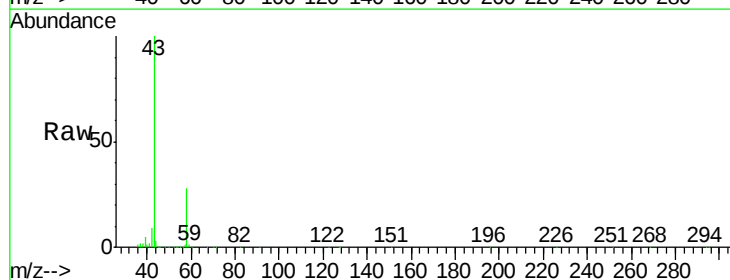
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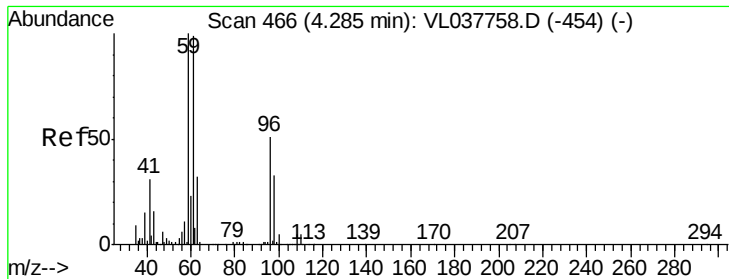
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#15
Acetone
Concen: 22.063 ppbv
RT: 3.84 min Scan# 327
Delta R.T. -0.01 min
Lab File: VL037802.D
Acq: 7 Oct 2021 19:06

Tgt Ion: 43 Resp: 2761666
Ion Ratio Lower Upper
43 100
58 32.7 23.0 34.6





#17

tert-Butyl alcohol

Concen: 0.362 ppbv m

RT: 4.30 min Scan# 471

Delta R.T. 0.02 min

Lab File: VL037802.D

Acq: 7 Oct 2021 19:06

Instrument :

MSVOA_L

ClientSampleId :

C0P20DUP

Tgt Ion: 59 Resp: 46714

Ion Ratio Lower Upper

59 100

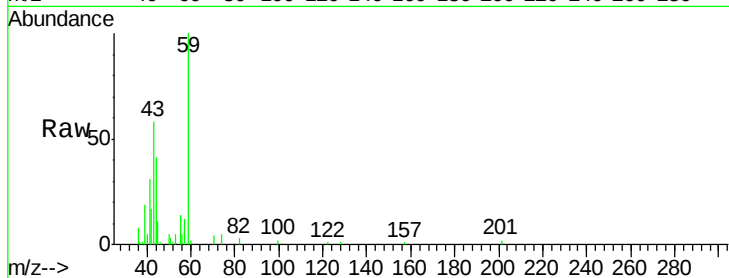
57 13.8 8.6 13.0#

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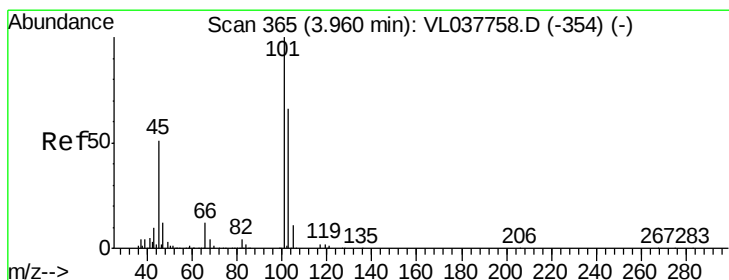
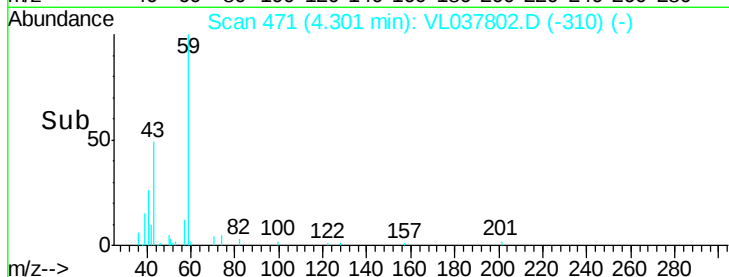
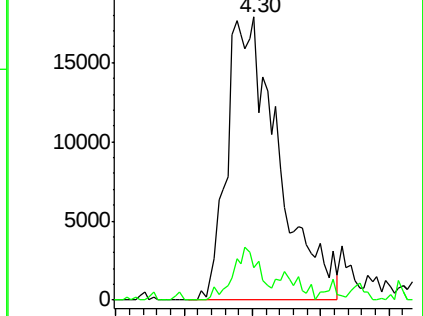
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Abundance Ion 59.10 (58.80 to 59.80): VL0

Ion 57.10 (56.80 to 57.80): VL0



#19

Isopropyl Alcohol

Concen: 0.583 ppbv m

RT: 3.97 min Scan# 368

Delta R.T. 0.01 min

Lab File: VL037802.D

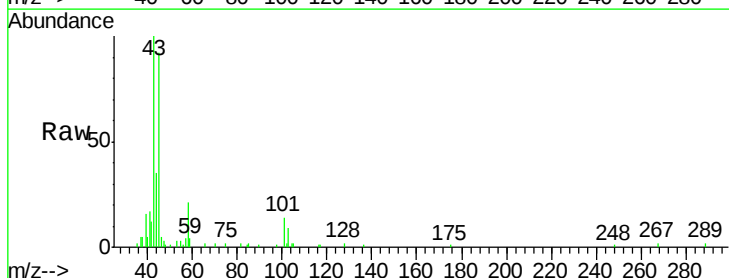
Acq: 7 Oct 2021 19:06

Tgt Ion: 45 Resp: 45421

Ion Ratio Lower Upper

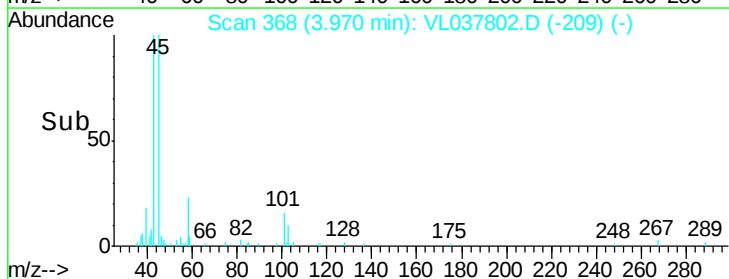
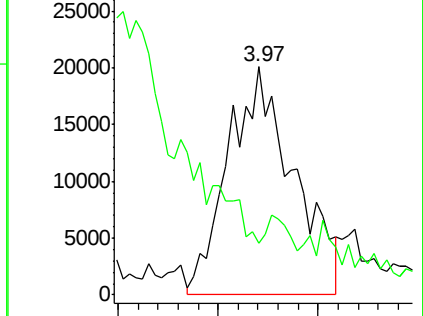
45 100

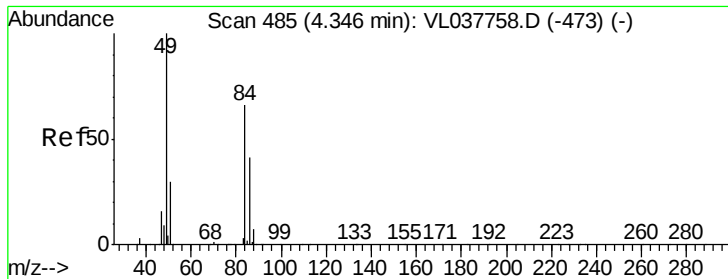
58 0.0 1.1 1.7#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0





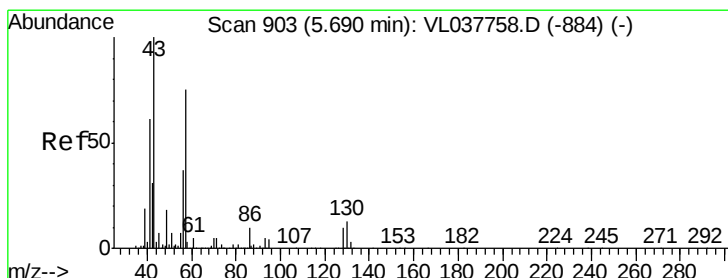
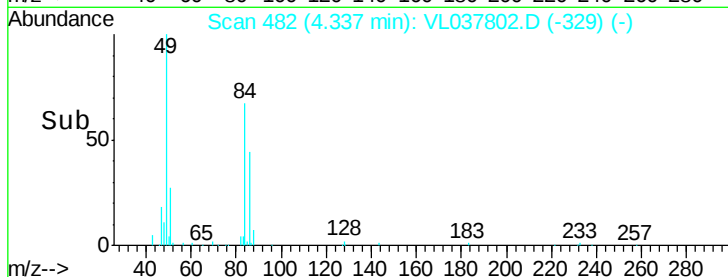
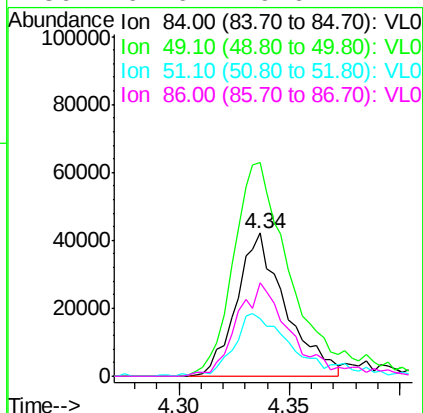
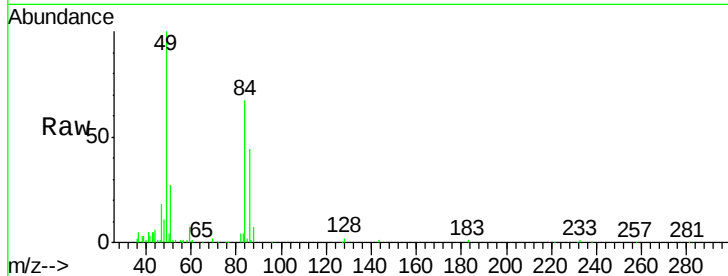
#20
Methylene Chloride
Concen: 1.025 ppbv
RT: 4.34 min Scan# 482
Delta R.T. -0.01 min
Lab File: VL037802.D
Acq: 7 Oct 2021 19:06

Instrument :
MSVOA_L
ClientSampleId :
C0P20DUP

Tgt Ion	Ratio	Lower	Upper
84	100		
49	147.2	120.7	181.1
51	39.8	36.2	54.4
86	64.6	49.6	74.4

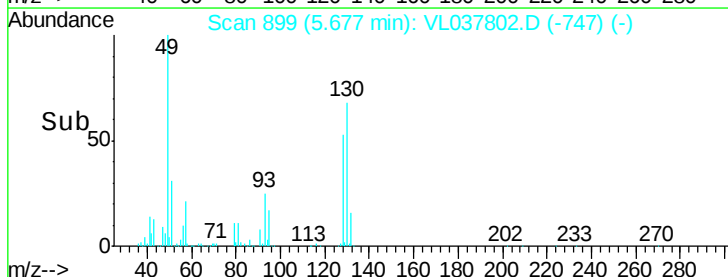
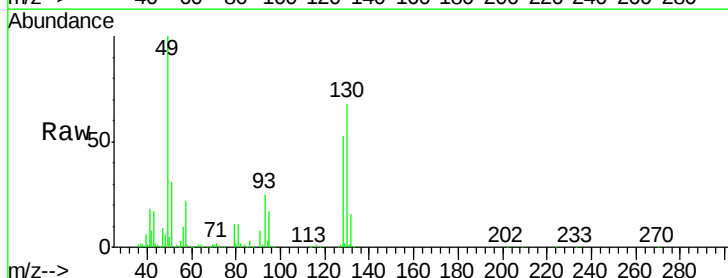
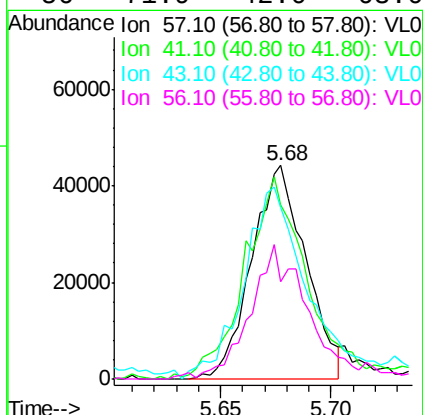
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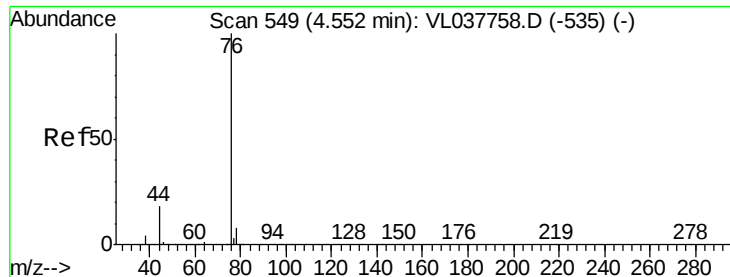
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#26
Hexane
Concen: 0.435 ppbv
RT: 5.68 min Scan# 899
Delta R.T. -0.01 min
Lab File: VL037802.D
Acq: 7 Oct 2021 19:06

Tgt Ion	Ratio	Lower	Upper
57	100		
41	110.5	69.6	104.4#
43	116.2	171.4	257.0#
56	71.9	42.0	63.0#





#27

Carbon Disulfide

Concen: 0.258 ppbv m

RT: 4.54 min Scan# 545

Delta R.T. -0.01 min

Lab File: VL037802.D

Acq: 7 Oct 2021 19:06

Instrument :

MSVOA_L

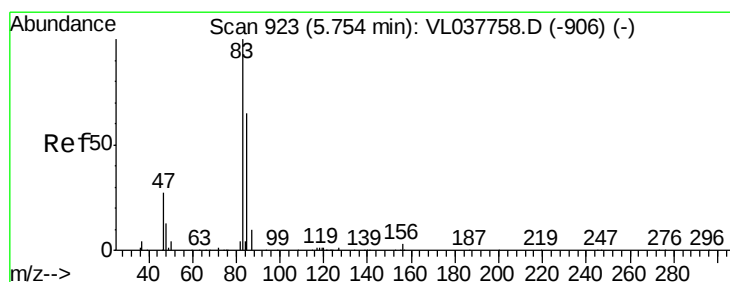
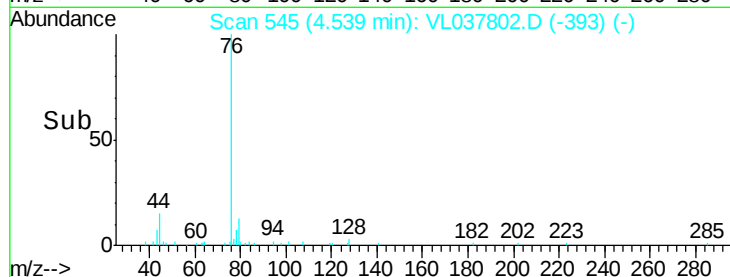
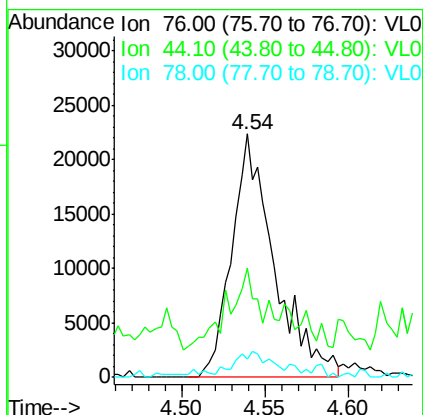
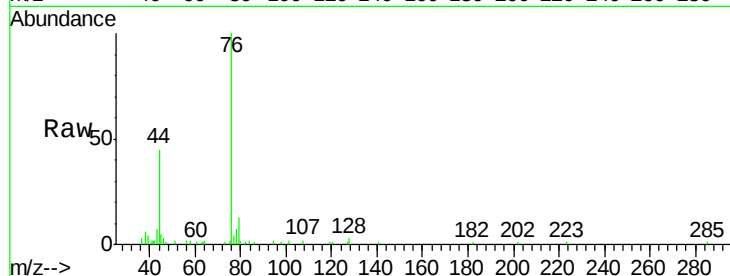
ClientSampled :

C0P20DUP

Tgt Ion	Ratio	Lower	Upper
76	100		
44	42.7	14.3	21.5#
78	14.6	7.8	11.6#

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#29

Chloroform

Concen: 0.775 ppbv

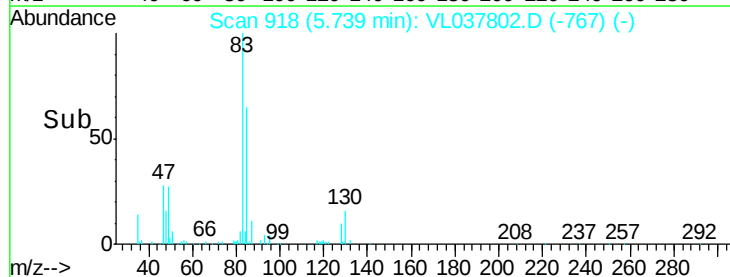
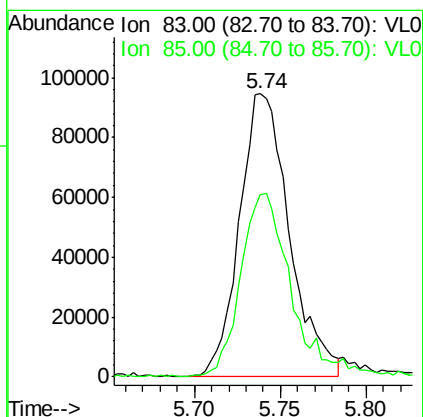
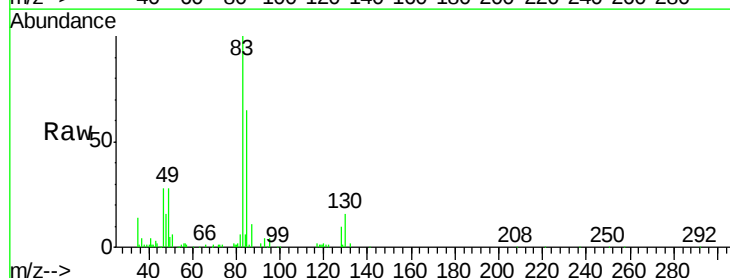
RT: 5.74 min Scan# 918

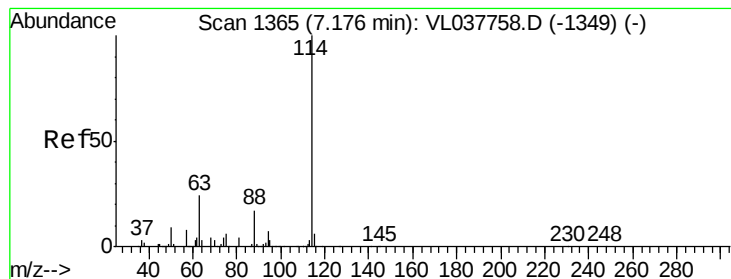
Delta R.T. -0.02 min

Lab File: VL037802.D

Acq: 7 Oct 2021 19:06

Tgt Ion	Ratio	Lower	Upper
83	100		
85	64.3	51.8	77.8





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.16 min Scan# 1360

Delta R.T. -0.02 min

Lab File: VL037802.D

Acq: 7 Oct 2021 19:06

Instrument :

MSVOA_L

ClientSampleId :

C0P20DUP

Tgt Ion: 114 Resp: 3920798

Ion Ratio Lower Upper

114 100

63 24.0 19.4 29.2

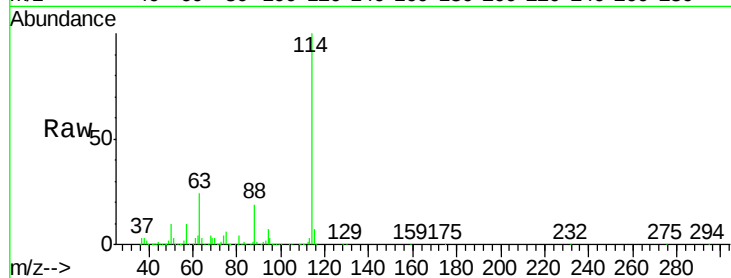
88 17.8 14.4 21.6

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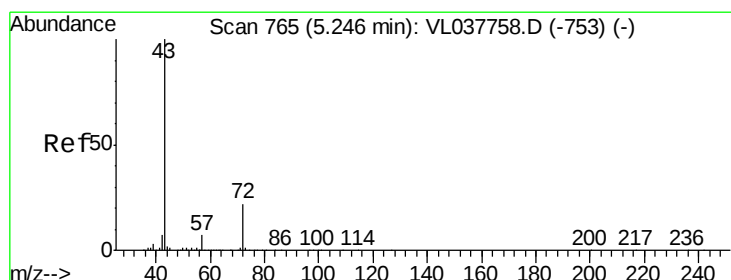
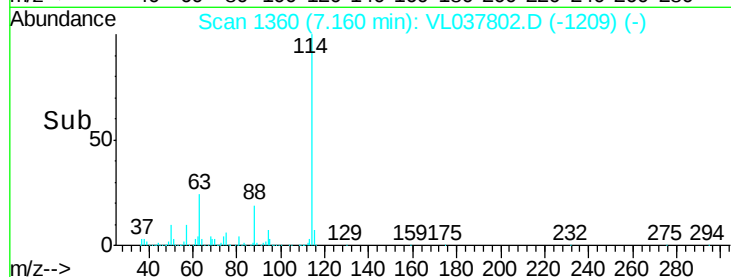
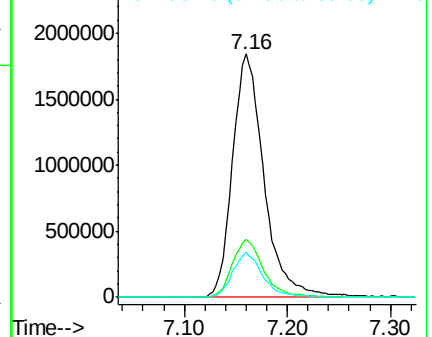
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Abundance Ion 114.10 (113.80 to 114.80): VL0

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0



#34

2-Butanone

Concen: 3.578 ppbv

RT: 5.24 min Scan# 762

Delta R.T. -0.01 min

Lab File: VL037802.D

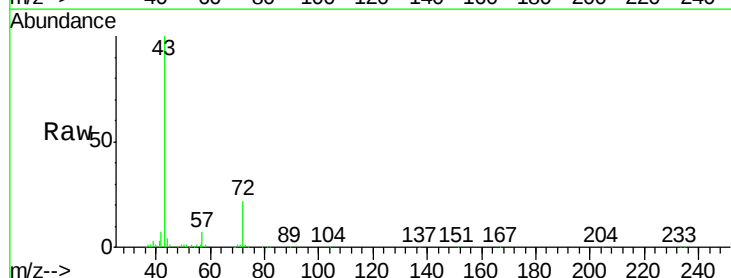
Acq: 7 Oct 2021 19:06

Tgt Ion: 43 Resp: 566286

Ion Ratio Lower Upper

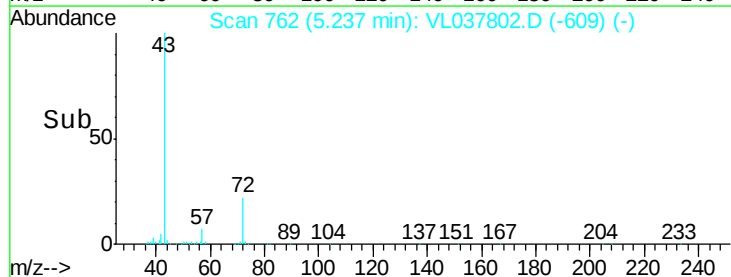
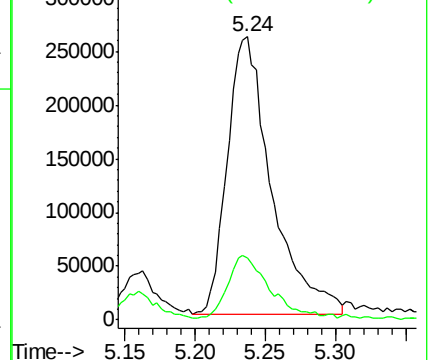
43 100

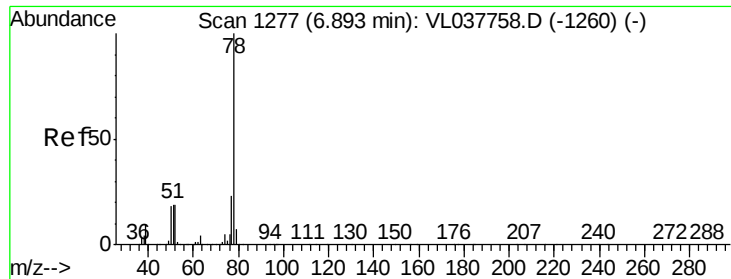
72 23.6 18.2 27.2



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0





#36

Benzene

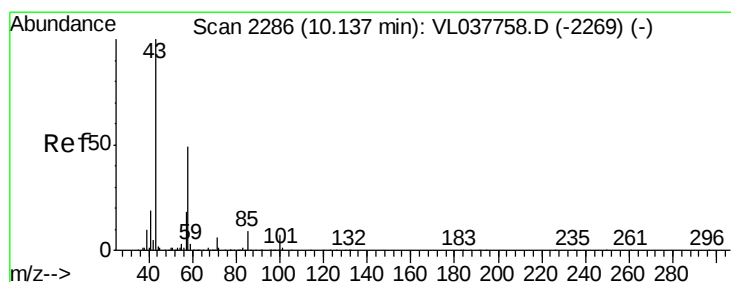
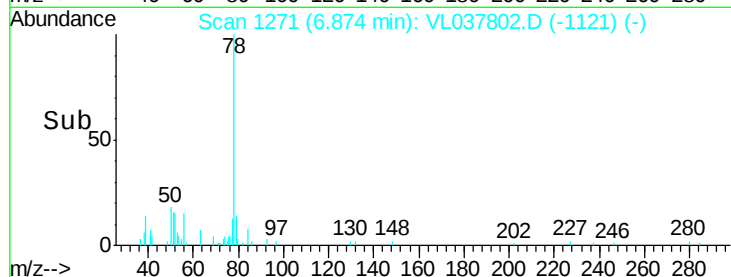
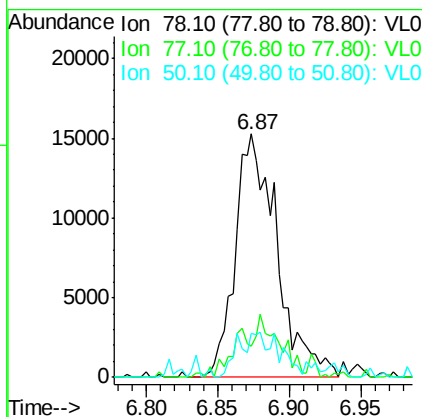
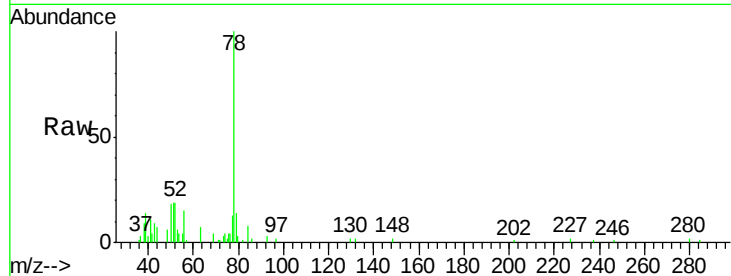
Concen: 0.092 ppbv m
RT: 6.87 min Scan# 1271
Delta R.T. -0.02 min
Lab File: VL037802.D
Acq: 7 Oct 2021 19:06

Instrument :
MSVOA_L
ClientSampleId :
C0P20DUP

Tgt Ion	Ratio	Lower	Upper
78	100		
77	12.8	18.8	28.2#
50	18.1	14.7	22.1

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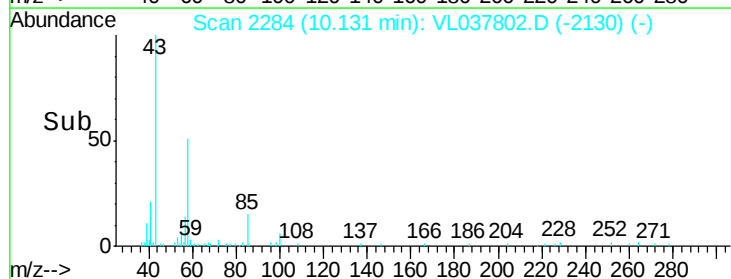
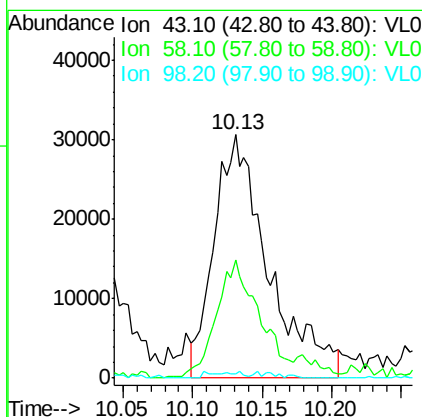
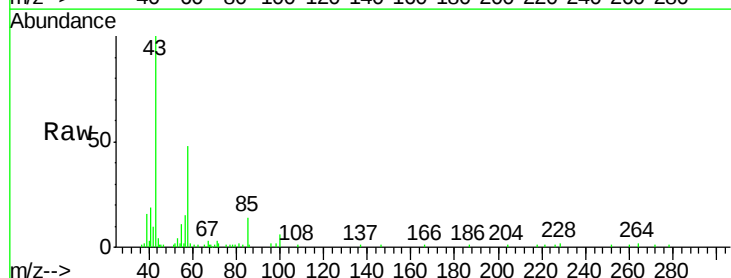


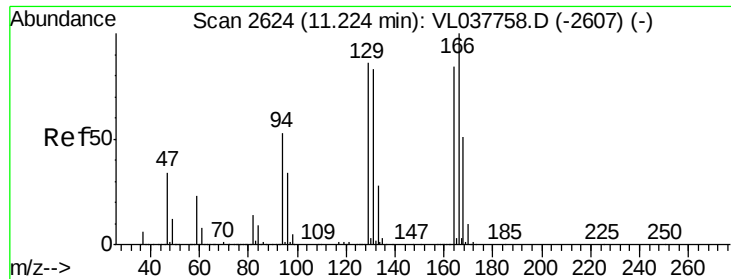
#51

2-Hexanone

Concen: 0.908 ppbv m
RT: 10.13 min Scan# 2284
Delta R.T. -0.01 min
Lab File: VL037802.D
Acq: 7 Oct 2021 19:06

Tgt Ion	Ratio	Lower	Upper
43	100		
58	0.0	39.4	59.0#
98	1.4	0.3	0.5#





#52

Tetrachloroethene

Concen: 1.404 ppbv

RT: 11.20 min Scan# 2618

Delta R.T. -0.02 min

Lab File: VL037802.D

Acq: 7 Oct 2021 19:06

Instrument :

MSVOA_L

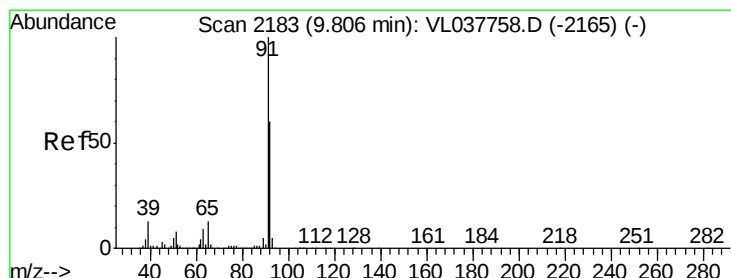
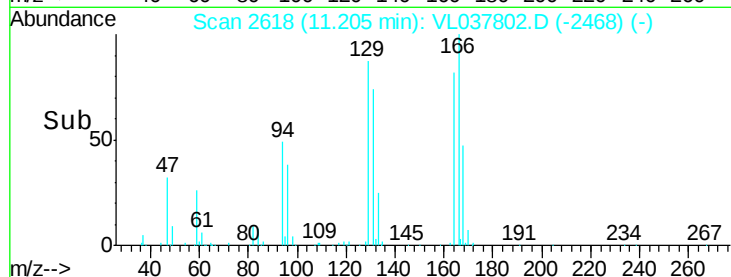
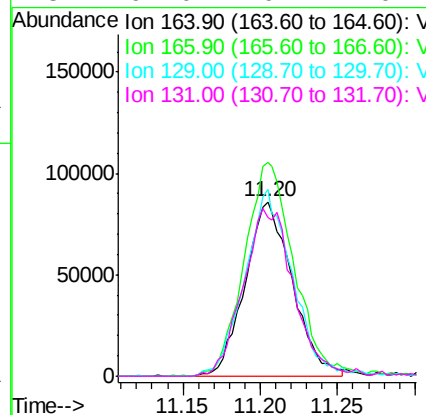
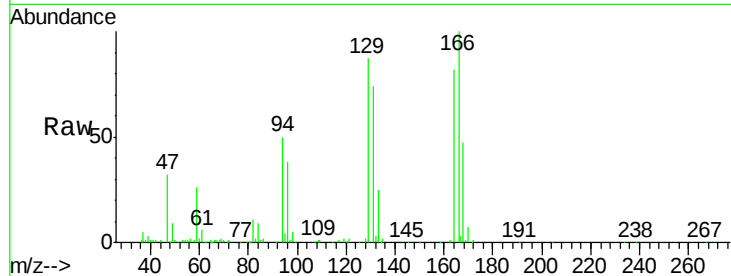
ClientSampleId :

C0P20DUP

Tgt Ion:	164	Resp:	182941
Ion Ratio	Lower	Upper	
164	100		
166	122.4	95.4	143.2
129	106.9	82.2	123.4
131	91.0	79.4	119.2

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#53

Toluene

Concen: 0.170 ppbv m

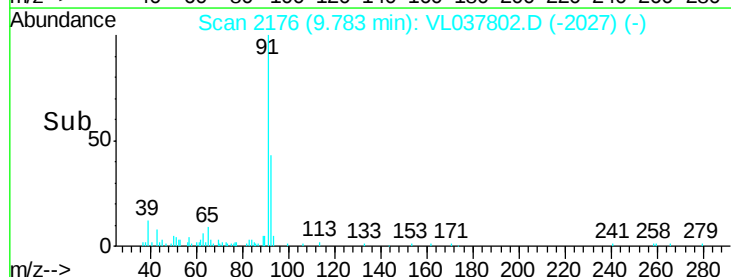
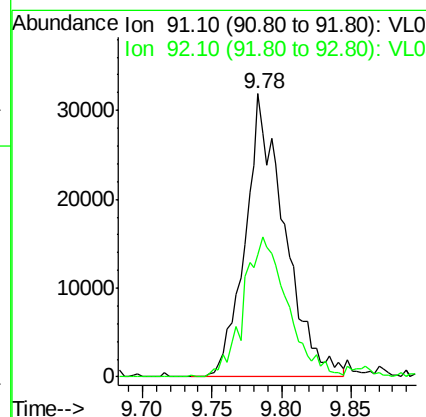
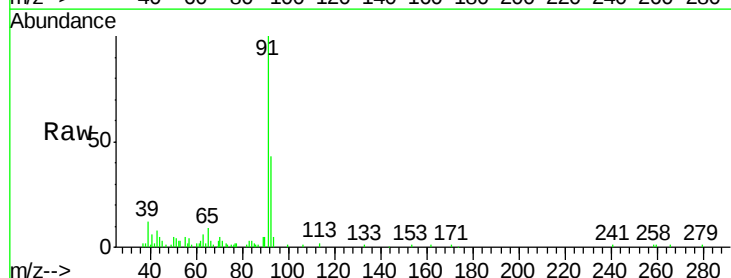
RT: 9.78 min Scan# 2176

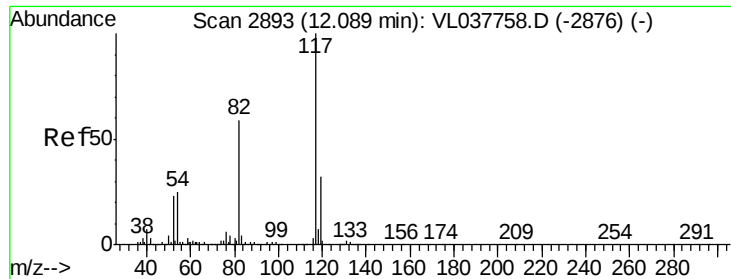
Delta R.T. -0.02 min

Lab File: VL037802.D

Acq: 7 Oct 2021 19:06

Tgt Ion:	91	Resp:	62931
Ion Ratio	Lower	Upper	
91	100		
92	55.3	48.4	72.6





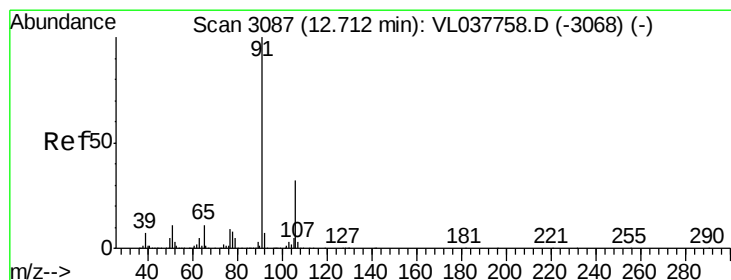
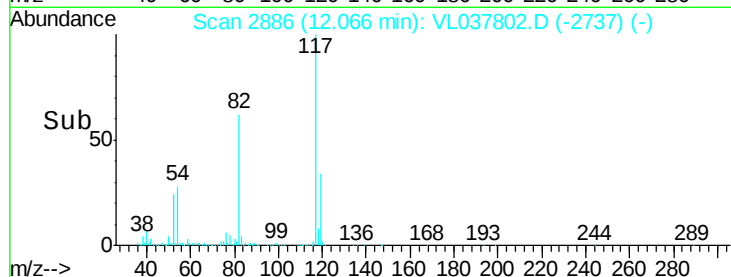
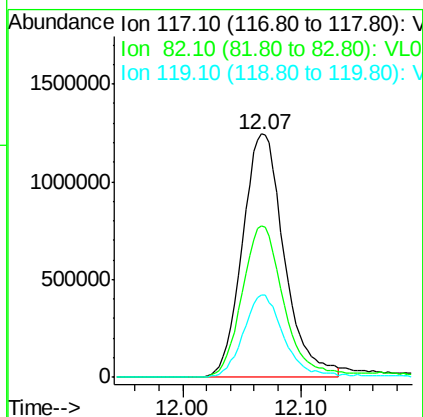
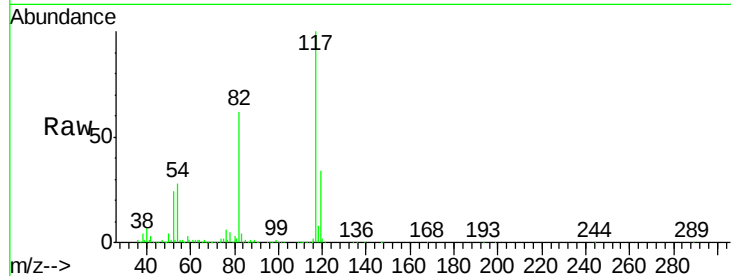
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.07 min Scan# 2886
Delta R.T. -0.02 min
Lab File: VL037802.D
Acq: 7 Oct 2021 19:06

Instrument :
MSVOA_L
ClientSampleId :
C0P20DUP

Tgt Ion: 117 Resp: 3031417
Ion Ratio Lower Upper
117 100
82 64.7 52.2 78.2
119 33.8 26.0 39.0

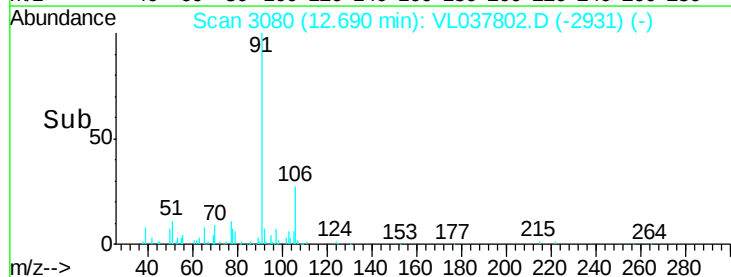
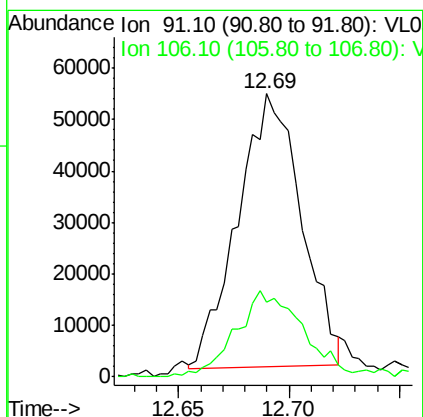
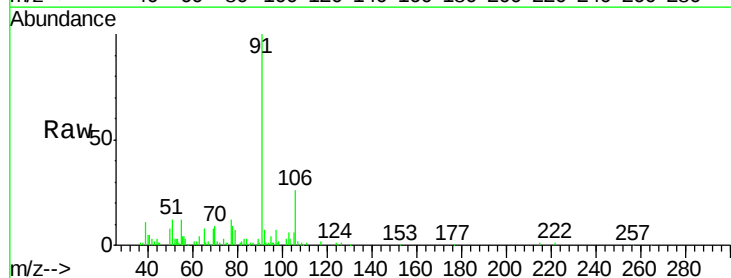
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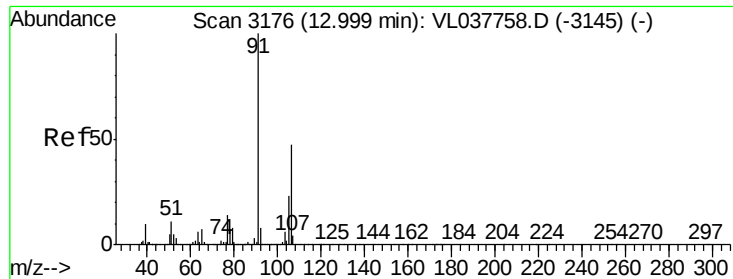
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#58
Ethyl Benzene
Concen: 0.260 ppbv
RT: 12.69 min Scan# 3080
Delta R.T. -0.02 min
Lab File: VL037802.D
Acq: 7 Oct 2021 19:06

Tgt Ion: 91 Resp: 105937
Ion Ratio Lower Upper
91 100
106 25.6 25.3 37.9





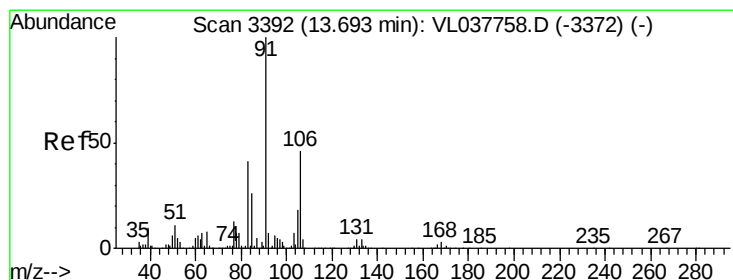
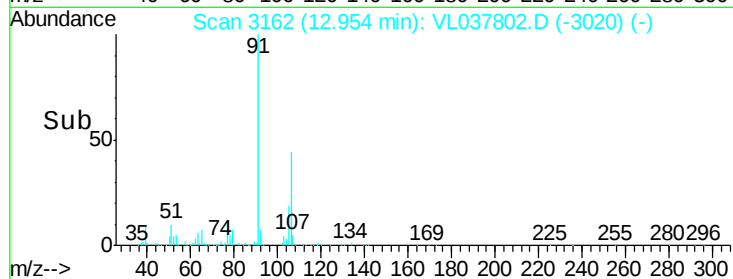
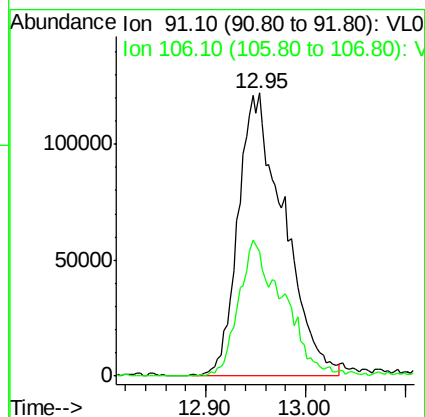
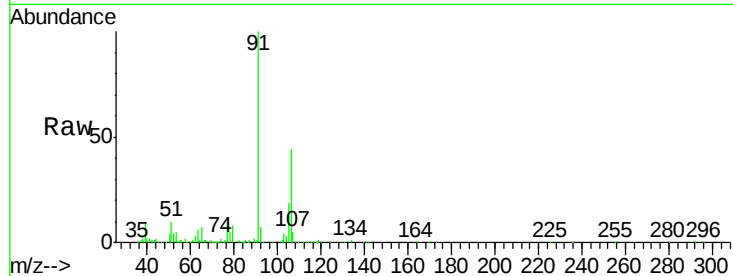
#59
m/p-Xylene
Concen: 1.117 ppbv m
RT: 12.95 min Scan# 3162
Delta R.T. -0.04 min
Lab File: VL037802.D
Acq: 7 Oct 2021 19:06

Instrument :
MSVOA_L
ClientSampleId :
C0P20DUP

Tgt Ion: 91 Resp: 390208
Ion Ratio Lower Upper
91 100
106 0.0 36.7 55.1#

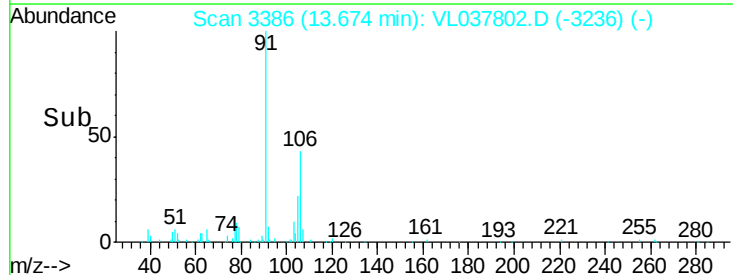
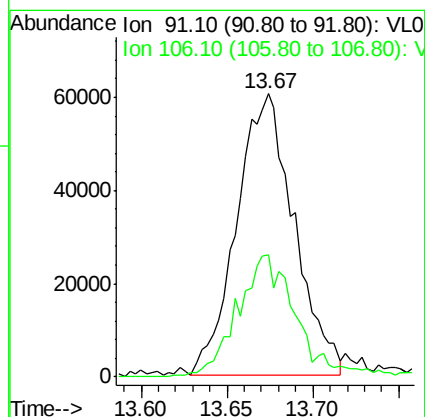
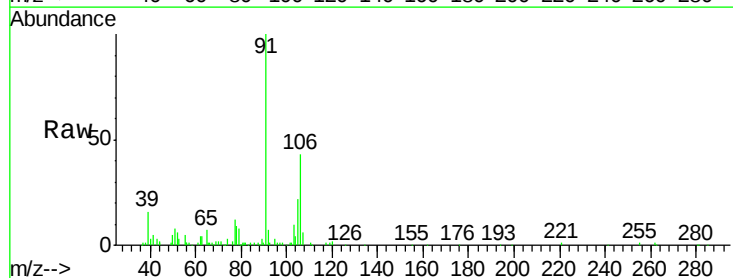
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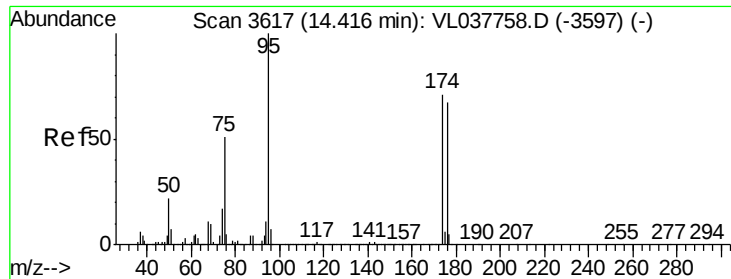
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#60
o-Xylene
Concen: 0.418 ppbv
RT: 13.67 min Scan# 3386
Delta R.T. -0.02 min
Lab File: VL037802.D
Acq: 7 Oct 2021 19:06

Tgt Ion: 91 Resp: 140066
Ion Ratio Lower Upper
91 100
106 44.9 23.5 70.5





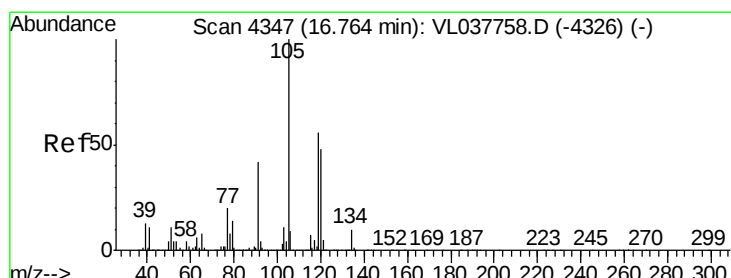
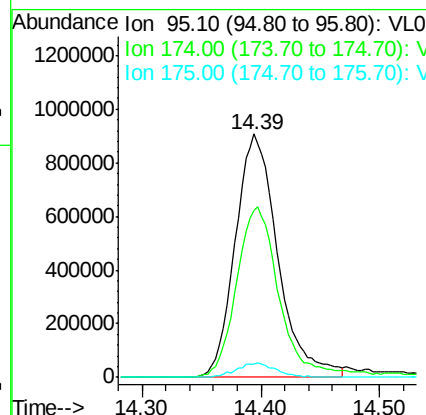
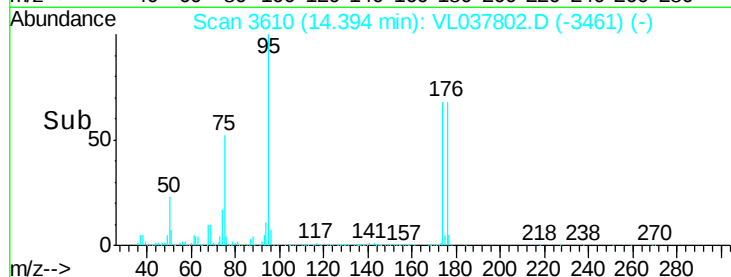
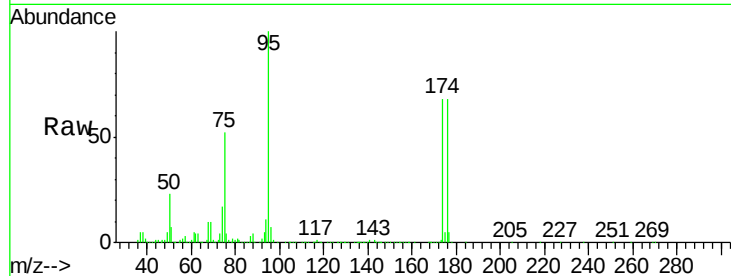
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.606 ppbv
 RT: 14.39 min Scan# 3610
 Delta R.T. -0.02 min
 Lab File: VL037802.D
 Acq: 7 Oct 2021 19:06

Instrument :
 MSVOA_L
 ClientSampleId :
 C0P20DUP

Tgt Ion: 95 Resp: 2248268
 Ion Ratio Lower Upper
 95 100
 174 73.6 57.8 86.6
 175 5.8 4.7 7.1

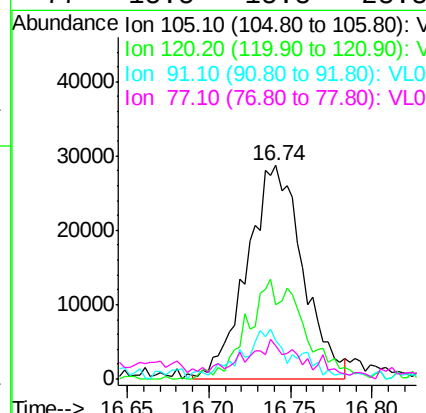
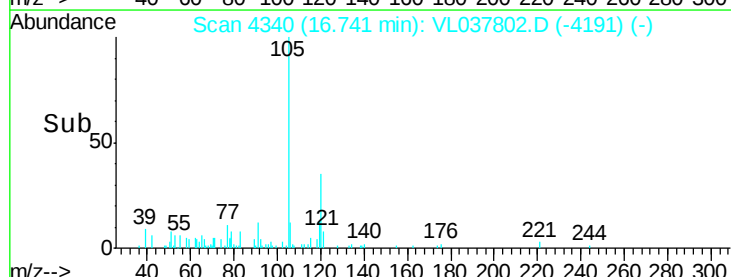
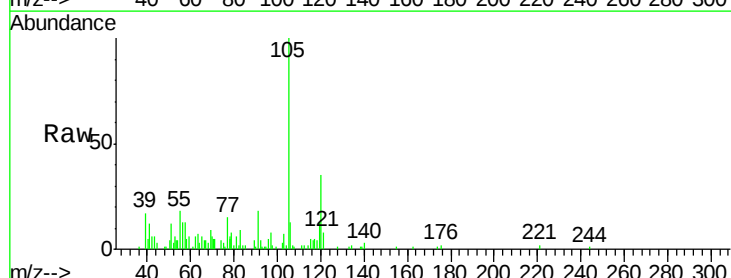
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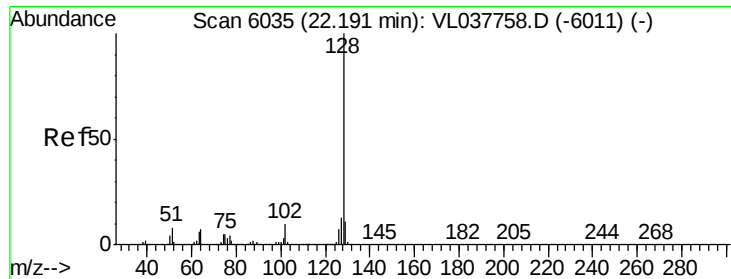
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#74
 1,2,4-Trimethylbenzene
 Concen: 0.187 ppbv m
 RT: 16.74 min Scan# 4340
 Delta R.T. -0.02 min
 Lab File: VL037802.D
 Acq: 7 Oct 2021 19:06

Tgt Ion: 105 Resp: 67851
 Ion Ratio Lower Upper
 105 100
 120 35.0 38.4 57.6#
 91 18.3 34.2 51.2#
 77 15.5 15.8 23.8#





#79
Naphthalene
Concen: 0.148 ppbv m
RT: 22.18 min Scan# 6030
Delta R.T. -0.02 min
Lab File: VL037802.D
Acq: 7 Oct 2021 19:06

Instrument :
MSVOA_L
ClientSampleId :
C0P20DUP

Tgt Ion	Ratio	Resp Lower	Resp Upper
128	100		
127	9.8	10.1	15.1#
129	13.3	9.1	13.7

Manual Integrations
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