

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL052021\
 Data File : VL037040.D
 Acq On : 21 May 2021 1:26
 Operator : SY/AP
 Sample : M2424-13 2X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 DUP-03-05132021

Manual Integrations
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 5/24/2021 3:27:39 PM

Quant Time: May 21 03:52:52 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL051821AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue May 18 2021
 QLast Update : Tue May 18 12:00:15 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.63	49	1130137	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.14	114	3307666	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.04	117	3005708	10.00	ppbv	-0.02

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.37	95	2211006	9.79	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.90%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.02	85	31075	0.162	ppbv #	87
3) Chlorodifluoromethane	2.96	51	31882	0.154	ppbv	99
4) Chloromethane	3.11	50	38842	0.551	ppbv	97
9) Propene	2.98	41	74705	1.008	ppbv	99
10) Heptane	8.08	43	104630m	0.566	ppbv	
11) Trichlorofluoromethane	3.92	101	17546	0.099	ppbv	88
13) Ethanol	3.58	45	319647	32.314	ppbv	96
15) Acetone	3.82	43	8968648	77.479	ppbv	99
17) tert-Butyl alcohol	4.28	59	81750	0.771	ppbv	94
19) Isopropyl Alcohol	3.95	45	151777	2.439	ppbv #	30
20) Methylene Chloride	4.31	84	2076745	33.469	ppbv	99
26) Hexane	5.65	57	1813774	12.764	ppbv #	49
29) Chloroform	5.72	83	69354	0.345	ppbv	92
30) Cyclohexane	7.10	84	18259m	0.151	ppbv	
34) 2-Butanone	5.21	43	545796	4.532	ppbv	97
36) Benzene	6.85	78	45989m	0.161	ppbv	
50) 4-Methyl-2-Pentanone	8.72	43	56251m	0.283	ppbv	
51) 2-Hexanone	10.10	43	68956m	0.656	ppbv	
53) Toluene	9.76	91	535243	1.579	ppbv	98
58) Ethyl Benzene	12.67	91	42855	0.101	ppbv	94
59) m/p-Xylene	12.93	91	106472m	0.304	ppbv	
60) o-Xylene	13.65	91	39563m	0.118	ppbv	
61) Styrene	13.48	104	26189m	0.139	ppbv	
72) 4-Ethyltoluene	15.80	105	48355	0.122	ppbv #	94
73) 1,3,5-Trimethylbenzene	15.96	105	71196m	0.191	ppbv	
74) 1,2,4-Trimethylbenzene	16.72	105	191832	0.498	ppbv #	70

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

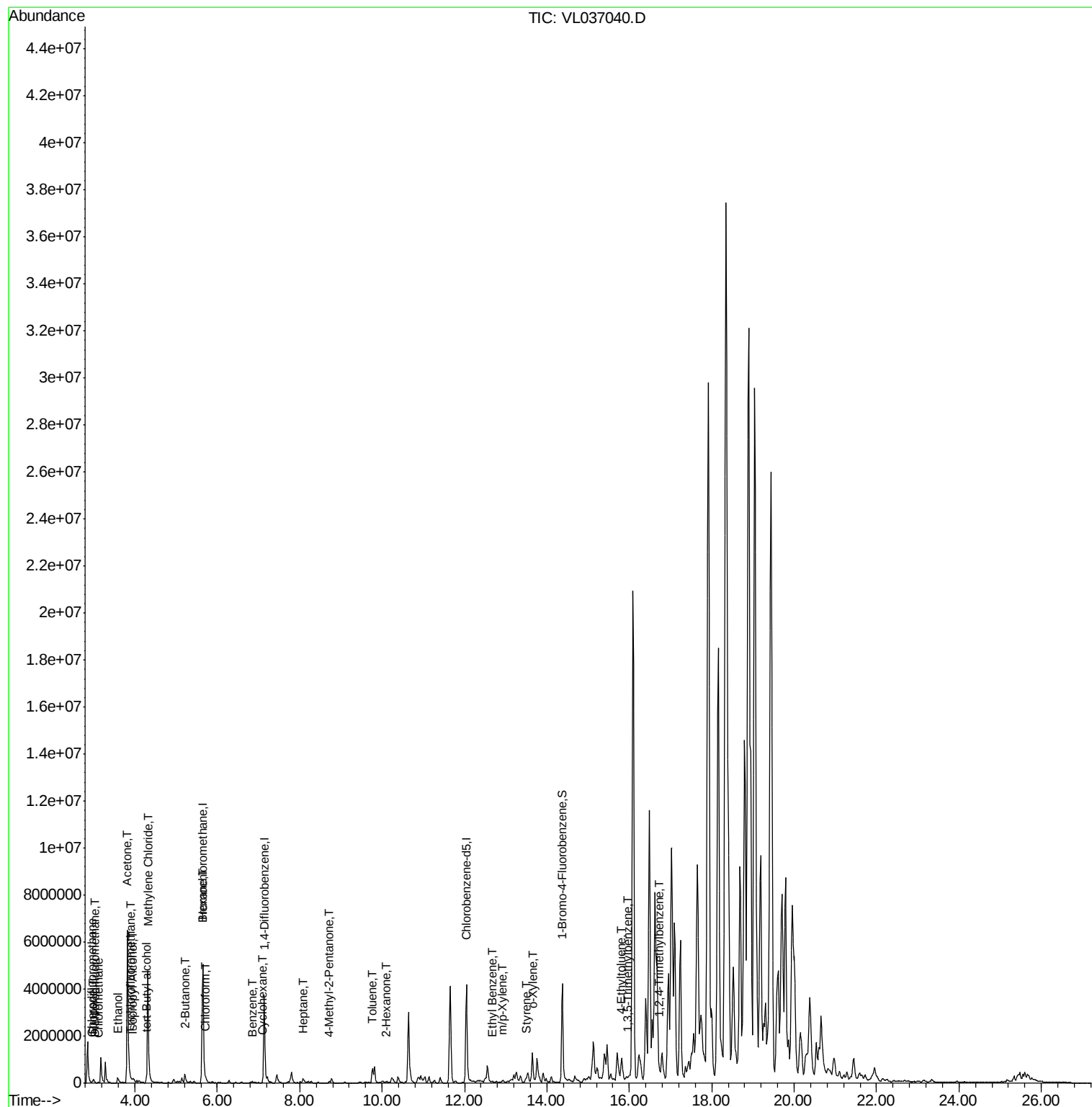
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL052021\
Data File : VL037040.D
Acq On : 21 May 2021 1:26
Operator : SY/AP
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Misc : 400mL/MSVOA L
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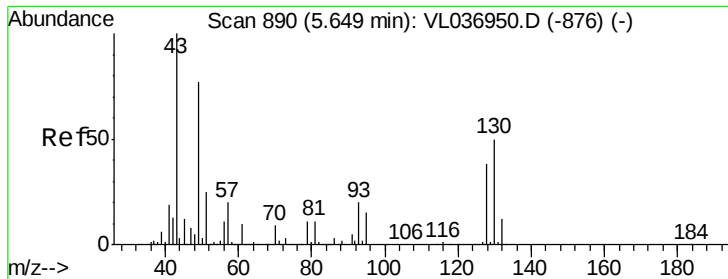
Instrument :
MSVOA_L
ClientSampleId :
DUP-03-05132021

Manual Integrations
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Quant Time: May 21 03:52:52 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL051821AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LTue May
QLast Update : Tue May 18 12:00:15 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.63 min Scan# 885

Delta R.T. -0.02 min

Lab File: VL037040.D

Acq: 21 May 2021 1:26

Instrument :

MSVOA_L

ClientSampleId :

DUP-03-05132021

Tot Ion: 49 Resp: 1130137

Ion Ratio Lower Upper

49 100

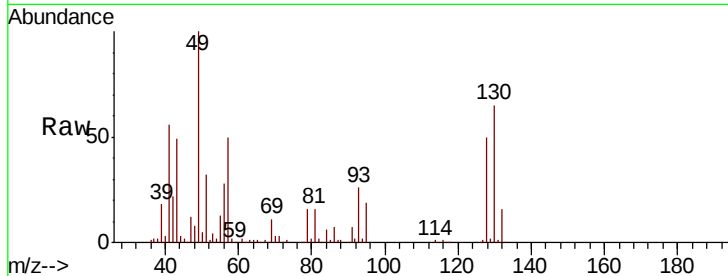
128 53.5 26.9 80.7

130 69.3 33.8 101.4

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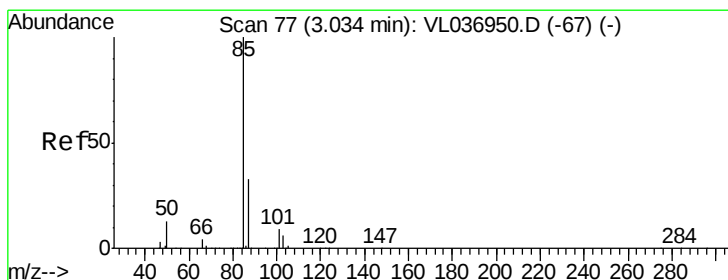
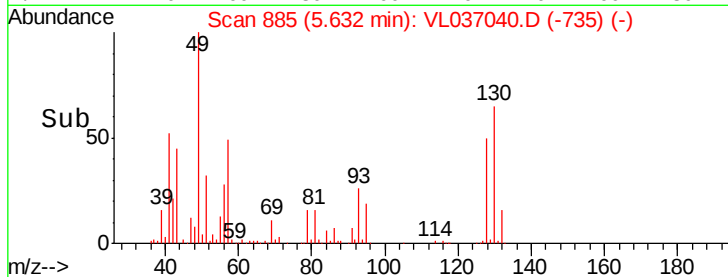
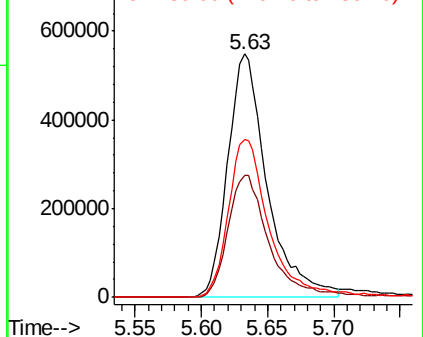
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Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.162 ppbv

RT: 3.02 min Scan# 74

Delta R.T. -0.01 min

Lab File: VL037040.D

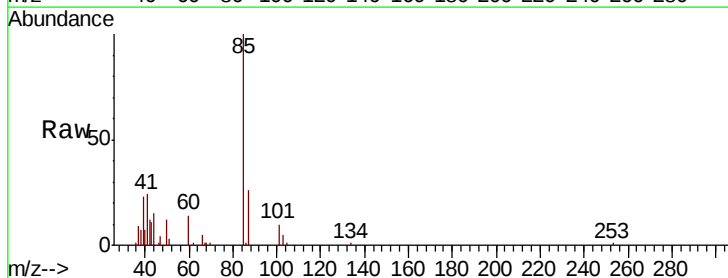
Acq: 21 May 2021 1:26

Tgt Ion: 85 Resp: 31075

Ion Ratio Lower Upper

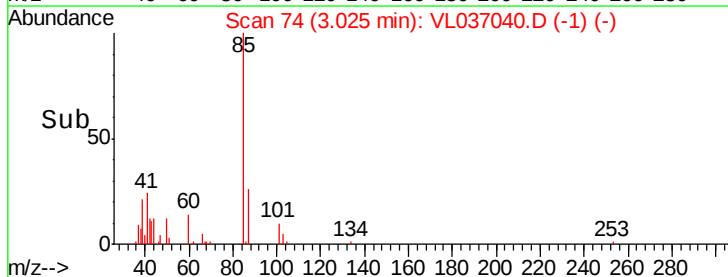
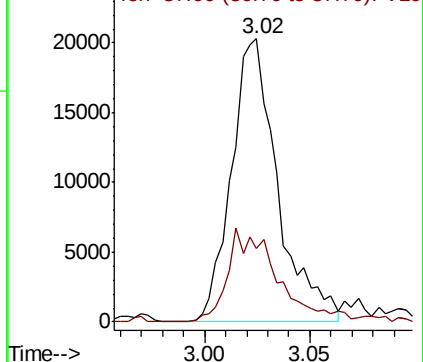
85 100

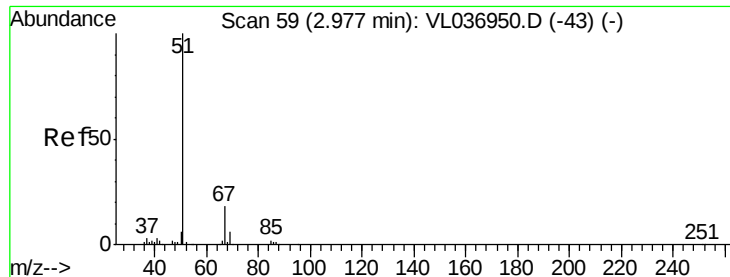
87 26.1 26.6 39.8#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.154 ppbv

RT: 2.96 min Scan# 53

Delta R.T. -0.02 min

Lab File: VL037040.D

Acq: 21 May 2021 1:26

Instrument :

MSVOA_L

ClientSampleId :

DUP-03-05132021

Tot Ion: 51 Resp: 31882

Ion Ratio Lower Upper

51 100

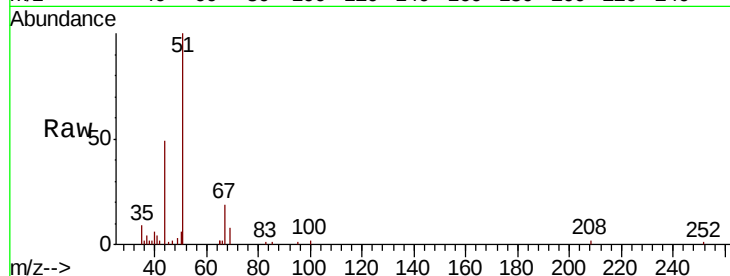
67 18.7 14.6 21.8

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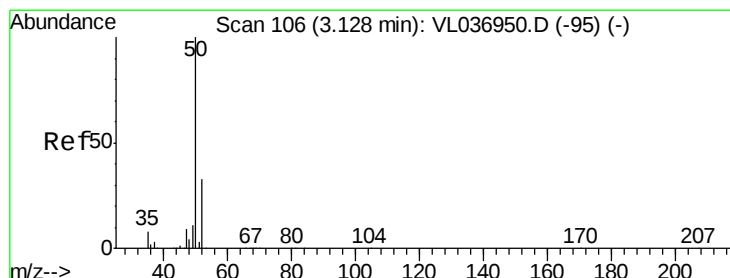
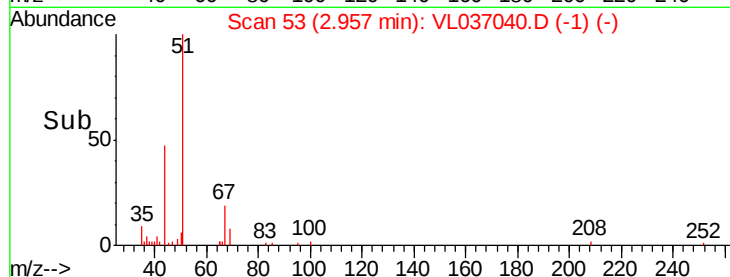
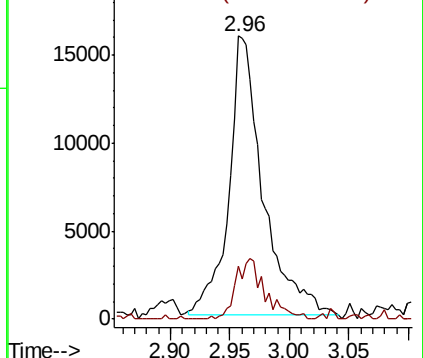
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.551 ppbv

RT: 3.11 min Scan# 101

Delta R.T. -0.02 min

Lab File: VL037040.D

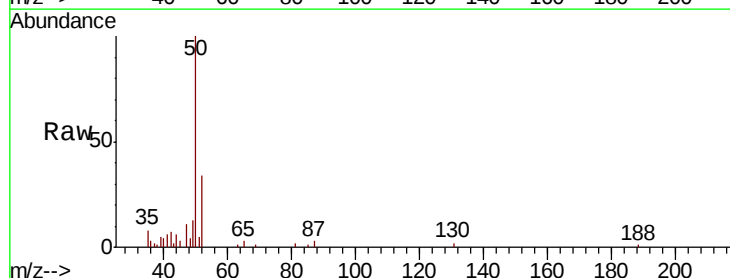
Acq: 21 May 2021 1:26

Tgt Ion: 50 Resp: 38842

Ion Ratio Lower Upper

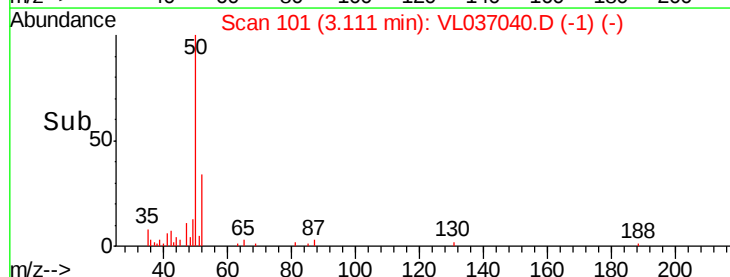
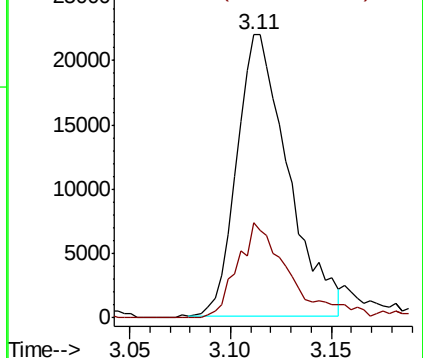
50 100

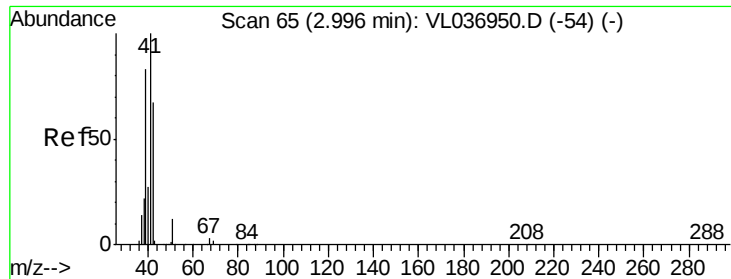
52 34.3 26.1 39.1



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 1.008 ppbv

RT: 2.98 min Scan# 61

Delta R.T. -0.01 min

Lab File: VL037040.D

Acq: 21 May 2021 1:26

Instrument :

MSVOA_L

ClientSampleId :

DUP-03-05132021

Tot Ion: 41 Resp: 74705

Ion Ratio Lower Upper

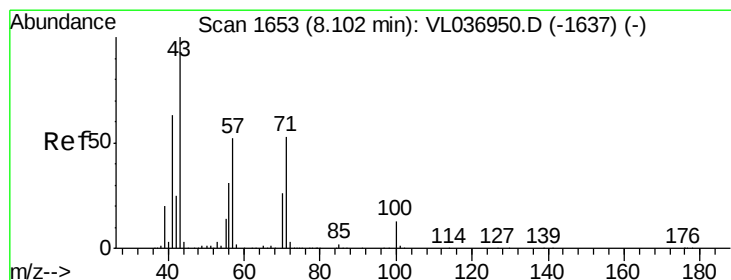
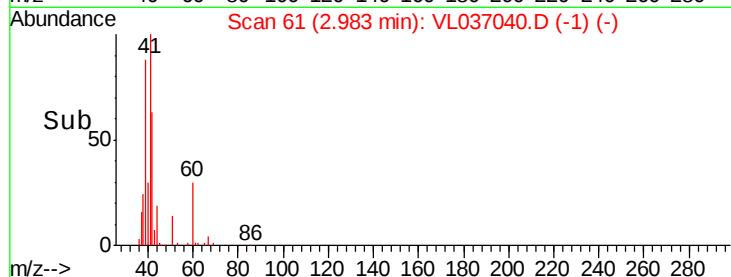
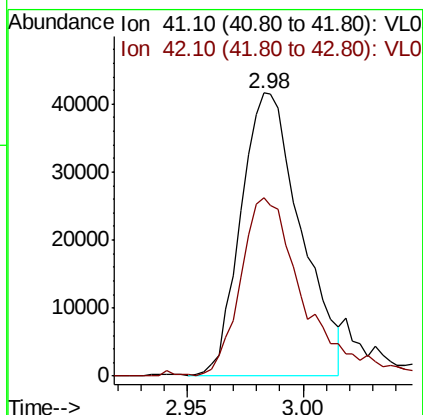
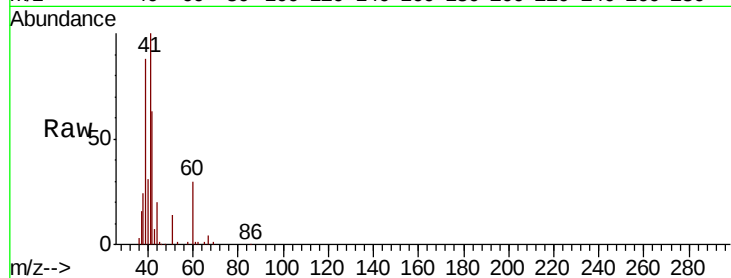
41 100

42 67.9 53.9 80.9

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#10

Heptane

Concen: 0.566 ppbv m

RT: 8.08 min Scan# 1646

Delta R.T. -0.02 min

Lab File: VL037040.D

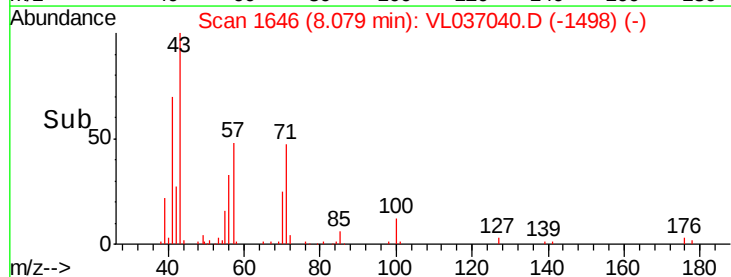
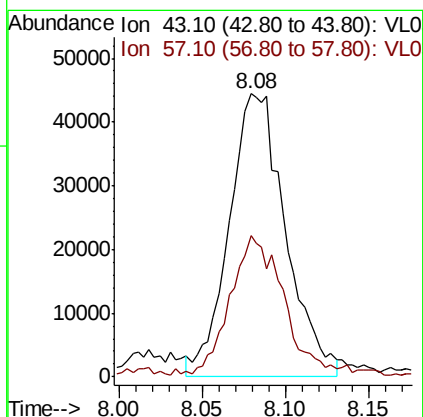
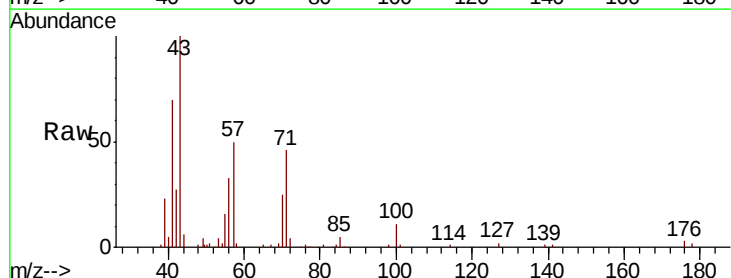
Acq: 21 May 2021 1:26

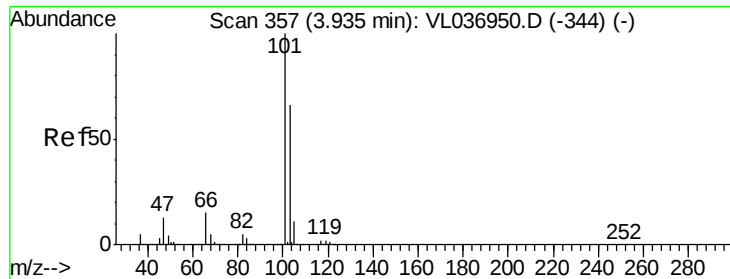
Tgt Ion: 43 Resp: 104630

Ion Ratio Lower Upper

43 100

57 47.8 41.0 61.6





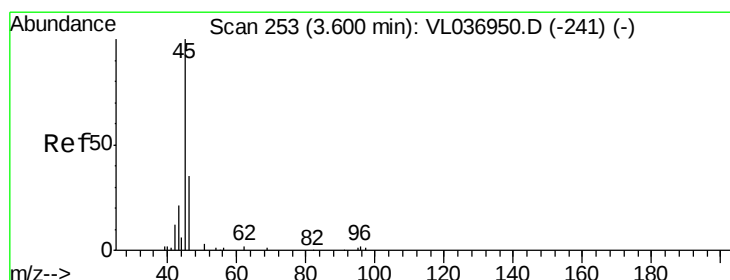
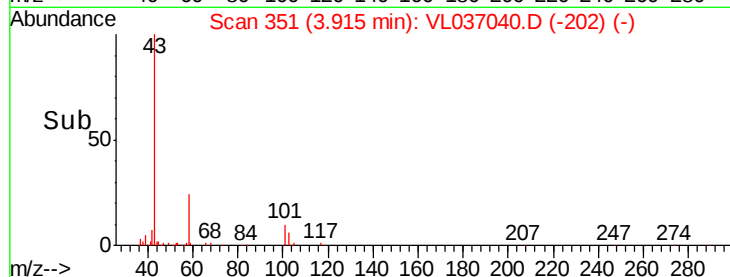
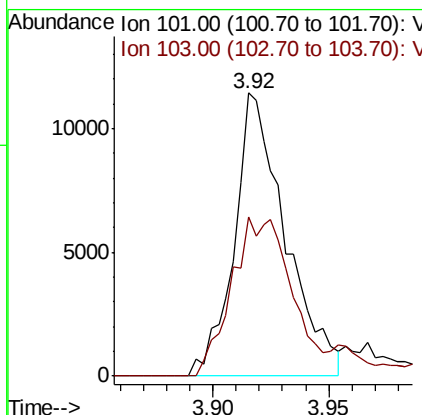
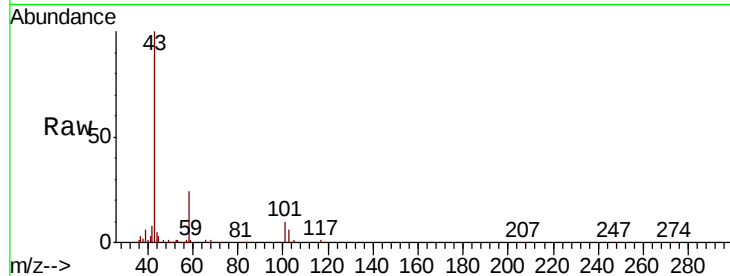
#11
Trichlorofluoromethane
Concen: 0.099 ppbv
RT: 3.92 min Scan# 351
Delta R.T. -0.02 min
Lab File: VL037040.D
Acq: 21 May 2021 1:26

Instrument :
MSVOA_L
ClientSampleId :
DUP-03-05132021

Tot Ion	Ion	Ratio	Resp	Lower	Upper
101	100		17546		
103	56.3		52.6	79.0	

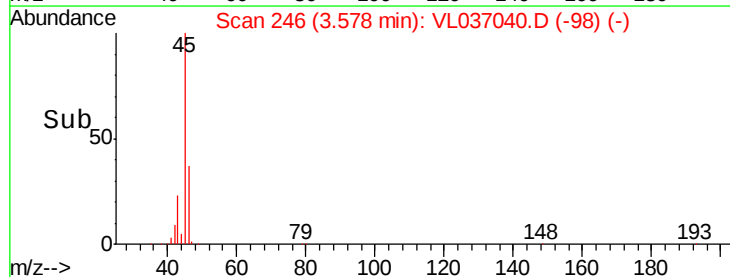
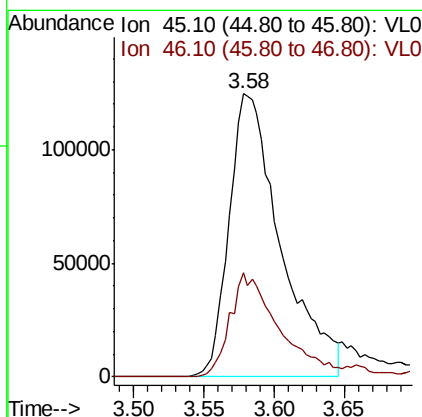
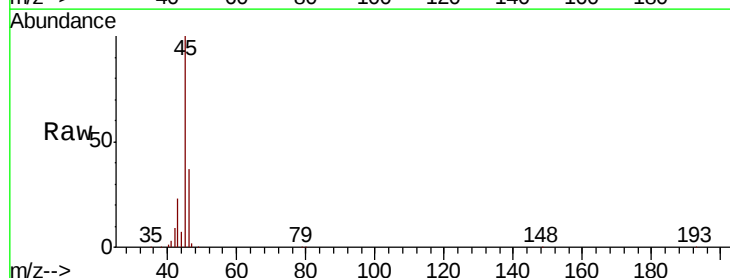
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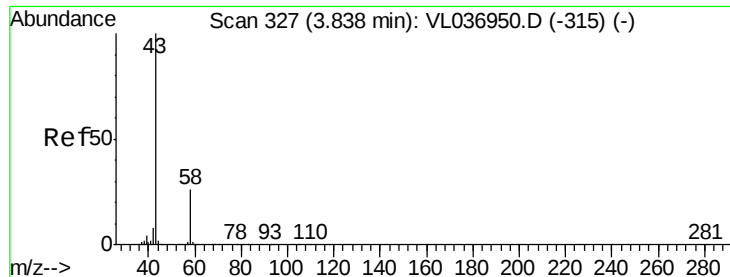
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#13
Ethanol
Concen: 32.314 ppbv
RT: 3.58 min Scan# 246
Delta R.T. -0.02 min
Lab File: VL037040.D
Acq: 21 May 2021 1:26

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
45	100		319647		
46	38.4		16.3	65.3	





#15

Acetone

Concen: 77.479 ppbv

RT: 3.82 min Scan# 320

Delta R.T. -0.02 min

Lab File: VL037040.D

Acq: 21 May 2021 1:26

Instrument :

MSVOA_L

ClientSampleId :

DUP-03-05132021

Tot Ion: 43 Resp: 8968648

Ion Ratio Lower Upper

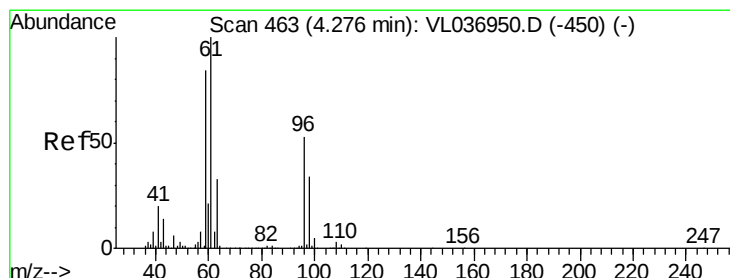
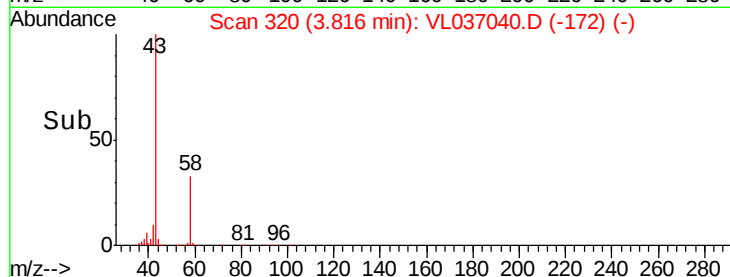
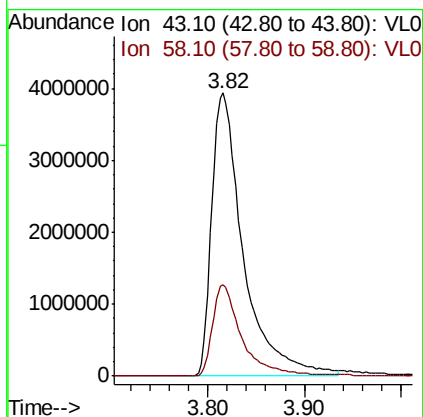
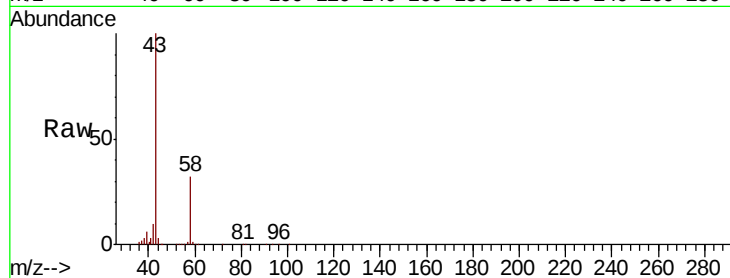
43 100

58 30.8 24.0 36.0

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#17

tert-Butyl alcohol

Concen: 0.771 ppbv

RT: 4.28 min Scan# 463

Delta R.T. -0.00 min

Lab File: VL037040.D

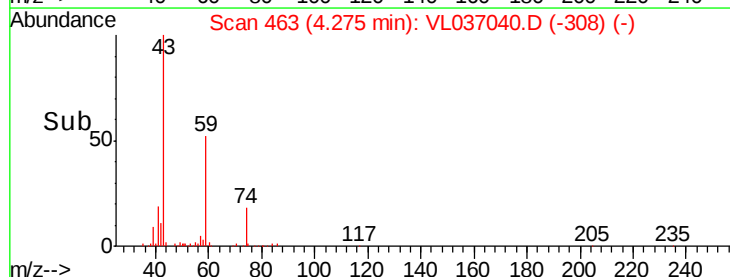
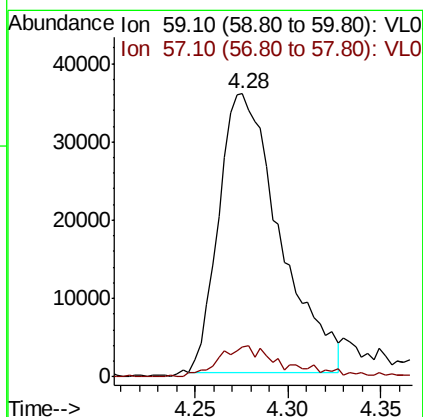
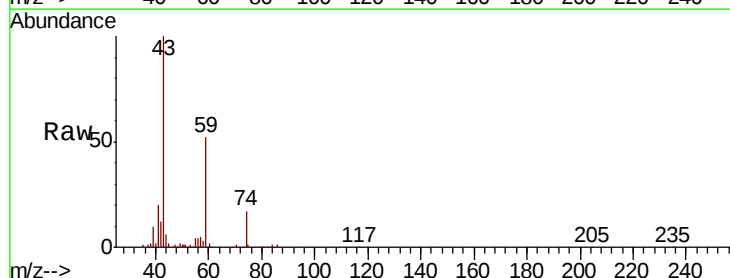
Acq: 21 May 2021 1:26

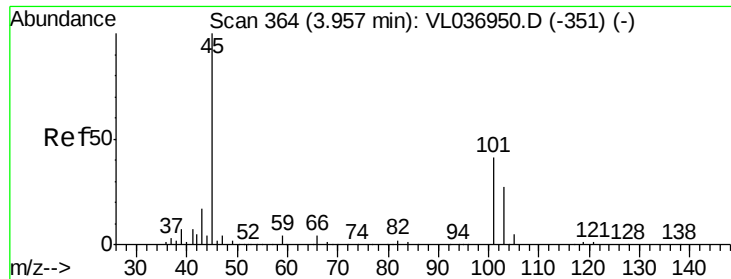
Tgt Ion: 59 Resp: 81750

Ion Ratio Lower Upper

59 100

57 12.5 8.3 12.5





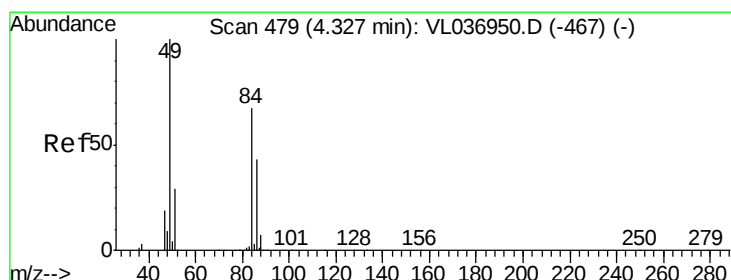
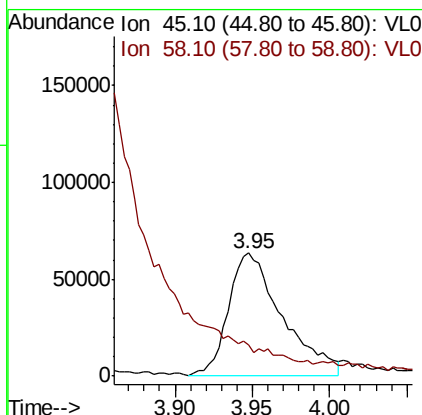
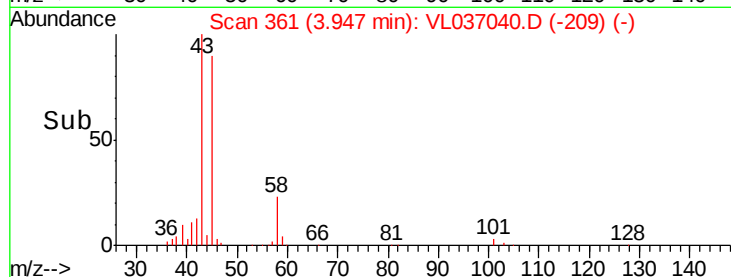
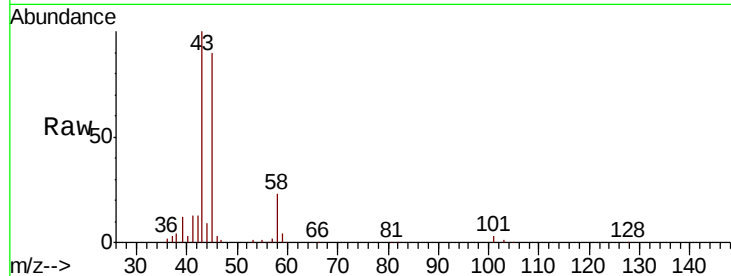
#19
Isopropyl Alcohol
Concen: 2.439 ppbv
RT: 3.95 min Scan# 361
Delta R.T. -0.01 min
Lab File: VL037040.D
Acq: 21 May 2021 1:26

Instrument :
MSVOA_L
ClientSampleId :
DUP-03-05132021

Tot Ion: 45 Resp: 151777
Ion Ratio Lower Upper
45 100
58 0.0 37.2 55.8#

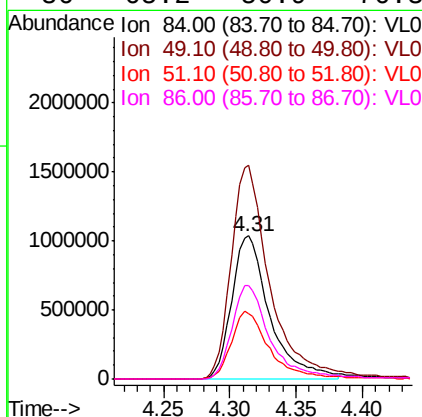
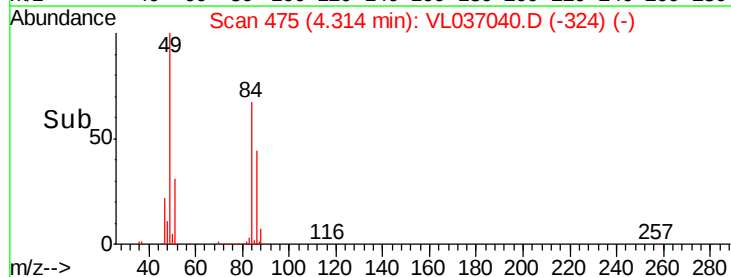
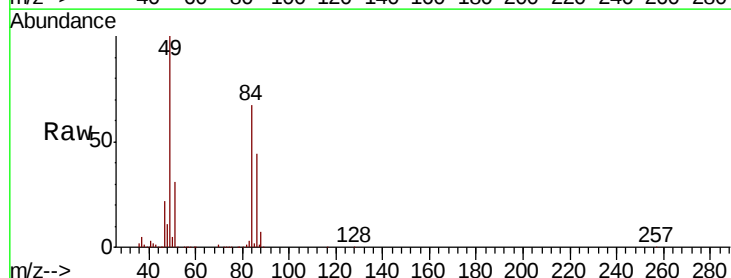
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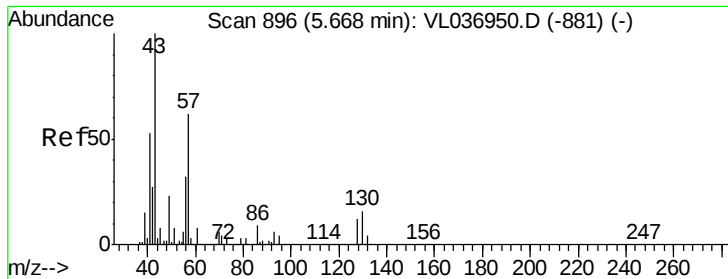
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#20
Methylene Chloride
Concen: 33.469 ppbv
RT: 4.31 min Scan# 475
Delta R.T. -0.01 min
Lab File: VL037040.D
Acq: 21 May 2021 1:26

Tgt Ion: 84 Resp: 2076745
Ion Ratio Lower Upper
84 100
49 149.2 119.8 179.6
51 46.0 35.1 52.7
86 65.2 50.9 76.3





#26

Hexane

Concen: 12.764 ppbv

RT: 5.65 min Scan# 891

Delta R.T. -0.02 min

Lab File: VL037040.D

Acq: 21 May 2021 1:26

Instrument :

MSVOA_L

ClientSampleId :

DUP-03-05132021

Tot Ion: 57 Resp: 1813774

Ion Ratio Lower Upper

57 100

41 95.6 70.5 105.7

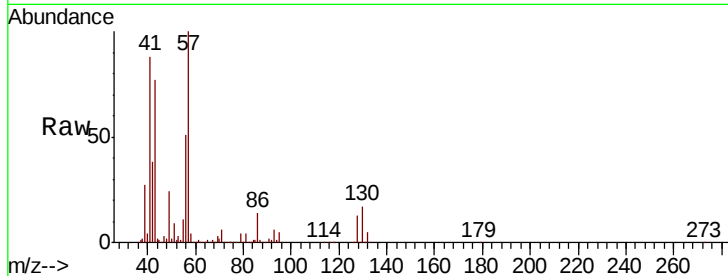
43 81.6 165.8 248.8#

56 54.0 42.2 63.4

Manual Integrations
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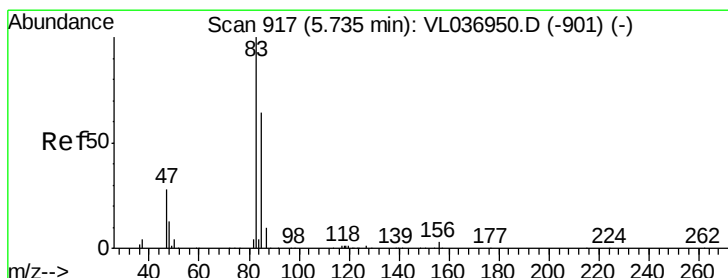
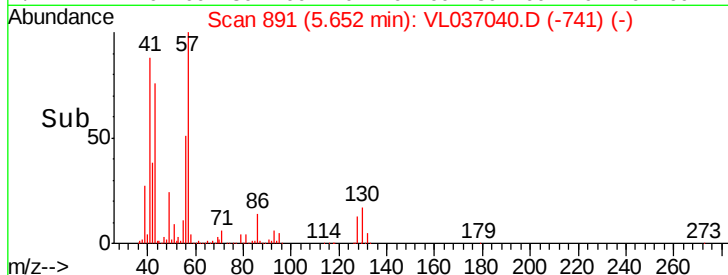
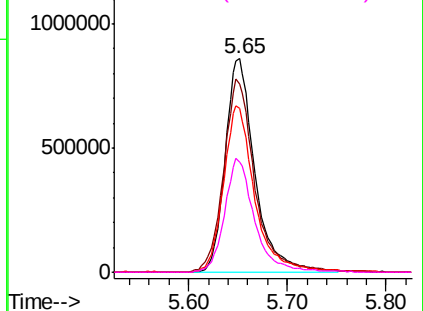


Abundance Ion 57.10 (56.80 to 57.80): VL0

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



#29

Chloroform

Concen: 0.345 ppbv

RT: 5.72 min Scan# 912

Delta R.T. -0.02 min

Lab File: VL037040.D

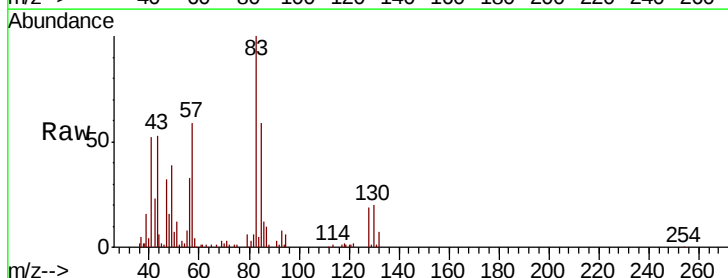
Acq: 21 May 2021 1:26

Tgt Ion: 83 Resp: 69354

Ion Ratio Lower Upper

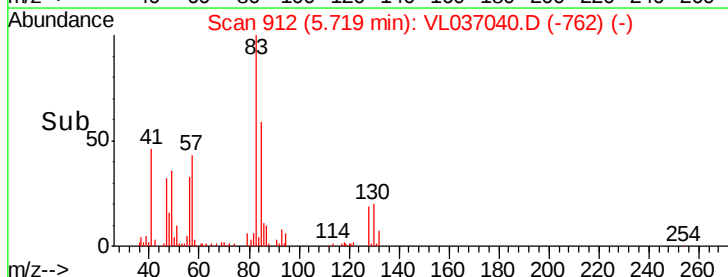
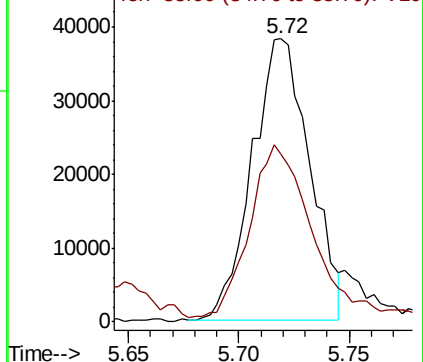
83 100

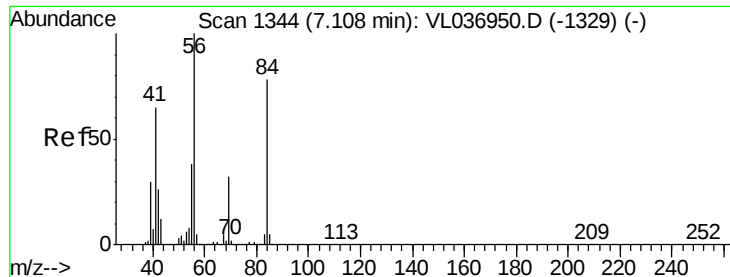
85 57.8 51.1 76.7



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0





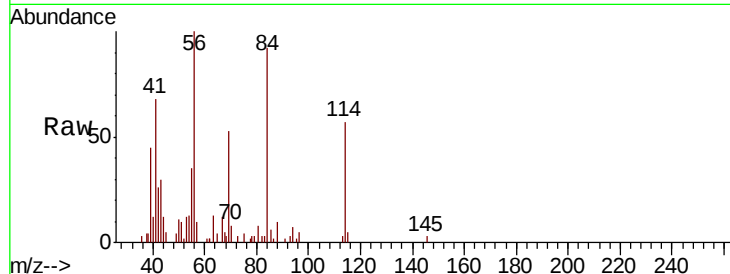
#30
Cyclohexane
Concen: 0.151 ppbv m
RT: 7.10 min Scan# 1340
Delta R.T. -0.01 min
Lab File: VL037040.D
Acq: 21 May 2021 1:26

Instrument :
MSVOA_L
ClientSampleId :
DUP-03-05132021

Tot Ion	Ratio	Lower	Upper
84	100		
56	0.0	107.9	161.9#
41	100.3	65.5	98.3#

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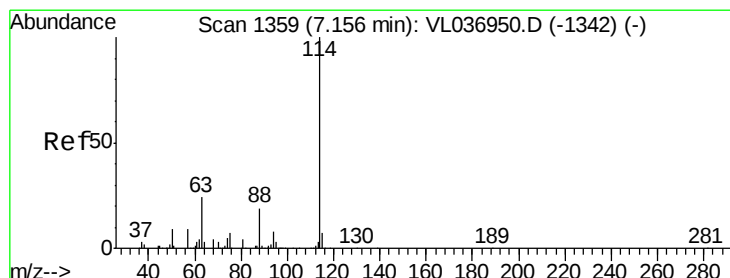
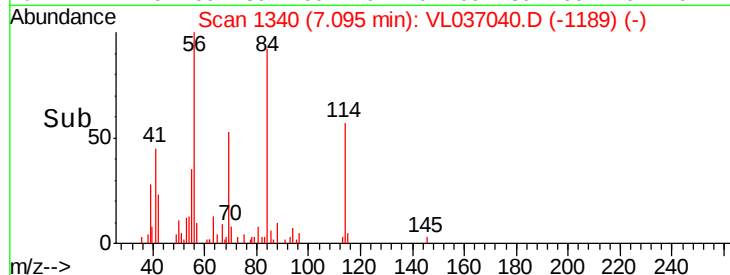
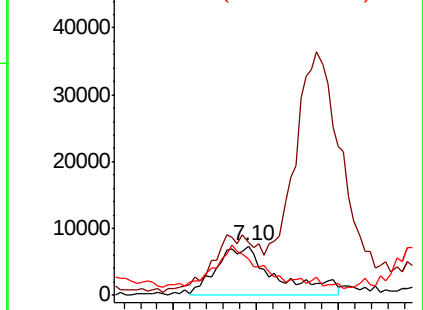


Abundance

Ion 84.20 (83.90 to 84.90): VL0

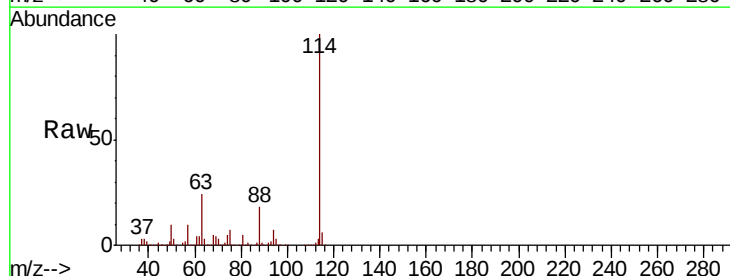
Ion 56.10 (55.80 to 56.80): VL0

Ion 41.10 (40.80 to 41.80): VL0



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.14 min Scan# 1353
Delta R.T. -0.02 min
Lab File: VL037040.D
Acq: 21 May 2021 1:26

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

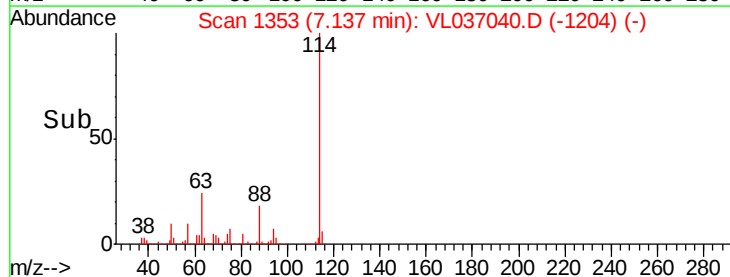
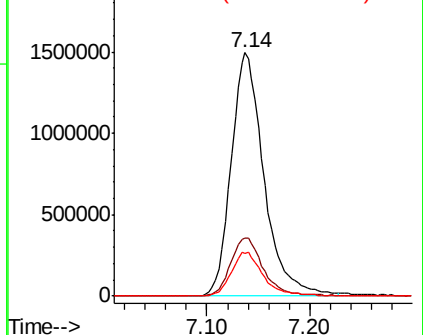


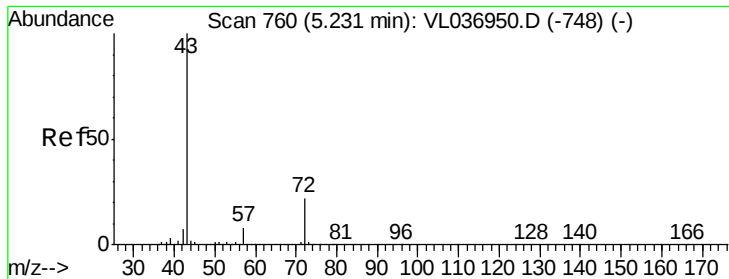
Abundance

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





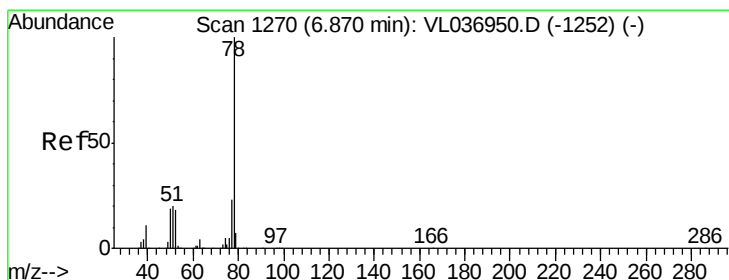
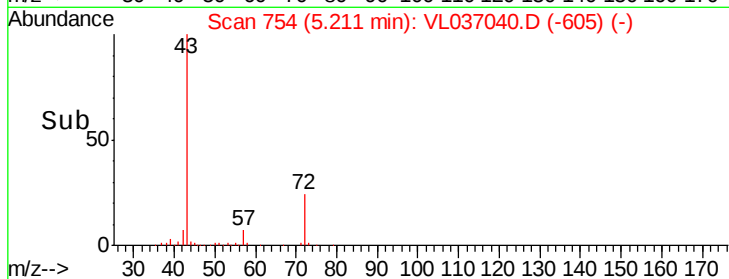
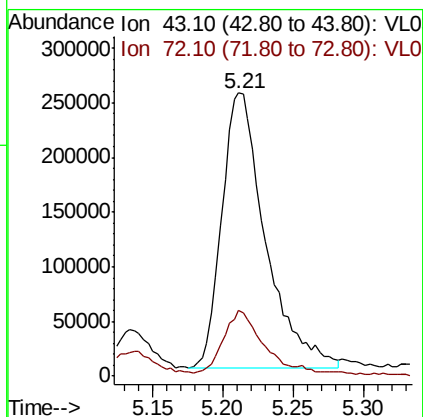
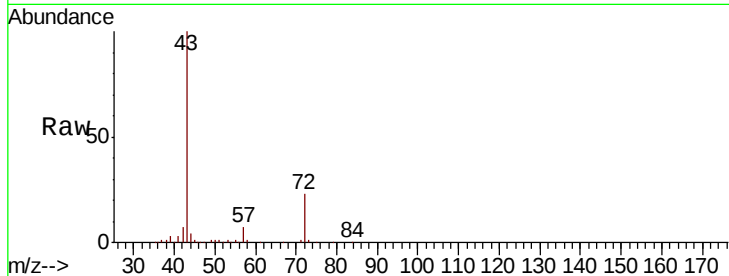
#34
2-Butanone
Concen: 4.532 ppbv
RT: 5.21 min Scan# 754
Delta R.T. -0.02 min
Lab File: VL037040.D
Acq: 21 May 2021 1:26

Instrument :
MSVOA_L
ClientSampleId :
DUP-03-05132021

Tot Ion	Ratio	Lower	Upper
43	100		
72	25.0	19.0	28.4

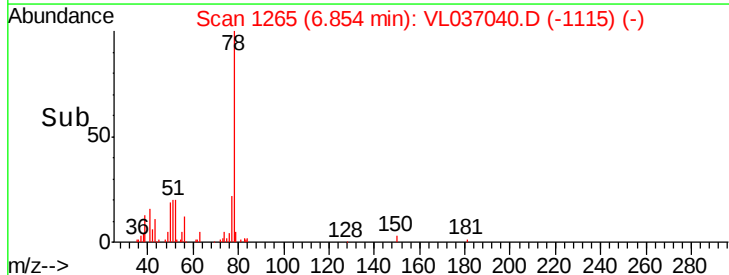
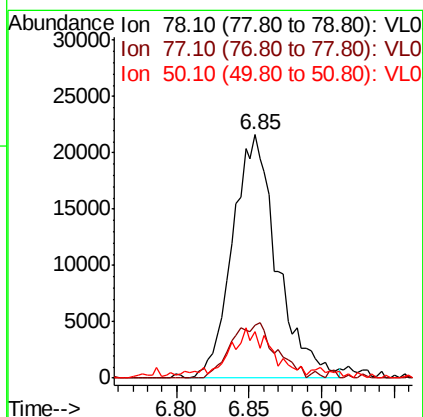
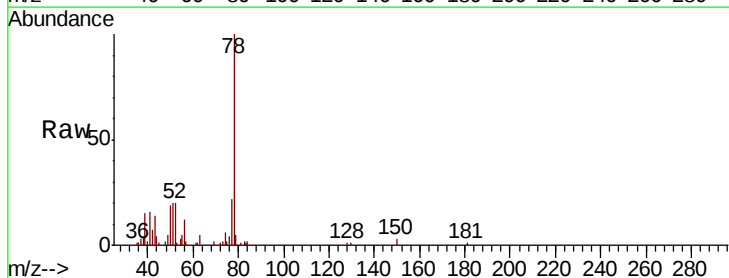
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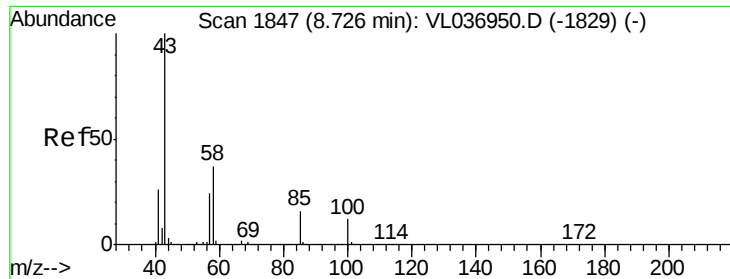
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#36
Benzene
Concen: 0.161 ppbv m
RT: 6.85 min Scan# 1265
Delta R.T. -0.02 min
Lab File: VL037040.D
Acq: 21 May 2021 1:26

Tgt Ion	Ratio	Lower	Upper
78	100		
77	22.0	18.6	28.0
50	19.0	15.0	22.4





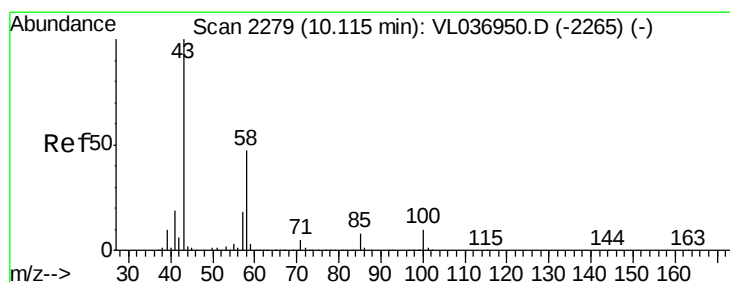
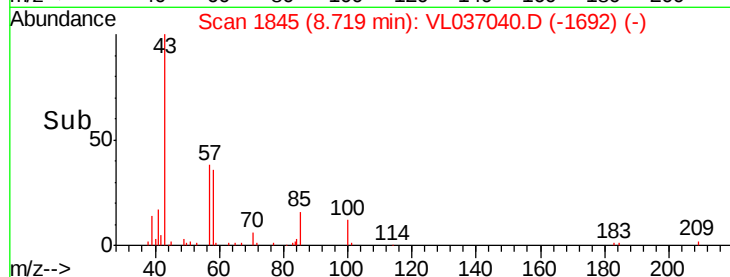
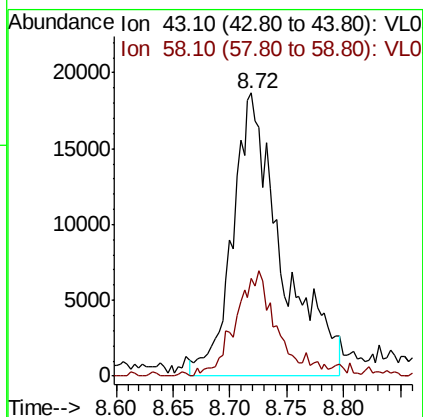
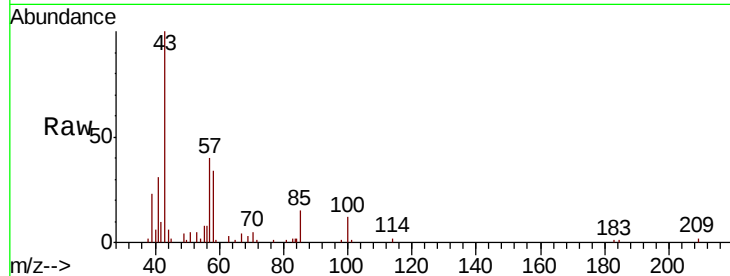
#50
4-Methyl-2-Pentanone
Concen: 0.283 ppbv m
RT: 8.72 min Scan# 1845
Delta R.T. -0.01 min
Lab File: VL037040.D
Acq: 21 May 2021 1:26

Instrument :
MSVOA_L
ClientSampleId :
DUP-03-05132021

Tot Ion	Ratio	Lower	Upper
43	100		
58	0.0	29.4	44.2#

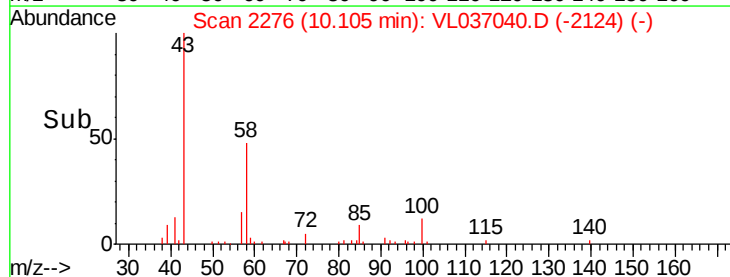
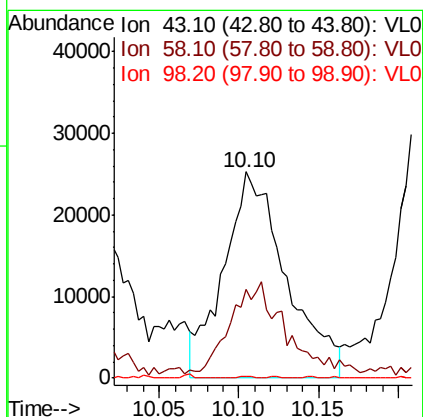
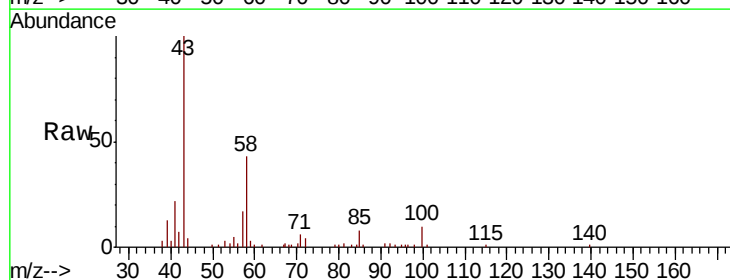
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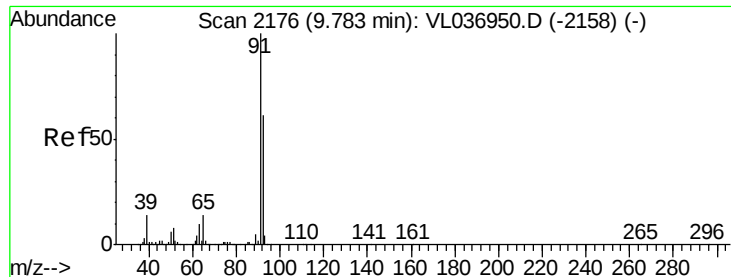
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#51
2-Hexanone
Concen: 0.656 ppbv m
RT: 10.10 min Scan# 2276
Delta R.T. -0.01 min
Lab File: VL037040.D
Acq: 21 May 2021 1:26

Tgt Ion	Ratio	Lower	Upper
43	100		
58	0.0	41.1	61.7#
98	0.0	0.1	0.1#





#53

Toluene

Concen: 1.579 ppbv

RT: 9.76 min Scan# 2170

Delta R.T. -0.02 min

Lab File: VL037040.D

Acq: 21 May 2021 1:26

Instrument :

MSVOA_L

ClientSampleId :

DUP-03-05132021

Tot Ion: 91 Resp: 535243

Ion Ratio Lower Upper

91 100

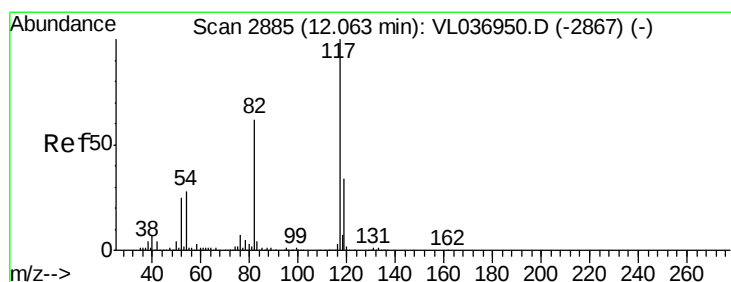
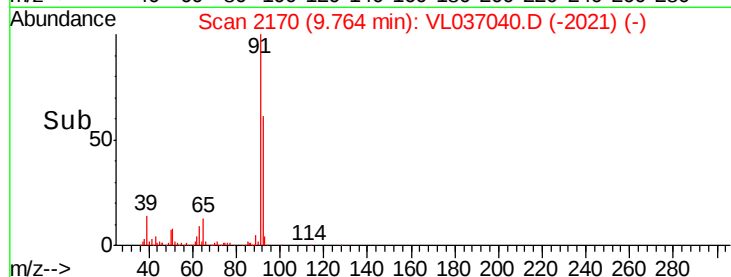
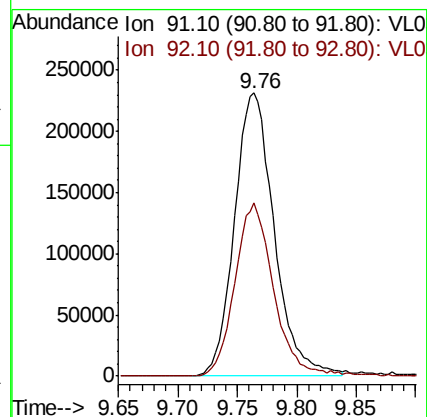
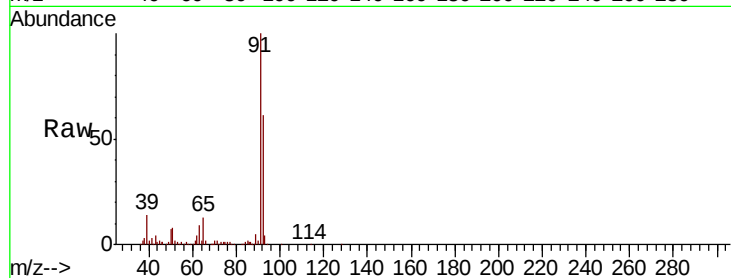
92 60.2 49.5 74.3

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.04 min Scan# 2879

Delta R.T. -0.02 min

Lab File: VL037040.D

Acq: 21 May 2021 1:26

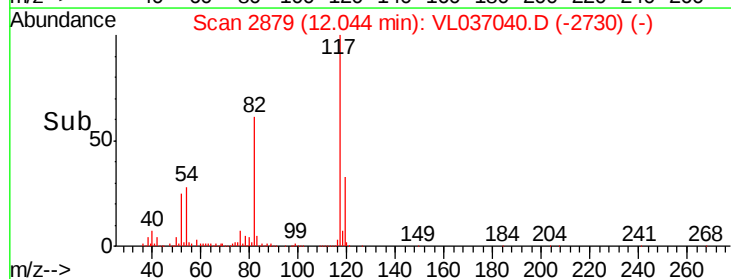
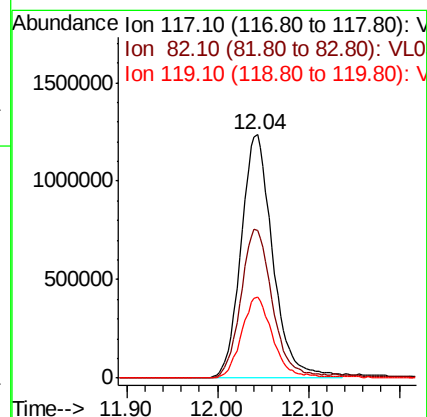
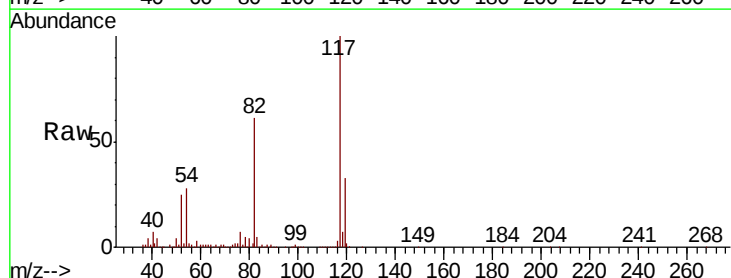
Tgt Ion: 117 Resp: 3005708

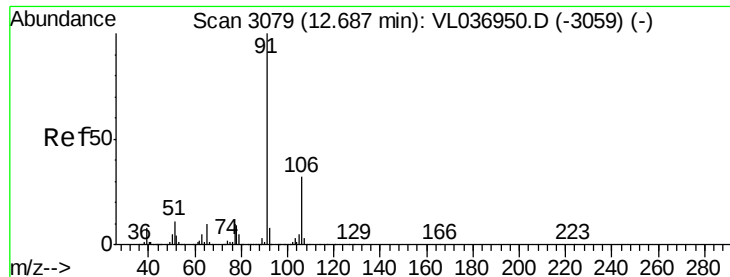
Ion Ratio Lower Upper

117 100

82 63.5 52.6 79.0

119 33.5 46.6 70.0#





#58

Ethyl Benzene

Concen: 0.101 ppbv

RT: 12.67 min Scan# 3073

Delta R.T. -0.02 min

Lab File: VL037040.D

Acq: 21 May 2021 1:26

Instrument :

MSVOA_L

ClientSampleId :

DUP-03-05132021

Tot Ion: 91 Resp: 42855

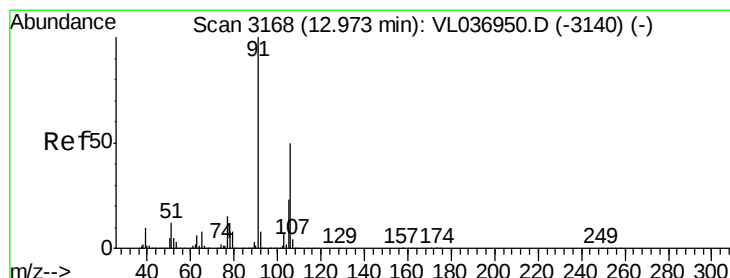
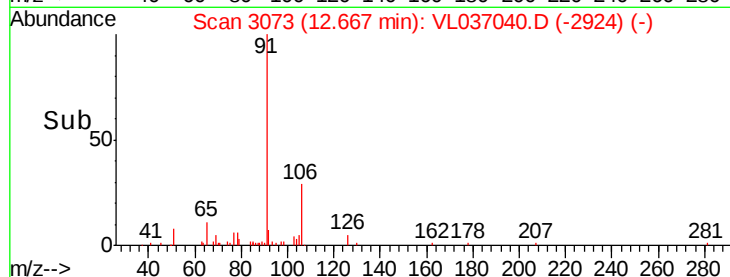
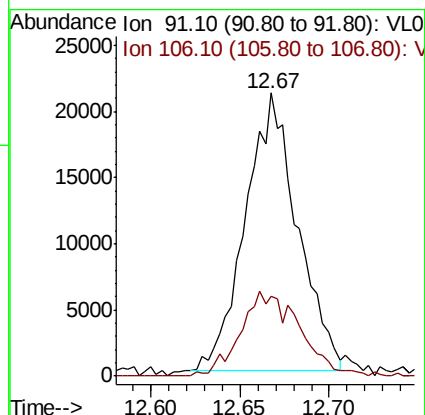
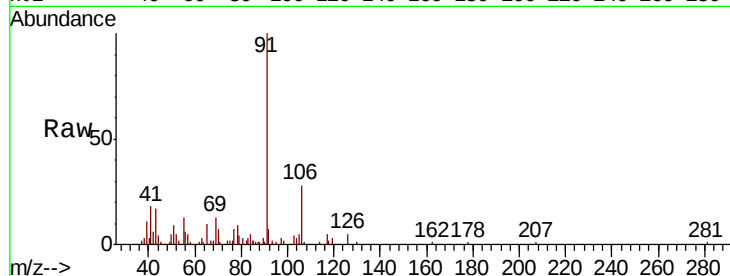
Ion Ratio Lower Upper

91 100

106 28.8 25.6 38.4

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#59

m/p-Xylene

Concen: 0.304 ppbv m

RT: 12.93 min Scan# 3154

Delta R.T. -0.05 min

Lab File: VL037040.D

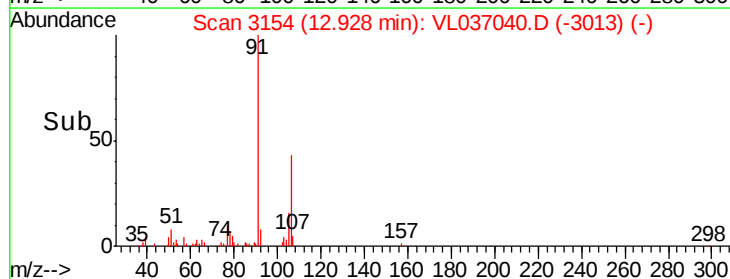
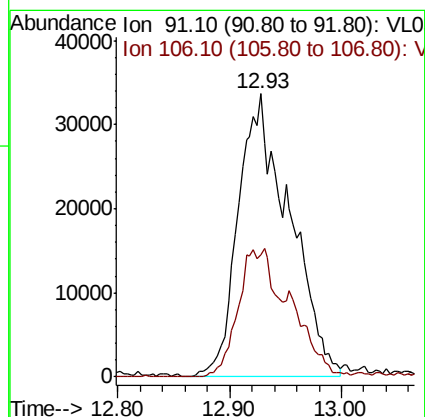
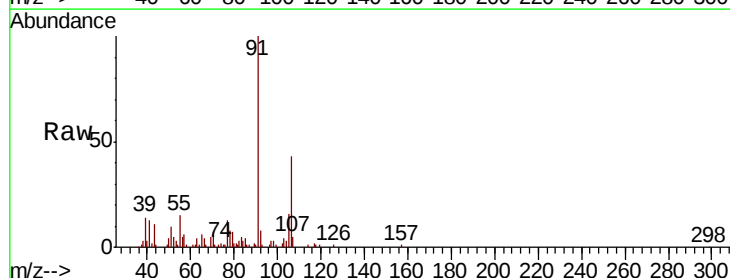
Acq: 21 May 2021 1:26

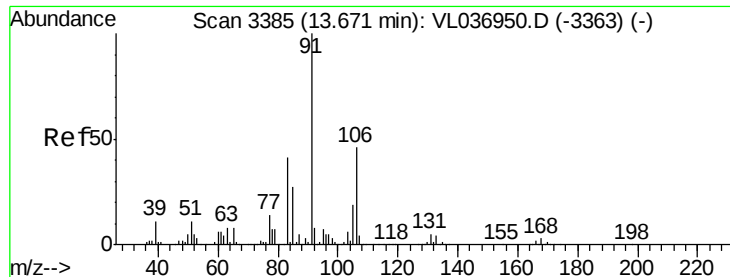
Tgt Ion: 91 Resp: 106472

Ion Ratio Lower Upper

91 100

106 0.0 37.4 56.2#





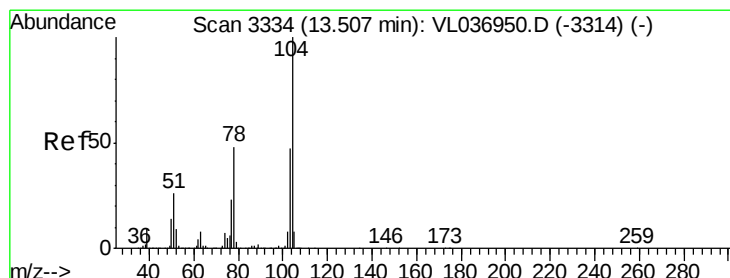
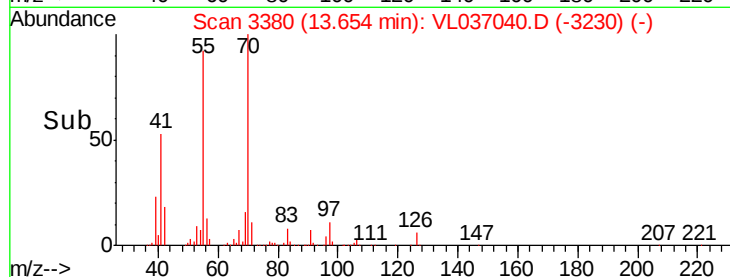
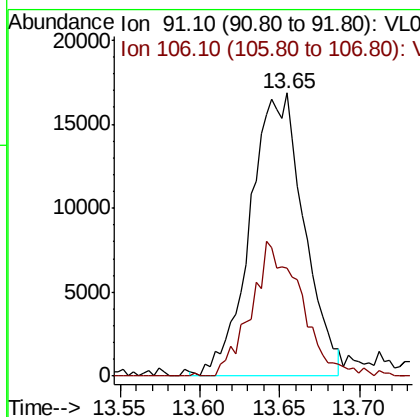
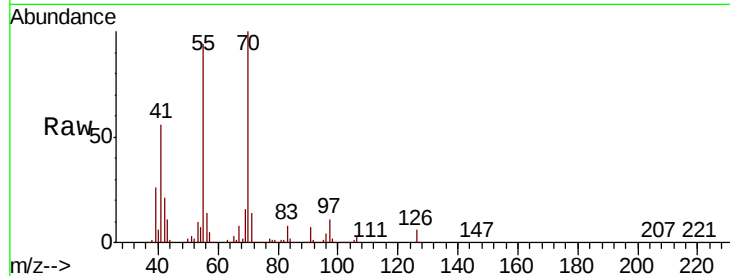
#60
o-Xylene
Concen: 0.118 ppbv m
RT: 13.65 min Scan# 3380
Delta R.T. -0.02 min
Lab File: VL037040.D
Acq: 21 May 2021 1:26

Instrument :
MSVOA_L
ClientSampleId :
DUP-03-05132021

Tot Ion	Ratio	Lower	Upper
91	100		
106	44.2	23.4	70.3

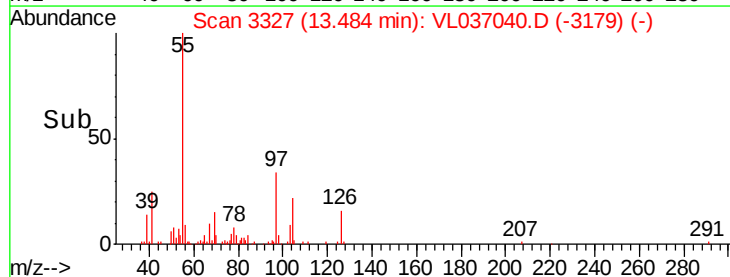
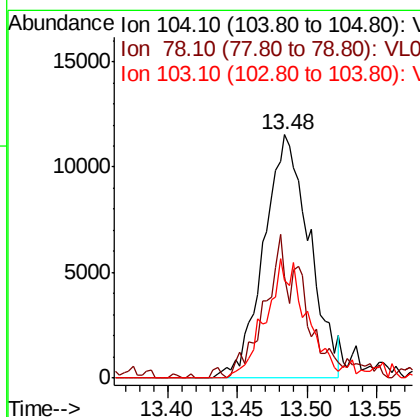
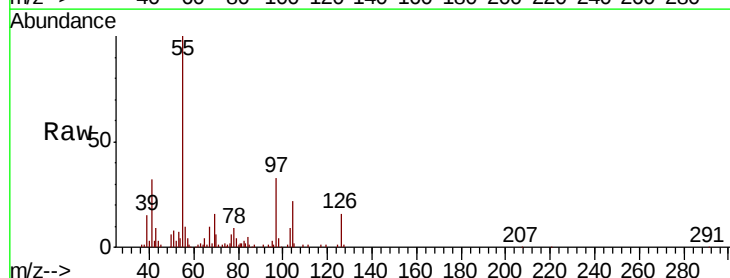
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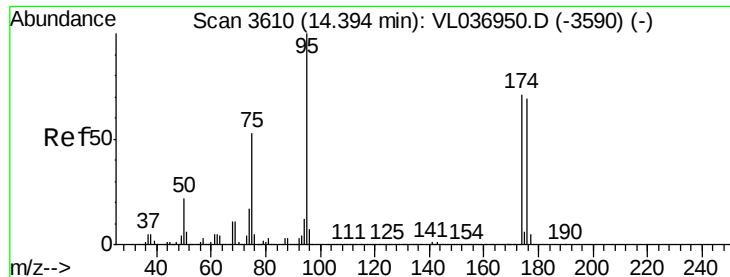
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#61
Styrene
Concen: 0.139 ppbv m
RT: 13.48 min Scan# 3327
Delta R.T. -0.02 min
Lab File: VL037040.D
Acq: 21 May 2021 1:26

Tgt Ion	Ratio	Lower	Upper
104	100		
78	54.6	39.0	58.6
103	44.7	38.0	57.0





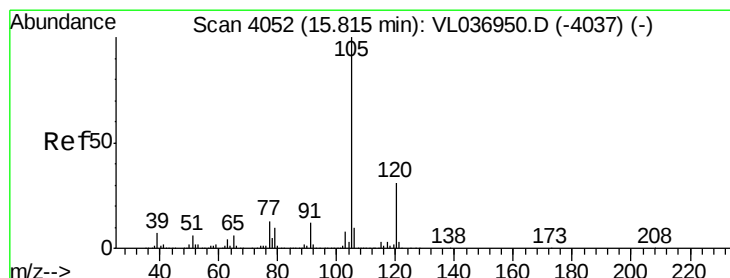
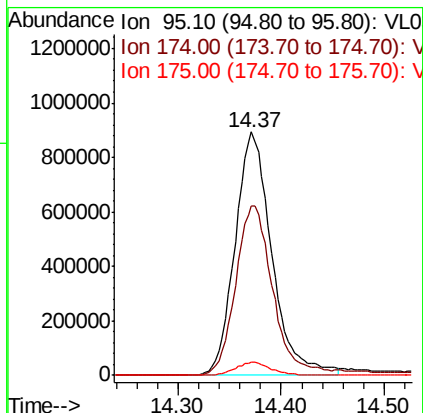
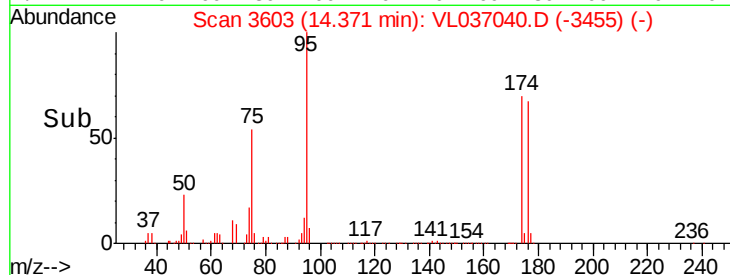
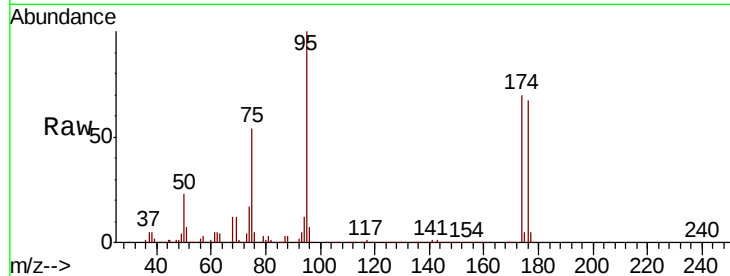
#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.792 ppbv
 RT: 14.37 min Scan# 3603
 Delta R.T. -0.02 min
 Lab File: VL037040.D
 Acq: 21 May 2021 1:26

Instrument :
 MSVOA_L
 ClientSampleId :
 DUP-03-05132021

Tot Ion: 95 Resp: 2211006
 Ion Ratio Lower Upper
 95 100
 174 74.6 58.4 87.6
 175 5.7 4.4 6.6

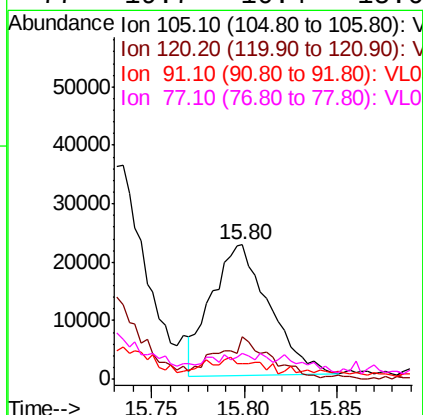
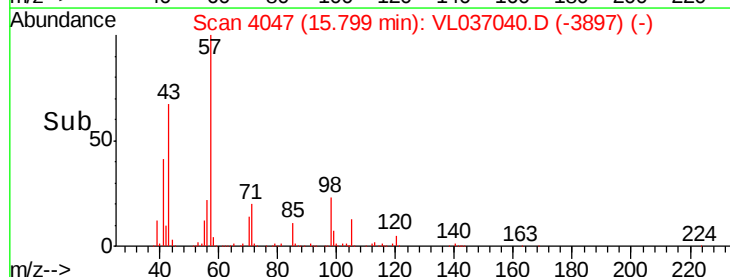
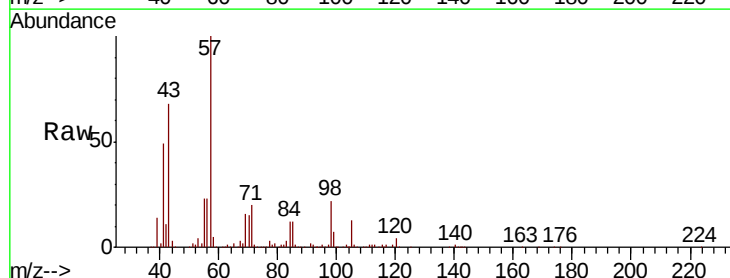
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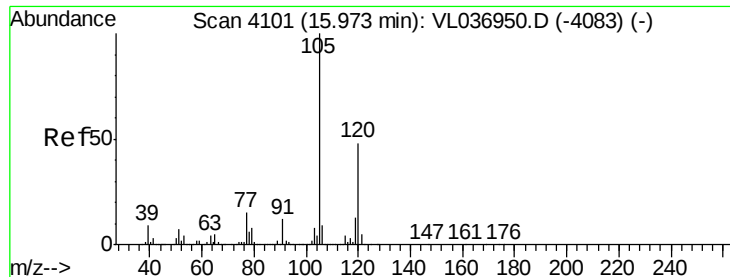
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#72
 4-Ethyltoluene
 Concen: 0.122 ppbv
 RT: 15.80 min Scan# 4047
 Delta R.T. -0.02 min
 Lab File: VL037040.D
 Acq: 21 May 2021 1:26

Tgt Ion: 105 Resp: 48355
 Ion Ratio Lower Upper
 105 100
 120 32.1 24.6 37.0
 91 14.2 9.8 14.6
 77 19.7 10.4 15.6#





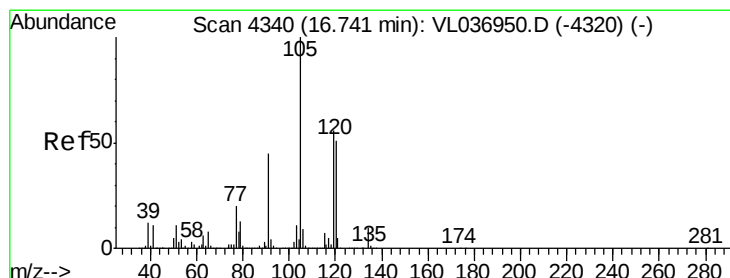
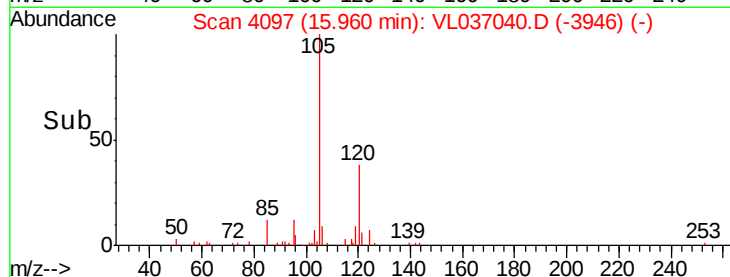
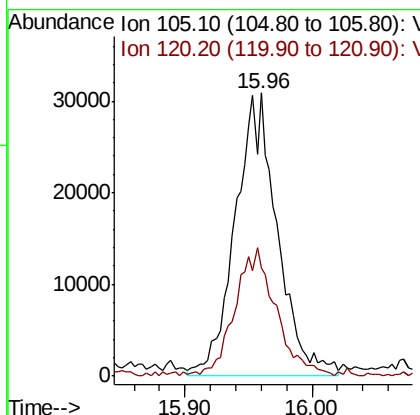
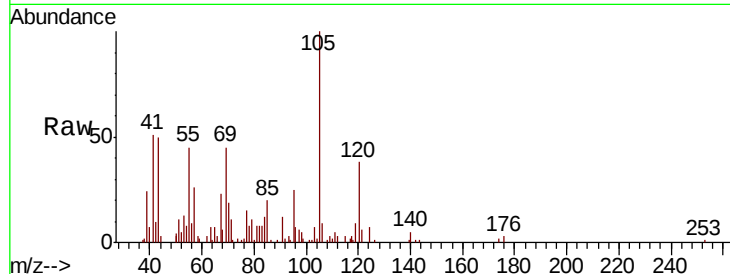
#73
 1,3,5-Trimethylbenzene
 Concen: 0.191 ppbv
 RT: 15.96 min Scan# 4097
 Delta R.T. -0.01 min
 Lab File: VL037040.D
 Acq: 21 May 2021 1:26

Instrument :
 MSVOA_L
 ClientSampleId :
 DUP-03-05132021

Tot Ion	Ratio	Lower	Upper
105	100		
120	38.2	38.6	58.0#

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#74
 1,2,4-Trimethylbenzene
 Concen: 0.498 ppbv
 RT: 16.72 min Scan# 4334
 Delta R.T. -0.02 min
 Lab File: VL037040.D
 Acq: 21 May 2021 1:26

Tgt Ion	Ratio	Lower	Upper
105	100		
120	41.6	40.6	61.0
91	10.0	37.4	56.0#
77	13.4	16.2	24.4#

