

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL052021\
 Data File : VL037028.D
 Acq On : 20 May 2021 17:53
 Operator : SY/AP
 Sample : M2424-13 10X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 DUP-03-05132021

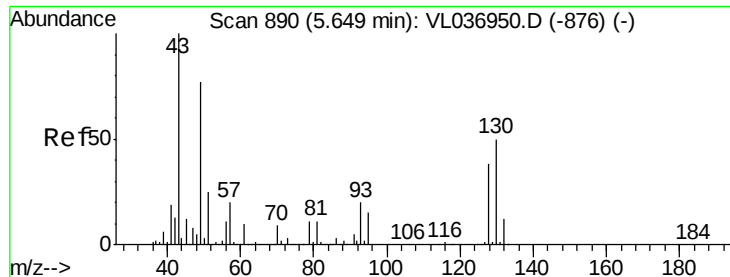
Quant Time: May 21 01:16:55 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL051821AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue May 18 12:00:15 2021
 QLast Update : Tue May 18 12:00:15 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.63	49	1266370	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.14	114	3667486	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.04	117	3217493	10.00	ppbv	-0.02

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.37	95	2347837	9.71	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.10%

Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.02	85	11075	0.052 ppbv	95
3) Chlorodifluoromethane	2.96	51	7440	0.032 ppbv	93
4) Chloromethane	3.12	50	8179	0.104 ppbv	94
9) Propene	2.99	41	21996	0.265 ppbv	88
10) Heptane	8.08	43	21749	0.105 ppbv #	74
13) Ethanol	3.59	45	31595	2.850 ppbv #	35
15) Acetone	3.82	43	2647471	20.411 ppbv	98
16) 1,3-Butadiene	3.32	39	3359	0.042 ppbv #	10
17) tert-Butyl alcohol	4.29	59	10205	0.086 ppbv #	62
19) Isopropyl Alcohol	3.96	45	24294	0.348 ppbv #	30
20) Methylene Chloride	4.31	84	575775	8.281 ppbv	97
25) Ethyl Acetate	5.65	43	357729	1.148 ppbv #	83
26) Hexane	5.65	57	447772	2.812 ppbv #	48
29) Chloroform	5.71	83	19193	0.085 ppbv	99
34) 2-Butanone	5.22	43	125707	0.941 ppbv #	84
39) 1,2-Dichloropropane	7.14	63	872469	7.169 ppbv #	26
41) Tetrahydrofuran	5.65	42	167013	2.196 ppbv #	51
53) Toluene	9.77	91	121936	0.324 ppbv	97
74) 1,2,4-Trimethylbenzene	16.71	105	18189	0.044 ppbv #	68

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.63 min Scan# 885

Delta R.T. -0.02 min

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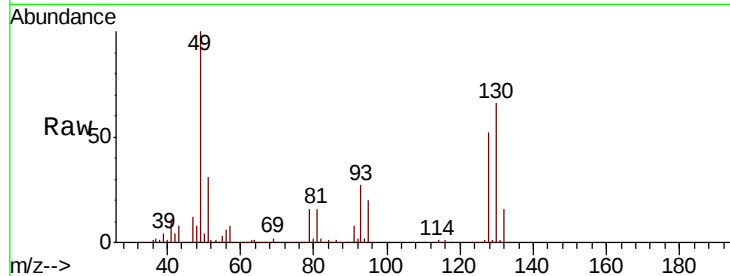
Tot Ion: 49 Resp: 1266370

Ion Ratio Lower Upper

49 100

128 55.0 26.9 80.7

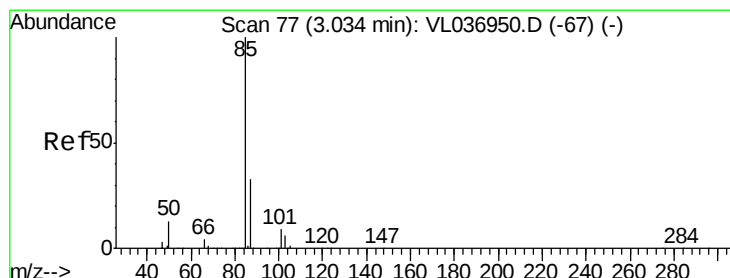
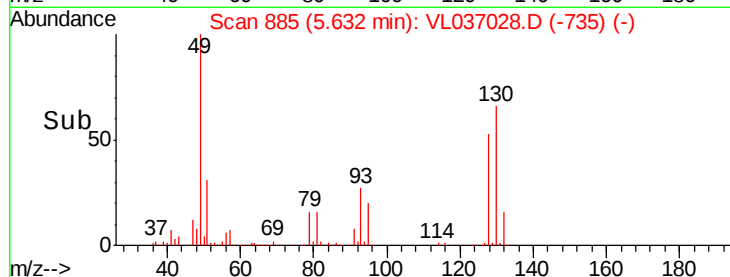
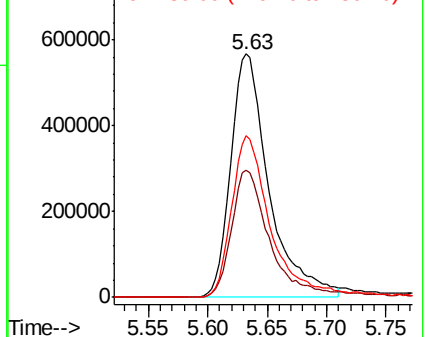
130 70.2 33.8 101.4



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: 0.052 ppbv

RT: 3.02 min Scan# 74

Delta R.T. -0.01 min

Lab File: VL037028.D

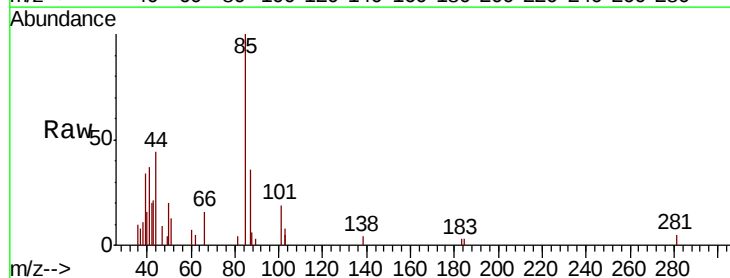
Acq: 20 May 2021 17:53

Tgt Ion: 85 Resp: 11075

Ion Ratio Lower Upper

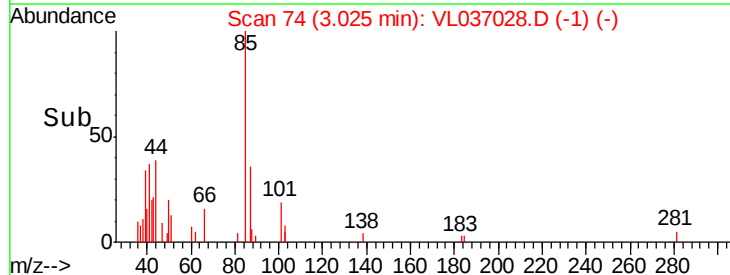
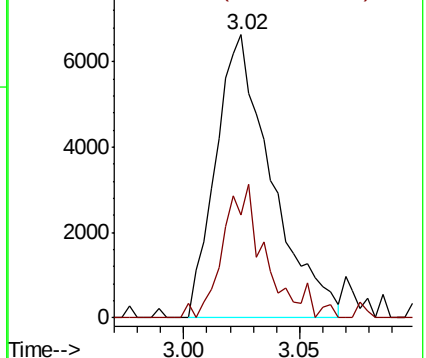
85 100

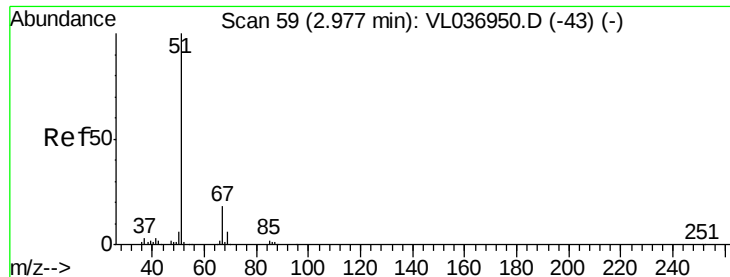
87 36.2 26.6 39.8



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.032 ppbv

RT: 2.96 min Scan# 55

Delta R.T. -0.01 min

Lab File: VL037028.D

Acq: 20 May 2021 17:53

Instrument :

MSVOA_L

ClientSampleId :

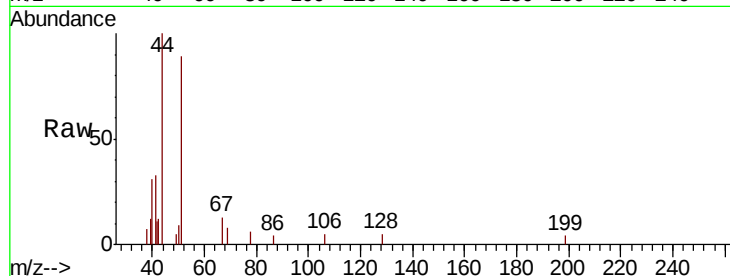
DUP-03-05132021

Tot Ion: 51 Resp: 7440

Ion Ratio Lower Upper

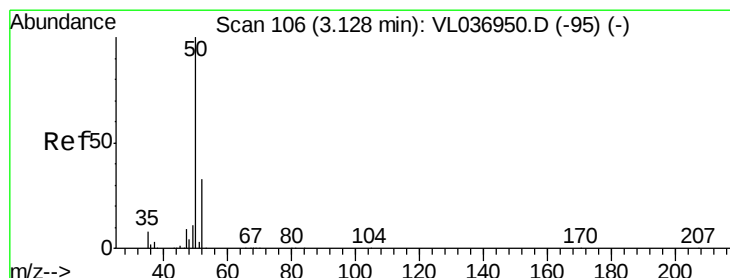
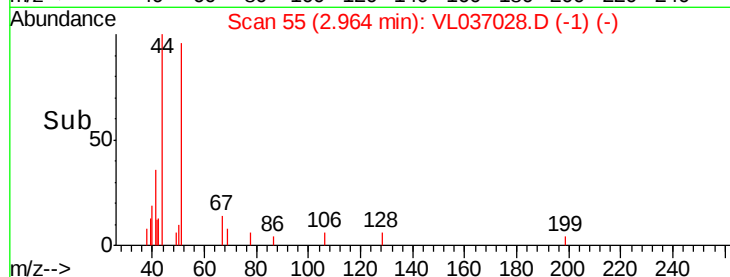
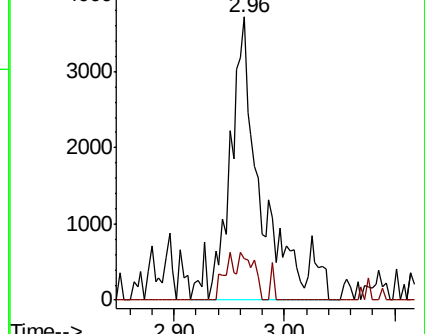
51 100

67 15.0 14.6 21.8



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.104 ppbv

RT: 3.12 min Scan# 103

Delta R.T. -0.01 min

Lab File: VL037028.D

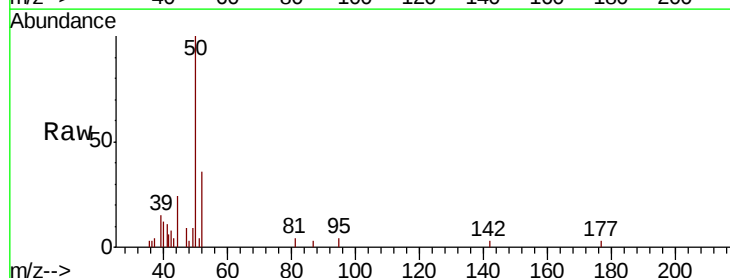
Acq: 20 May 2021 17:53

Tgt Ion: 50 Resp: 8179

Ion Ratio Lower Upper

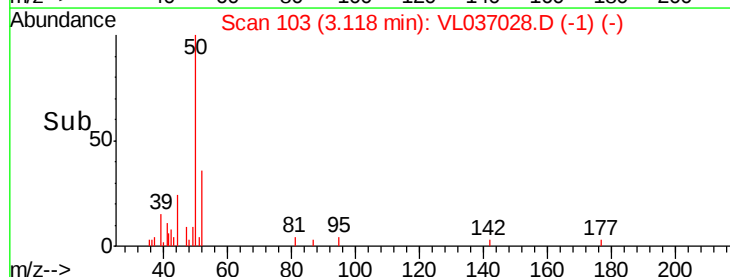
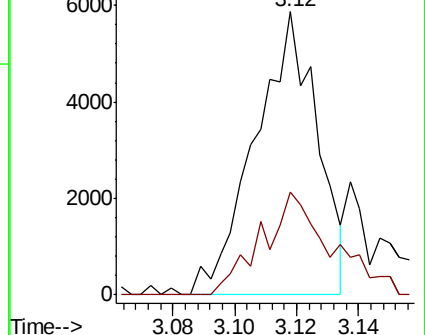
50 100

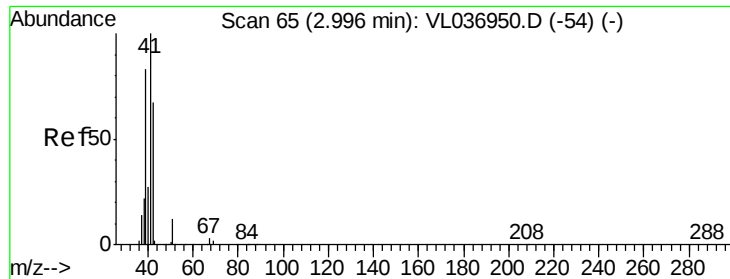
52 36.2 26.1 39.1



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 0.265 ppbv

RT: 2.99 min Scan# 62

Delta R.T. -0.01 min

Lab File: VL037028.D

Acq: 20 May 2021 17:53

Instrument :

MSVOA_L

ClientSampleId :

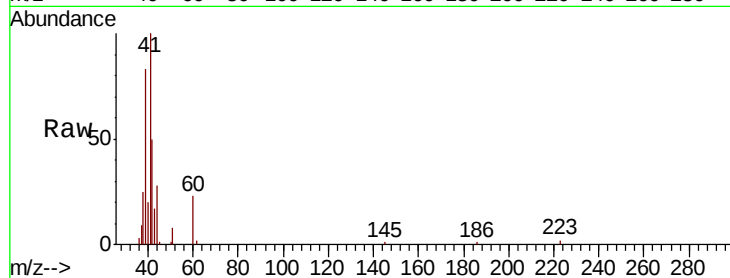
DUP-03-05132021

Tot Ion: 41 Resp: 21996

Ion Ratio Lower Upper

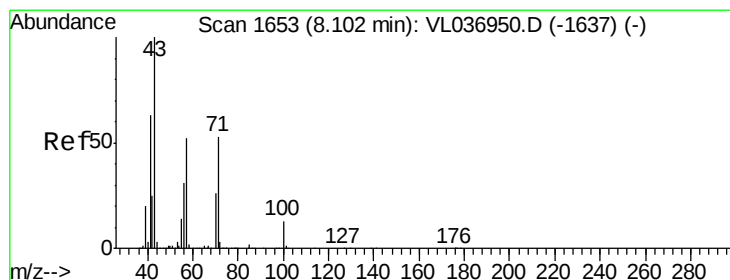
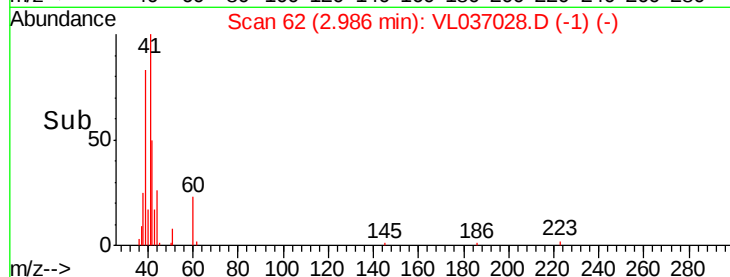
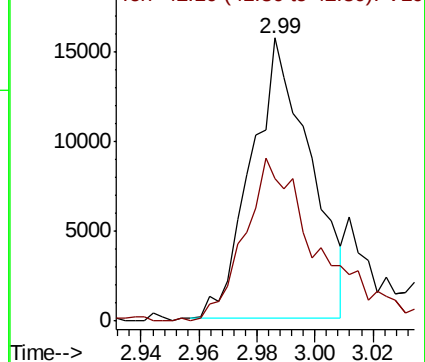
41 100

42 76.9 53.9 80.9



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0



#10

Heptane

Concen: 0.105 ppbv

RT: 8.08 min Scan# 1647

Delta R.T. -0.02 min

Lab File: VL037028.D

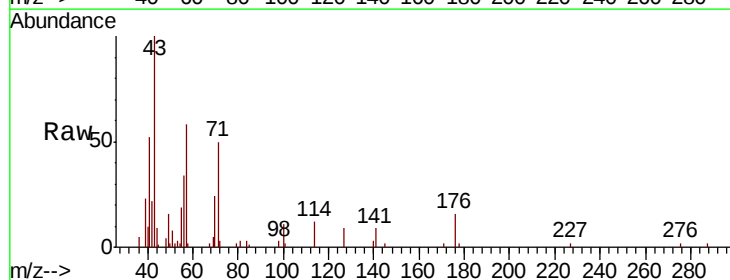
Acq: 20 May 2021 17:53

Tgt Ion: 43 Resp: 21749

Ion Ratio Lower Upper

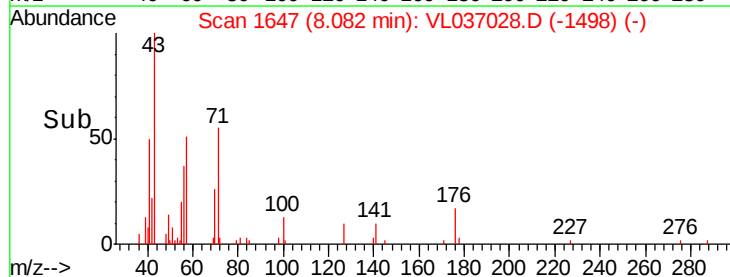
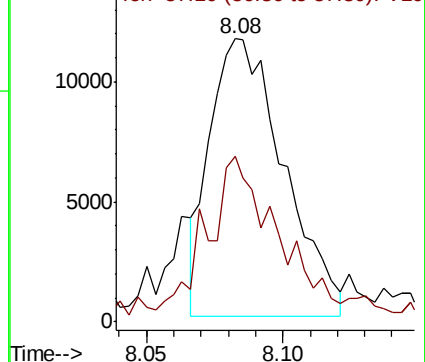
43 100

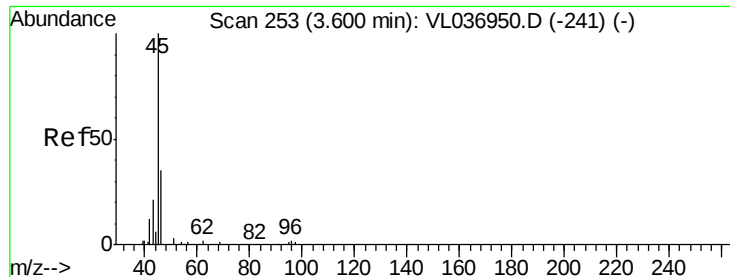
57 69.6 41.0 61.6#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0

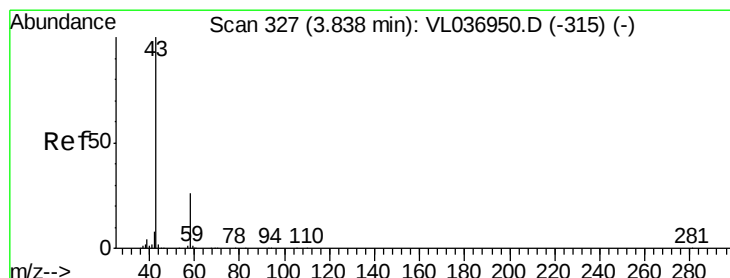
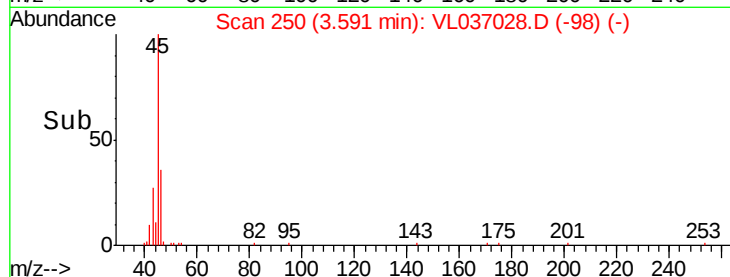
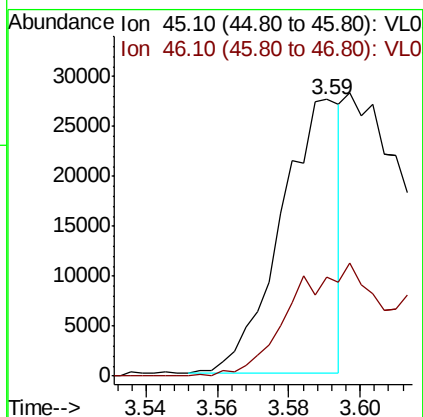
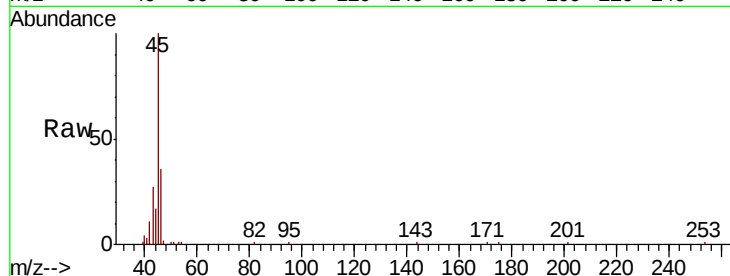




#13
Ethanol
Concen: 2.850 ppbv
RT: 3.59 min Scan# 250
Delta R.T. -0.01 min
Lab File: VL037028.D
Acq: 20 May 2021 17:53

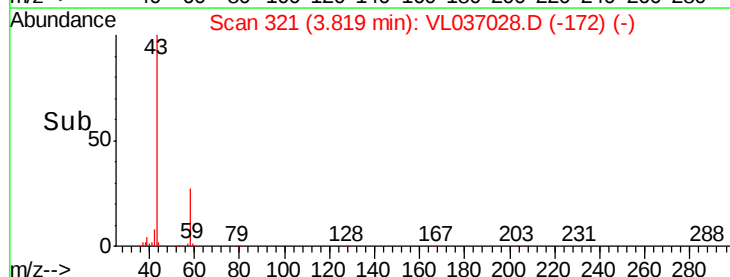
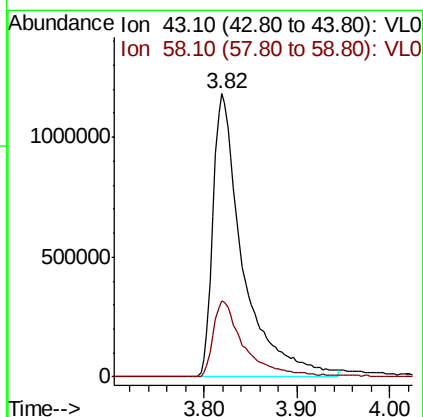
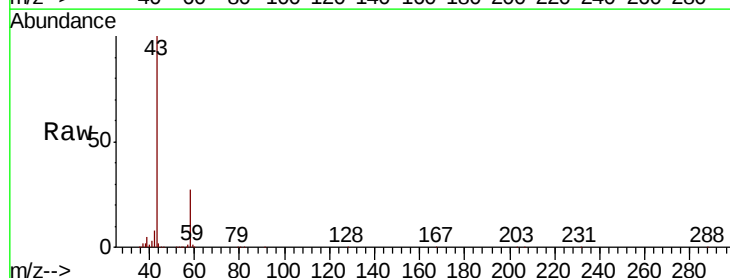
Instrument :
MSVOA_L
ClientSampleId :
DUP-03-05132021

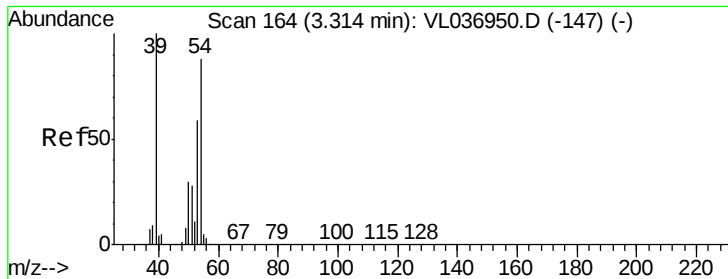
Tot Ion: 45 Resp: 31595
Ion Ratio Lower Upper
45 100
46 0.0 16.3 65.3#



#15
Acetone
Concen: 20.411 ppbv
RT: 3.82 min Scan# 321
Delta R.T. -0.02 min
Lab File: VL037028.D
Acq: 20 May 2021 17:53

Tgt Ion: 43 Resp: 2647471
Ion Ratio Lower Upper
43 100
58 28.8 24.0 36.0

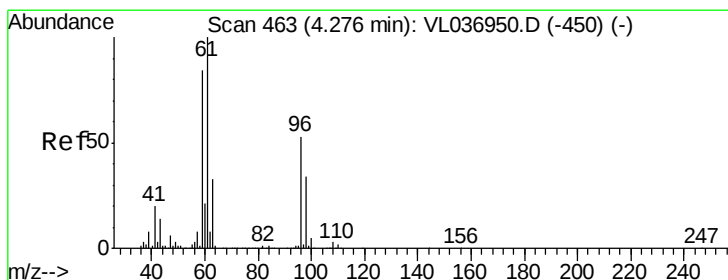
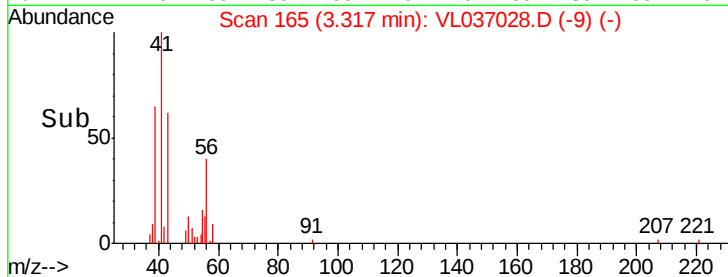
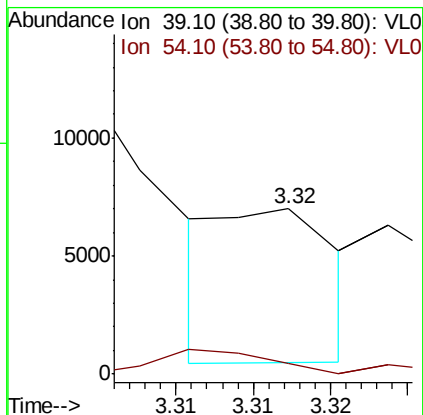
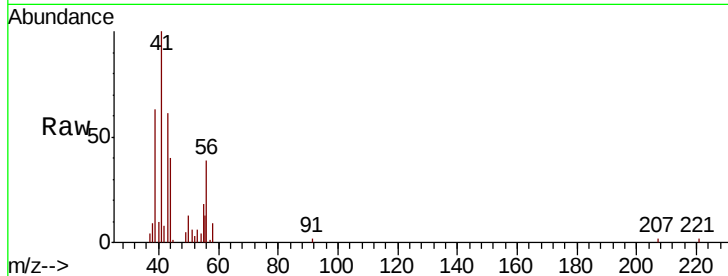




#16
 1,3-Butadiene
 Concen: 0.042 ppbv
 RT: 3.32 min Scan# 165
 Delta R.T. 0.00 min
 Lab File: VL037028.D
 Acq: 20 May 2021 17:53

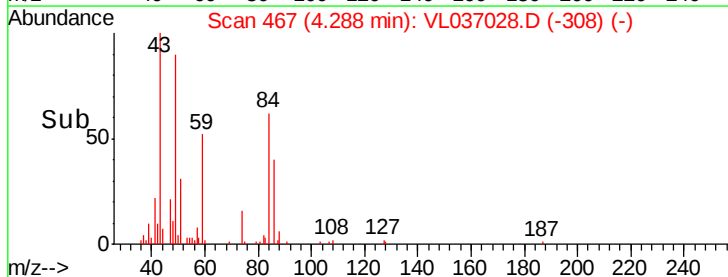
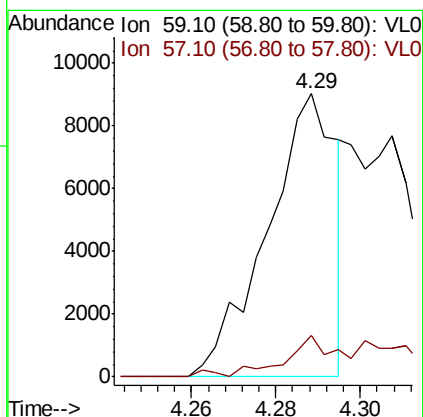
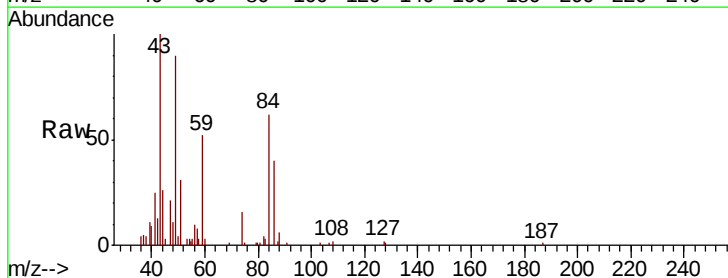
Instrument :
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 ClientSampleId :
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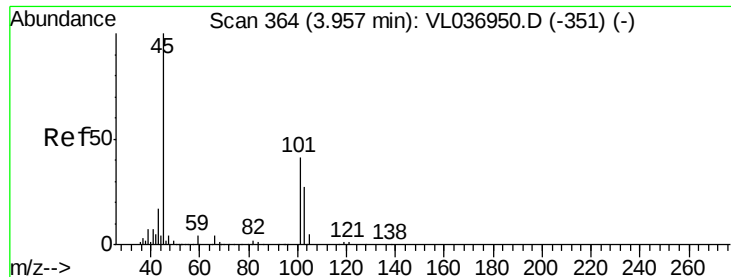
Tot Ion: 39 Resp: 3359
 Ion Ratio Lower Upper
 39 100
 54 0.0 63.2 94.8#



#17
 tert-Butyl alcohol
 Concen: 0.086 ppbv
 RT: 4.29 min Scan# 467
 Delta R.T. 0.01 min
 Lab File: VL037028.D
 Acq: 20 May 2021 17:53

Tgt Ion: 59 Resp: 10205
 Ion Ratio Lower Upper
 59 100
 57 24.7 8.3 12.5#





#19

Isopropyl Alcohol

Concen: 0.348 ppbv

RT: 3.96 min Scan# 366

Delta R.T. 0.01 min

Lab File: VL037028.D

Acq: 20 May 2021 17:53

Instrument :

MSVOA_L

ClientSampleId :

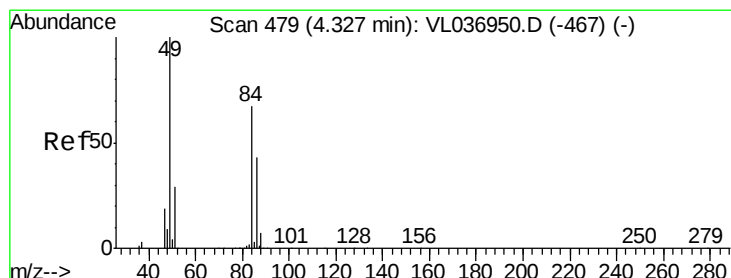
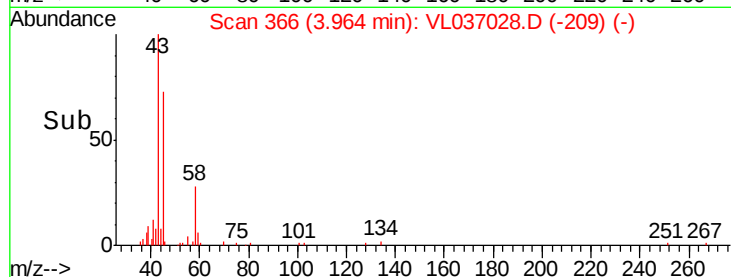
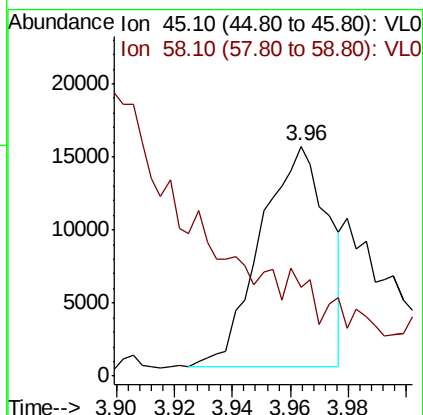
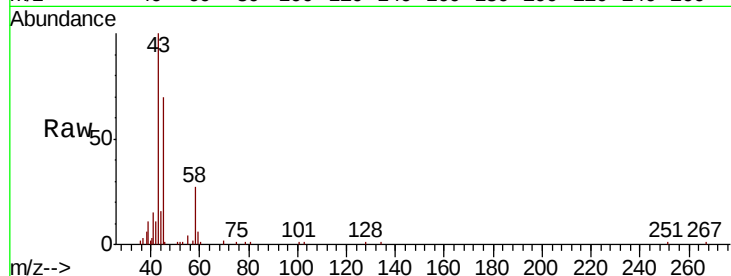
DUP-03-05132021

Tot Ion: 45 Resp: 24294

Ion Ratio Lower Upper

45 100

58 0.0 37.2 55.8#



#20

Methylene Chloride

Concen: 8.281 ppbv

RT: 4.31 min Scan# 475

Delta R.T. -0.01 min

Lab File: VL037028.D

Acq: 20 May 2021 17:53

Tgt Ion: 84 Resp: 575775

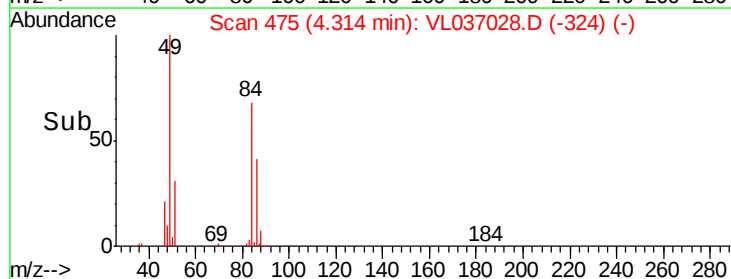
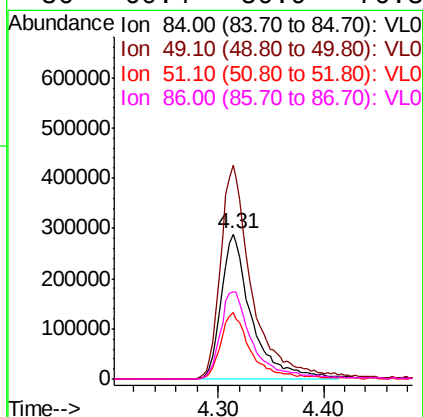
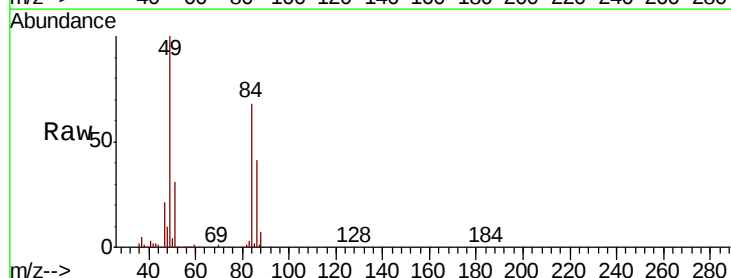
Ion Ratio Lower Upper

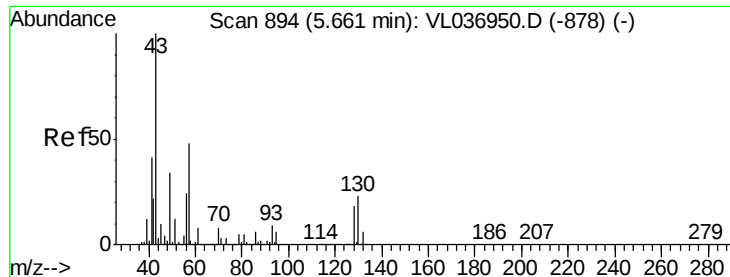
84 100

49 147.6 119.8 179.6

51 46.1 35.1 52.7

86 60.4 50.9 76.3

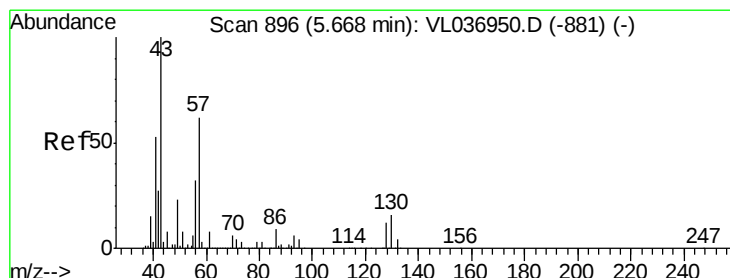
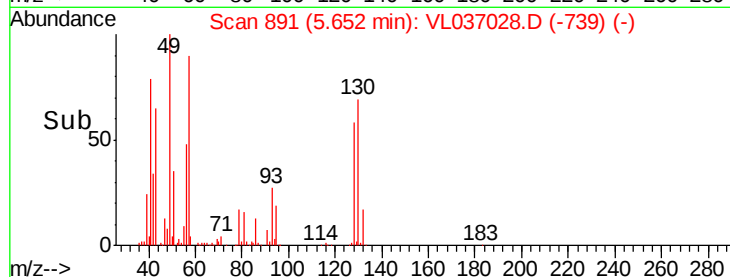
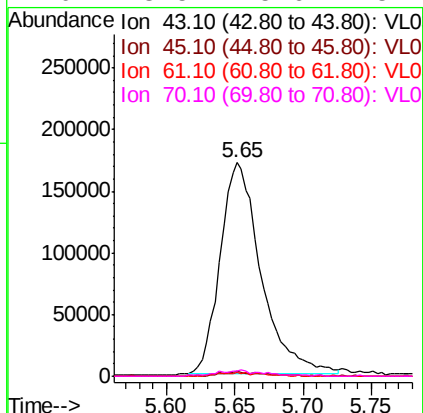
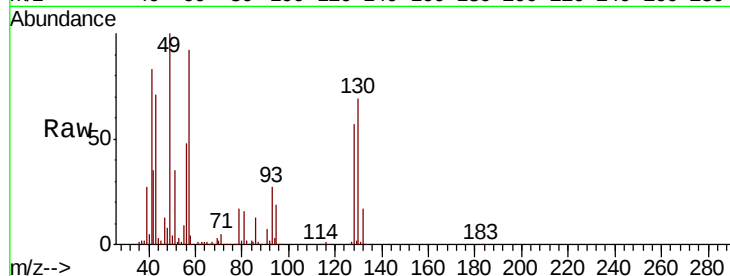




#25
Ethyl Acetate
Concen: 1.148 ppbv
RT: 5.65 min Scan# 891
Delta R.T. -0.01 min
Lab File: VL037028.D
Acq: 20 May 2021 17:53

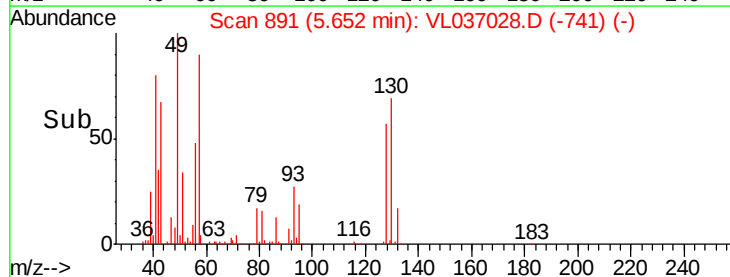
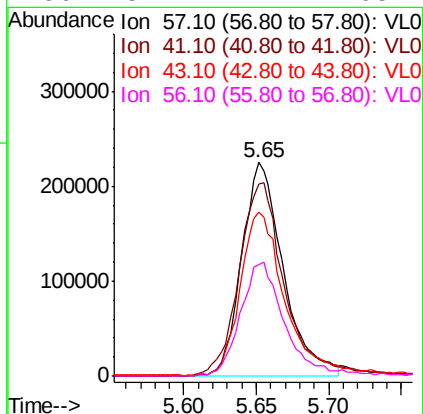
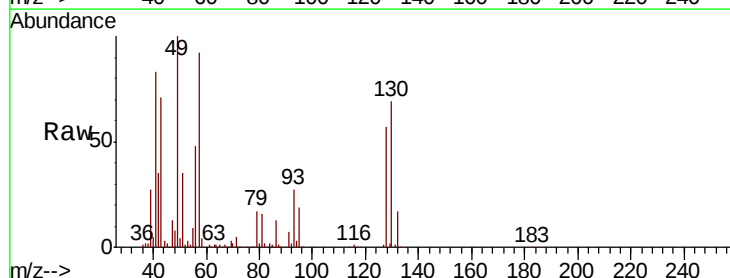
Instrument :
MSVOA_L
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DUP-03-05132021

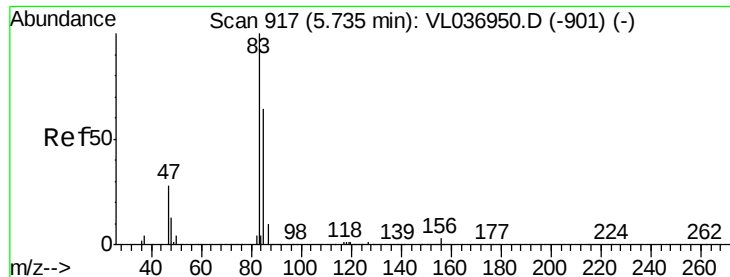
Tot Ion:	43	Resp:	357729
Ion	Ratio	Lower	Upper
43	100		
45	2.8	7.8	11.8#
61	2.0	7.8	11.8#
70	3.5	5.6	8.4#



#26
Hexane
Concen: 2.812 ppbv
RT: 5.65 min Scan# 891
Delta R.T. -0.02 min
Lab File: VL037028.D
Acq: 20 May 2021 17:53

Tgt Ion:	57	Resp:	447772
Ion	Ratio	Lower	Upper
57	100		
41	101.4	70.5	105.7
43	83.6	165.8	248.8#
56	57.4	42.2	63.4





#29

Chloroform

Concen: 0.085 ppbv

RT: 5.71 min Scan# 910

Delta R.T. -0.02 min

Lab File: VL037028.D

Acq: 20 May 2021 17:53

Instrument :

MSVOA_L

ClientSampleId :

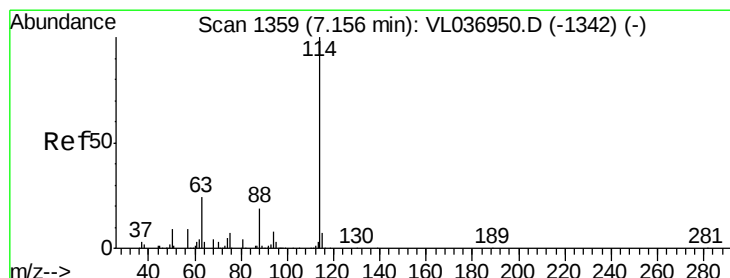
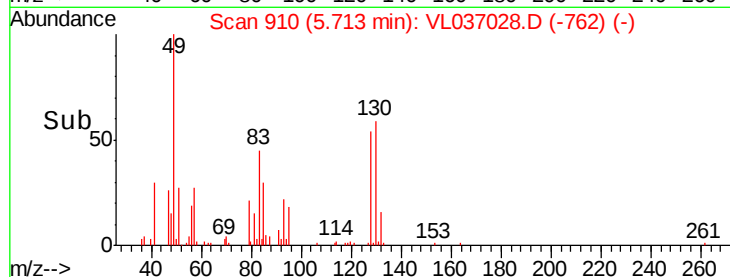
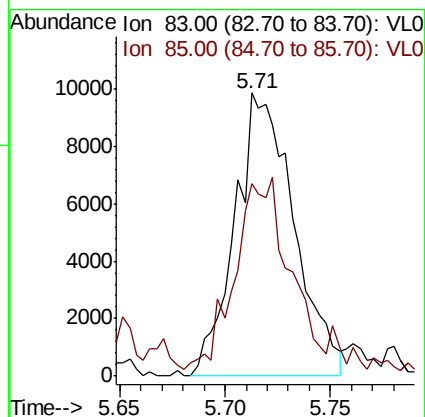
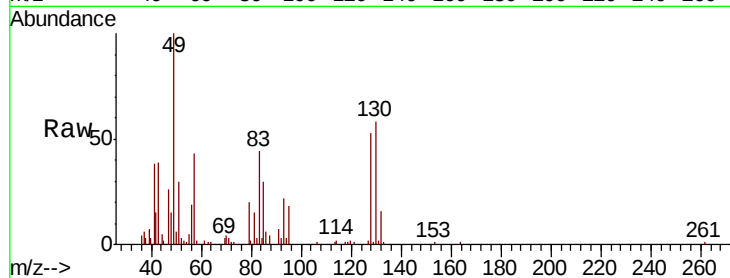
DUP-03-05132021

Tot Ion: 83 Resp: 19193

Ion Ratio Lower Upper

83 100

85 63.0 51.1 76.7



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.14 min Scan# 1353

Delta R.T. -0.02 min

Lab File: VL037028.D

Acq: 20 May 2021 17:53

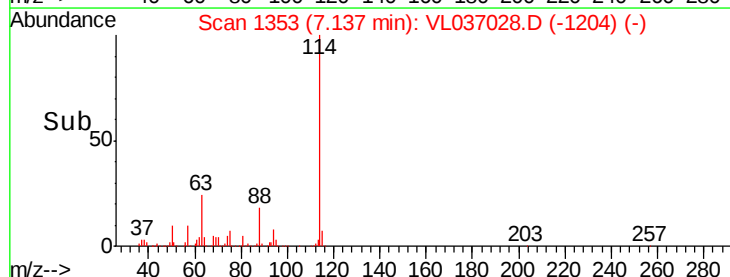
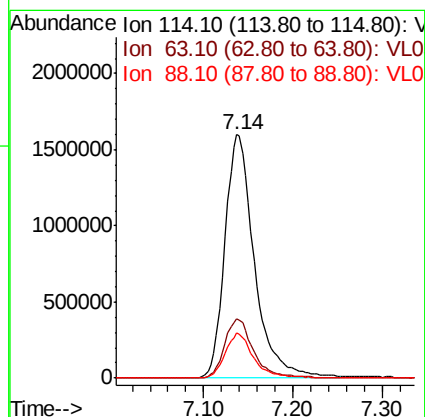
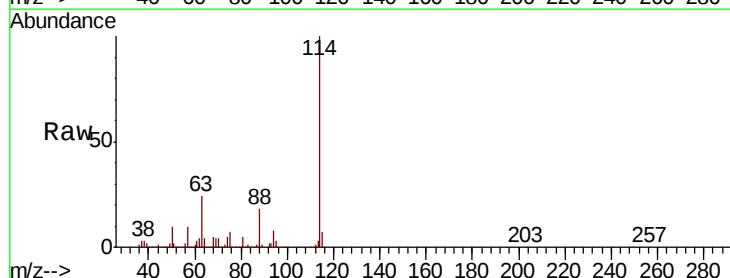
Tgt Ion: 114 Resp: 3667486

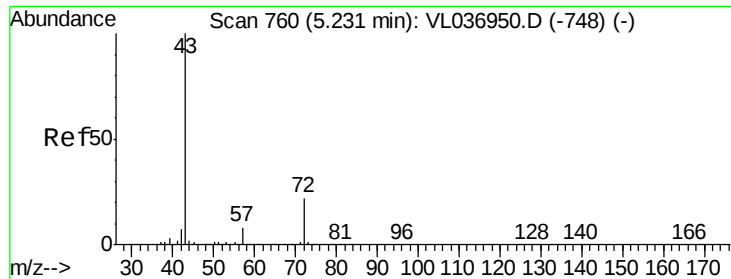
Ion Ratio Lower Upper

114 100

63 24.2 19.6 29.4

88 17.9 14.6 21.8

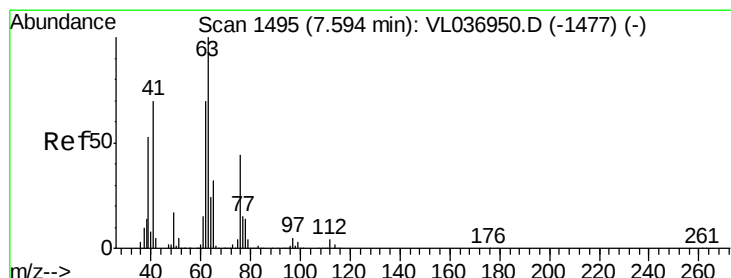
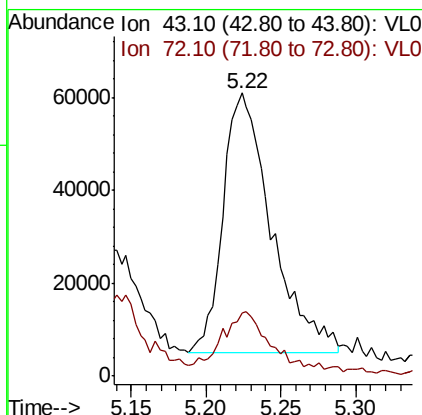
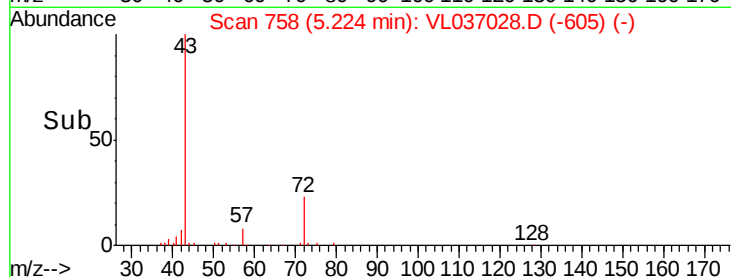
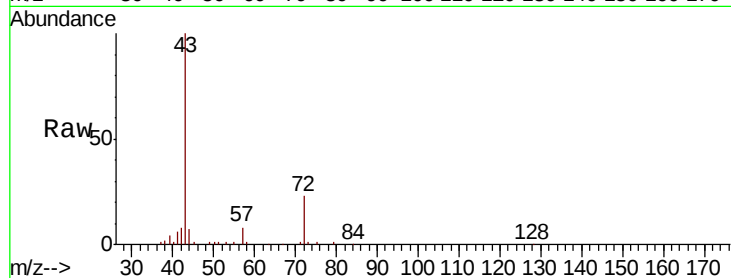




#34
2-Butanone
Concen: 0.941 ppbv
RT: 5.22 min Scan# 758
Delta R.T. -0.01 min
Lab File: VL037028.D
Acq: 20 May 2021 17:53

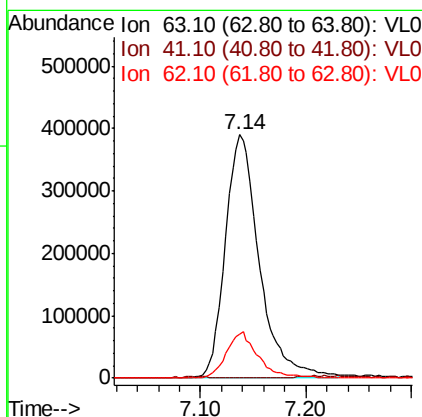
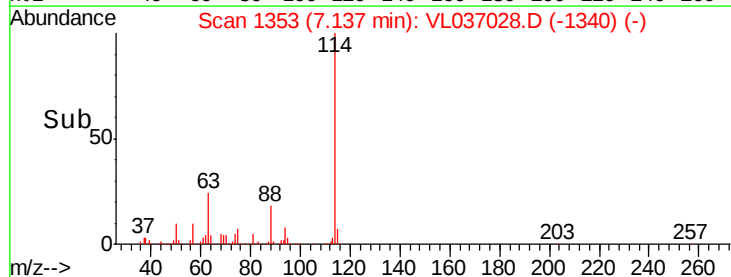
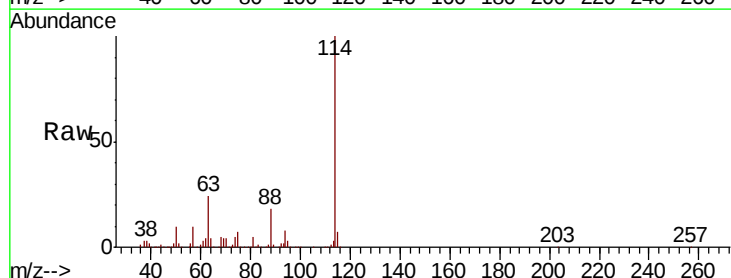
Instrument :
MSVOA_L
ClientSampleId :
DUP-03-05132021

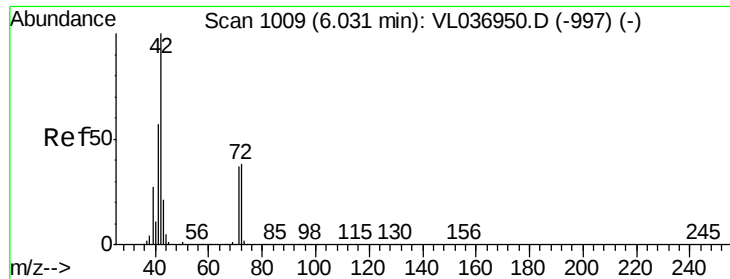
Tot Ion: 43 Resp: 125707
Ion Ratio Lower Upper
43 100
72 31.3 19.0 28.4#



#39
1,2-Dichloropropane
Concen: 7.169 ppbv
RT: 7.14 min Scan# 1353
Delta R.T. -0.46 min
Lab File: VL037028.D
Acq: 20 May 2021 17:53

Tgt Ion: 63 Resp: 872469
Ion Ratio Lower Upper
63 100
41 0.0 55.7 83.5#
62 18.2 56.2 84.4#





#41

Tetrahydrofuran

Concen: 2.196 ppbv

RT: 5.65 min Scan# 891

Delta R.T. -0.38 min

Lab File: VL037028.D

Acq: 20 May 2021 17:53

Instrument :

MSVOA_L

ClientSampleId :

DUP-03-05132021

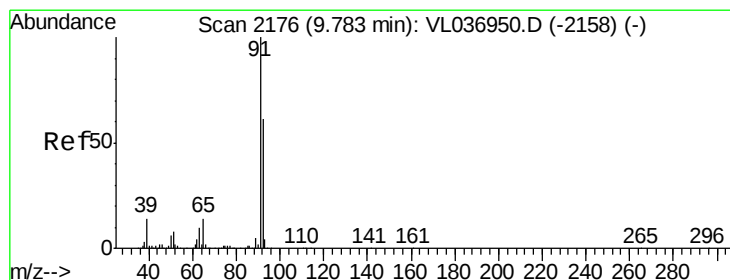
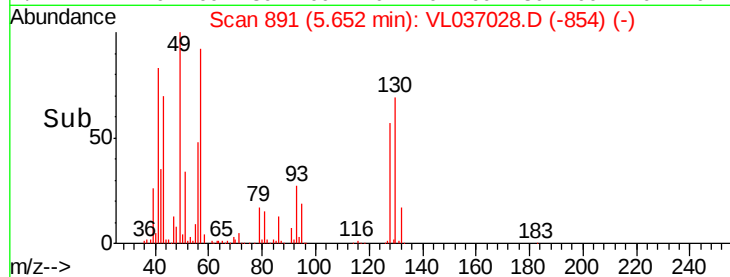
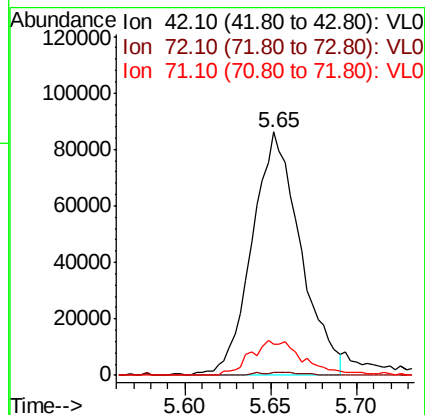
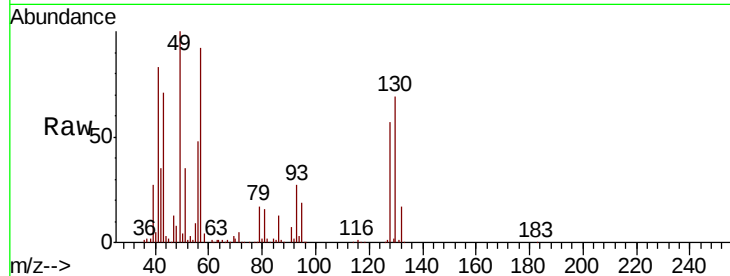
Tot Ion: 42 Resp: 167013

Ion Ratio Lower Upper

42 100

72 1.2 31.4 47.2#

71 16.1 30.4 45.6#



#53

Toluene

Concen: 0.324 ppbv

RT: 9.77 min Scan# 2171

Delta R.T. -0.02 min

Lab File: VL037028.D

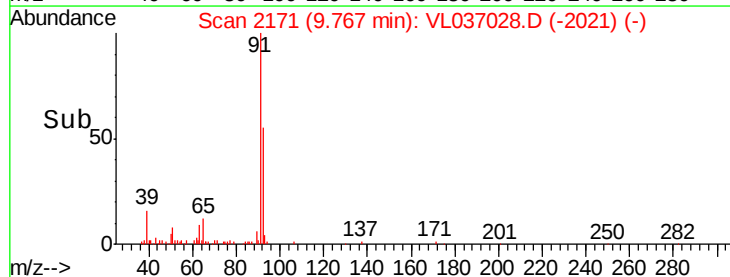
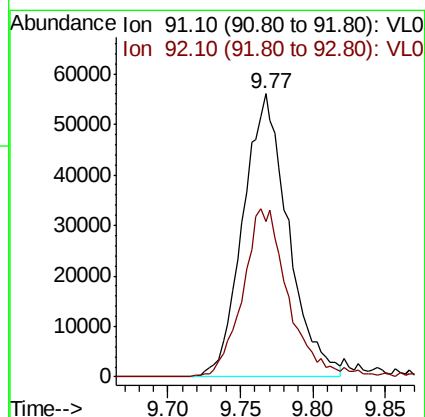
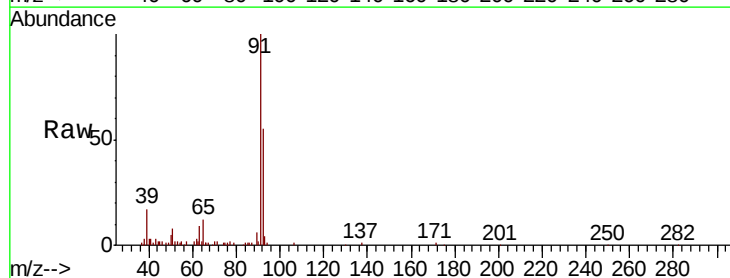
Acq: 20 May 2021 17:53

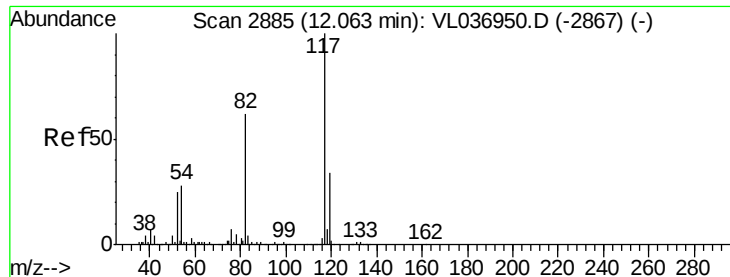
Tgt Ion: 91 Resp: 121936

Ion Ratio Lower Upper

91 100

92 59.9 49.5 74.3

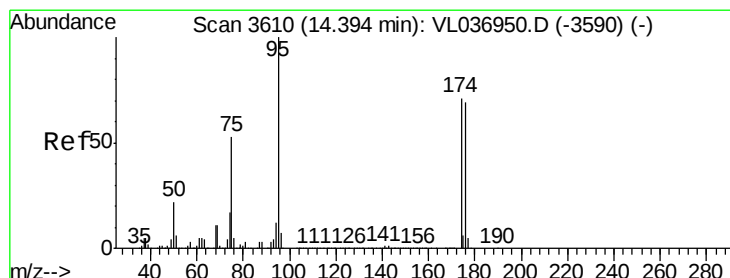
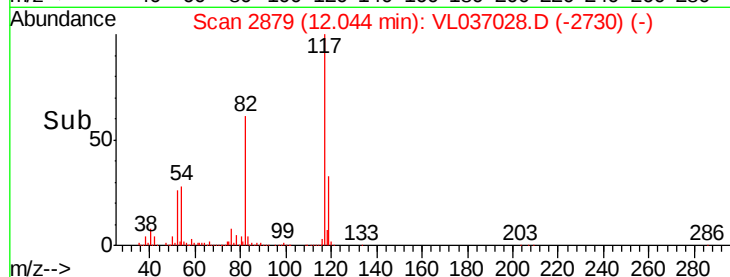
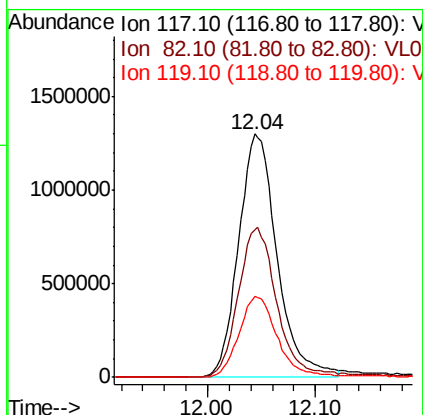
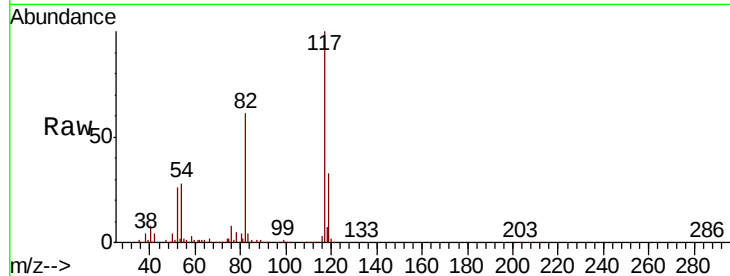




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.04 min Scan# 2879
Delta R.T. -0.02 min
Lab File: VL037028.D
Acq: 20 May 2021 17:53

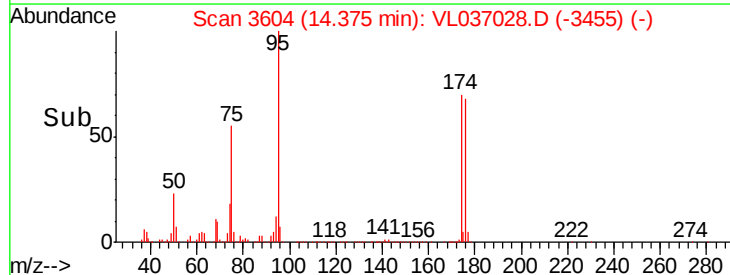
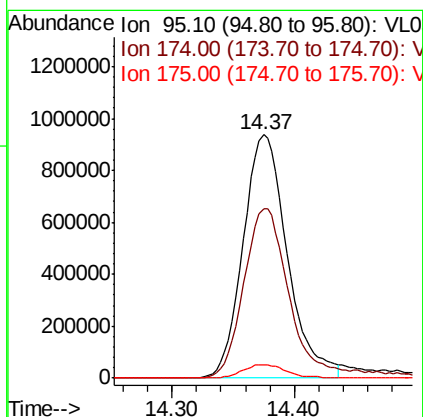
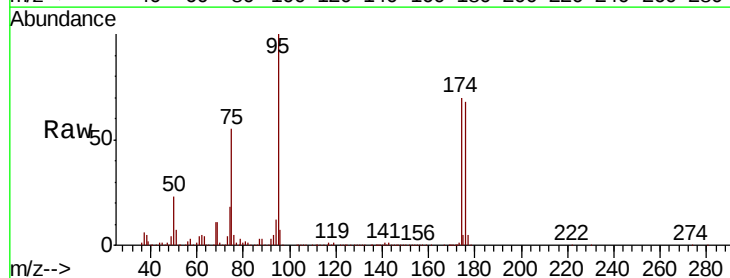
Instrument :
MSVOA_L
ClientSampleId :
DUP-03-05132021

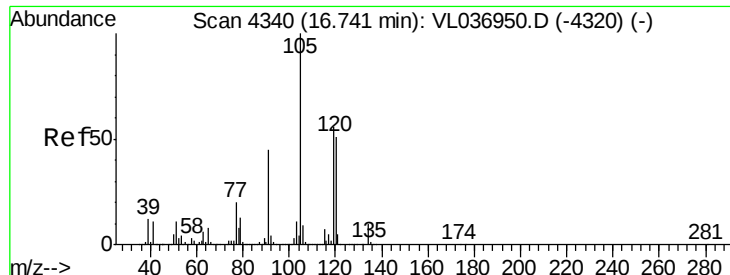
Tot Ion:117 Resp: 3217493
Ion Ratio Lower Upper
117 100
82 64.5 52.6 79.0
119 33.8 46.6 70.0#



#68
1-Bromo-4-Fluorobenzene
Concen: 9.714 ppbv
RT: 14.37 min Scan# 3604
Delta R.T. -0.02 min
Lab File: VL037028.D
Acq: 20 May 2021 17:53

Tgt Ion: 95 Resp: 2347837
Ion Ratio Lower Upper
95 100
174 76.4 58.4 87.6
175 5.6 4.4 6.6





#74
 1,2,4-Trimethylbenzene
 Concen: 0.044 ppbv
 RT: 16.71 min Scan# 4331
 Delta R.T. -0.03 min
 Lab File: VL037028.D
 Acq: 20 May 2021 17:53

Instrument :
 MSVOA_L
 ClientSampleId :
 DUP-03-05132021

Tot Ion:	105	Resp:	18189
Ion	Ratio	Lower	Upper
105	100		
120	37.2	40.6	61.0#
91	13.3	37.4	56.0#
77	9.9	16.2	24.4#

