

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL080421\
 Data File : VL037332.D
 Acq On : 5 Aug 2021 7:19
 Operator : SY/AP
 Sample : M3211-04DL 10X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SVP-4DL

Quant Time: Aug 05 08:23:53 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL080421AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Aug 04 22:53:01 2021
 QLast Update : Wed Aug 04 22:53:01 2021
 Response via : Initial Calibration

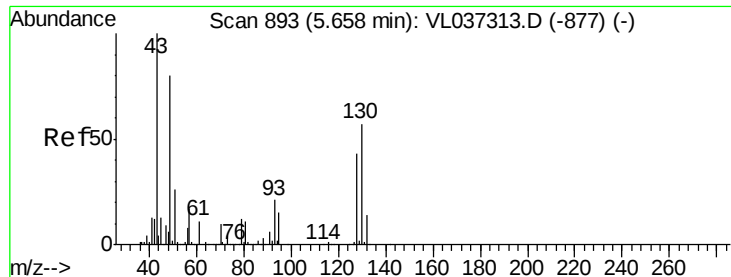
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1042931	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	3487682	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.08	117	2955408	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.40	95	2023596	10.02	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.20%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Chlorodifluoromethane	2.96	51	9076	0.043	ppbv #	61
4) Chloromethane	3.13	50	3377	0.044	ppbv #	80
9) Propene	3.01	41	15540	0.203	ppbv #	16
11) Trichlorofluoromethane	3.94	101	162206	0.833	ppbv	98
13) Ethanol	3.61	45	7091	0.614	ppbv #	34
15) Acetone	3.85	43	412296	3.639	ppbv #	84
16) 1,3-Butadiene	3.33	39	3254	0.045	ppbv #	8
20) Methylene Chloride	4.34	84	145065	1.547	ppbv	97
23) Vinyl Acetate	5.17	43	23327	0.136	ppbv #	14
25) Ethyl Acetate	5.68	43	60747	0.206	ppbv #	78
26) Hexane	5.68	57	47112	0.286	ppbv #	45
29) Chloroform	5.74	83	24650	0.118	ppbv #	82
34) 2-Butanone	5.25	43	374384	3.093	ppbv #	86
35) Carbon Tetrachloride	7.01	117	6462	0.031	ppbv	89
38) Trichloroethene	7.83	130	4325	0.031	ppbv #	55
39) 1,2-Dichloropropane	7.16	63	774248	6.624	ppbv #	28
41) Tetrahydrofuran	6.05	42	280834	4.173	ppbv	95
51) 2-Hexanone	10.16	43	15562	0.185	ppbv #	14
53) Toluene	9.80	91	20856	0.056	ppbv	90
65) tert-Butylbenzene	16.97	119	63049	0.142	ppbv #	26
66) Benzyl Chloride	16.98	91	778	0.045	ppbv #	60

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 min Scan# 893

Delta R.T. -0.00 min

Lab File: VL037332.D

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ClientSampleId :

SVP-4DL

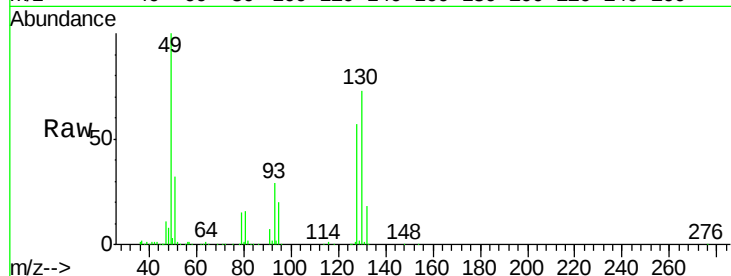
Tgt Ion: 49 Resp: 1042931

Ion Ratio Lower Upper

49 100

128 61.7 29.8 89.5

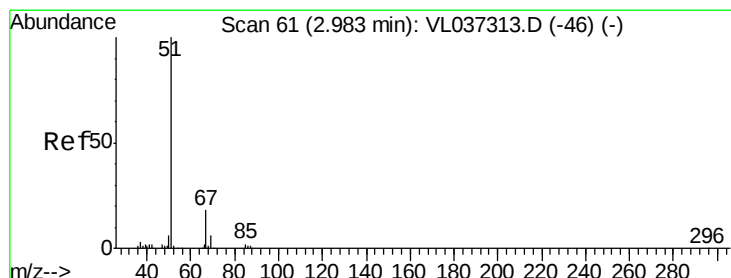
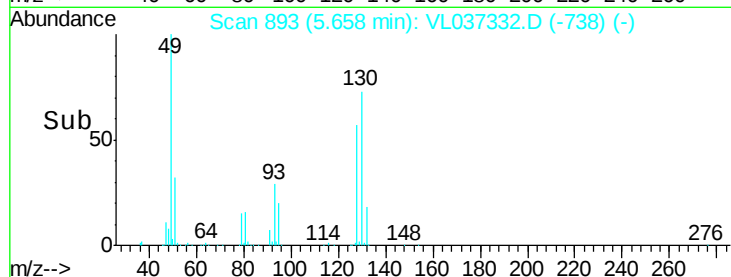
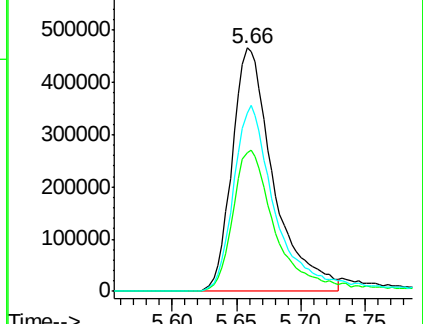
130 80.3 37.5 112.7



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: 0.043 ppbv

RT: 2.96 min Scan# 55

Delta R.T. -0.02 min

Lab File: VL037332.D

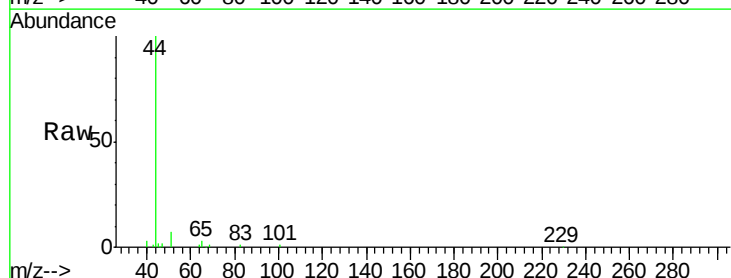
Acq: 5 Aug 2021 7:19

Tgt Ion: 51 Resp: 9076

Ion Ratio Lower Upper

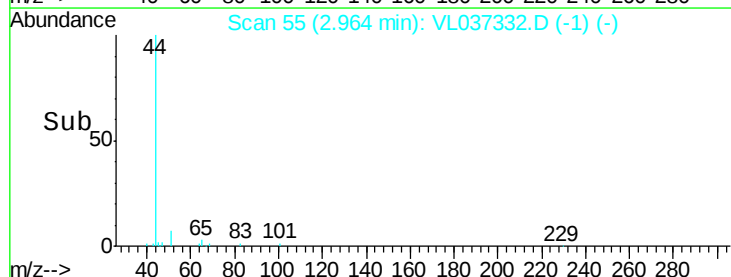
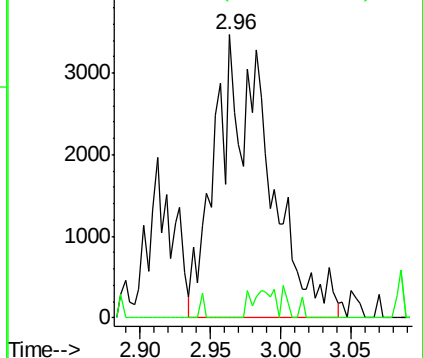
51 100

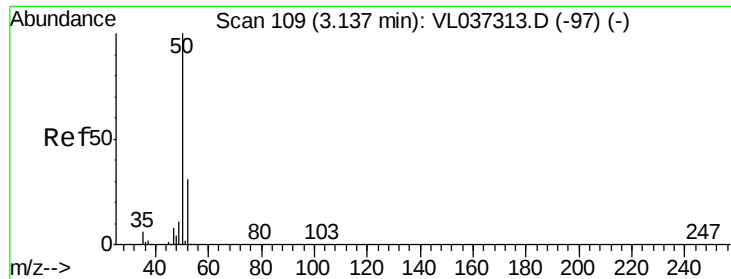
67 0.6 14.2 21.2#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0





#4

Chloromethane

Concen: 0.044 ppbv

RT: 3.13 min Scan# 108

Delta R.T. -0.00 min

Lab File: VL037332.D

Acq: 5 Aug 2021 7:19

Instrument :

MSVOA_L

ClientSampleId :

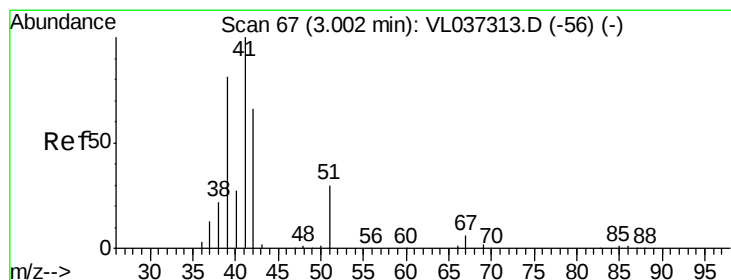
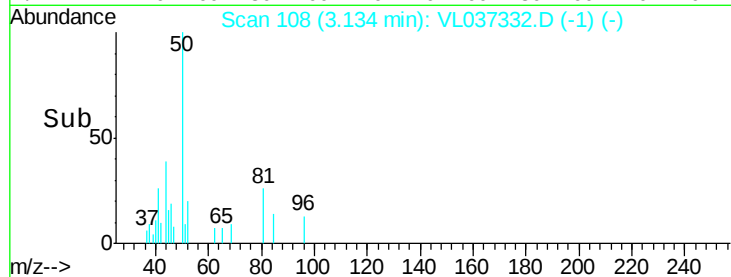
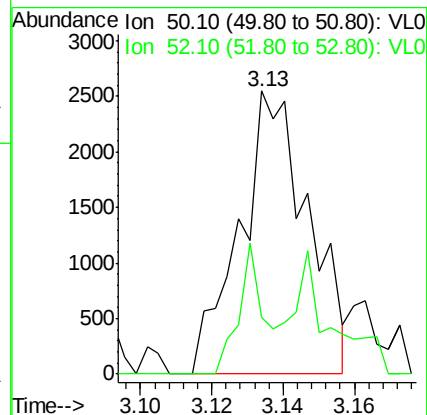
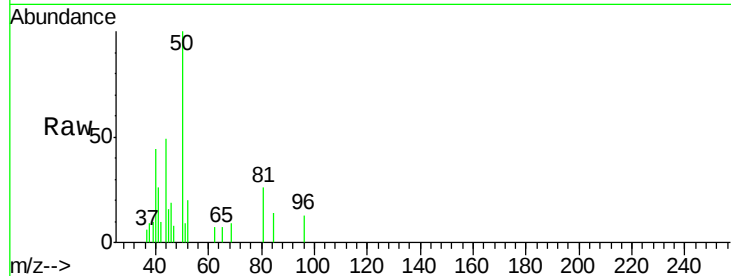
SVP-4DL

Tgt Ion: 50 Resp: 3377

Ion Ratio Lower Upper

50 100

52 20.3 25.1 37.7#



#9

Propene

Concen: 0.203 ppbv

RT: 3.01 min Scan# 69

Delta R.T. 0.01 min

Lab File: VL037332.D

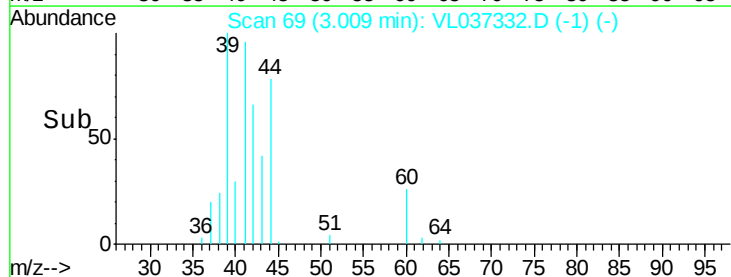
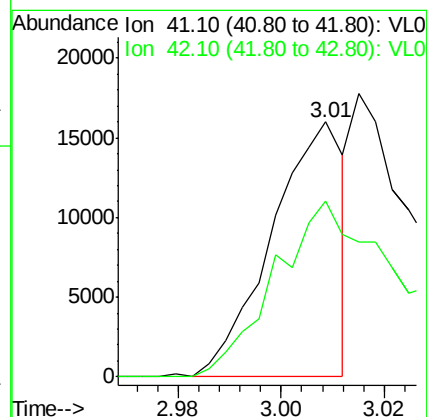
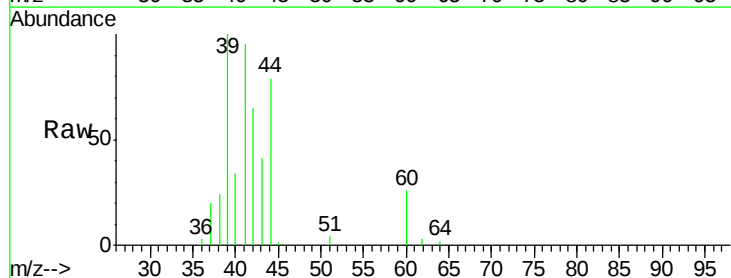
Acq: 5 Aug 2021 7:19

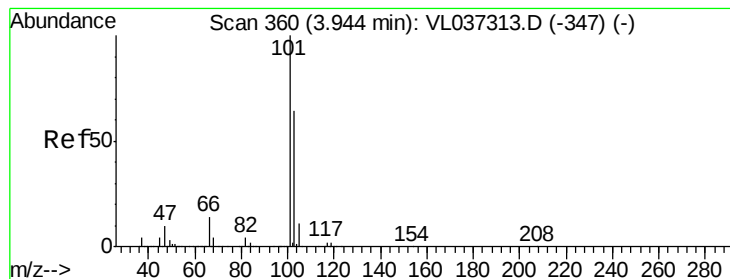
Tgt Ion: 41 Resp: 15540

Ion Ratio Lower Upper

41 100

42 134.9 53.8 80.8#





#11

Trichlorofluoromethane

Concen: 0.833 ppbv

RT: 3.94 min Scan# 360

Delta R.T. -0.00 min

Lab File: VL037332.D

Acq: 5 Aug 2021 7:19

Instrument :

MSVOA_L

ClientSampleId :

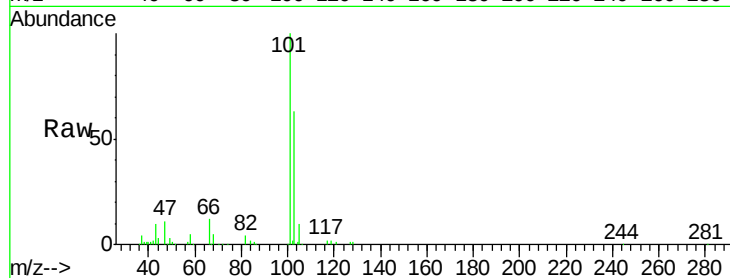
SVP-4DL

Tgt Ion:101 Resp: 162206

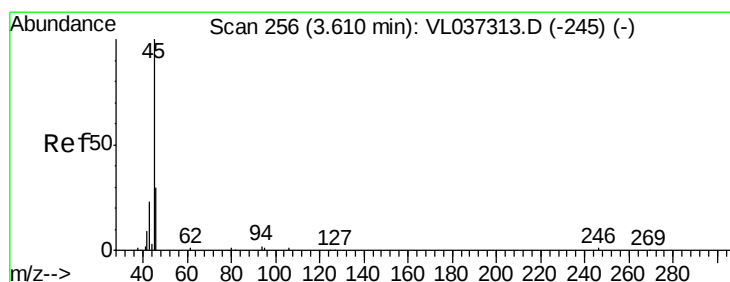
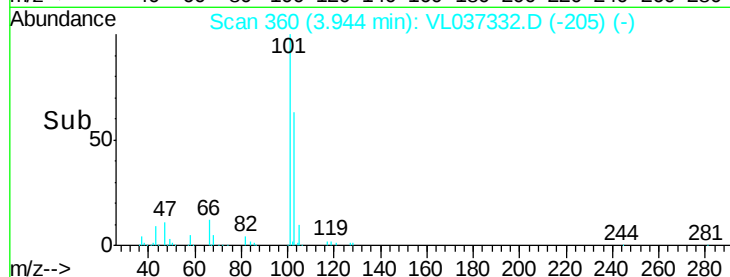
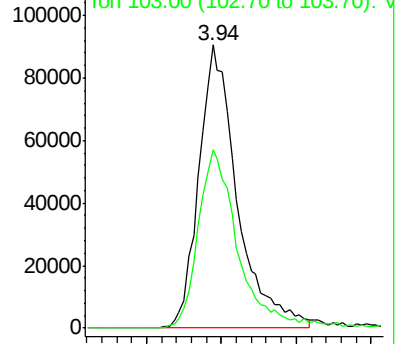
Ion Ratio Lower Upper

101 100

103 62.8 51.6 77.4



Abundance Ion 101.00 (100.70 to 101.70): V



#13

Ethanol

Concen: 0.614 ppbv

RT: 3.61 min Scan# 257

Delta R.T. 0.00 min

Lab File: VL037332.D

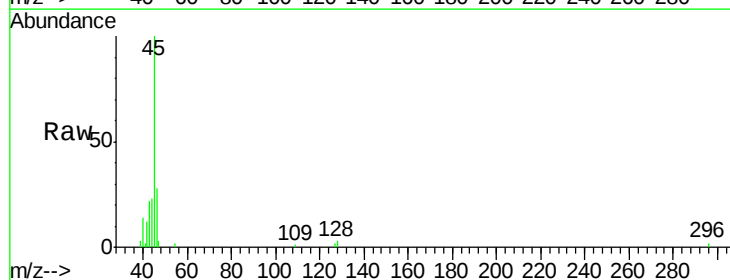
Acq: 5 Aug 2021 7:19

Tgt Ion: 45 Resp: 7091

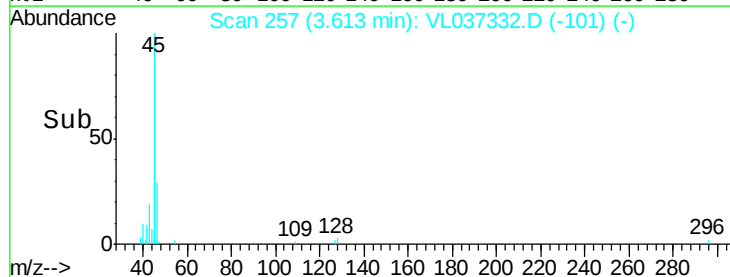
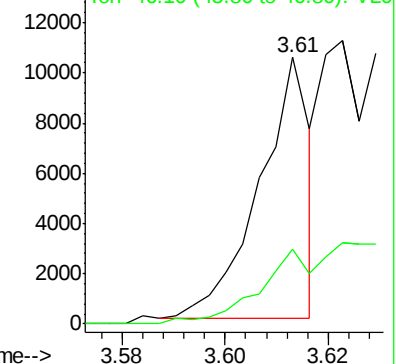
Ion Ratio Lower Upper

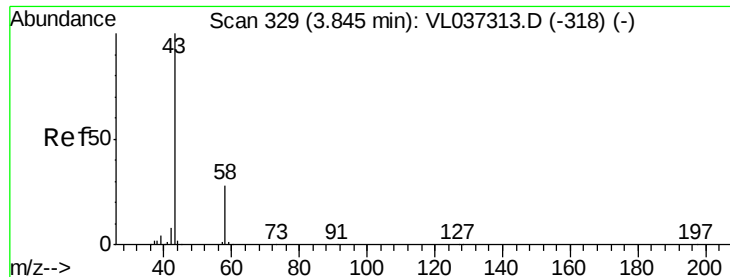
45 100

46 0.0 16.6 66.4#



Abundance Ion 45.10 (44.80 to 45.80): VL0





#15

Acetone

Concen: 3.639 ppbv

RT: 3.85 min Scan# 331

Delta R.T. 0.01 min

Lab File: VL037332.D

Acq: 5 Aug 2021 7:19

Instrument :

MSVOA_L

ClientSampleId :

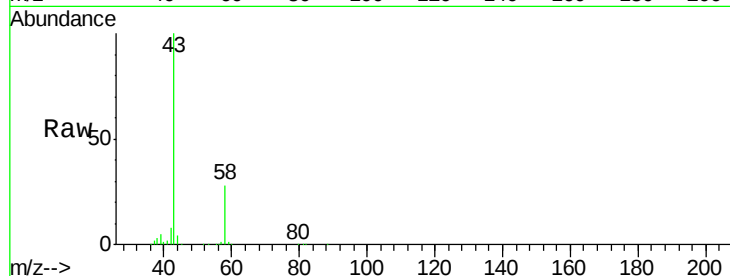
SVP-4DL

Tgt Ion: 43 Resp: 412296

Ion Ratio Lower Upper

43 100

58 40.3 25.3 37.9#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

3.85

200000

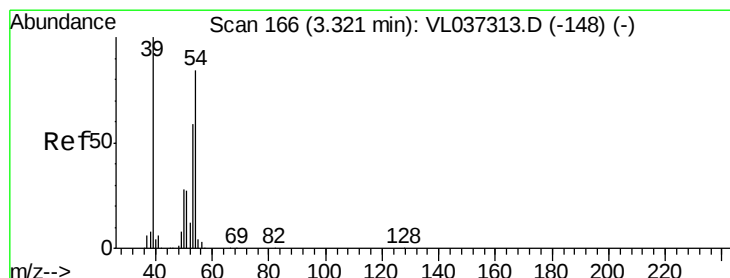
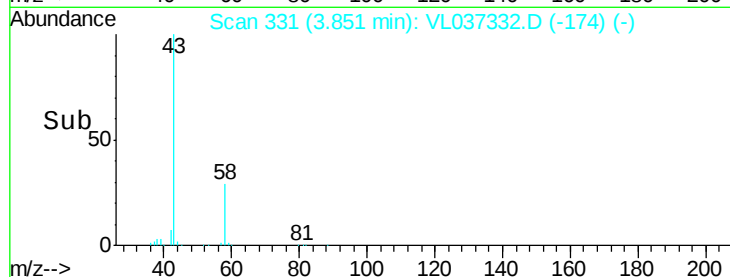
150000

100000

50000

0

Time-->



#16

1,3-Butadiene

Concen: 0.045 ppbv

RT: 3.33 min Scan# 169

Delta R.T. 0.01 min

Lab File: VL037332.D

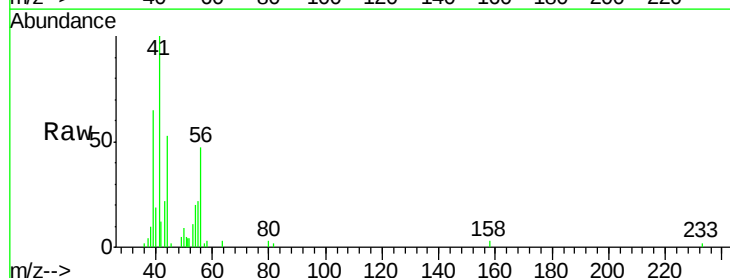
Acq: 5 Aug 2021 7:19

Tgt Ion: 39 Resp: 3254

Ion Ratio Lower Upper

39 100

54 0.0 66.1 99.1#



Abundance Ion 39.10 (38.80 to 39.80): VL0

Ion 54.10 (53.80 to 54.80): VL0

3.33

10000

8000

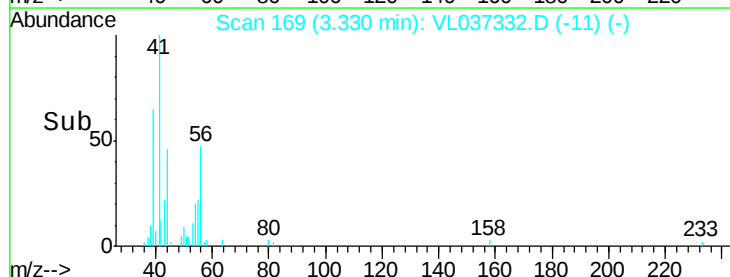
6000

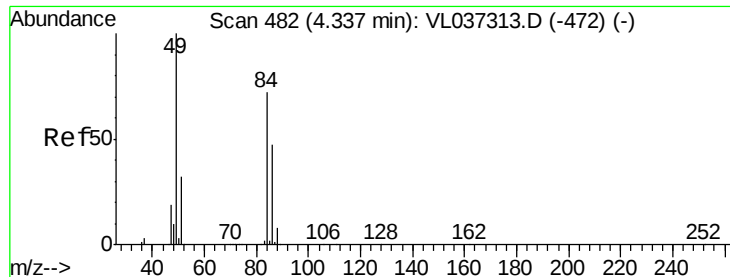
4000

2000

0

Time-->

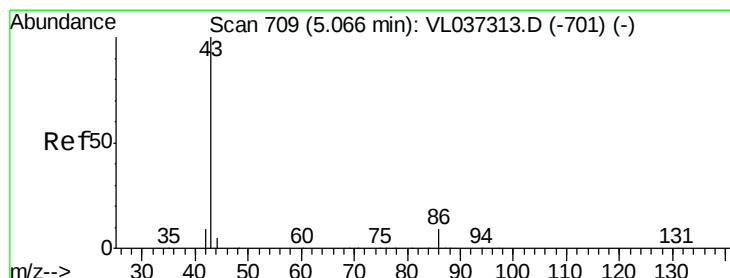
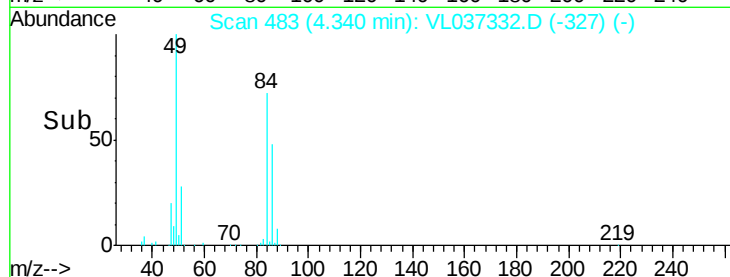
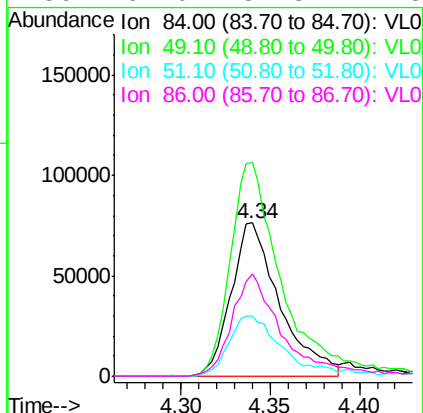
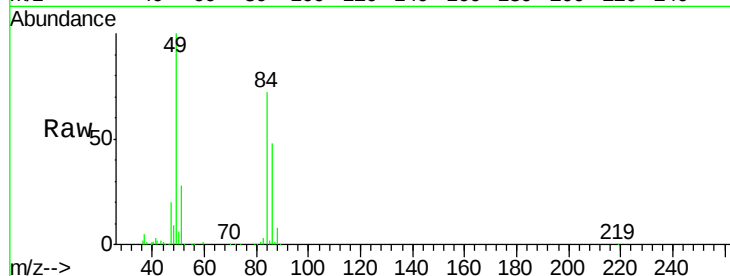




#20
Methylene Chloride
Concen: 1.547 ppbv
RT: 4.34 min Scan# 483
Delta R.T. 0.00 min
Lab File: VL037332.D
Acq: 5 Aug 2021 7:19

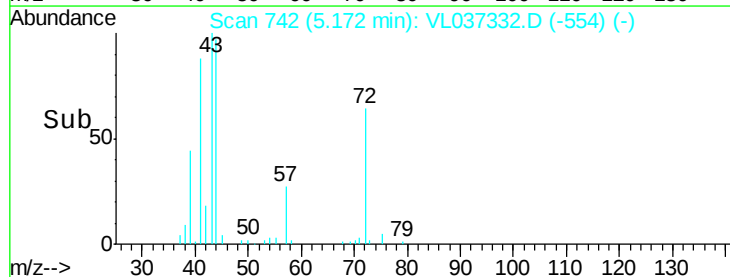
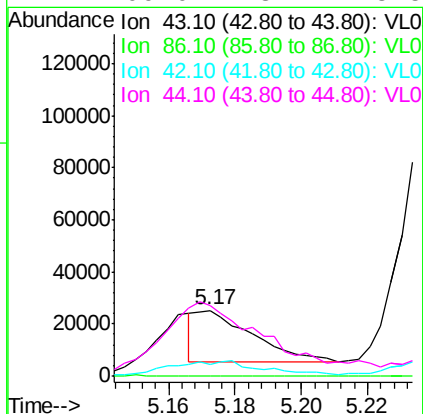
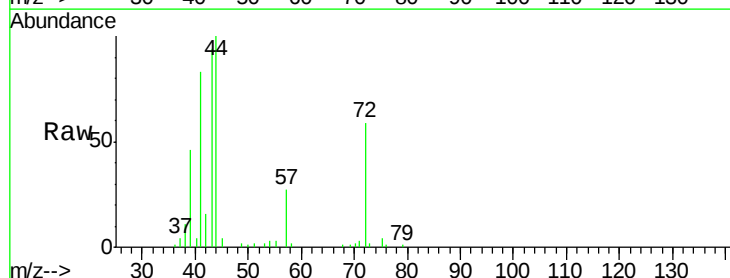
Instrument :
MSVOA_L
ClientSampleId :
SVP-4DL

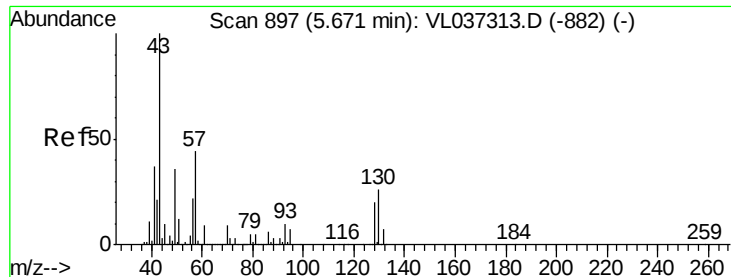
Tgt Ion:	84	Resp:	145065
Ion	Ratio	Lower	Upper
84	100		
49	138.7	110.4	165.6
51	39.1	35.8	53.6
86	67.0	51.8	77.8



#23
Vinyl Acetate
Concen: 0.136 ppbv
RT: 5.17 min Scan# 742
Delta R.T. 0.11 min
Lab File: VL037332.D
Acq: 5 Aug 2021 7:19

Tgt Ion:	43	Resp:	23327
Ion	Ratio	Lower	Upper
43	100		
86	0.0	6.2	9.2#
42	19.2	7.7	11.5#
44	109.0	3.7	5.5#

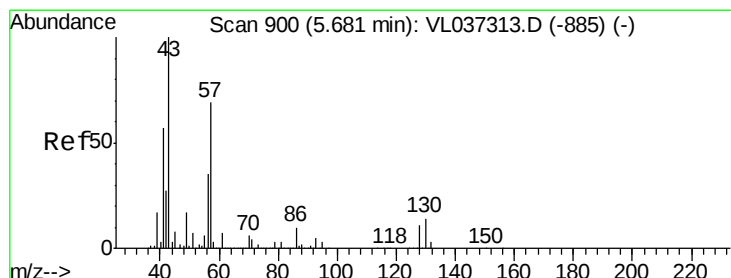
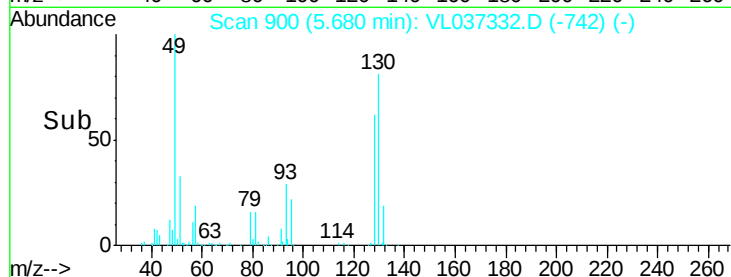
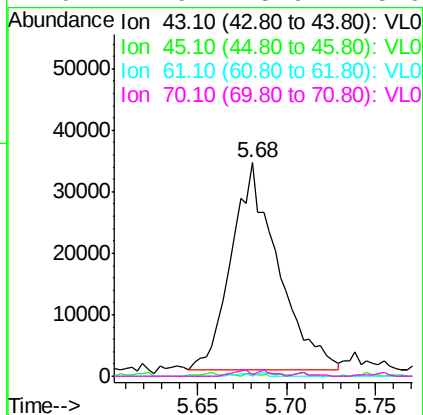
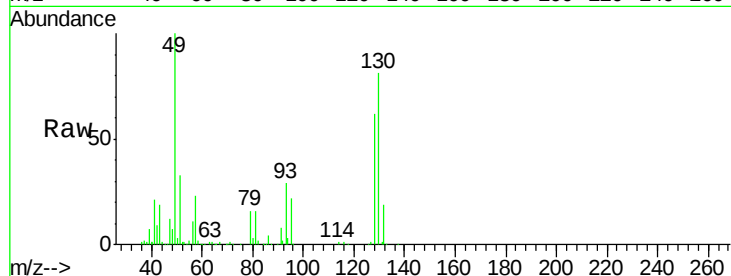




#25
Ethyl Acetate
Concen: 0.206 ppbv
RT: 5.68 min Scan# 900
Delta R.T. 0.01 min
Lab File: VL037332.D
Acq: 5 Aug 2021 7:19

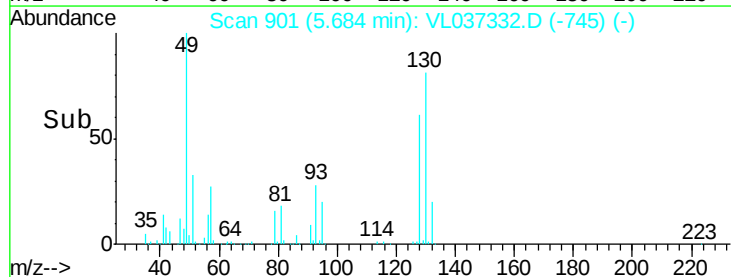
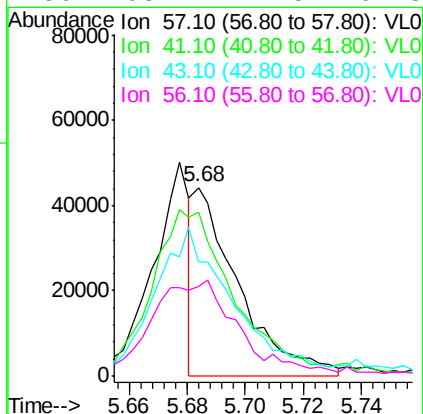
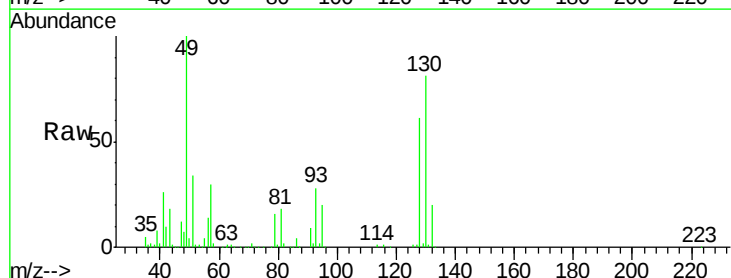
Instrument :
MSVOA_L
ClientSampleId :
SVP-4DL

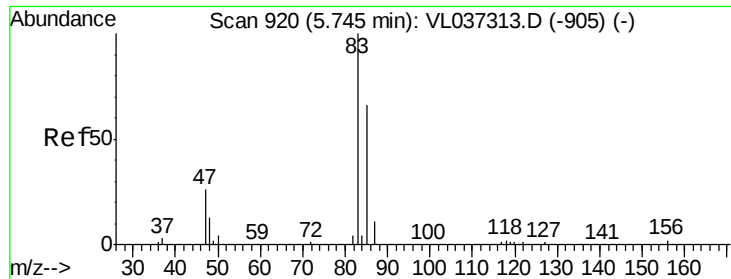
Tgt Ion:	43	Resp:	60747
Ion	Ratio	Lower	Upper
43	100		
45	2.2	7.8	11.8#
61	0.7	8.6	12.8#
70	1.9	5.9	8.9#



#26
Hexane
Concen: 0.286 ppbv
RT: 5.68 min Scan# 901
Delta R.T. 0.00 min
Lab File: VL037332.D
Acq: 5 Aug 2021 7:19

Tgt Ion:	57	Resp:	47112
Ion	Ratio	Lower	Upper
57	100		
41	0.0	67.5	101.3#
43	151.1	163.0	244.4#
56	105.2	41.5	62.3#





#29

Chloroform

Concen: 0.118 ppbv

RT: 5.74 min Scan# 920

Delta R.T. -0.00 min

Lab File: VL037332.D

Acq: 5 Aug 2021 7:19

Instrument :

MSVOA_L

ClientSampleId :

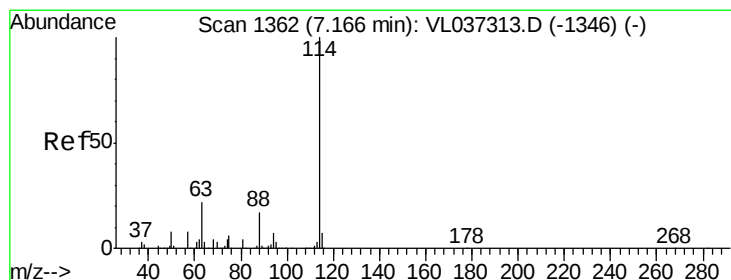
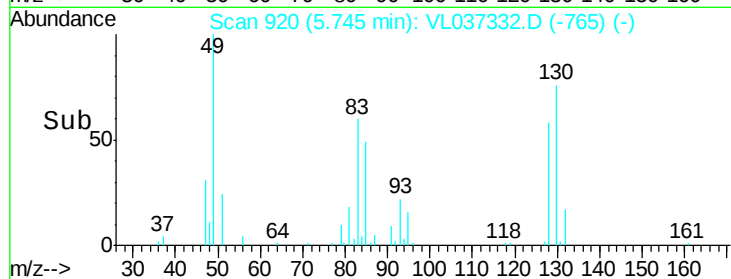
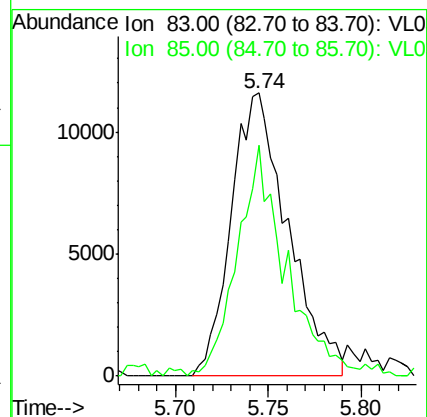
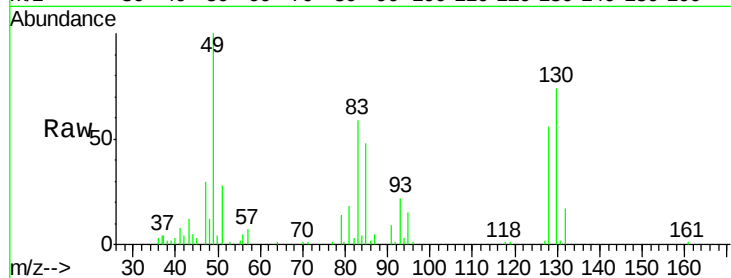
SVP-4DL

Tgt Ion: 83 Resp: 24650

Ion Ratio Lower Upper

83 100

85 80.0 52.6 79.0#



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.17 min Scan# 1362

Delta R.T. -0.00 min

Lab File: VL037332.D

Acq: 5 Aug 2021 7:19

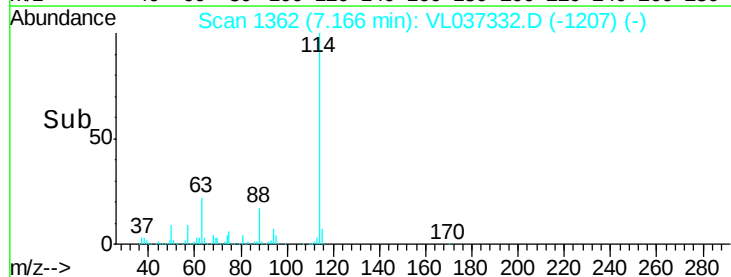
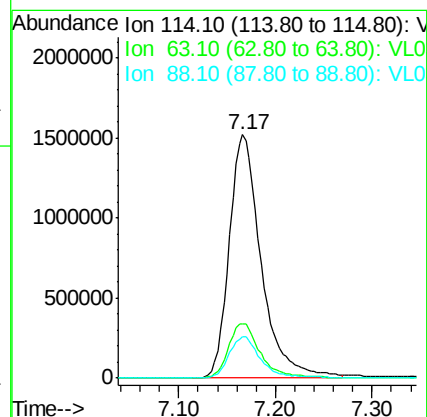
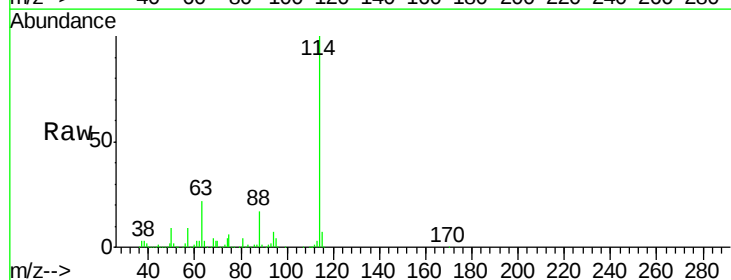
Tgt Ion: 114 Resp: 3487682

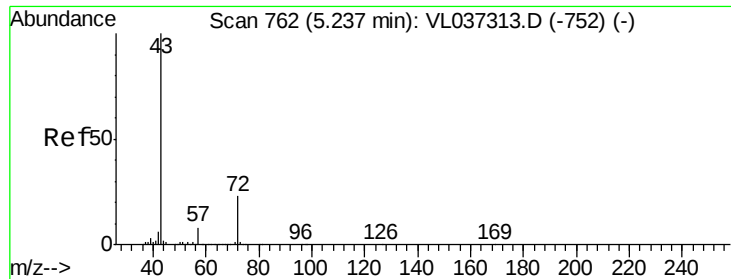
Ion Ratio Lower Upper

114 100

63 22.8 18.1 27.1

88 17.2 13.8 20.8





#34

2-Butanone

Concen: 3.093 ppbv

RT: 5.25 min Scan# 765

Delta R.T. 0.01 min

Lab File: VL037332.D

Acq: 5 Aug 2021 7:19

Instrument :

MSVOA_L

ClientSampleId :

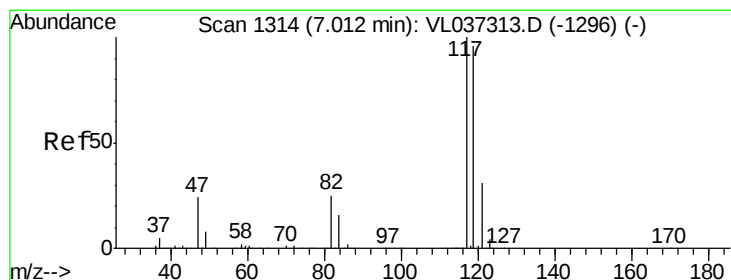
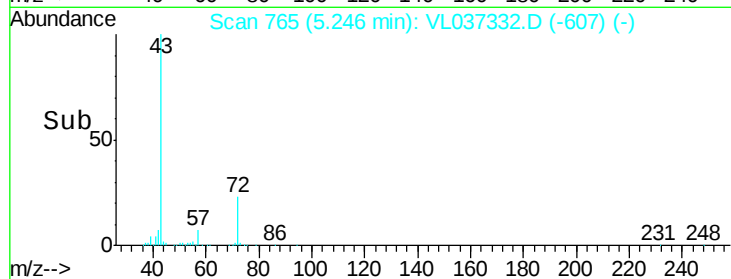
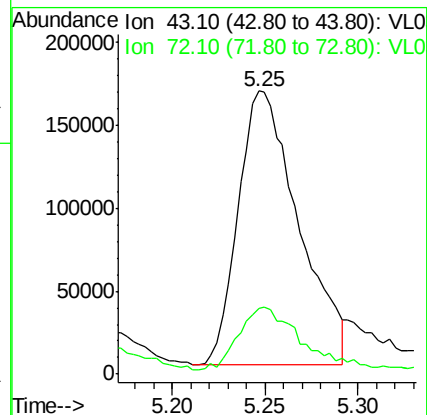
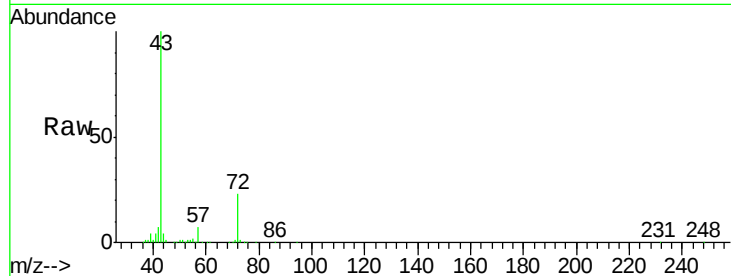
SVP-4DL

Tgt Ion: 43 Resp: 374384

Ion Ratio Lower Upper

43 100

72 32.3 20.3 30.5#



#35

Carbon Tetrachloride

Concen: 0.031 ppbv

RT: 7.01 min Scan# 1312

Delta R.T. -0.01 min

Lab File: VL037332.D

Acq: 5 Aug 2021 7:19

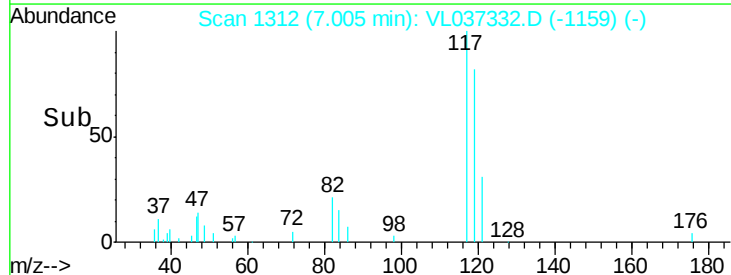
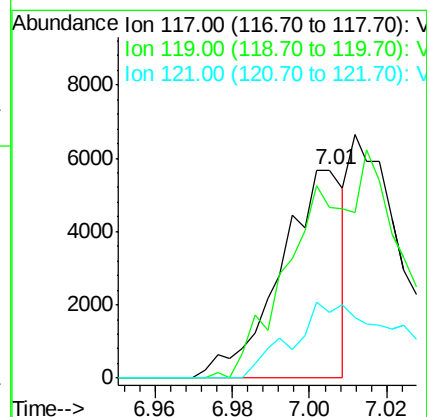
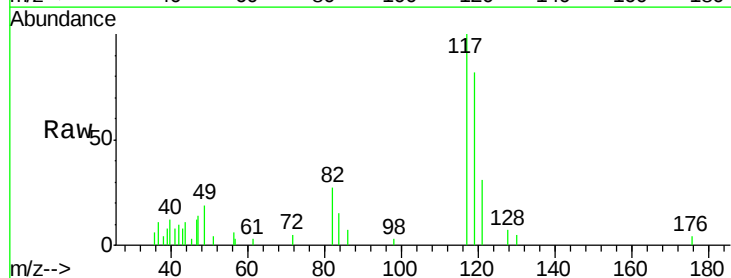
Tgt Ion: 117 Resp: 6462

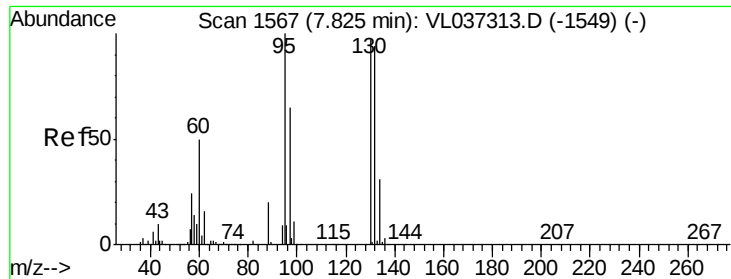
Ion Ratio Lower Upper

117 100

119 82.2 76.6 114.8

121 31.3 24.9 37.3





#38

Trichloroethene

Concen: 0.031 ppbv

RT: 7.83 min Scan# 1568

Delta R.T. 0.00 min

Lab File: VL037332.D

Acq: 5 Aug 2021 7:19

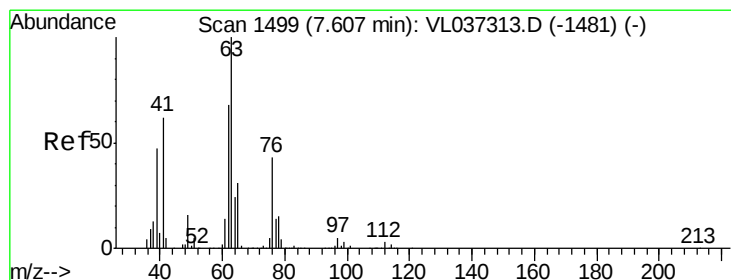
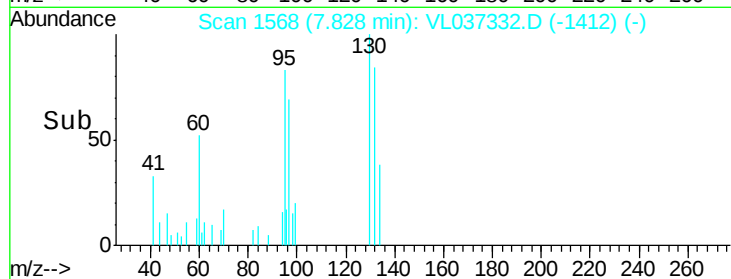
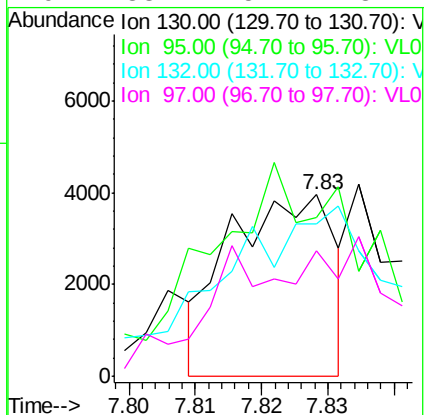
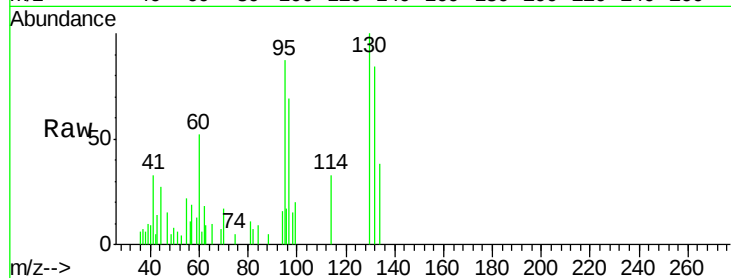
Instrument :

MSVOA_L

ClientSampleId :

SVP-4DL

Tgt Ion:	130	Resp:	4325
Ion	Ratio	Lower	Upper
130	100		
95	28.9	82.8	124.2#
132	64.1	78.2	117.4#
97	83.2	54.2	81.2#



#39

1,2-Dichloropropane

Concen: 6.624 ppbv

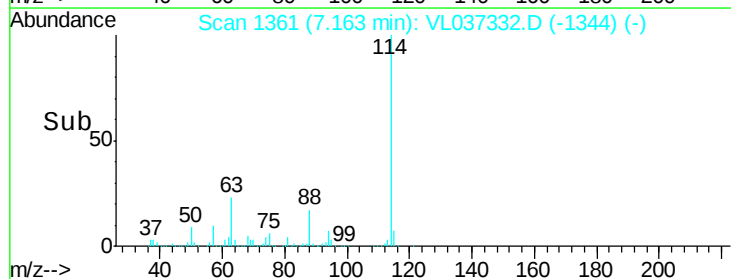
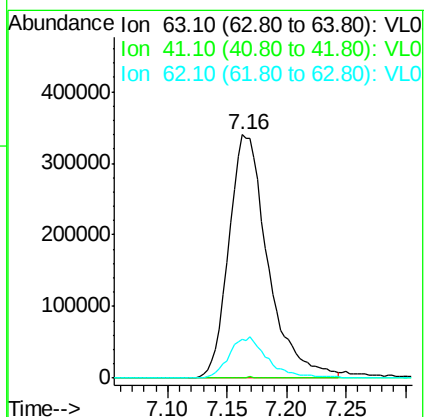
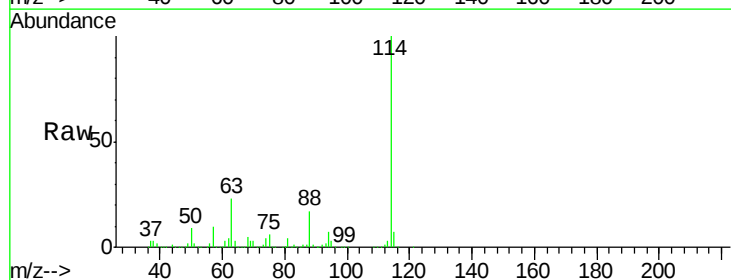
RT: 7.16 min Scan# 1361

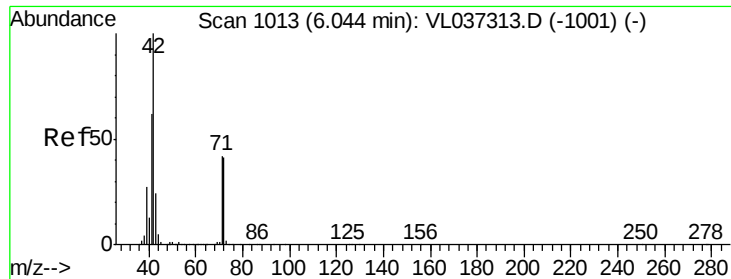
Delta R.T. -0.44 min

Lab File: VL037332.D

Acq: 5 Aug 2021 7:19

Tgt Ion:	63	Resp:	774248
Ion	Ratio	Lower	Upper
63	100		
41	0.2	49.2	73.8#
62	16.1	54.2	81.4#

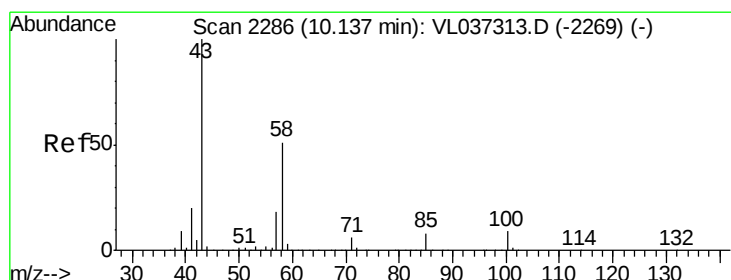
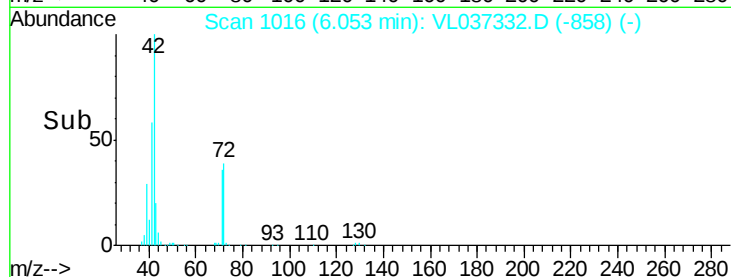
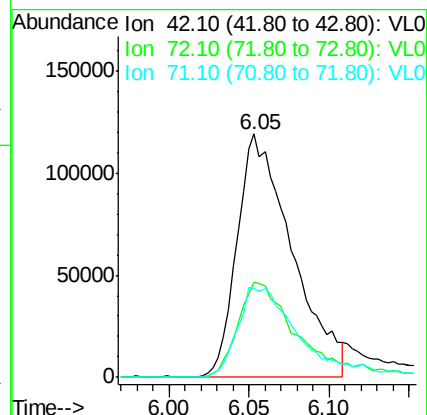
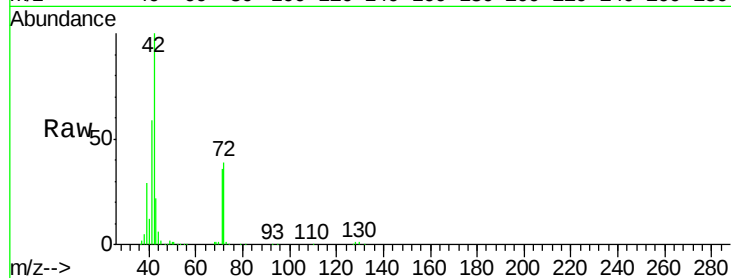




#41
Tetrahydrofuran
Concen: 4.173 ppbv
RT: 6.05 min Scan# 1016
Delta R.T. 0.01 min
Lab File: VL037332.D
Acq: 5 Aug 2021 7:19

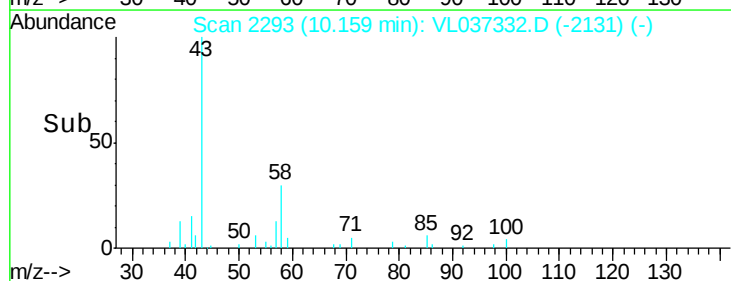
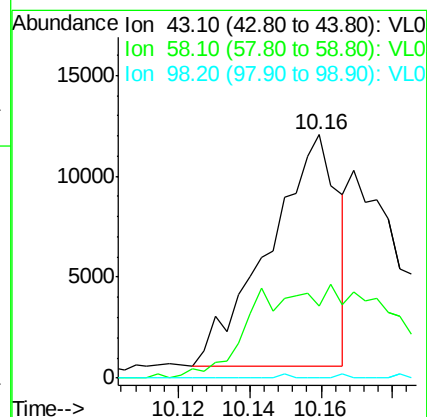
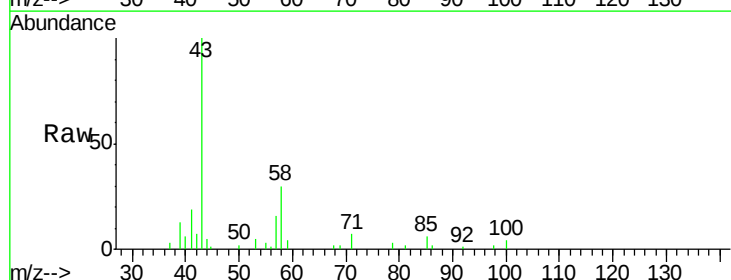
Instrument :
MSVOA_L
ClientSampleId :
SVP-4DL

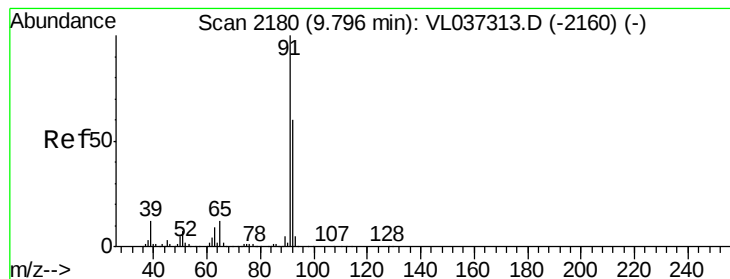
Tgt Ion:	42	Resp:	280834
Ion	Ratio	Lower	Upper
42	100		
72	44.9	33.6	50.4
71	44.7	33.0	49.4



#51
2-Hexanone
Concen: 0.185 ppbv
RT: 10.16 min Scan# 2293
Delta R.T. 0.02 min
Lab File: VL037332.D
Acq: 5 Aug 2021 7:19

Tgt Ion:	43	Resp:	15562
Ion	Ratio	Lower	Upper
43	100		
58	111.4	40.9	61.3#
98	0.0	0.1	0.1#





#53

Toluene

Concen: 0.056 ppbv

RT: 9.80 min Scan# 2180

Delta R.T. -0.00 min

Lab File: VL037332.D

Acq: 5 Aug 2021 7:19

Instrument :

MSVOA_L

ClientSampleId :

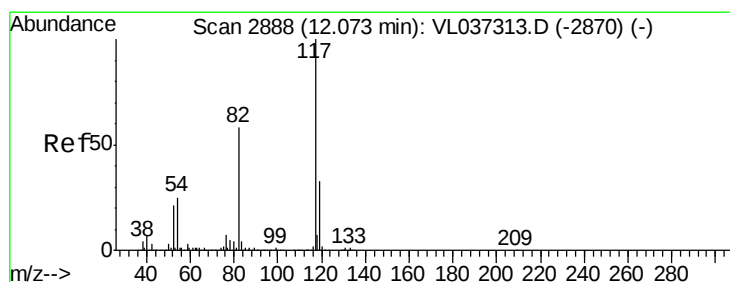
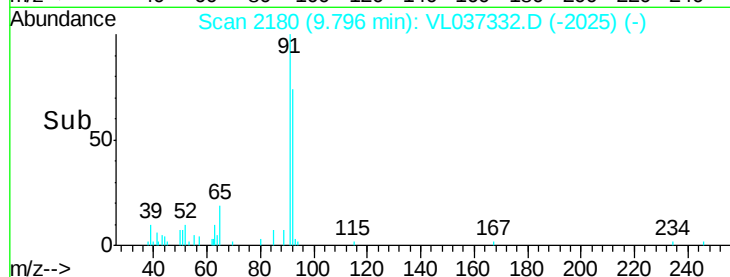
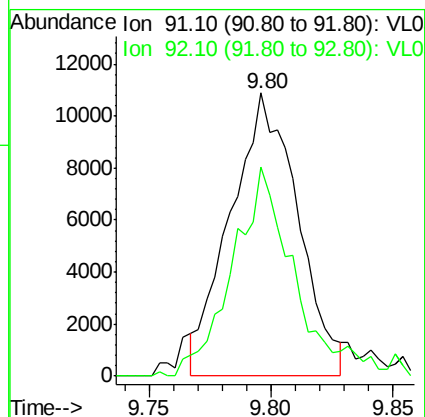
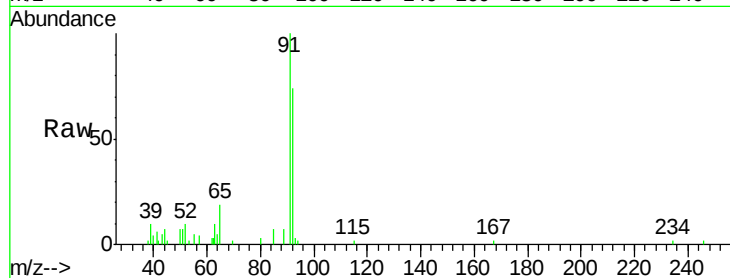
SVP-4DL

Tgt Ion: 91 Resp: 20856

Ion Ratio Lower Upper

91 100

92 69.0 48.8 73.2



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.08 min Scan# 2889

Delta R.T. 0.00 min

Lab File: VL037332.D

Acq: 5 Aug 2021 7:19

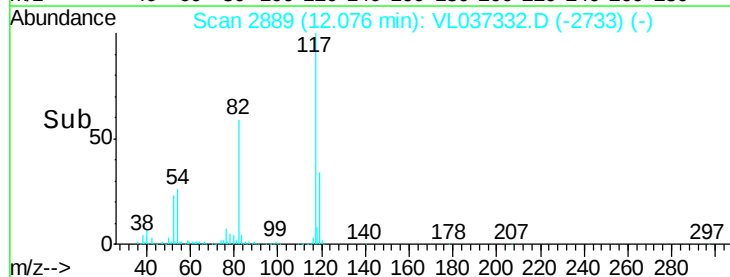
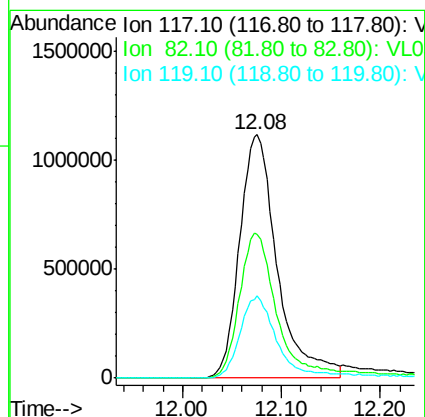
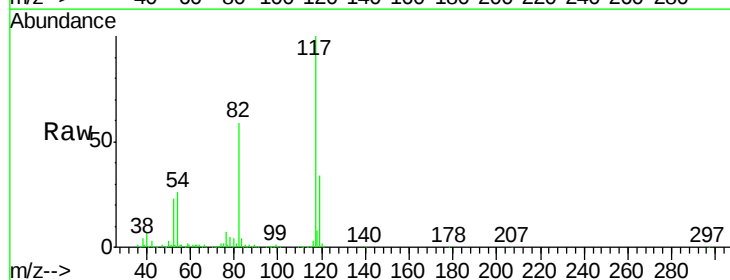
Tgt Ion: 117 Resp: 2955408

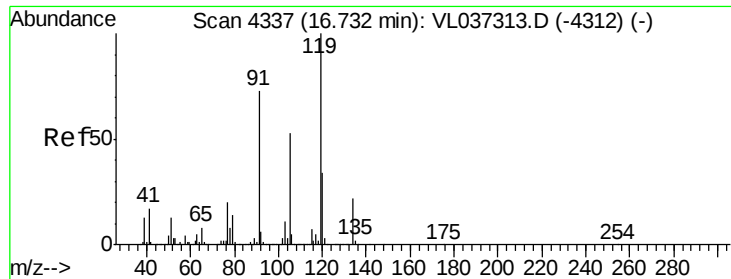
Ion Ratio Lower Upper

117 100

82 64.7 50.3 75.5

119 34.8 48.2 72.2#





#65

tert-Butylbenzene

Concen: 0.142 ppbv

RT: 16.97 min Scan# 4410

Delta R.T. 0.23 min

Lab File: VL037332.D

Acq: 5 Aug 2021 7:19

Instrument :

MSVOA_L

ClientSampleId :

SVP-4DL

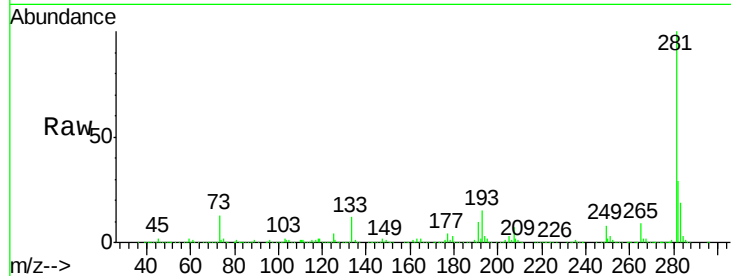
Tgt Ion:119 Resp: 63049

Ion Ratio Lower Upper

119 100

91 0.7 58.6 88.0#

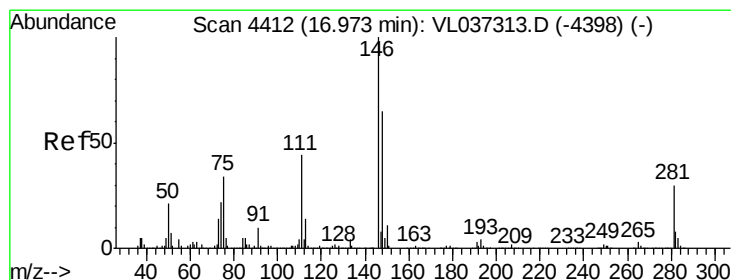
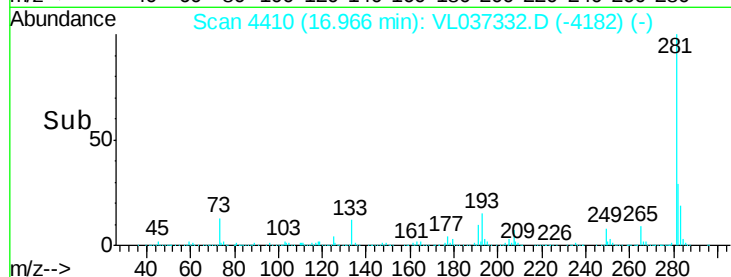
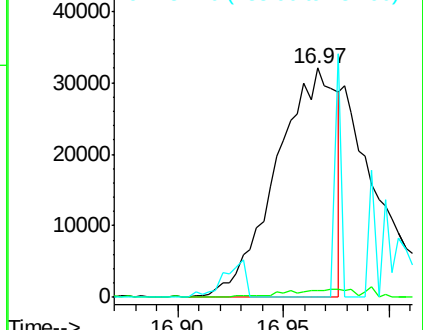
134 5.8 16.5 24.7#



Abundance Ion 119.20 (118.90 to 119.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 134.20 (133.90 to 134.90): V



#66

Benzyl Chloride

Concen: 0.045 ppbv

RT: 16.98 min Scan# 4413

Delta R.T. 0.00 min

Lab File: VL037332.D

Acq: 5 Aug 2021 7:19

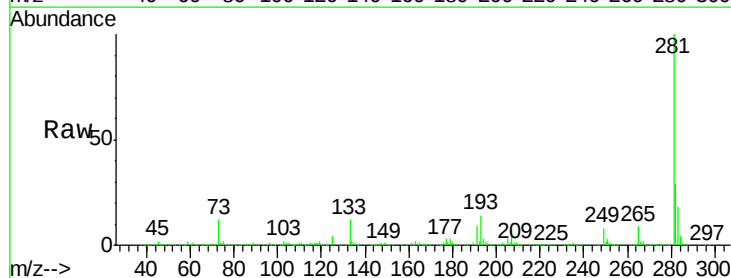
Tgt Ion: 91 Resp: 778

Ion Ratio Lower Upper

91 100

126 0.0 17.8 26.6#

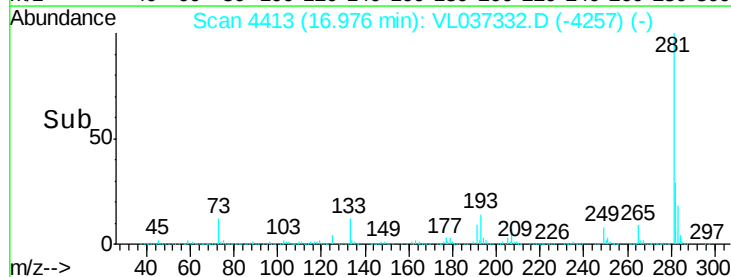
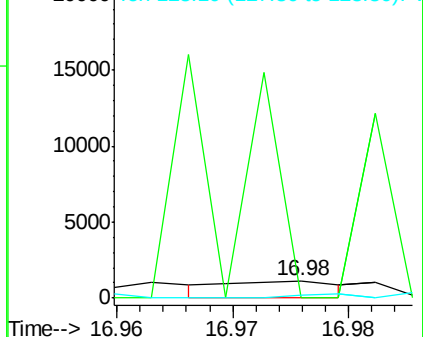
128 0.0 5.8 8.6#

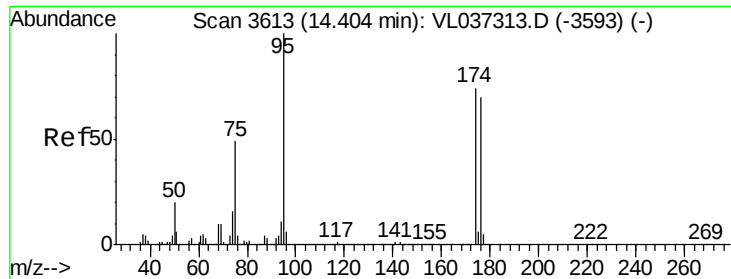


Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V

Ion 128.10 (127.80 to 128.80): V





#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.024 ppbv
 RT: 14.40 min Scan# 3613
 Delta R.T. -0.00 min
 Lab File: VL037332.D
 Acq: 5 Aug 2021 7:19

Instrument :
 MSVOA_L
 ClientSampleId :
 SVP-4DL

Tgt Ion: 95 Resp: 2023596
 Ion Ratio Lower Upper
 95 100
 174 83.6 66.9 100.3
 175 6.3 5.1 7.7

