

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL051920\
 Data File : VL035046.D
 Acq On : 19 May 2020 16:21
 Operator : SY/AP
 Sample : L2683-01DUP
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

Quant Time: May 20 04:44:57 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL050620AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed May 06 14:49:39 2020
 QLast Update : Wed May 06 14:49:39 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.64	49	1113630	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.16	114	2547564	10.00	ppbv	-0.03
55) Chlorobenzene-d5	12.10	117	2352403	10.00	ppbv	-0.03

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.43	95	1997405	10.49	ppbv	-0.03
Spiked Amount	10.000	Range	65 - 135	Recovery	=	104.90%

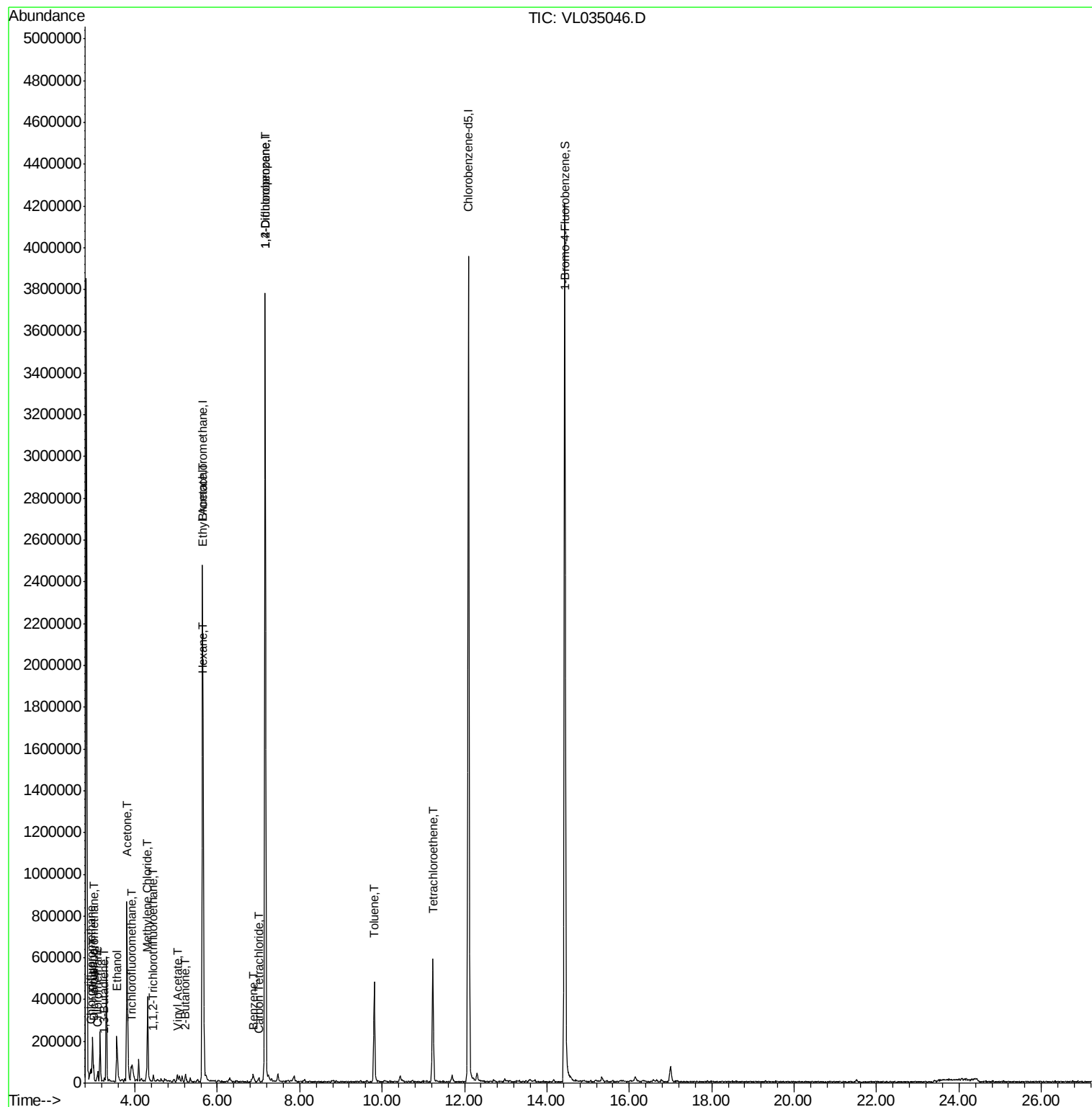
Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.00	85	42566	0.269	ppbv 91
3) Chlorodifluoromethane	2.94	51	74304	0.584	ppbv # 88
4) Chloromethane	3.09	50	35910	0.493	ppbv # 87
9) Propene	2.98	41	44280	0.803	ppbv # 73
11) Trichlorofluoromethane	3.91	101	40992	0.252	ppbv 98
12) 1,1,2-Trichlorotrifluoroet	4.45	101	5517	0.048	ppbv # 14
13) Ethanol	3.56	45	235567	12.939	ppbv 97
15) Acetone	3.81	43	851558	5.784	ppbv 100
16) 1,3-Butadiene	3.27	39	2522	0.040	ppbv # 8
20) Methylene Chloride	4.31	84	127601	2.618	ppbv 94
23) Vinyl Acetate	5.04	43	11226	0.060	ppbv # 64
25) Ethyl Acetate	5.66	43	111230	0.450	ppbv # 79
26) Hexane	5.66	57	150875	1.407	ppbv # 40
34) 2-Butanone	5.22	43	37500	0.237	ppbv 93
35) Carbon Tetrachloride	7.00	117	5170	0.032	ppbv # 63
36) Benzene	6.88	78	9639	0.046	ppbv # 90
39) 1,2-Dichloropropane	7.16	63	711626	8.452	ppbv # 25
52) Tetrachloroethene	11.23	164	68581	0.918	ppbv 94
53) Toluene	9.81	91	344410	1.547	ppbv 97

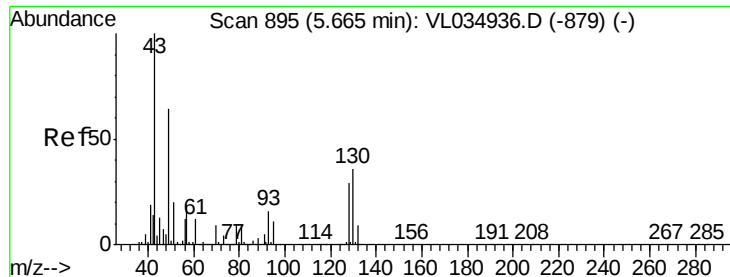
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Wed May 06 14:49:39 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.64 min Scan# 888

Delta R.T. -0.02 min

Lab File: VL035046.D

Acq: 19 May 2020 16:21

Instrument :

MSVOA_L

ClientSampleId :

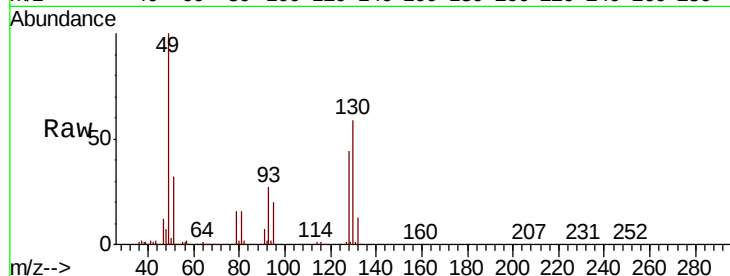
Tot Ion: 49 Resp: 1113630

Ion Ratio Lower Upper

49 100

128 44.7 22.1 66.5

130 58.3 29.1 87.3



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

5.64

800000

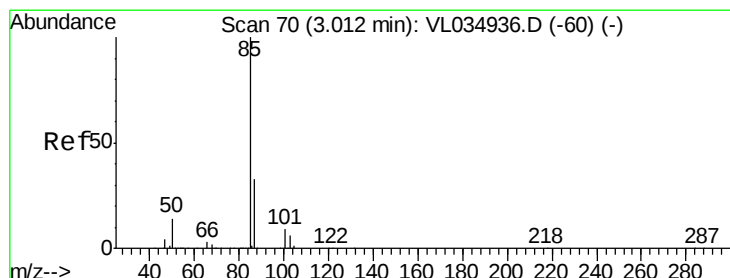
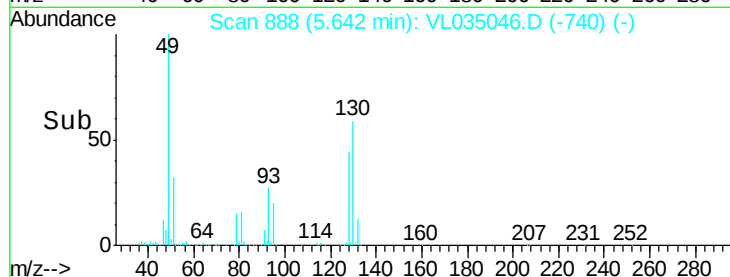
600000

400000

200000

0

Time-->



#2

Dichlorodifluoromethane

Concen: 0.269 ppbv

RT: 3.00 min Scan# 65

Delta R.T. -0.02 min

Lab File: VL035046.D

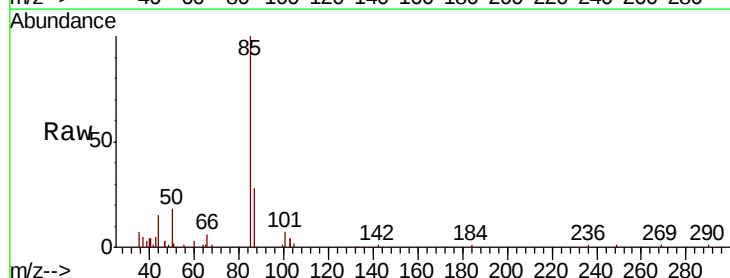
Acq: 19 May 2020 16:21

Tgt Ion: 85 Resp: 42566

Ion Ratio Lower Upper

85 100

87 27.8 26.2 39.2



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

3.00

40000

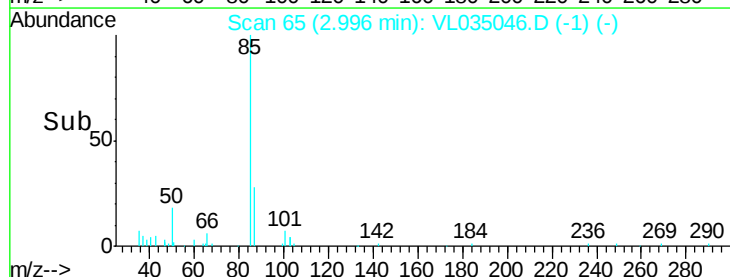
30000

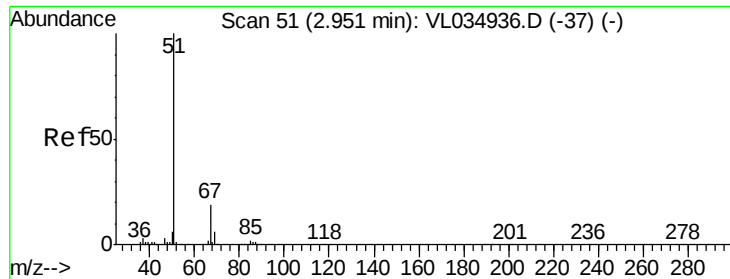
20000

10000

0

Time-->





#3

Chlorodifluoromethane

Concen: 0.584 ppbv

RT: 2.94 min Scan# 48

Delta R.T. -0.01 min

Lab File: VL035046.D

Acq: 19 May 2020 16:21

Instrument :

MSVOA_L

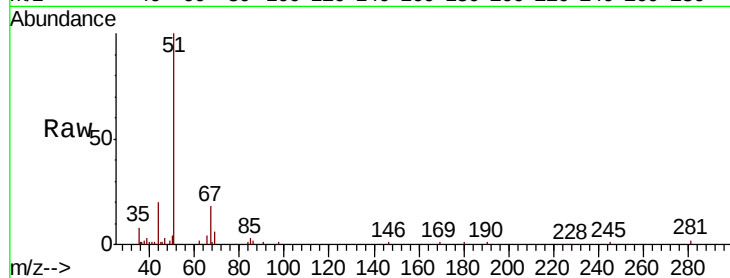
ClientSampleId :

Tot Ion: 51 Resp: 74304

Ion Ratio Lower Upper

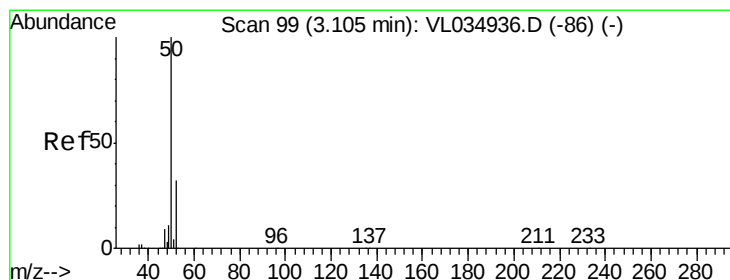
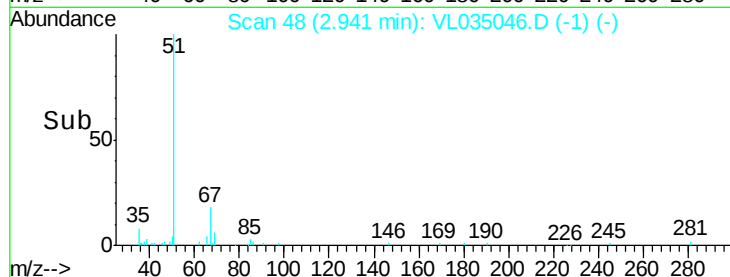
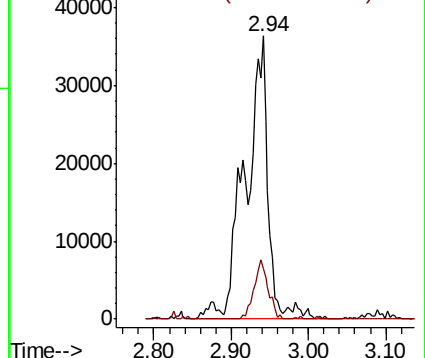
51 100

67 13.3 15.0 22.6#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.493 ppbv

RT: 3.09 min Scan# 95

Delta R.T. -0.01 min

Lab File: VL035046.D

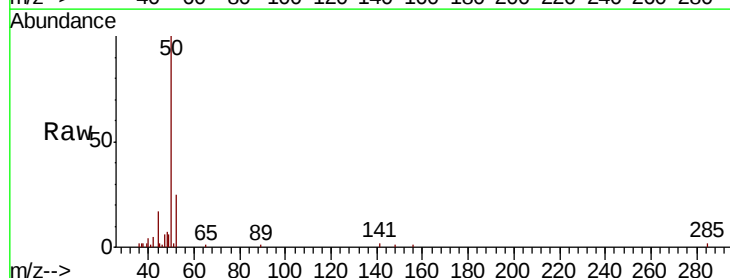
Acq: 19 May 2020 16:21

Tgt Ion: 50 Resp: 35910

Ion Ratio Lower Upper

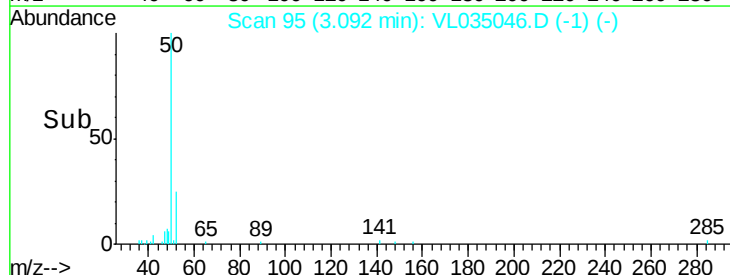
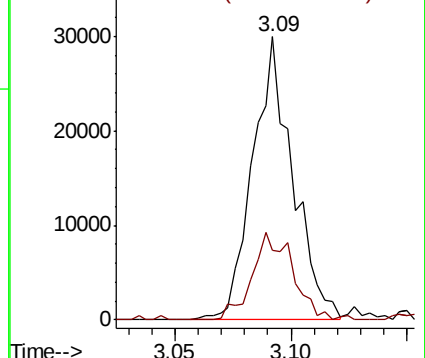
50 100

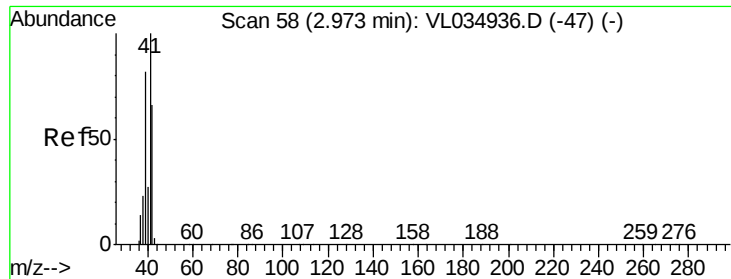
52 24.5 25.4 38.2#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 0.803 ppbv

RT: 2.98 min Scan# 59

Delta R.T. 0.00 min

Lab File: VL035046.D

Acq: 19 May 2020 16:21

Instrument :

MSVOA_L

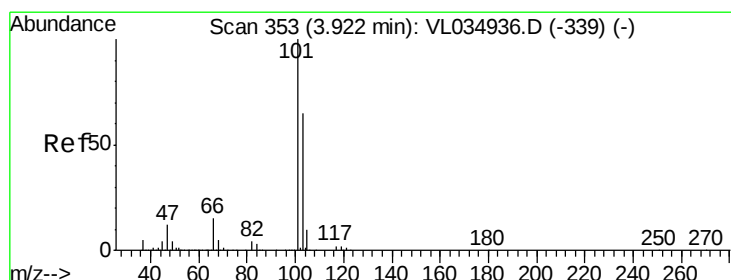
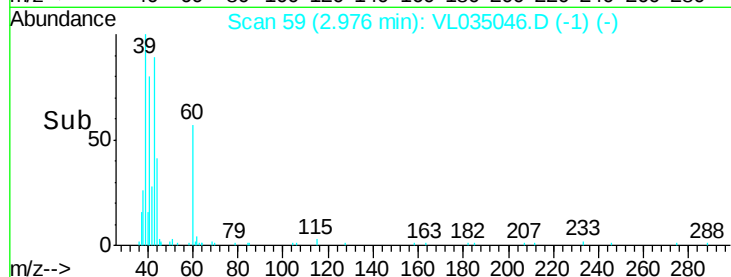
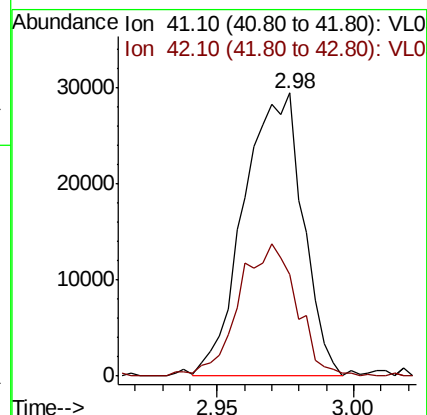
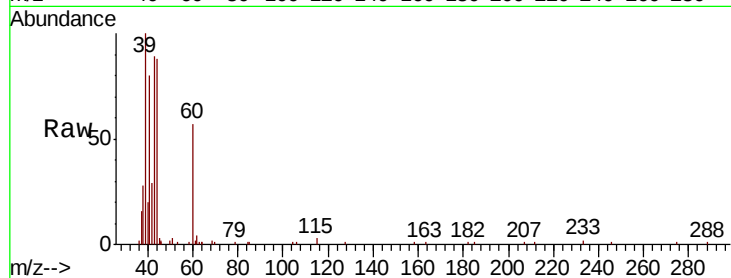
ClientSampleId :

Tot Ion: 41 Resp: 44280

Ion Ratio Lower Upper

41 100

42 46.1 54.5 81.7#



#11

Trichlorofluoromethane

Concen: 0.252 ppbv

RT: 3.91 min Scan# 349

Delta R.T. -0.01 min

Lab File: VL035046.D

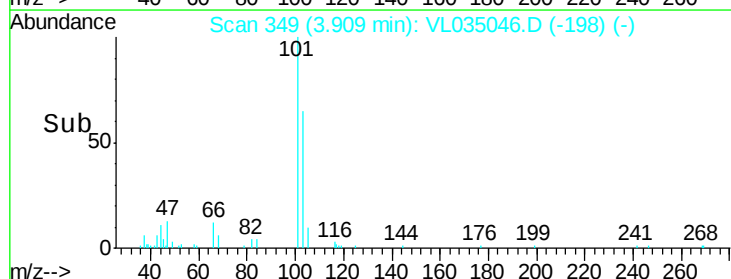
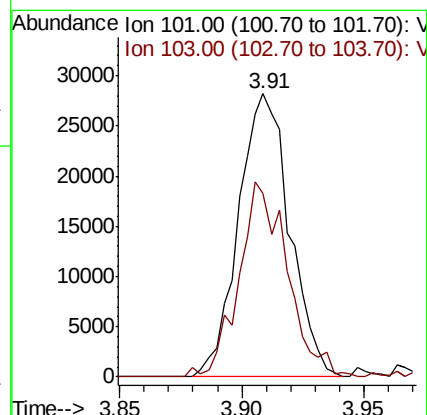
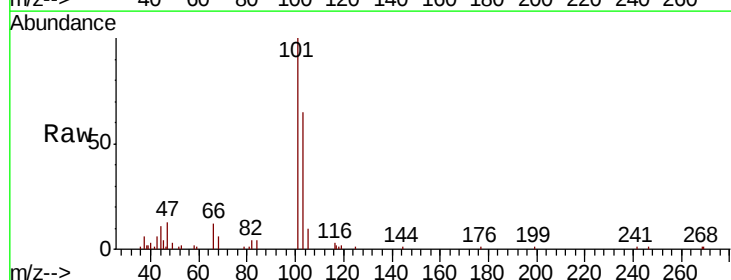
Acq: 19 May 2020 16:21

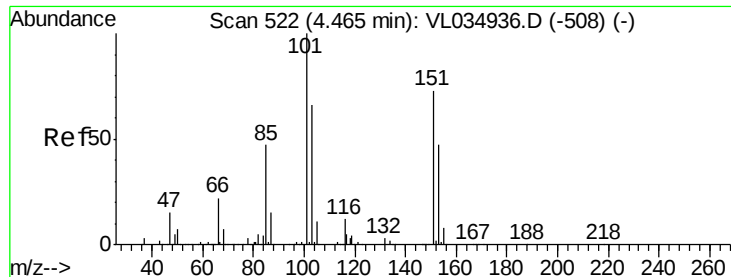
Tgt Ion: 101 Resp: 40992

Ion Ratio Lower Upper

101 100

103 63.5 51.9 77.9





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.048 ppbv

RT: 4.45 min Scan# 516

Delta R.T. -0.02 min

Lab File: VL035046.D

Acq: 19 May 2020 16:21

Instrument :

MSVOA_L

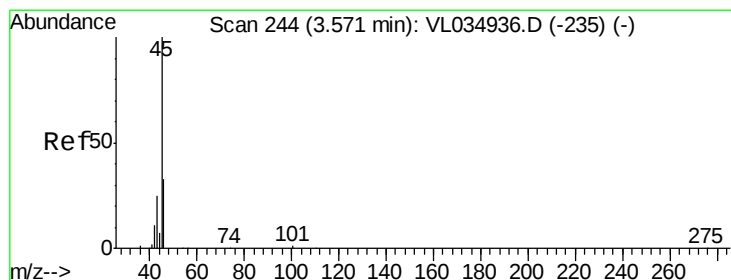
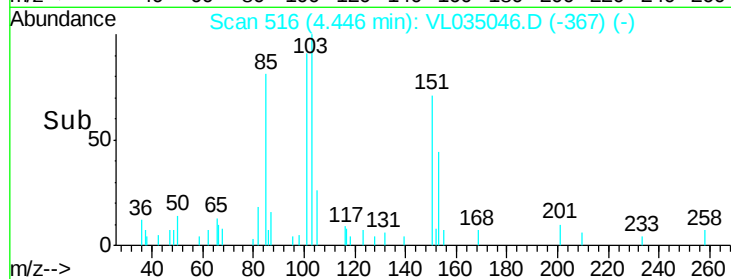
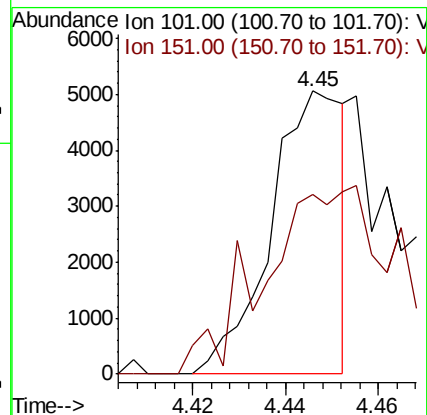
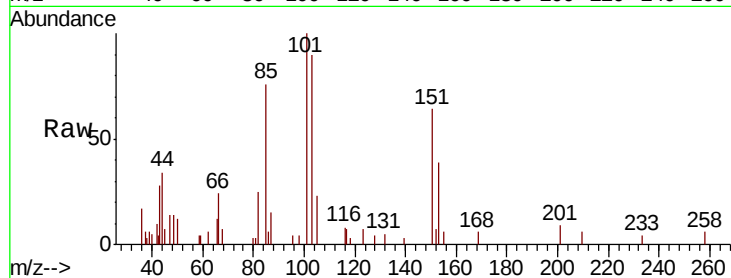
ClientSampleId :

Tot Ion:101 Resp: 5517

Ion Ratio Lower Upper

101 100

151 0.0 57.6 86.4#



#13

Ethanol

Concen: 12.939 ppbv

RT: 3.56 min Scan# 241

Delta R.T. -0.01 min

Lab File: VL035046.D

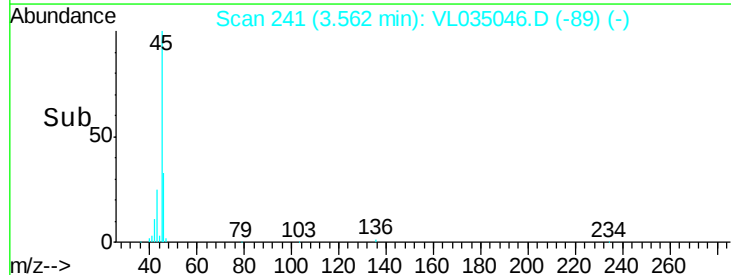
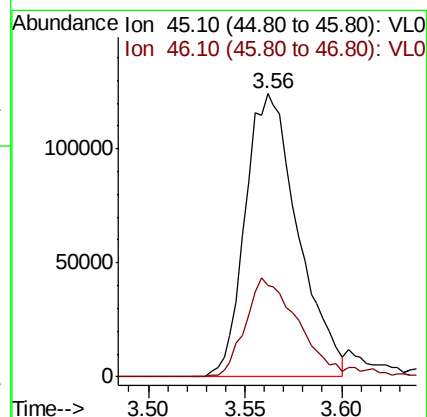
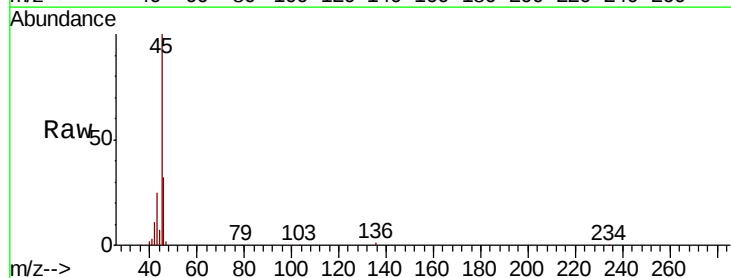
Acq: 19 May 2020 16:21

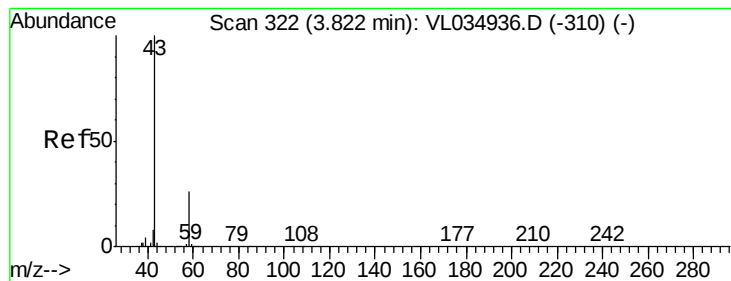
Tgt Ion: 45 Resp: 235567

Ion Ratio Lower Upper

45 100

46 37.5 14.3 57.3





#15

Acetone

Concen: 5.784 ppbv

RT: 3.81 min Scan# 317

Delta R.T. -0.02 min

Lab File: VL035046.D

Acq: 19 May 2020 16:21

Instrument :

MSVOA_L

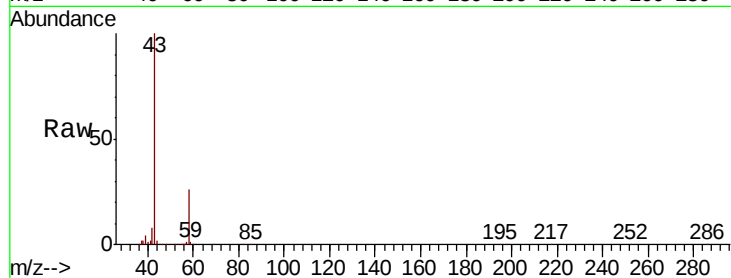
ClientSampleId :

Tot Ion: 43 Resp: 851558

Ion Ratio Lower Upper

43 100

58 27.0 21.7 32.5



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

3.81

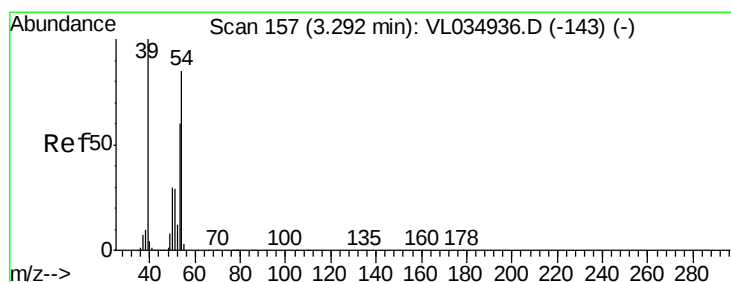
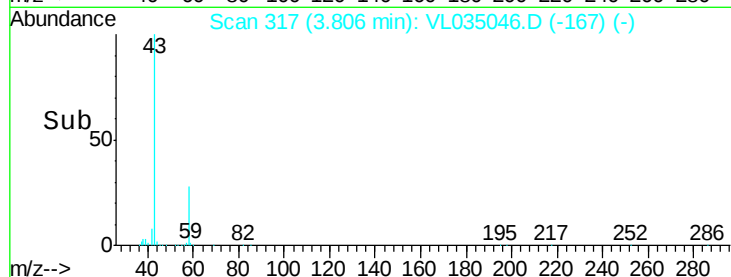
600000

400000

200000

0

Time-->



#16

1,3-Butadiene

Concen: 0.040 ppbv

RT: 3.27 min Scan# 150

Delta R.T. -0.02 min

Lab File: VL035046.D

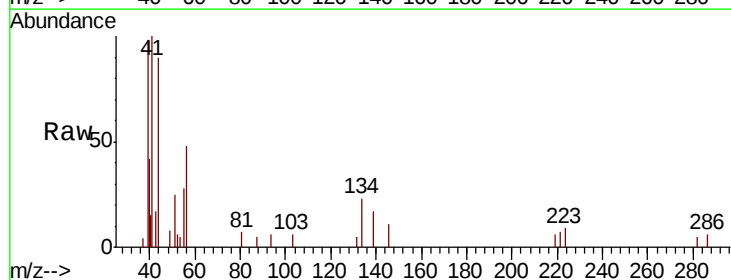
Acq: 19 May 2020 16:21

Tgt Ion: 39 Resp: 2522

Ion Ratio Lower Upper

39 100

54 0.0 66.6 100.0#



Abundance Ion 39.10 (38.80 to 39.80): VL0

Ion 54.10 (53.80 to 54.80): VL0

8000

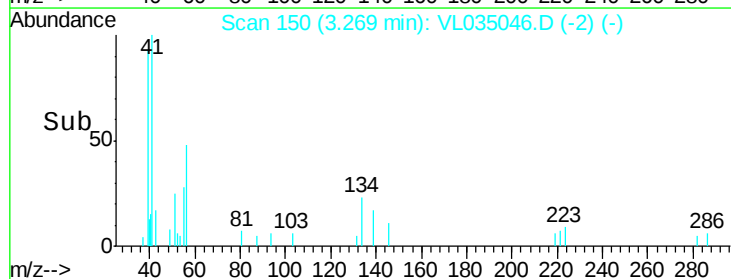
6000

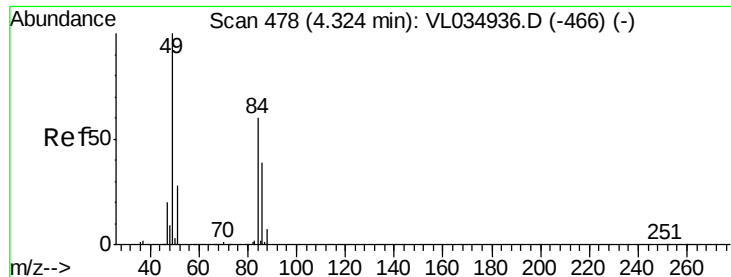
4000

2000

0

Time-->

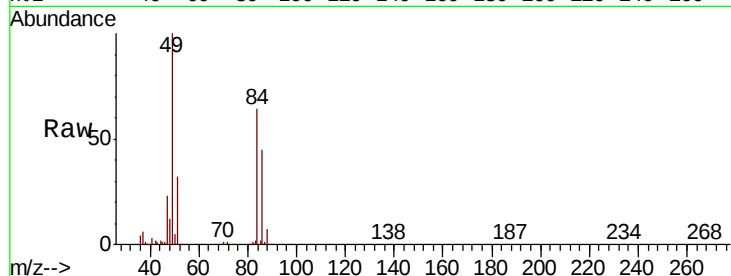




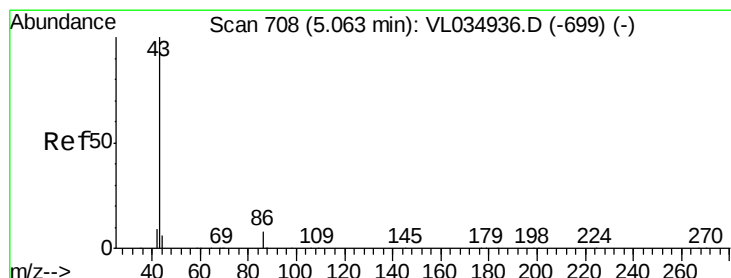
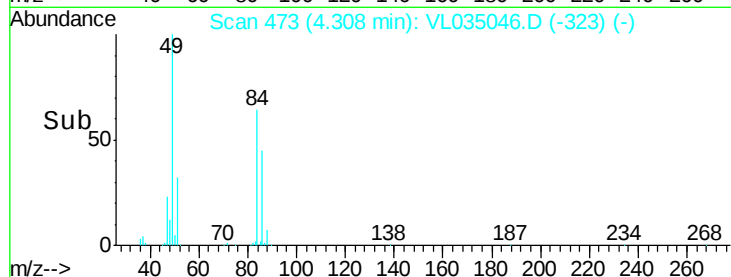
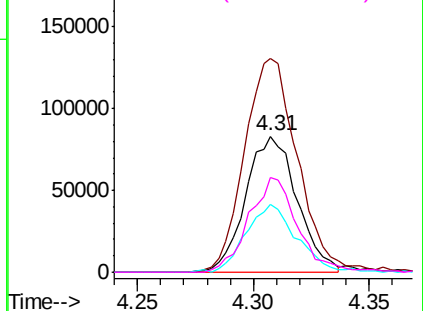
#20
Methylene Chloride
Concen: 2.618 ppbv
RT: 4.31 min Scan# 473
Delta R.T. -0.02 min
Lab File: VL035046.D
Acq: 19 May 2020 16:21

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion: 84 Resp: 127601
Ion Ratio Lower Upper
84 100
49 156.7 132.5 198.7
51 50.2 38.4 57.6
86 70.0 51.2 76.8

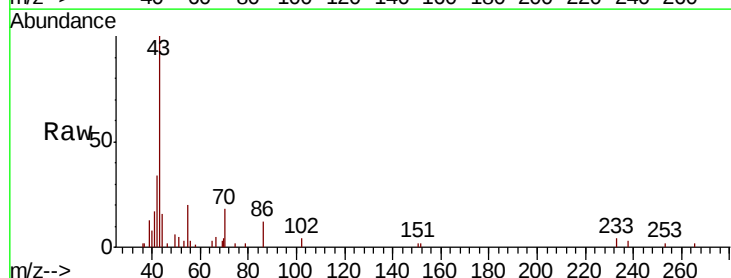


Abundance Ion 84.00 (83.70 to 84.70): VL0
200000
Ion 49.10 (48.80 to 49.80): VL0
Ion 51.10 (50.80 to 51.80): VL0
Ion 86.00 (85.70 to 86.70): VL0

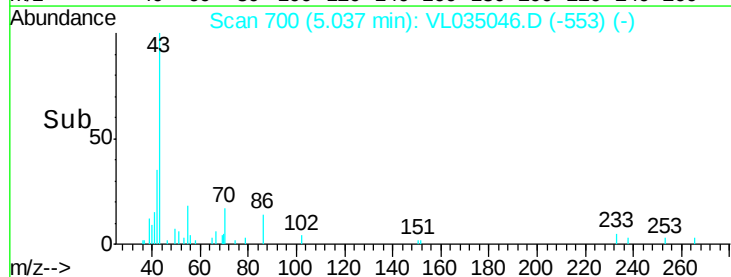
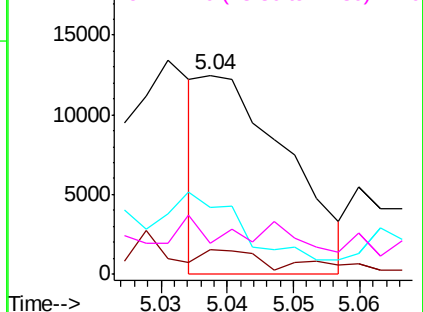


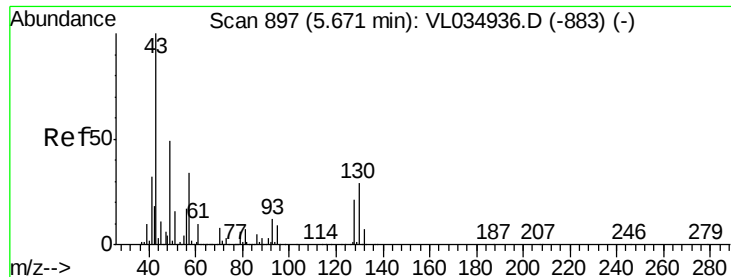
#23
Vinyl Acetate
Concen: 0.060 ppbv
RT: 5.04 min Scan# 700
Delta R.T. -0.03 min
Lab File: VL035046.D
Acq: 19 May 2020 16:21

Tgt Ion: 43 Resp: 11226
Ion Ratio Lower Upper
43 100
86 10.9 5.5 8.3#
42 36.2 8.0 12.0#
44 6.8 4.5 6.7#



Abundance Ion 43.10 (42.80 to 43.80): VL0
20000
Ion 86.10 (85.80 to 86.80): VL0
Ion 42.10 (41.80 to 42.80): VL0
Ion 44.10 (43.80 to 44.80): VL0

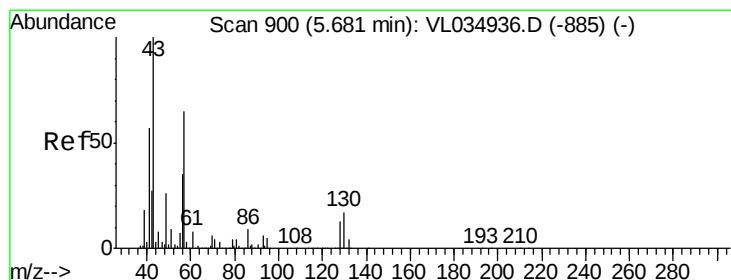
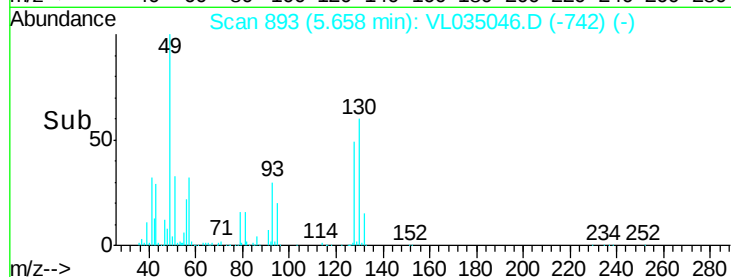
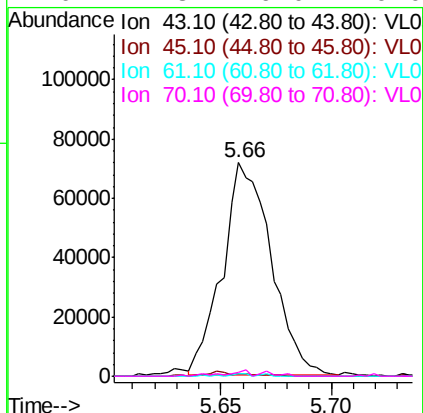
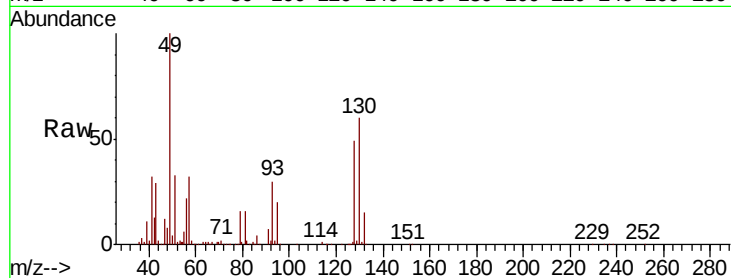




#25
Ethyl Acetate
Concen: 0.450 ppbv
RT: 5.66 min Scan# 893
Delta R.T. -0.01 min
Lab File: VL035046.D
Acq: 19 May 2020 16:21

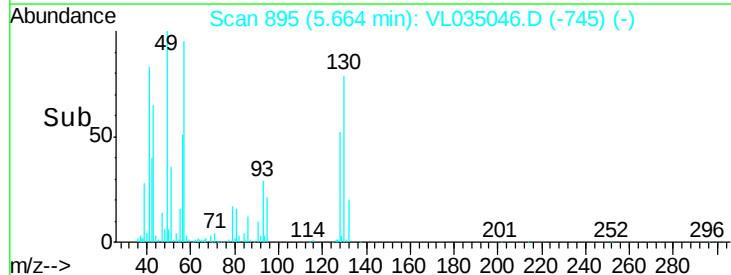
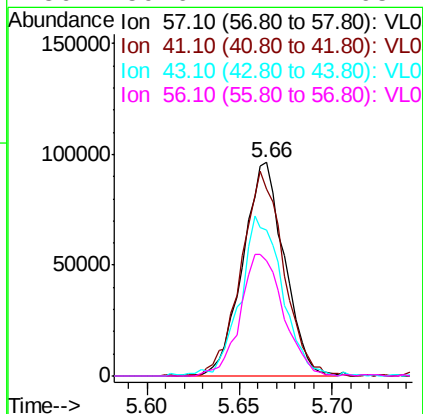
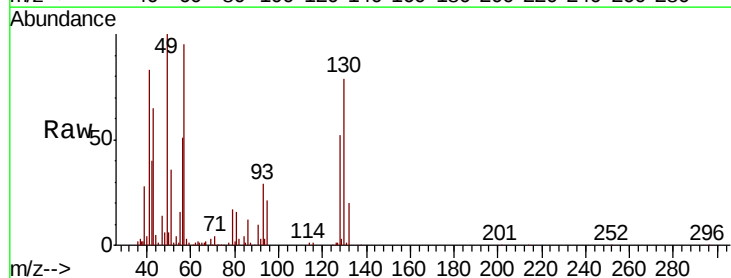
Instrument :
MSVOA_L
ClientSampleId :

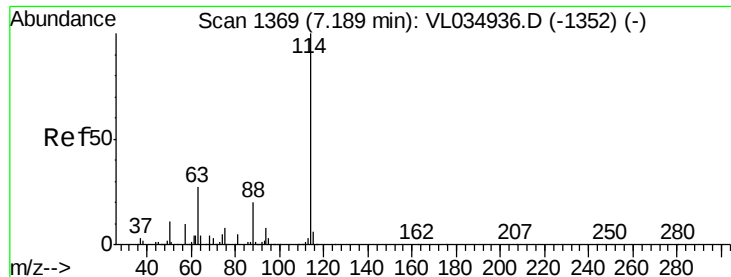
Tot Ion:	43	Resp:	111230
Ion	Ratio	Lower	Upper
43	100		
45	1.8	8.1	12.1#
61	0.8	7.8	11.8#
70	2.3	6.0	9.0#



#26
Hexane
Concen: 1.407 ppbv
RT: 5.66 min Scan# 895
Delta R.T. -0.02 min
Lab File: VL035046.D
Acq: 19 May 2020 16:21

Tgt Ion:	57	Resp:	150875
Ion	Ratio	Lower	Upper
57	100		
41	97.8	72.7	109.1
43	76.4	182.1	273.1#
56	59.6	42.2	63.2

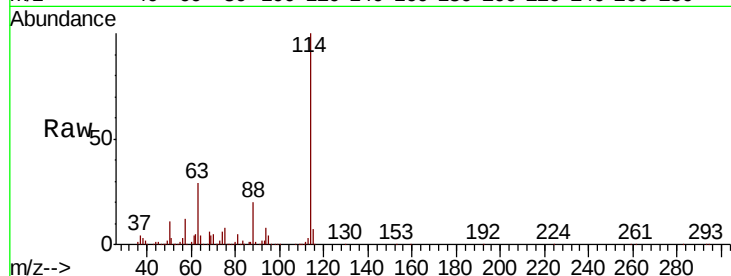




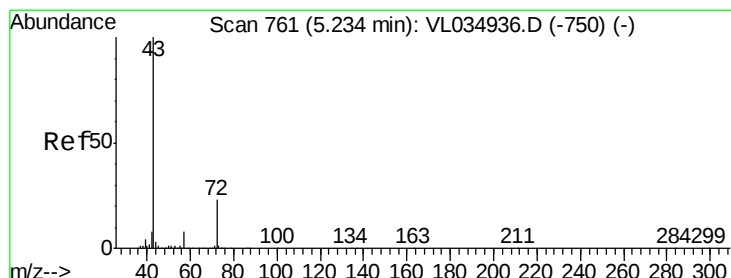
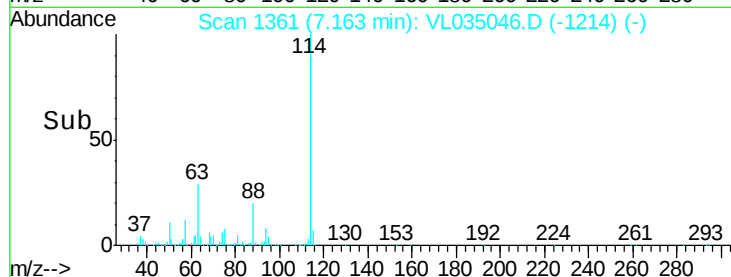
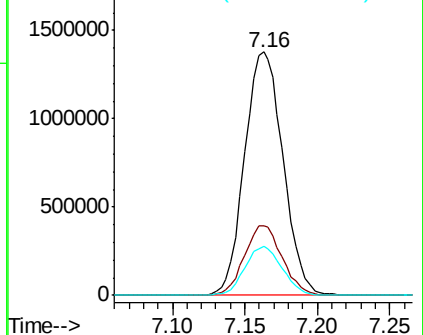
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.16 min Scan# 1361
 Delta R.T. -0.03 min
 Lab File: VL035046.D
 Acq: 19 May 2020 16:21

Instrument :
 MSVOA_L
 ClientSampleId :

Tot Ion:114 Resp: 2547564
 Ion Ratio Lower Upper
 114 100
 63 28.1 22.2 33.4
 88 19.7 15.5 23.3

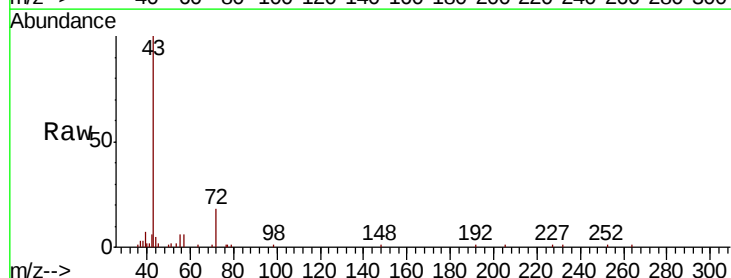


Abundance Ion 114.10 (113.80 to 114.80): V
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

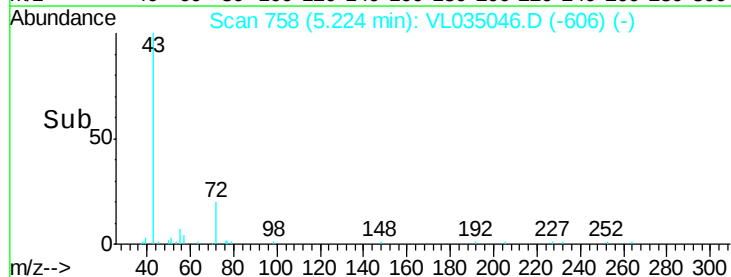
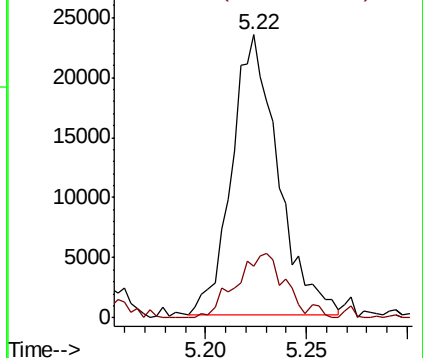


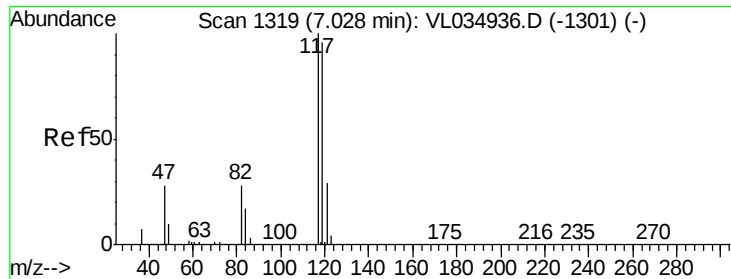
#34
 2-Butanone
 Concen: 0.237 ppbv
 RT: 5.22 min Scan# 758
 Delta R.T. -0.01 min
 Lab File: VL035046.D
 Acq: 19 May 2020 16:21

Tgt Ion: 43 Resp: 37500
 Ion Ratio Lower Upper
 43 100
 72 25.6 18.0 27.0



Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 72.10 (71.80 to 72.80): VL0





#35

Carbon Tetrachloride

Concen: 0.032 ppbv

RT: 7.00 min Scan# 1310

Delta R.T. -0.03 min

Lab File: VL035046.D

Acq: 19 May 2020 16:21

Instrument :

MSVOA_L

ClientSampleId :

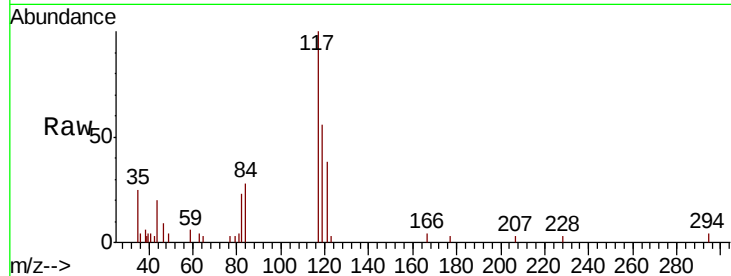
Tot Ion:117 Resp: 5170

Ion Ratio Lower Upper

117 100

119 52.4 77.0 115.6#

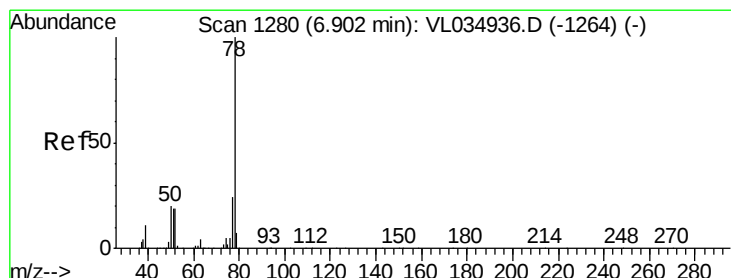
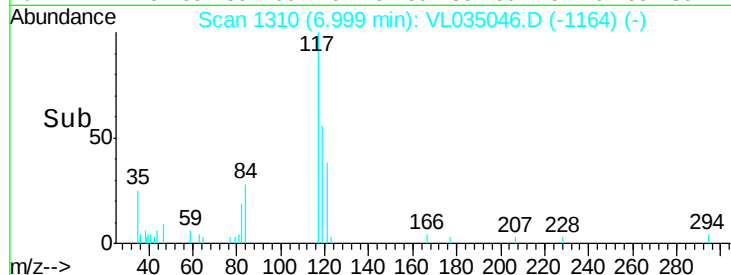
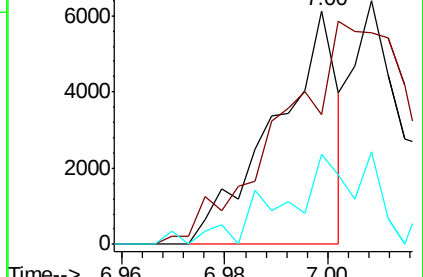
121 34.9 23.0 34.6#



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

Ion 121.00 (120.70 to 121.70): V



#36

Benzene

Concen: 0.046 ppbv

RT: 6.88 min Scan# 1274

Delta R.T. -0.02 min

Lab File: VL035046.D

Acq: 19 May 2020 16:21

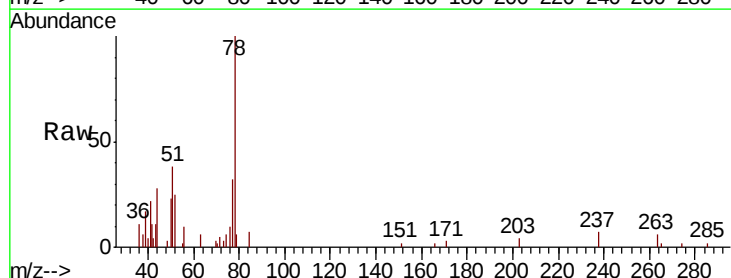
Tgt Ion: 78 Resp: 9639

Ion Ratio Lower Upper

78 100

77 29.3 19.0 28.6#

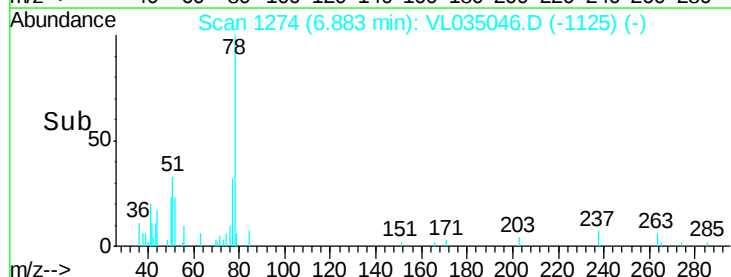
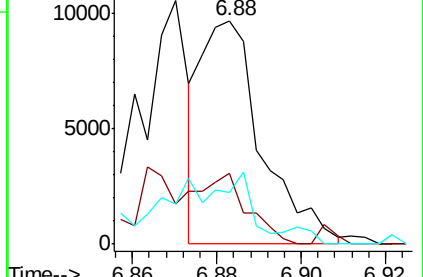
50 23.9 15.8 23.8#

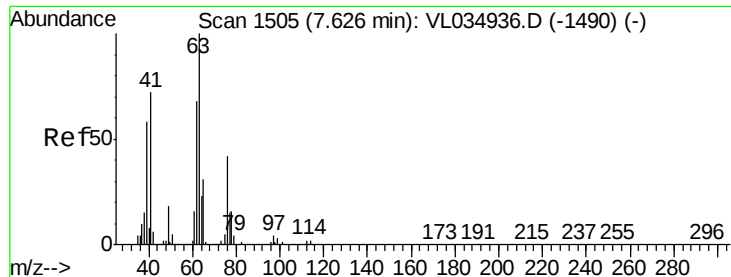


Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0





#39

1,2-Dichloropropane

Concen: 8.452 ppbv

RT: 7.16 min Scan# 1361

Delta R.T. -0.46 min

Lab File: VL035046.D

Acq: 19 May 2020 16:21

Instrument :

MSVOA_L

ClientSampled :

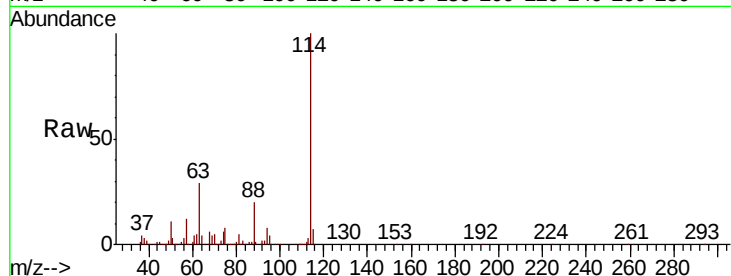
Tot Ion: 63 Resp: 711626

Ion Ratio Lower Upper

63 100

41 0.0 57.8 86.8#

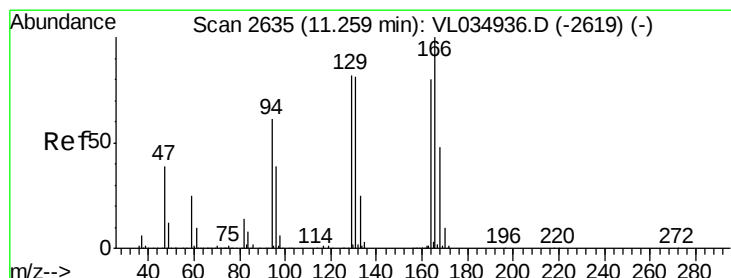
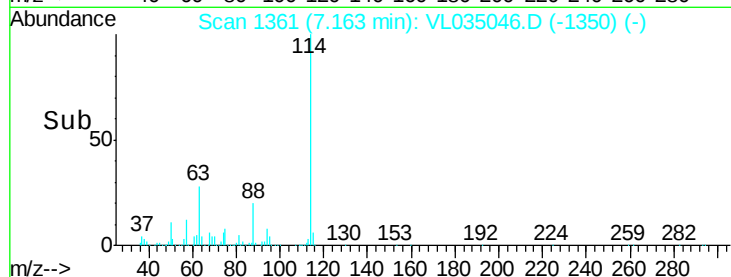
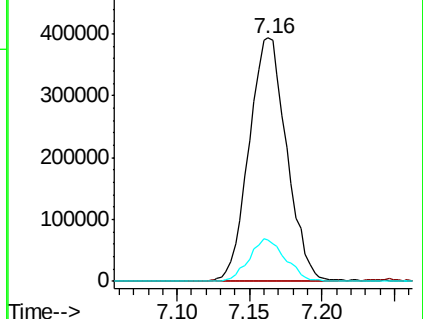
62 16.9 54.2 81.2#



Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0



#52

Tetrachloroethene

Concen: 0.918 ppbv

RT: 11.23 min Scan# 2625

Delta R.T. -0.03 min

Lab File: VL035046.D

Acq: 19 May 2020 16:21

Tgt Ion:164 Resp: 68581

Ion Ratio Lower Upper

164 100

166 127.4 100.7 151.1

129 118.1 83.0 124.4

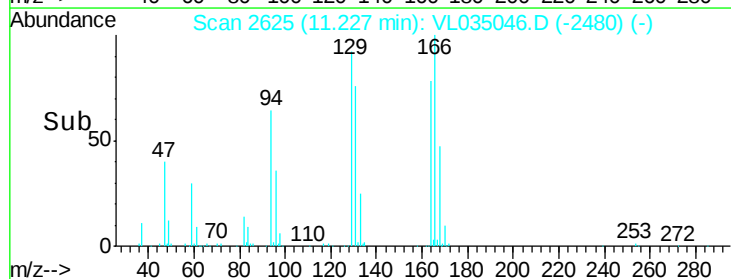
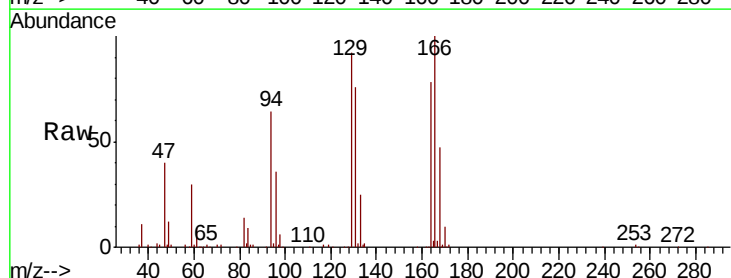
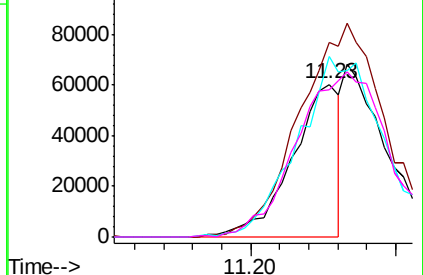
131 96.6 81.0 121.4

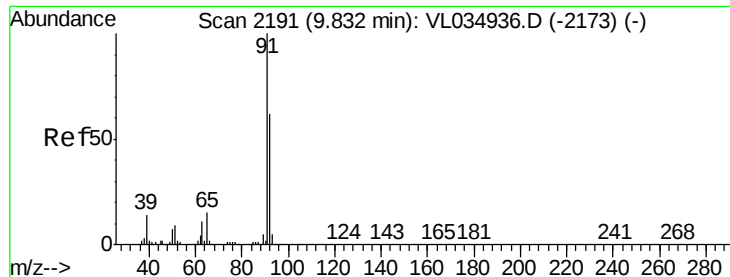
Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V





#53

Toluene

Concen: 1.547 ppbv

RT: 9.81 min Scan# 2183

Delta R.T. -0.03 min

Lab File: VL035046.D

Acq: 19 May 2020 16:21

Instrument :

MSVOA_L

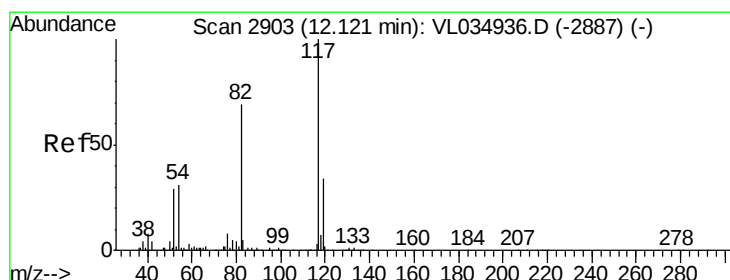
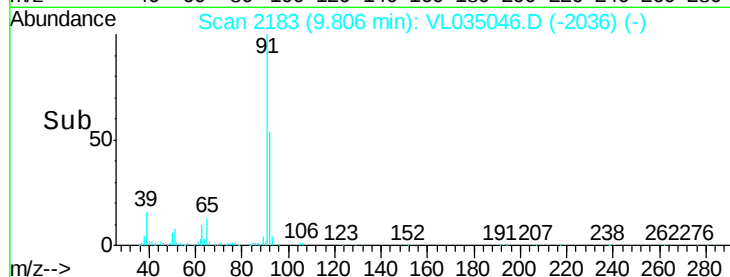
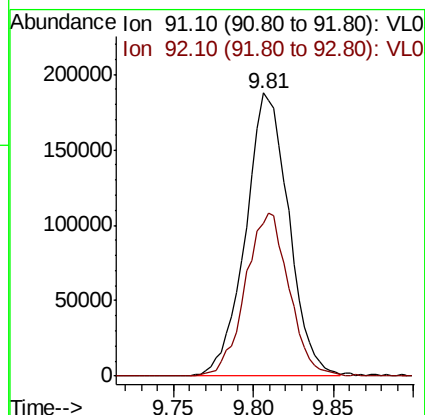
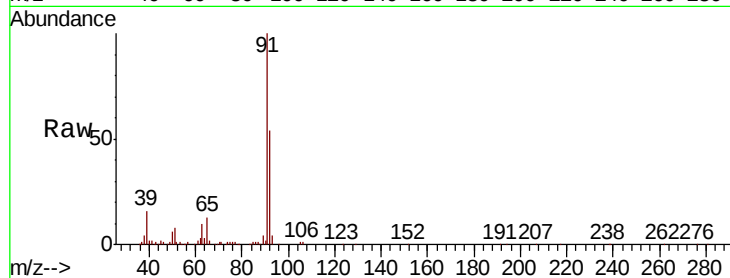
ClientSampleId :

Tot Ion: 91 Resp: 344410

Ion Ratio Lower Upper

91 100

92 58.4 48.6 73.0



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.10 min Scan# 2895

Delta R.T. -0.03 min

Lab File: VL035046.D

Acq: 19 May 2020 16:21

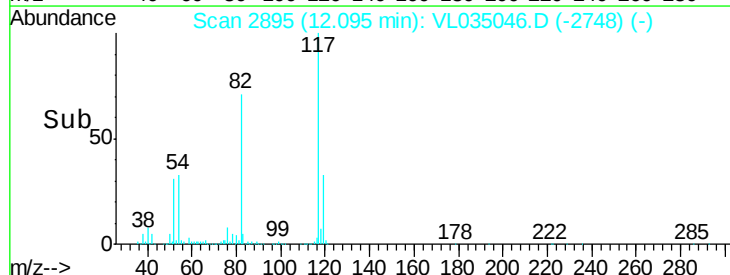
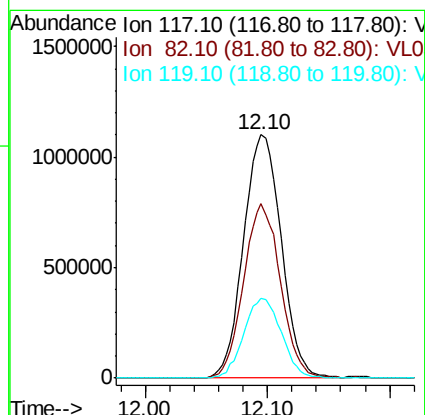
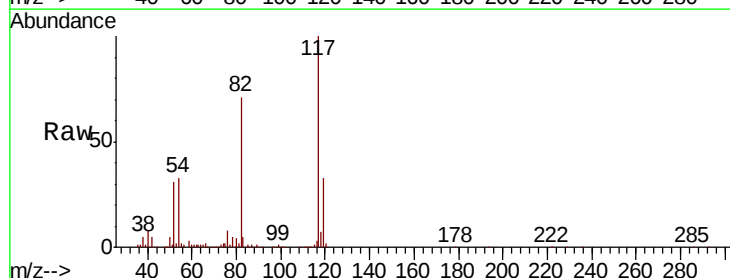
Tgt Ion: 117 Resp: 2352403

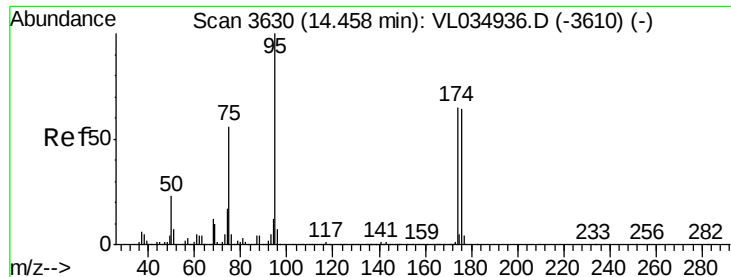
Ion Ratio Lower Upper

117 100

82 70.3 53.1 79.7

119 32.7 26.7 40.1





#68

1-Bromo-4-Fluorobenzene

Concen: 10.490 ppbv

RT: 14.43 min Scan# 3622

Delta R.T. -0.03 min

Lab File: VL035046.D

Acq: 19 May 2020 16:21

Instrument :

MSVOA_L

ClientSampleId :

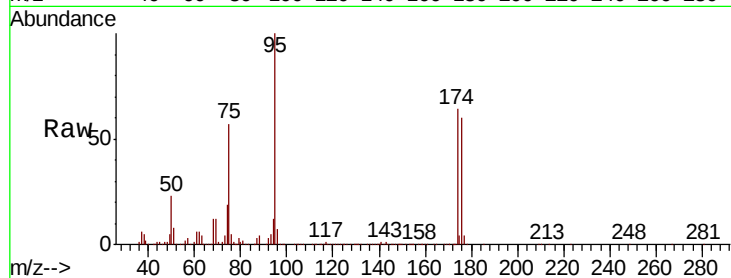
Tot Ion: 95 Resp: 1997405

Ion Ratio Lower Upper

95 100

174 64.3 51.5 77.3

175 4.8 3.8 5.8



Abundance Ion 95.10 (94.80 to 95.80): VL0

1200000 Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V

