

Data File : VL034151.D
Acq On : 10 Sep 2019 20:29
Operator : SY/AP
Sample : K4775-04DL 10X
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SV4DL

Quant Time: Sep 11 01:53:14 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL090519AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LThu Sep 05 10:21:45 2019
QLast Update : Thu Sep 05 10:21:45 2019
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.70	49	684517	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.23	114	1342721	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.17	117	1314372	10.00	ppbv	-0.01

System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.50 95 1096415 10.20 ppbv 0.00
Spiked Amount 10.000 Range 65 - 135 Recovery = 102.00%

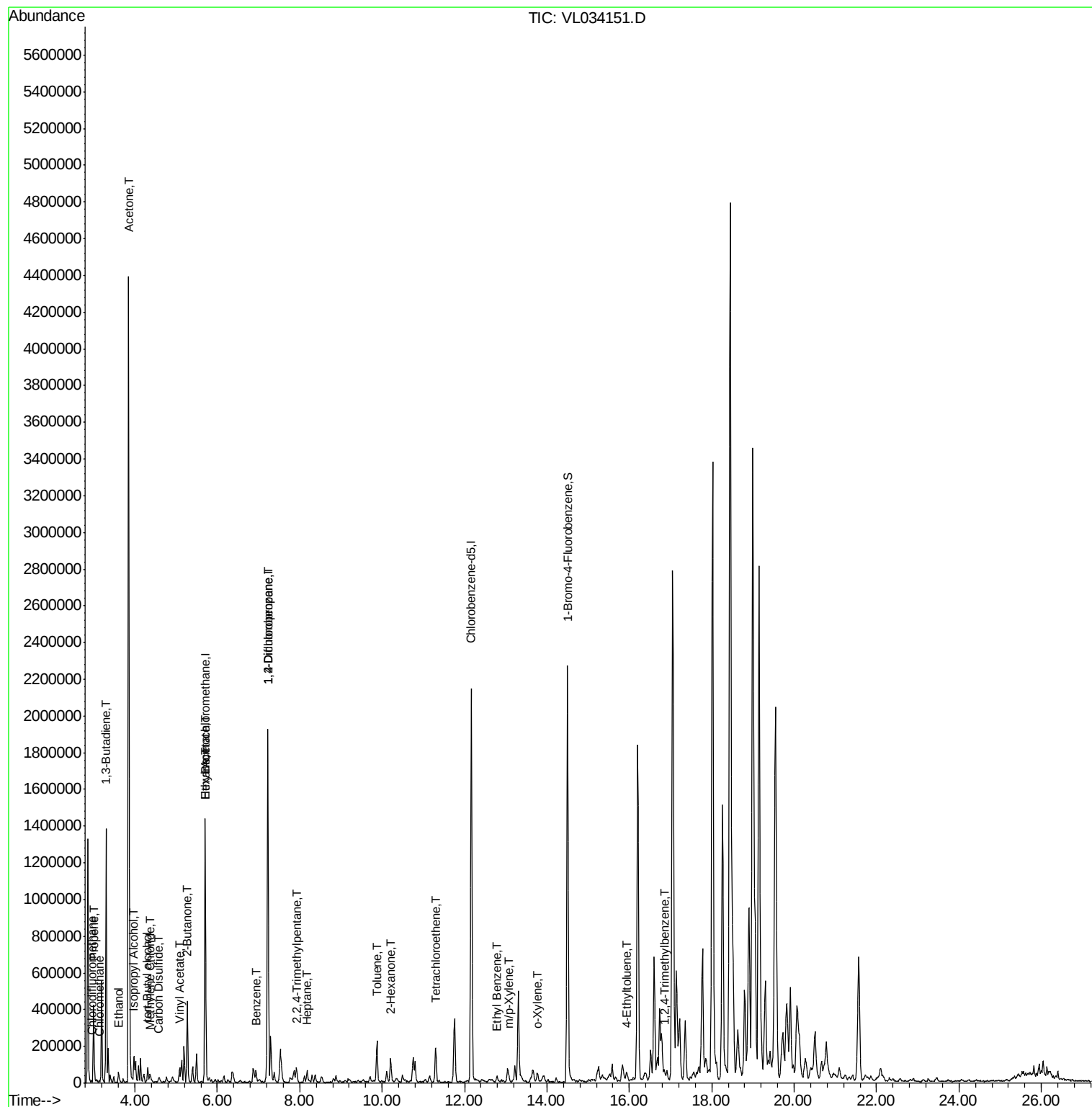
Target Compounds					Qvalue
3) Chlorodifluoromethane	2.95	51	8822	0.116 ppbv #	65
4) Chloromethane	3.13	50	2929	0.061 ppbv #	77
9) Propene	3.00	41	171154	4.009 ppbv	97
10) Heptane	8.18	43	31986	0.289 ppbv	100
13) Ethanol	3.60	45	53269	6.369 ppbv	96
15) Acetone	3.84	43	4702863	57.006 ppbv #	86
16) 1,3-Butadiene	3.30	39	349205	8.358 ppbv #	19
17) tert-Butyl alcohol	4.31	59	50423	0.842 ppbv	96
19) Isopropyl Alcohol	3.97	45	140893	2.530 ppbv #	97
20) Methylene Chloride	4.36	84	8116	0.298 ppbv #	81
23) Vinyl Acetate	5.09	43	18267	0.131 ppbv #	4
25) Ethyl Acetate	5.72	43	33247	0.184 ppbv #	84
26) Hexane	5.72	57	43998	0.546 ppbv #	34
27) Carbon Disulfide	4.57	76	2188	0.030 ppbv #	1
34) 2-Butanone	5.27	43	505626	3.917 ppbv	99
36) Benzene	6.94	78	42078	0.274 ppbv #	90
39) 1,2-Dichloropropane	7.23	63	381601	5.810 ppbv #	24
44) 2,2,4-Trimethylpentane	7.92	57	57427	0.203 ppbv #	79
51) 2-Hexanone	10.20	43	112874	0.663 ppbv #	100
52) Tetrachloroethene	11.31	164	12865	0.238 ppbv	88
53) Toluene	9.88	91	158635	0.935 ppbv	96
58) Ethyl Benzene	12.78	91	10638	0.049 ppbv	96
59) m/p-Xylene	13.07	91	17200	0.098 ppbv #	32
60) o-Xylene	13.77	91	24834	0.142 ppbv	96
72) 4-Ethyltoluene	15.92	105	9260	0.047 ppbv #	90
74) 1,2,4-Trimethylbenzene	16.85	105	24393	0.123 ppbv #	66

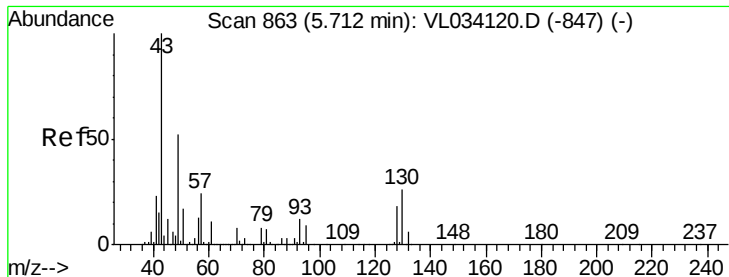
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data File : VL034151.D
Acq On : 10 Sep 2019 20:29
Operator : SY/AP
Sample : K4775-04DL 10X
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SV4DL

Quant Time: Sep 11 01:53:14 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL090519AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Sep 05 10:21:45 2019
QLast Update : Thu Sep 05 10:21:45 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.70 min Scan# 907

Delta R.T. -0.01 min

Lab File: VL034151.D

Acq: 10 Sep 2019 20:29

Instrument :

MSVOA_L

ClientSampleId :

SV4DL

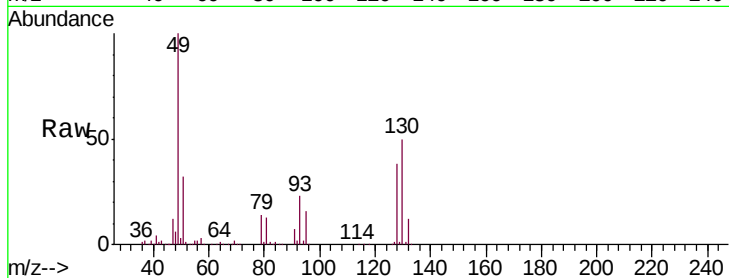
Tgt Ion: 49 Resp: 684517

Ion Ratio Lower Upper

49 100

128 38.1 18.4 55.0

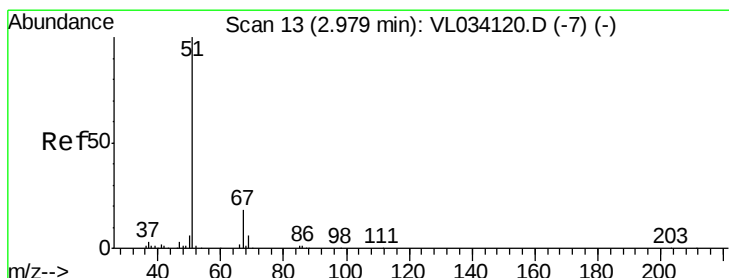
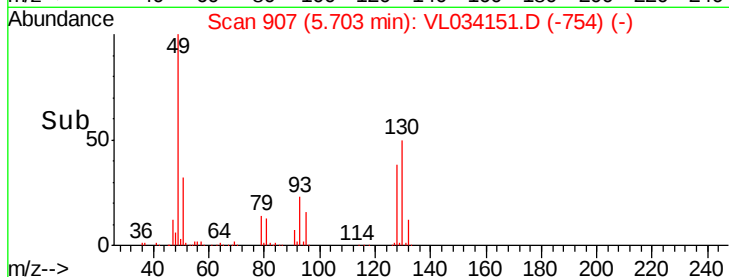
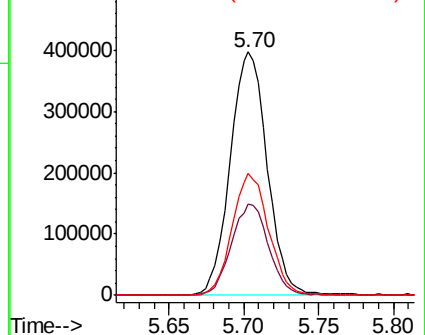
130 49.7 23.5 70.6



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



#3

Chlorodifluoromethane

Concen: 0.116 ppbv

RT: 2.95 min Scan# 50

Delta R.T. -0.03 min

Lab File: VL034151.D

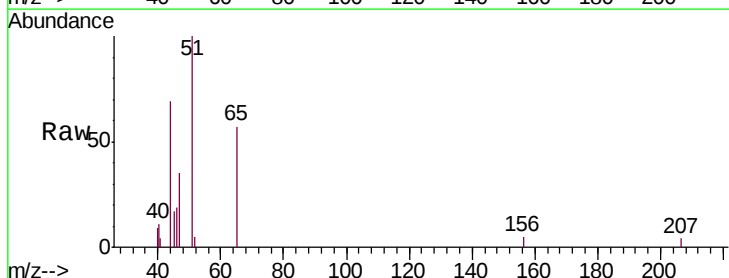
Acq: 10 Sep 2019 20:29

Tgt Ion: 51 Resp: 8822

Ion Ratio Lower Upper

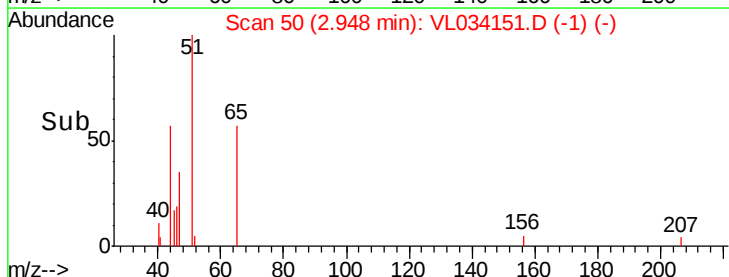
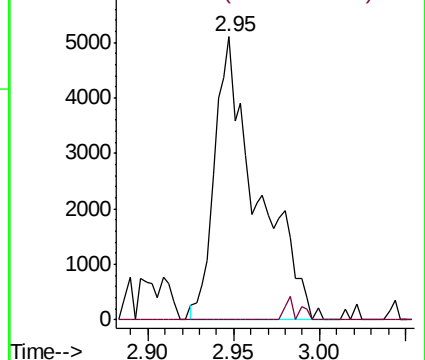
51 100

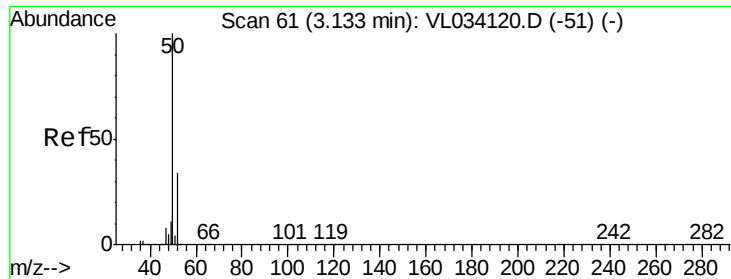
67 2.4 14.2 21.4#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0





#4

Chloromethane

Concen: 0.061 ppbv

RT: 3.13 min Scan# 106

Delta R.T. -0.01 min

Lab File: VL034151.D

Acq: 10 Sep 2019 20:29

Instrument :

MSVOA_L

ClientSampleId :

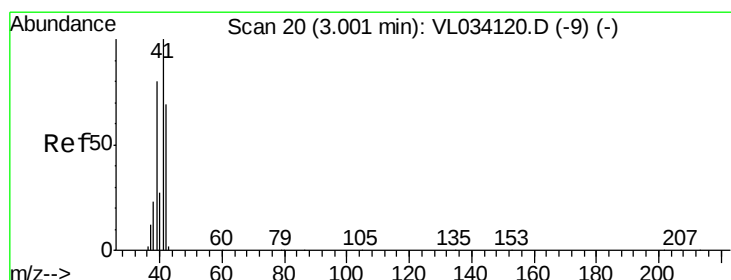
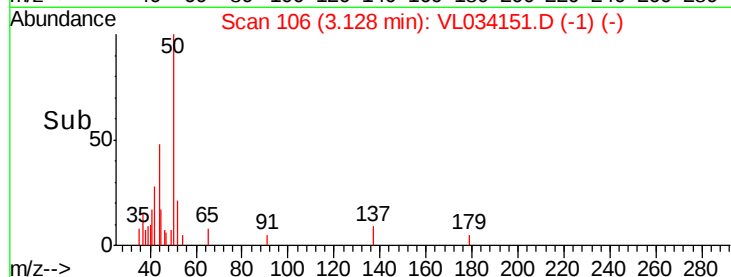
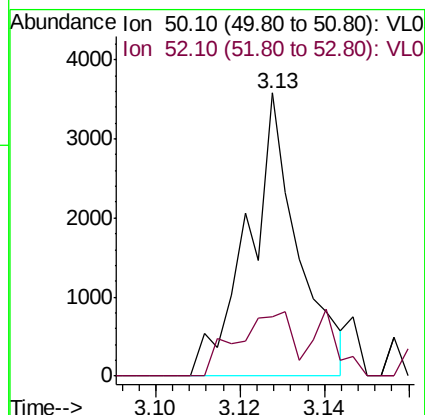
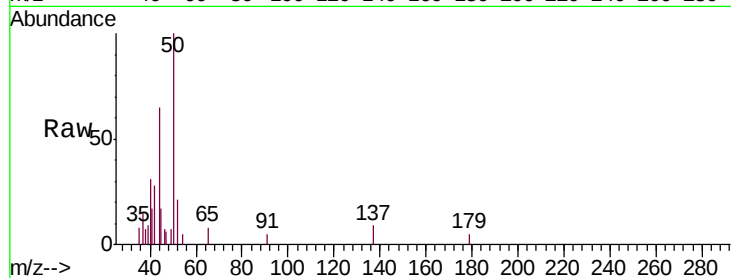
SV4DL

Tgt Ion: 50 Resp: 2929

Ion Ratio Lower Upper

50 100

52 21.1 27.4 41.2#



#9

Propene

Concen: 4.009 ppbv

RT: 3.00 min Scan# 65

Delta R.T. -0.01 min

Lab File: VL034151.D

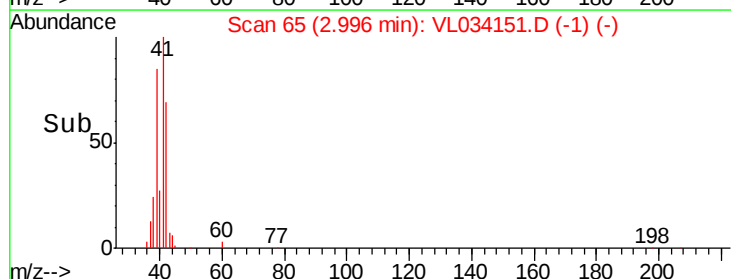
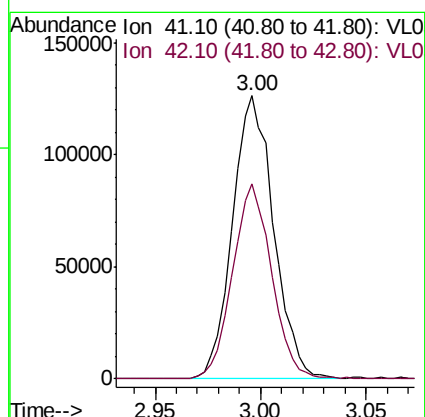
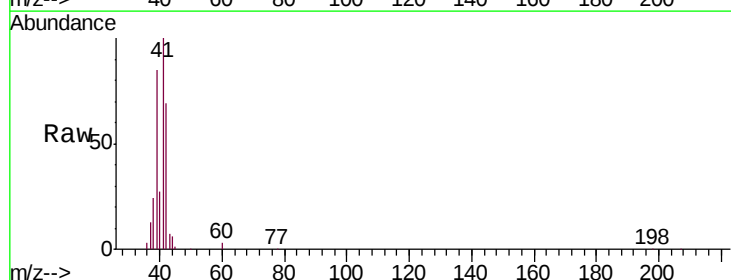
Acq: 10 Sep 2019 20:29

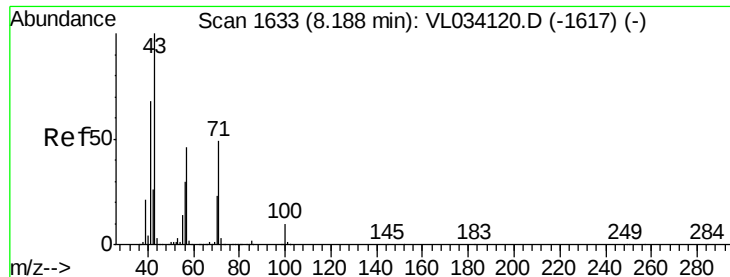
Tgt Ion: 41 Resp: 171154

Ion Ratio Lower Upper

41 100

42 65.8 54.6 81.8

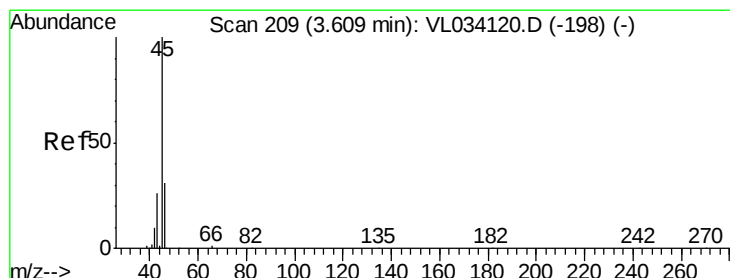
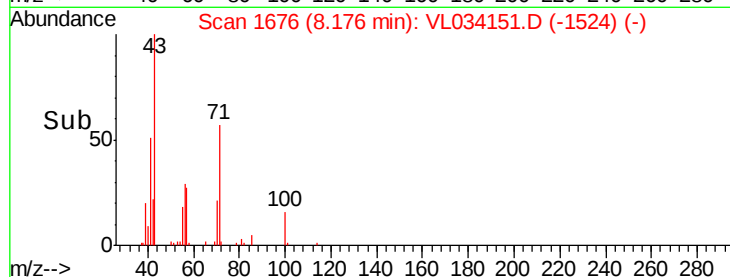
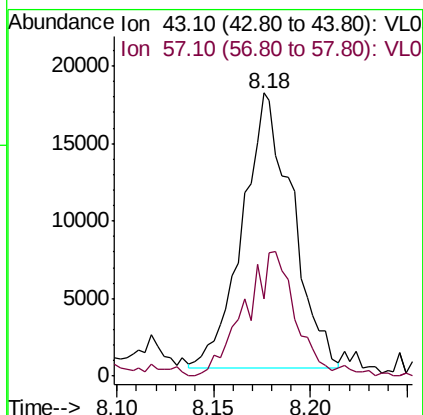
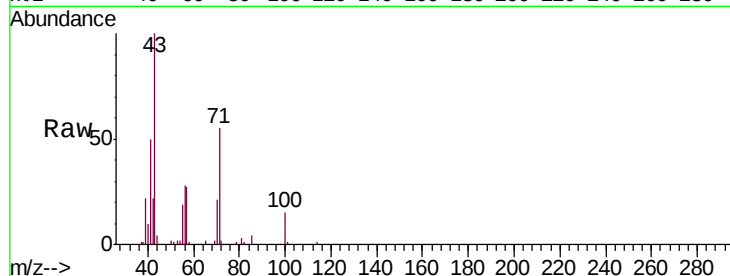




#10
Heptane
Concen: 0.289 ppbv
RT: 8.18 min Scan# 1676
Delta R.T. -0.01 min
Lab File: VL034151.D
Acq: 10 Sep 2019 20:29

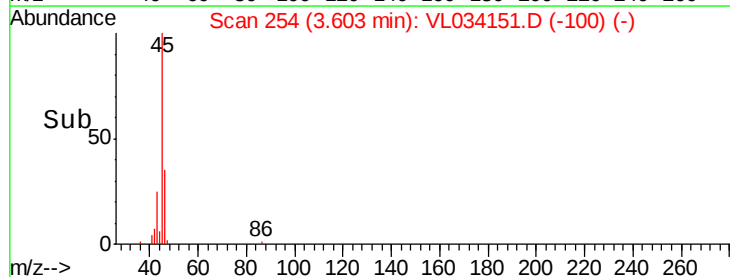
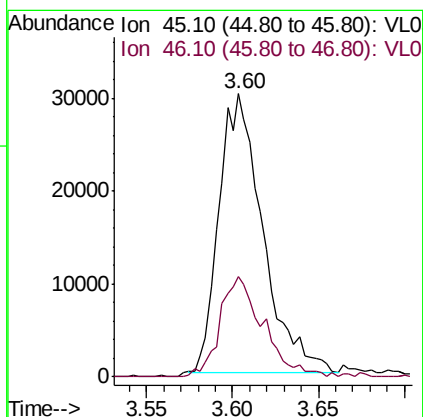
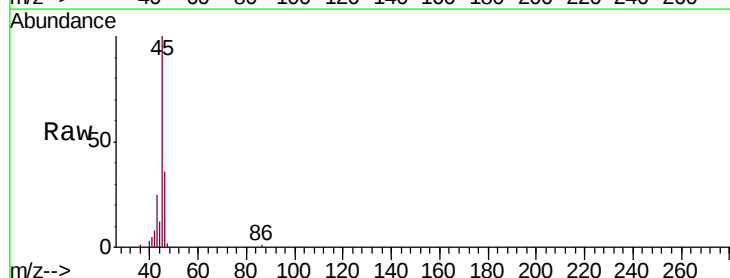
Instrument :
MSVOA_L
ClientSampleId :
SV4DL

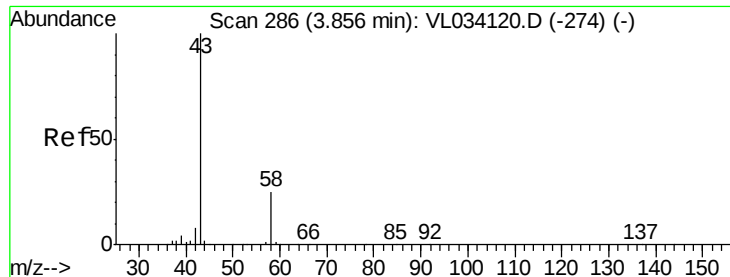
Tgt Ion: 43 Resp: 31986
Ion Ratio Lower Upper
43 100
57 47.6 38.1 57.1



#13
Ethanol
Concen: 6.369 ppbv
RT: 3.60 min Scan# 254
Delta R.T. -0.01 min
Lab File: VL034151.D
Acq: 10 Sep 2019 20:29

Tgt Ion: 45 Resp: 53269
Ion Ratio Lower Upper
45 100
46 35.2 15.0 60.0





#15

Acetone

Concen: 57.006 ppbv

RT: 3.84 min Scan# 329

Delta R.T. -0.01 min

Lab File: VL034151.D

Acq: 10 Sep 2019 20:29

Instrument :

MSVOA_L

ClientSampleId :

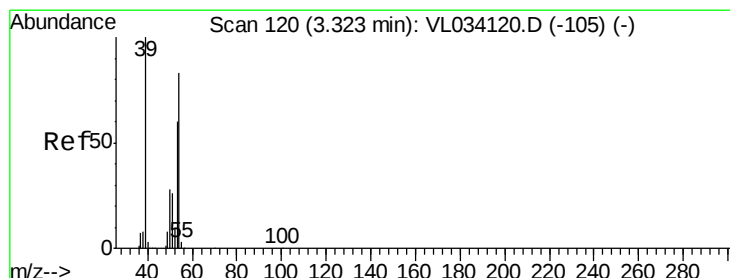
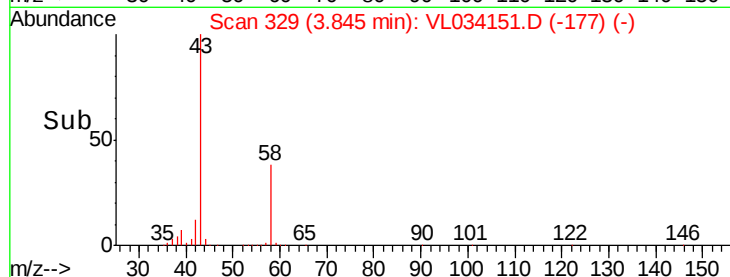
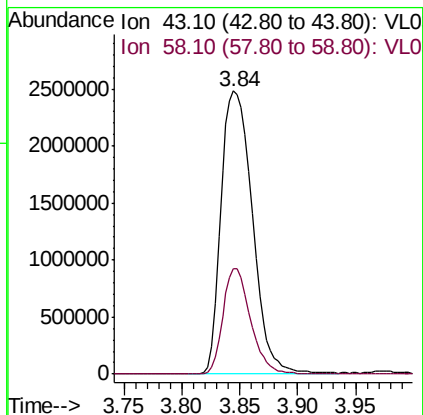
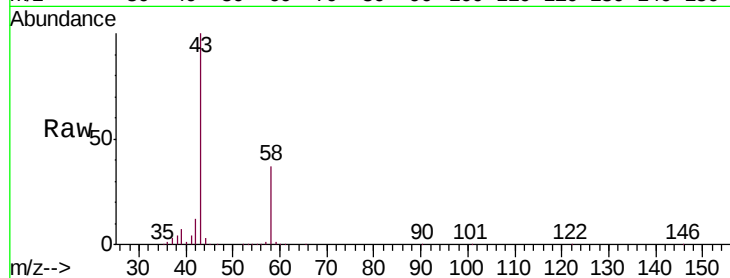
SV4DL

Tgt Ion: 43 Resp: 4702863

Ion Ratio Lower Upper

43 100

58 32.7 20.6 30.8#



#16

1,3-Butadiene

Concen: 8.358 ppbv

RT: 3.30 min Scan# 160

Delta R.T. -0.02 min

Lab File: VL034151.D

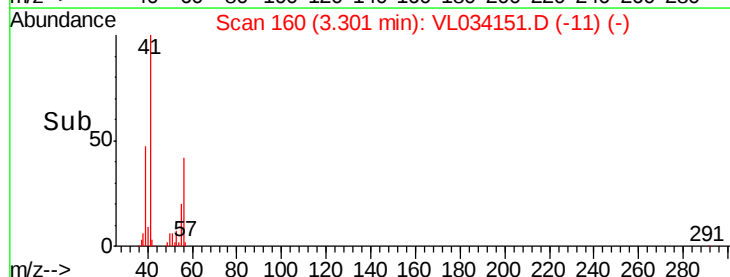
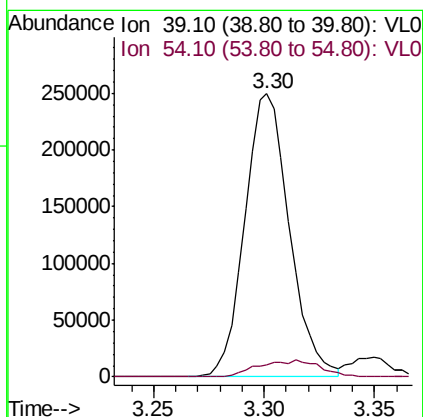
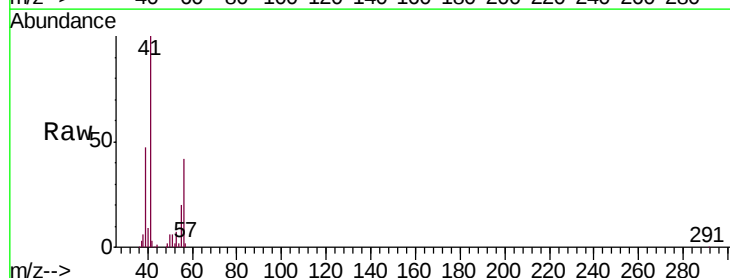
Acq: 10 Sep 2019 20:29

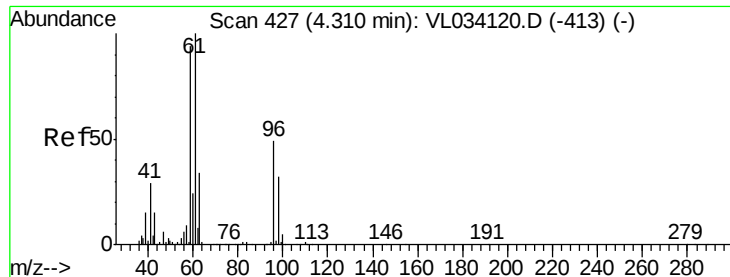
Tgt Ion: 39 Resp: 349205

Ion Ratio Lower Upper

39 100

54 8.4 63.5 95.3#





#17

tert-Butyl alcohol

Concen: 0.842 ppbv

RT: 4.31 min Scan# 474

Delta R.T. 0.00 min

Lab File: VL034151.D

Acq: 10 Sep 2019 20:29

Instrument :

MSVOA_L

ClientSampleId :

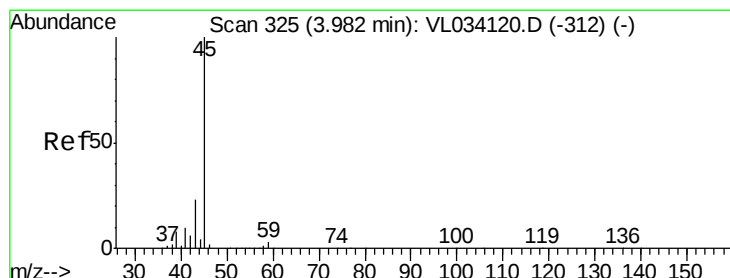
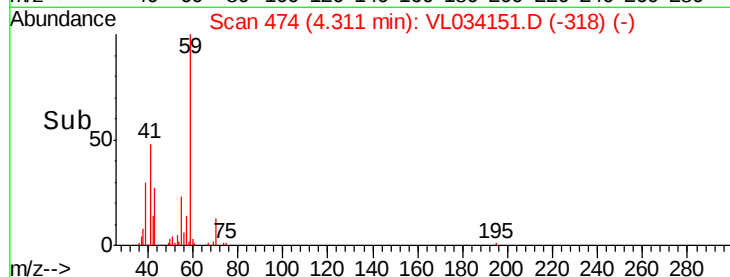
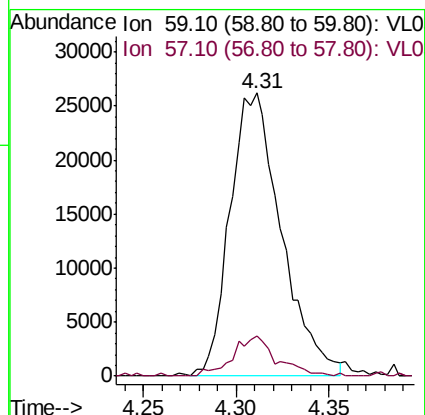
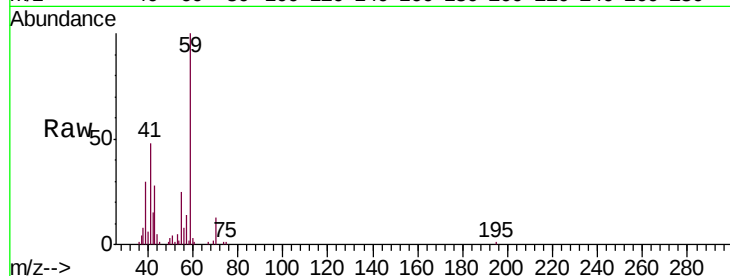
SV4DL

Tgt Ion: 59 Resp: 50423

Ion Ratio Lower Upper

59 100

57 12.1 8.6 12.8



#19

Isopropyl Alcohol

Concen: 2.530 ppbv

RT: 3.97 min Scan# 369

Delta R.T. -0.01 min

Lab File: VL034151.D

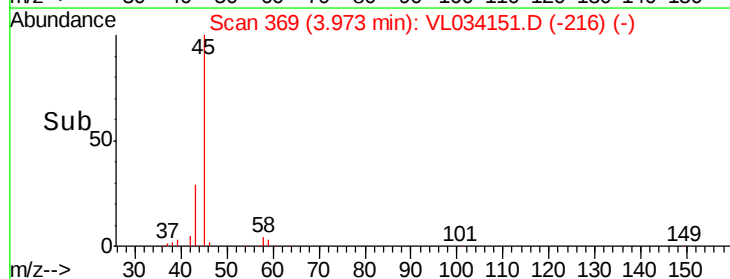
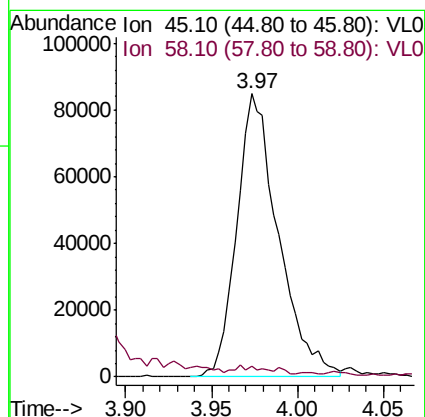
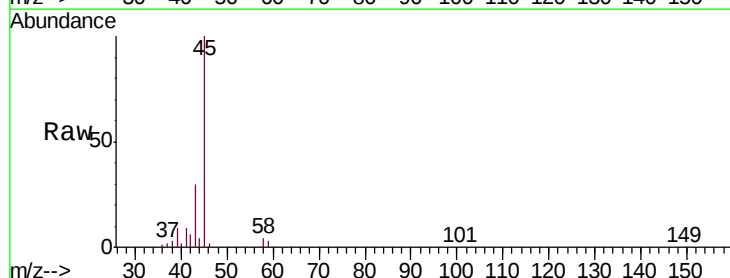
Acq: 10 Sep 2019 20:29

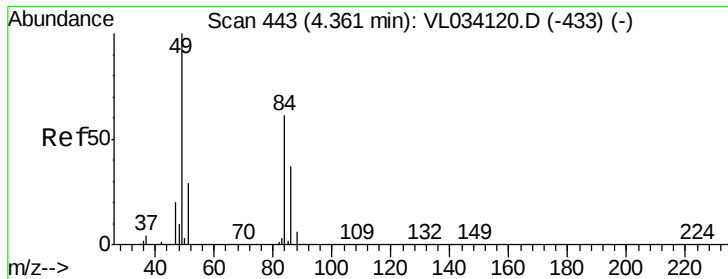
Tgt Ion: 45 Resp: 140893

Ion Ratio Lower Upper

45 100

58 0.0 1.0 1.6#

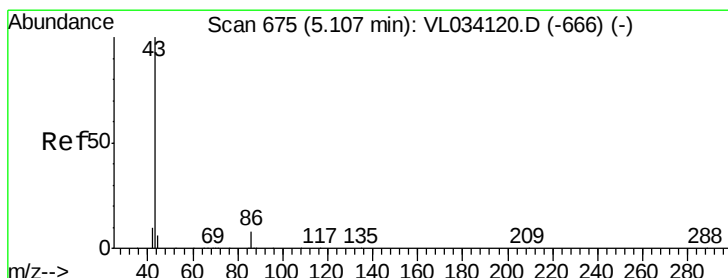
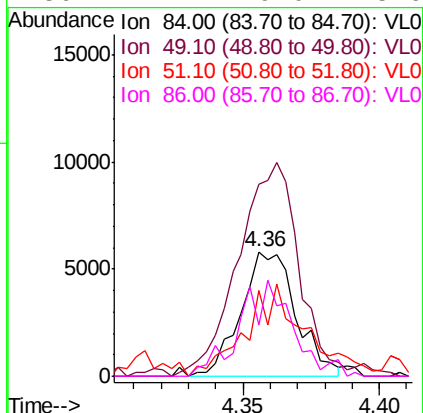
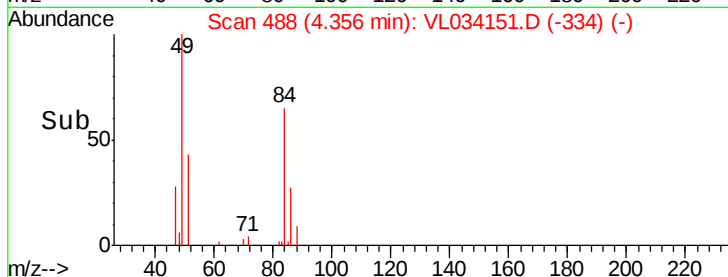
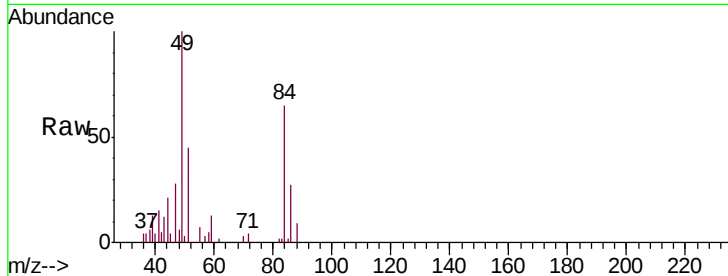




#20
Methylene Chloride
Concen: 0.298 ppbv
RT: 4.36 min Scan# 488
Delta R.T. -0.01 min
Lab File: VL034151.D
Acq: 10 Sep 2019 20:29

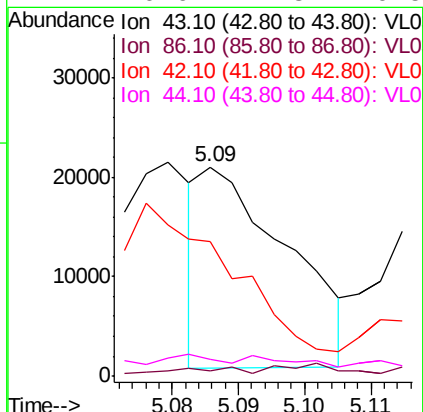
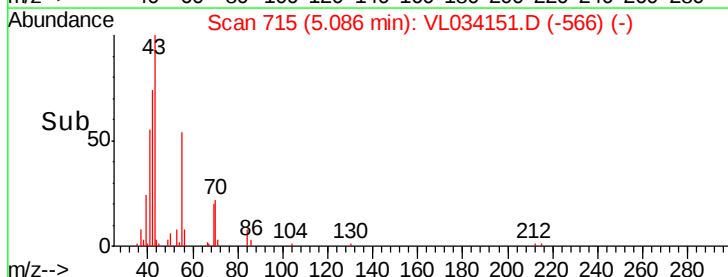
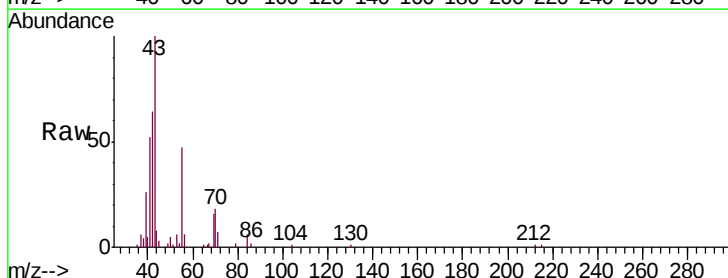
Instrument :
MSVOA_L
ClientSampleId :
SV4DL

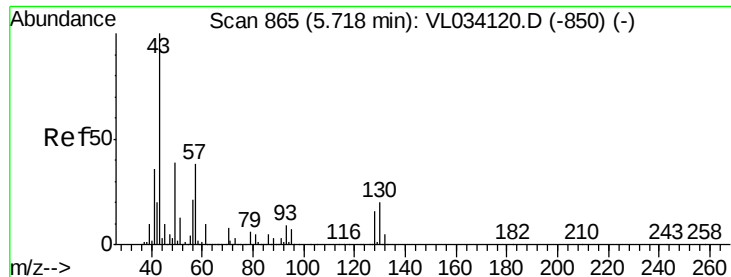
Tgt Ion:	84	Resp:	8116
Ion	Ratio	Lower	Upper
84	100		
49	146.9	131.0	196.6
51	69.4	38.1	57.1#
86	41.2	49.0	73.6#



#23
Vinyl Acetate
Concen: 0.131 ppbv
RT: 5.09 min Scan# 715
Delta R.T. -0.02 min
Lab File: VL034151.D
Acq: 10 Sep 2019 20:29

Tgt Ion:	43	Resp:	18267
Ion	Ratio	Lower	Upper
43	100		
86	0.1	5.5	8.3#
42	83.1	8.2	12.4#
44	6.6	4.3	6.5#

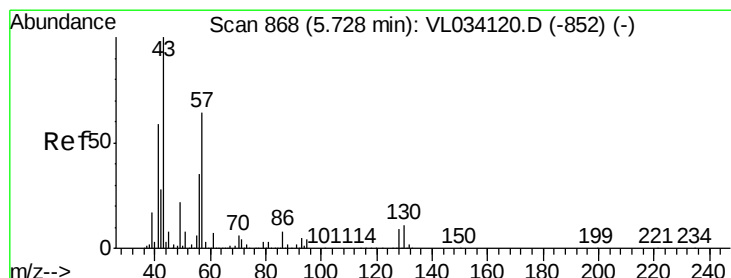
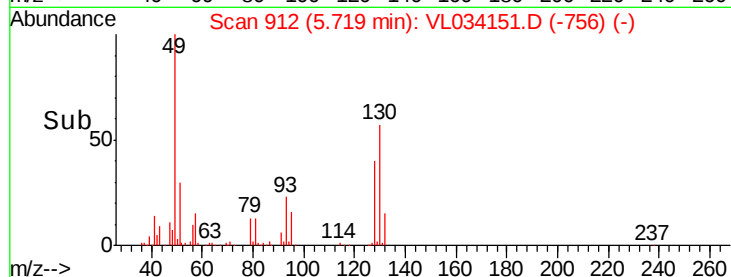
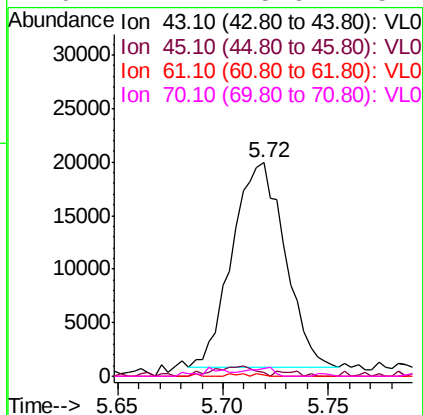
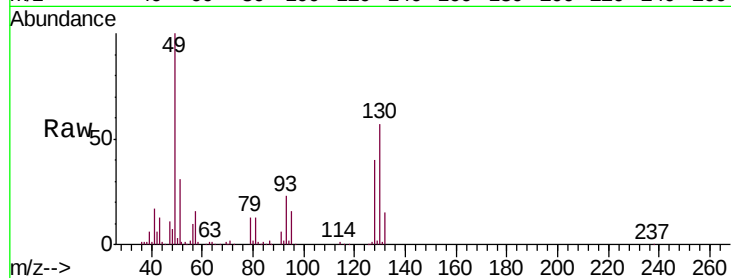




#25
Ethyl Acetate
Concen: 0.184 ppbv
RT: 5.72 min Scan# 912
Delta R.T. 0.00 min
Lab File: VL034151.D
Acq: 10 Sep 2019 20:29

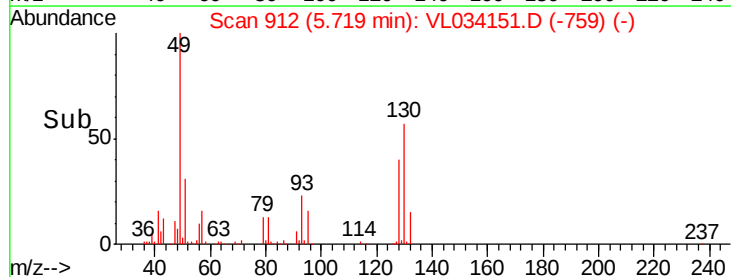
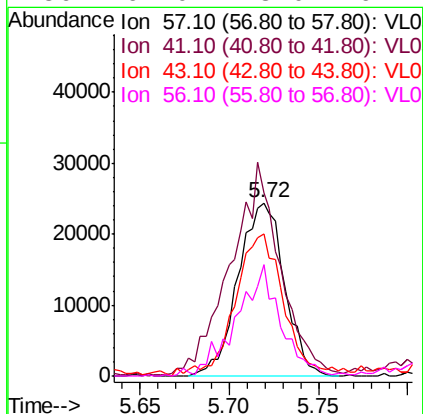
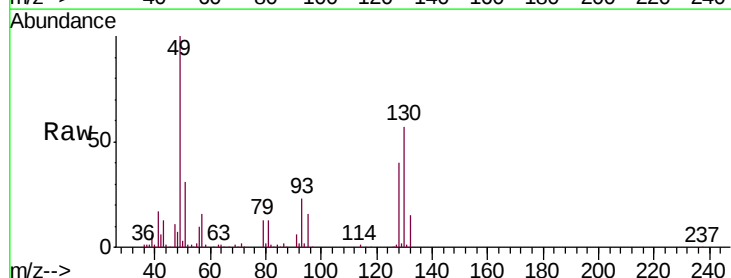
Instrument :
MSVOA_L
ClientSampleId :
SV4DL

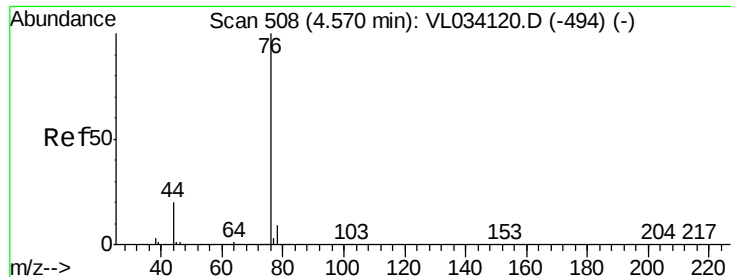
Tgt Ion:	43	Resp:	33247
Ion	Ratio	Lower	Upper
43	100		
45	5.2	8.2	12.4#
61	0.8	7.4	11.2#
70	4.2	5.6	8.4#



#26
Hexane
Concen: 0.546 ppbv
RT: 5.72 min Scan# 912
Delta R.T. -0.01 min
Lab File: VL034151.D
Acq: 10 Sep 2019 20:29

Tgt Ion:	57	Resp:	43998
Ion	Ratio	Lower	Upper
57	100		
41	130.4	76.6	115.0#
43	83.6	189.2	283.8#
56	62.0	43.0	64.4





#27

Carbon Disulfide

Concen: 0.030 ppbv

RT: 4.57 min Scan# 554

Delta R.T. -0.00 min

Lab File: VL034151.D

Acq: 10 Sep 2019 20:29

Instrument :

MSVOA_L

ClientSampleID :

SV4DL

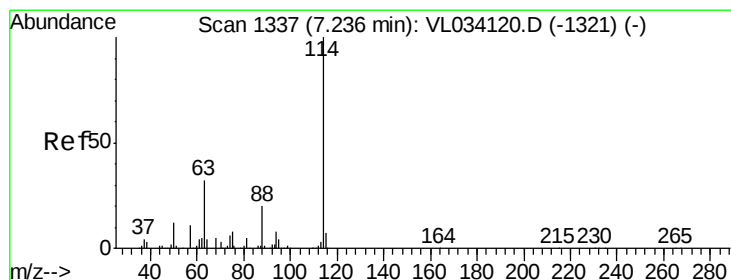
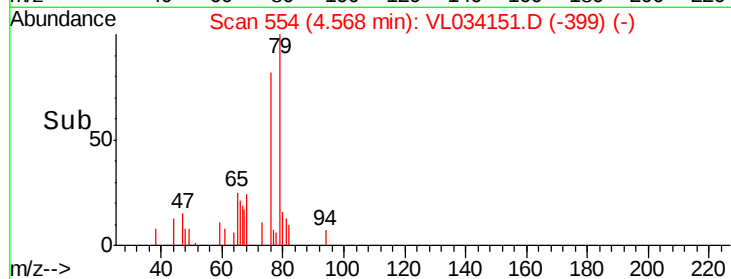
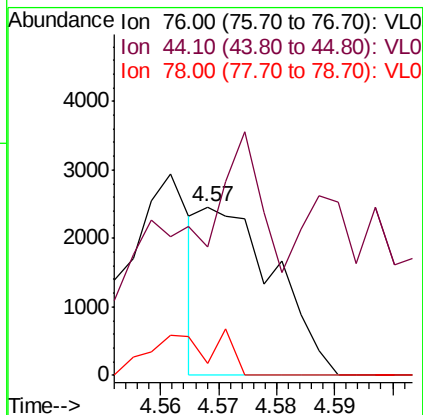
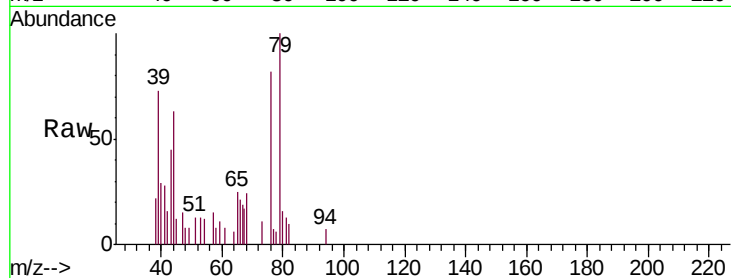
Tgt Ion: 76 Resp: 2188

Ion Ratio Lower Upper

76 100

44 128.7 17.6 26.4#

78 32.0 7.3 10.9#



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.23 min Scan# 1381

Delta R.T. -0.01 min

Lab File: VL034151.D

Acq: 10 Sep 2019 20:29

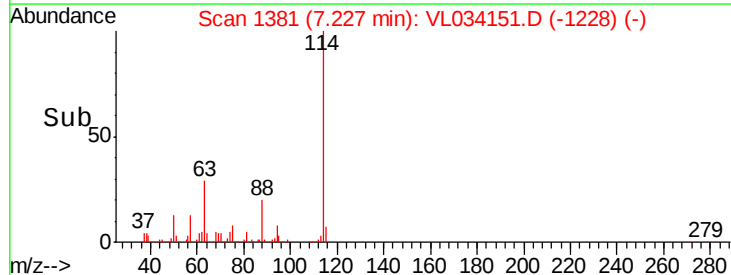
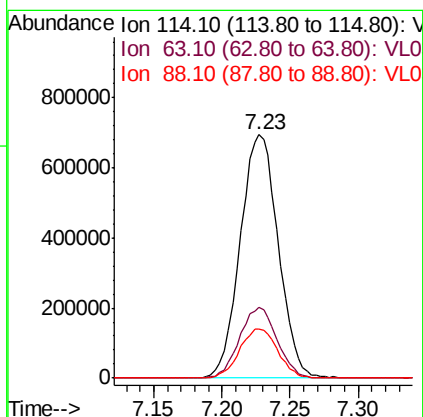
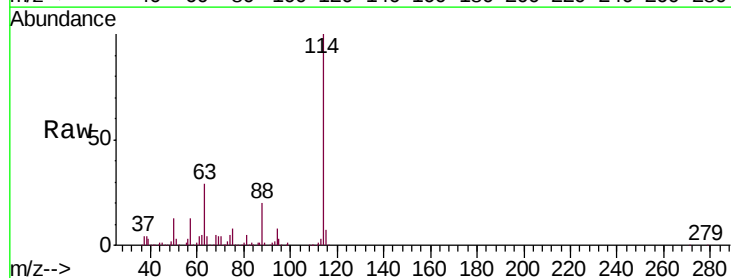
Tgt Ion: 114 Resp: 1342721

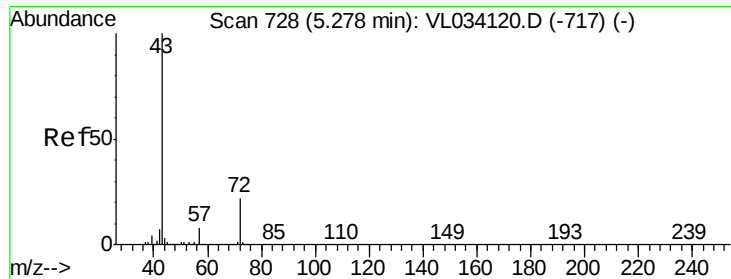
Ion Ratio Lower Upper

114 100

63 28.6 25.5 38.3

88 20.3 16.8 25.2

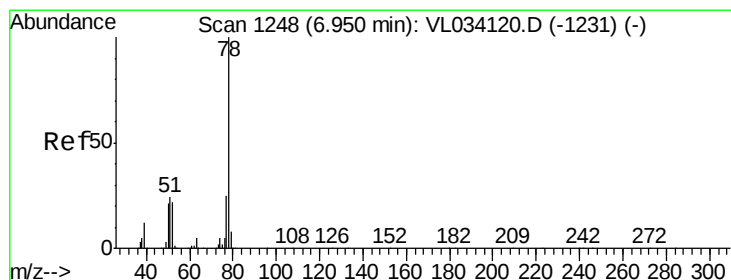
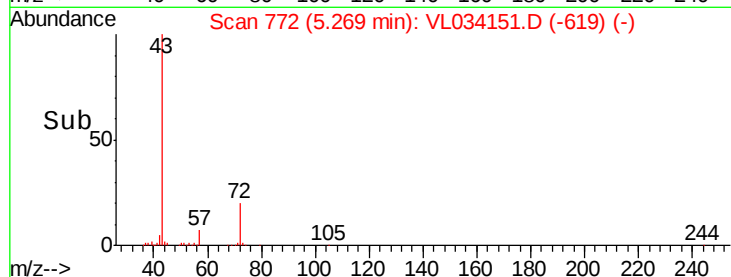
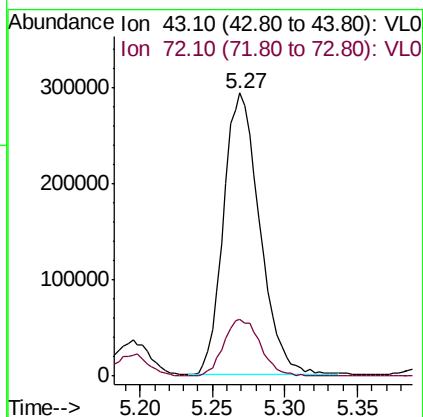
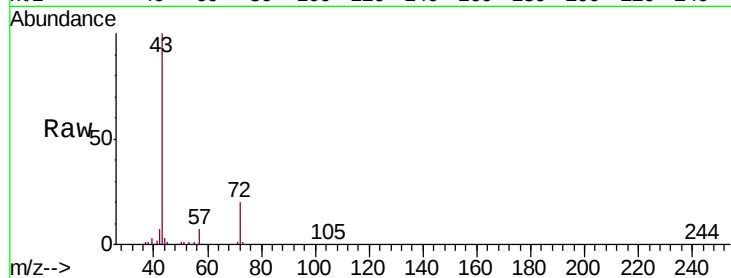




#34
2-Butanone
Concen: 3.917 ppbv
RT: 5.27 min Scan# 772
Delta R.T. -0.01 min
Lab File: VL034151.D
Acq: 10 Sep 2019 20:29

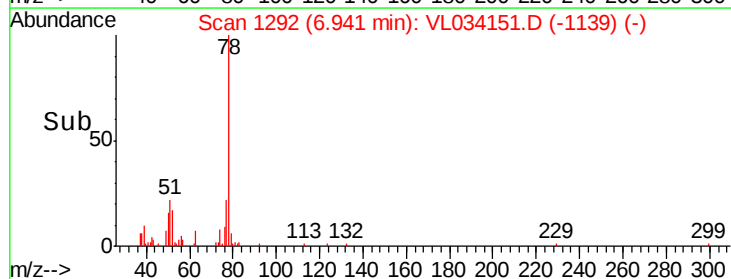
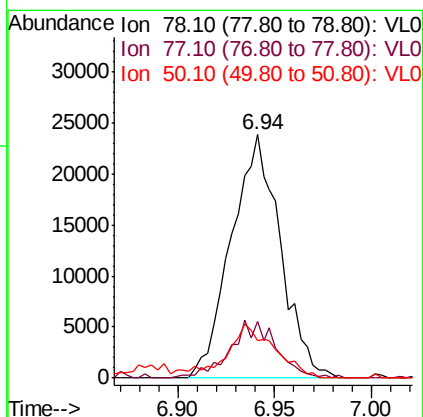
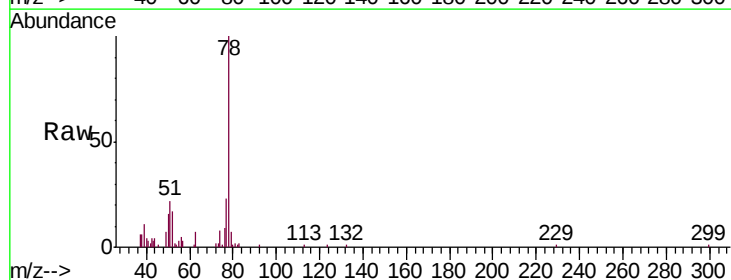
Instrument :
MSVOA_L
ClientSampleId :
SV4DL

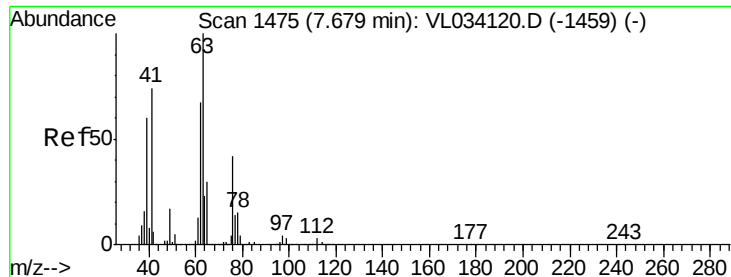
Tgt Ion: 43 Resp: 505626
Ion Ratio Lower Upper
43 100
72 20.9 16.5 24.7



#36
Benzene
Concen: 0.274 ppbv
RT: 6.94 min Scan# 1292
Delta R.T. -0.01 min
Lab File: VL034151.D
Acq: 10 Sep 2019 20:29

Tgt Ion: 78 Resp: 42078
Ion Ratio Lower Upper
78 100
77 22.2 20.3 30.5
50 14.1 16.9 25.3#





#39

1,2-Dichloropropane

Concen: 5.810 ppbv

RT: 7.23 min Scan# 1381

Delta R.T. -0.45 min

Lab File: VL034151.D

Acq: 10 Sep 2019 20:29

Instrument :

MSVOA_L

ClientSampleId :

SV4DL

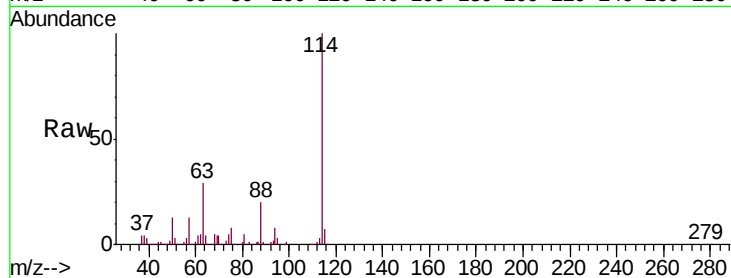
Tgt Ion: 63 Resp: 381601

Ion Ratio Lower Upper

63 100

41 0.0 59.3 88.9#

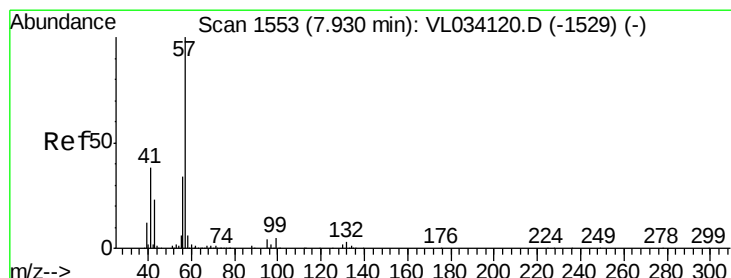
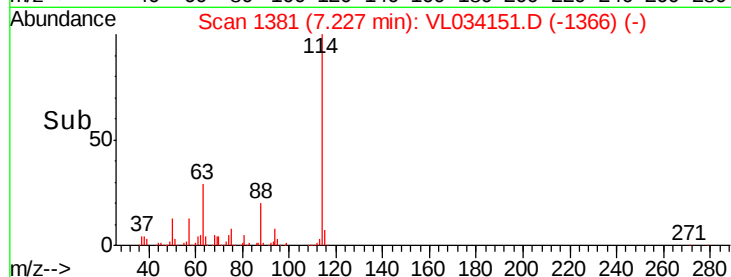
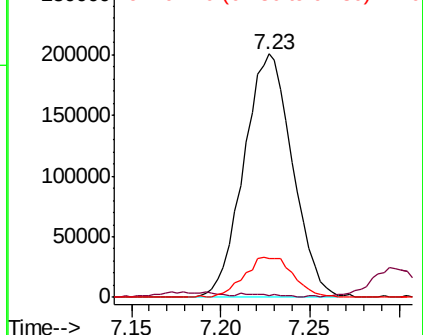
62 16.0 53.8 80.6#



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



#44

2,2,4-Trimethylpentane

Concen: 0.203 ppbv

RT: 7.92 min Scan# 1597

Delta R.T. -0.01 min

Lab File: VL034151.D

Acq: 10 Sep 2019 20:29

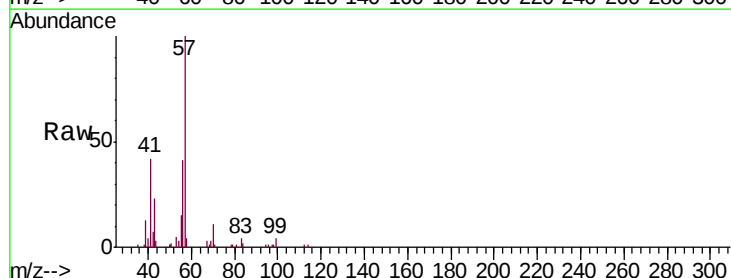
Tgt Ion: 57 Resp: 57427

Ion Ratio Lower Upper

57 100

41 47.6 28.4 42.6#

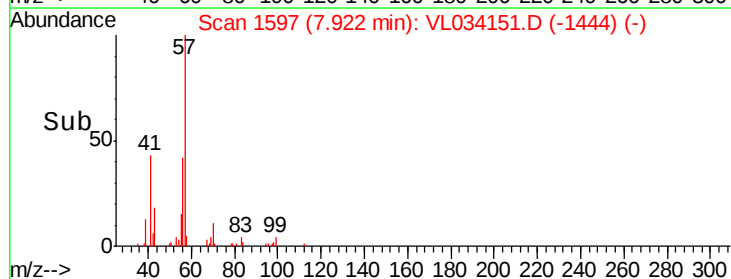
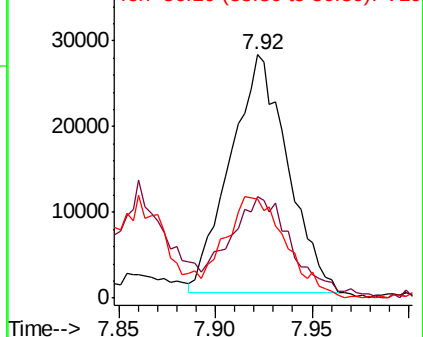
56 45.4 26.3 39.5#

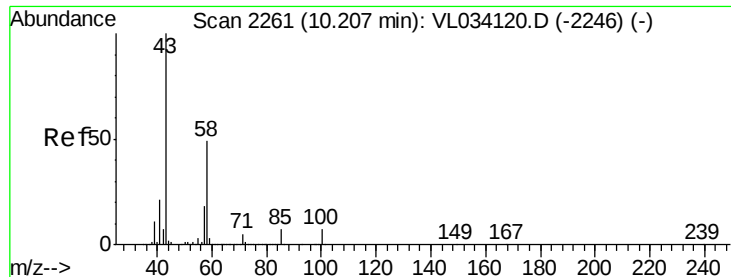


Abundance Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 56.10 (55.80 to 56.80): VL0





#51

2-Hexanone

Concen: 0.663 ppbv

RT: 10.20 min Scan# 2307

Delta R.T. -0.00 min

Lab File: VL034151.D

Acq: 10 Sep 2019 20:29

Instrument :

MSVOA_L

ClientSampleId :

SV4DL

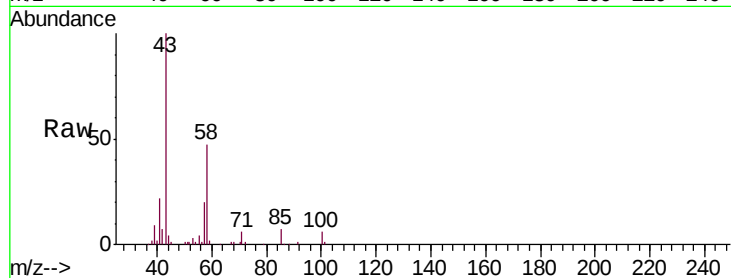
Tgt Ion: 43 Resp: 112874

Ion Ratio Lower Upper

43 100

58 47.6 38.2 57.2

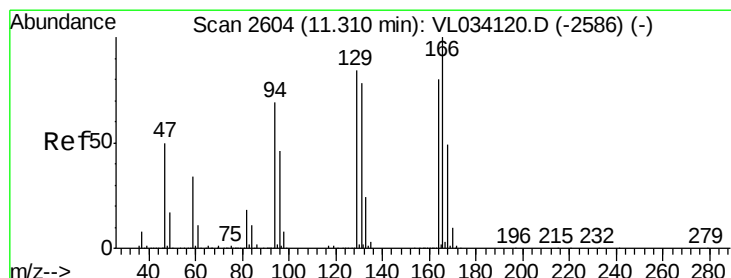
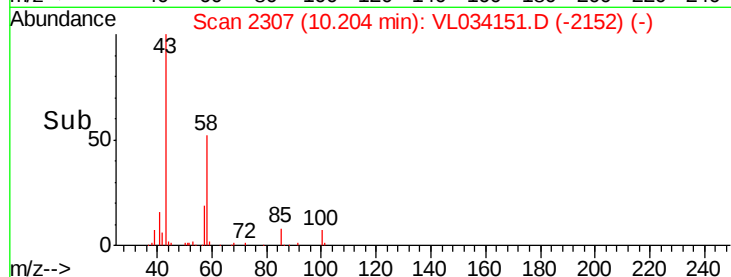
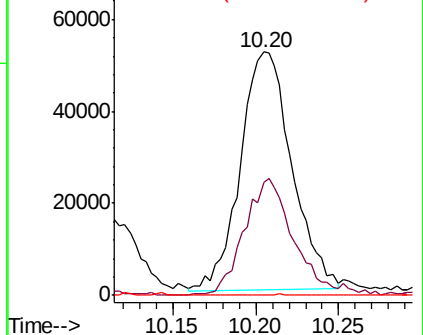
98 0.0 0.1 0.1#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

Ion 98.20 (97.90 to 98.90): VL0



#52

Tetrachloroethene

Concen: 0.238 ppbv

RT: 11.31 min Scan# 2651

Delta R.T. 0.00 min

Lab File: VL034151.D

Acq: 10 Sep 2019 20:29

Tgt Ion: 164 Resp: 12865

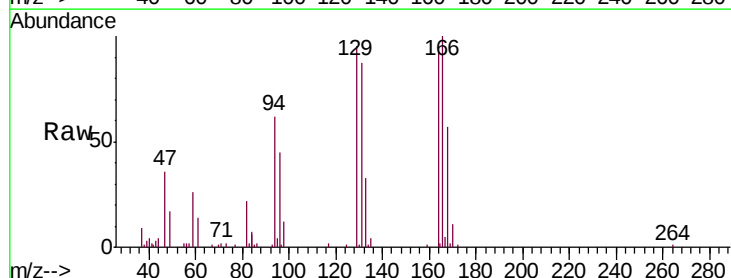
Ion Ratio Lower Upper

164 100

166 101.9 99.5 149.3

129 99.3 83.6 125.4

131 88.7 77.9 116.9

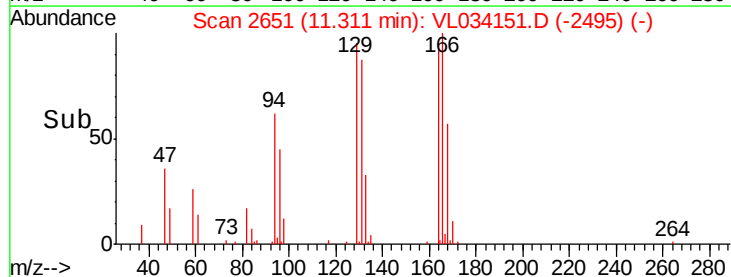
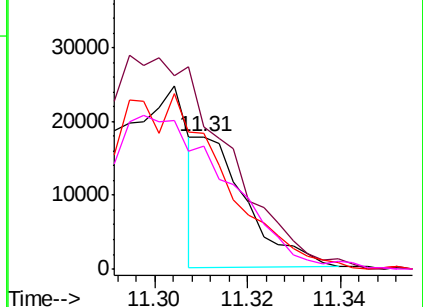


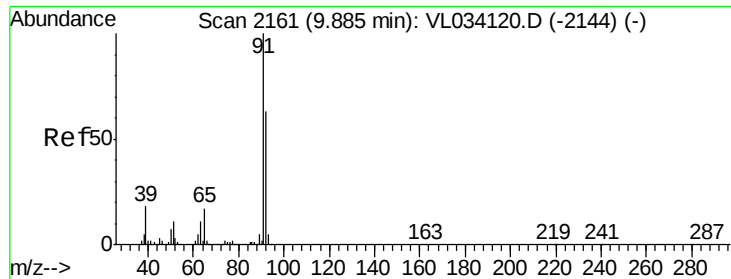
Abundance Ion 163.90 (163.60 to 164.60): V

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: 0.935 ppbv

RT: 9.88 min Scan# 2205

Delta R.T. -0.01 min

Lab File: VL034151.D

Acq: 10 Sep 2019 20:29

Instrument :

MSVOA_L

ClientSampleId :

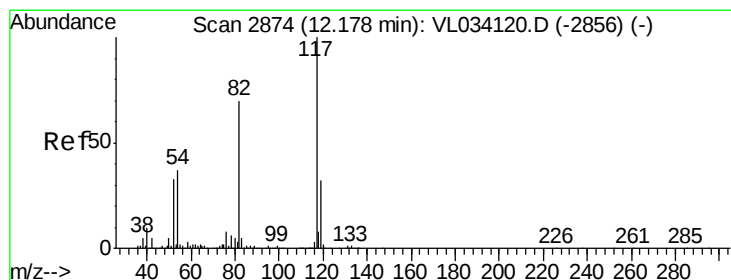
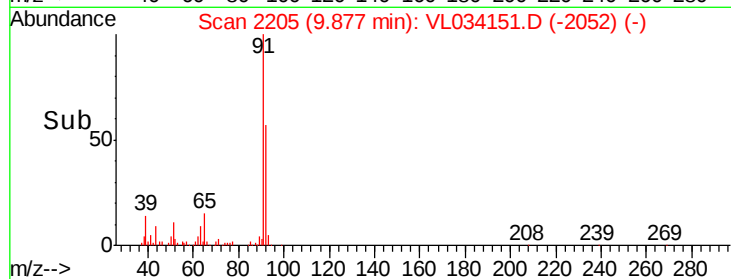
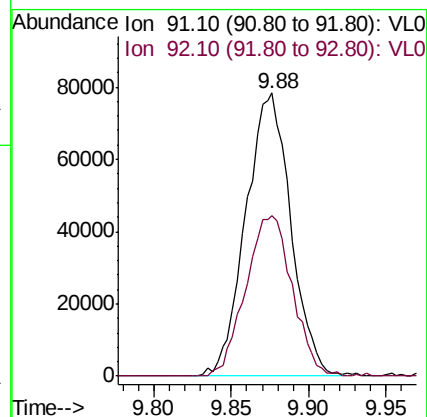
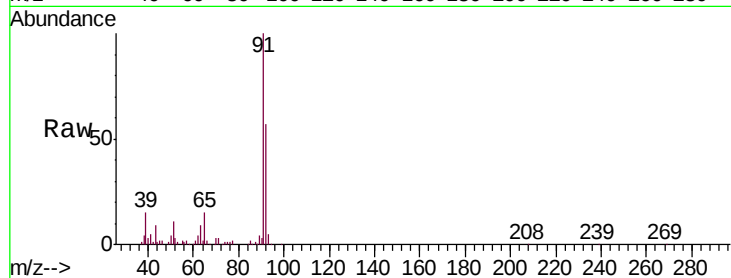
SV4DL

Tgt Ion: 91 Resp: 158635

Ion Ratio Lower Upper

91 100

92 58.7 49.3 73.9



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.17 min Scan# 2917

Delta R.T. -0.01 min

Lab File: VL034151.D

Acq: 10 Sep 2019 20:29

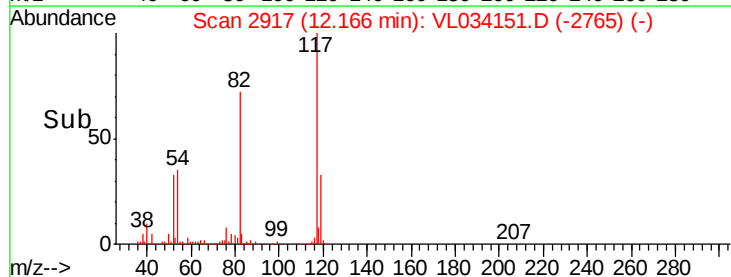
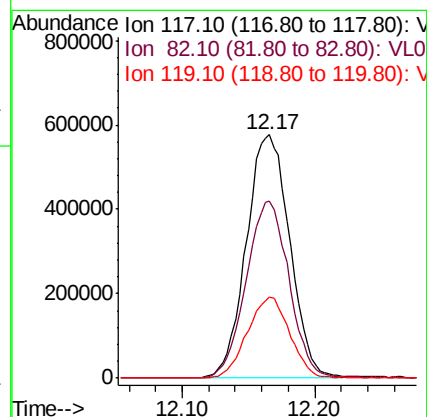
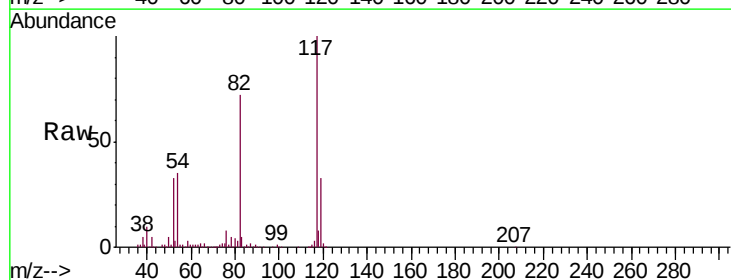
Tgt Ion: 117 Resp: 1314372

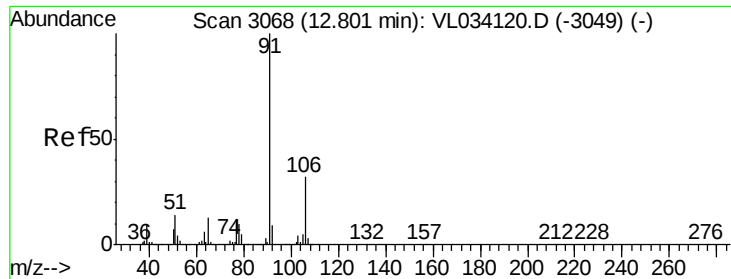
Ion Ratio Lower Upper

117 100

82 72.2 55.8 83.6

119 32.7 43.1 64.7#





#58

Ethyl Benzene

Concen: 0.049 ppbv

RT: 12.78 min Scan# 3108

Delta R.T. -0.02 min

Lab File: VL034151.D

Acq: 10 Sep 2019 20:29

Instrument :

MSVOA_L

ClientSampleId :

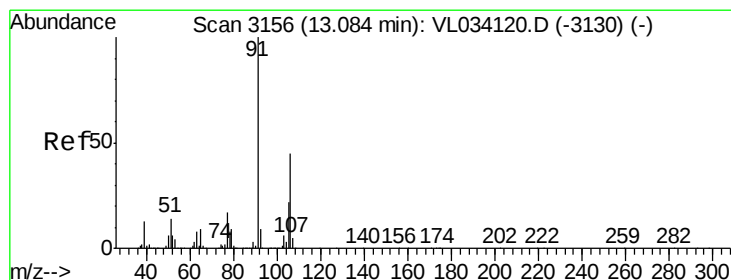
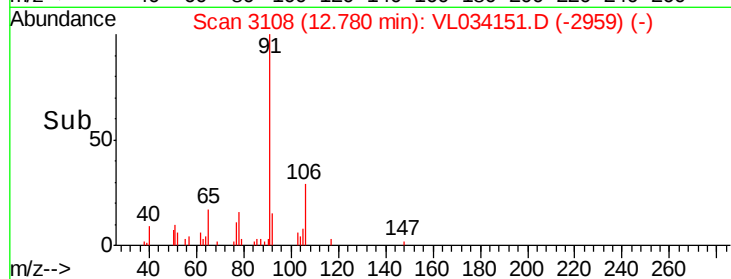
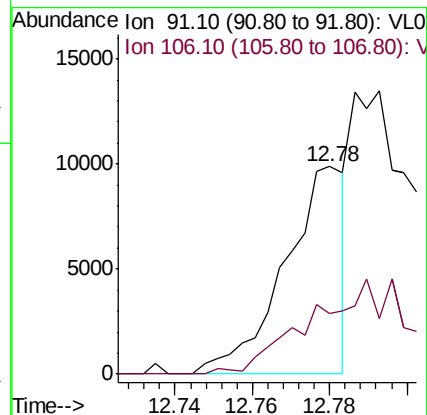
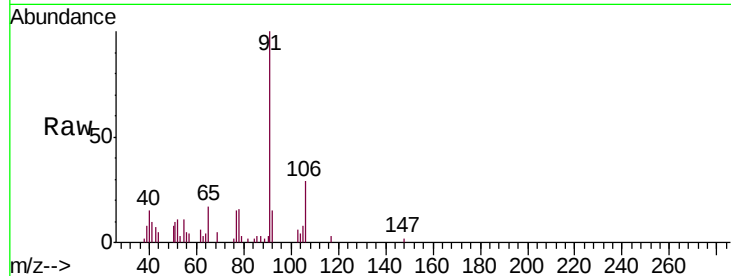
SV4DL

Tgt Ion: 91 Resp: 10638

Ion Ratio Lower Upper

91 100

106 29.3 25.3 37.9



#59

m/p-Xylene

Concen: 0.098 ppbv

RT: 13.07 min Scan# 3199

Delta R.T. -0.01 min

Lab File: VL034151.D

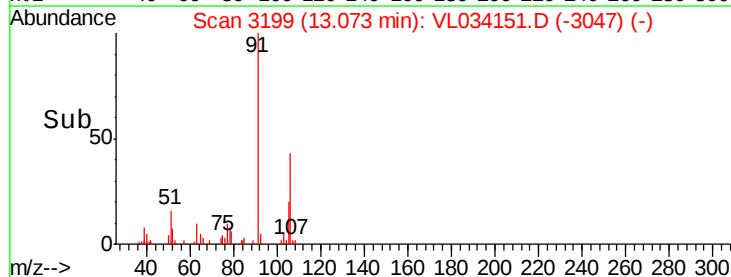
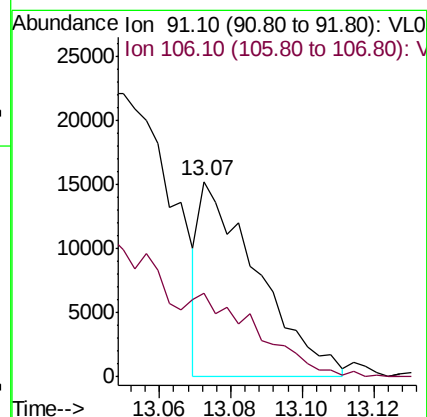
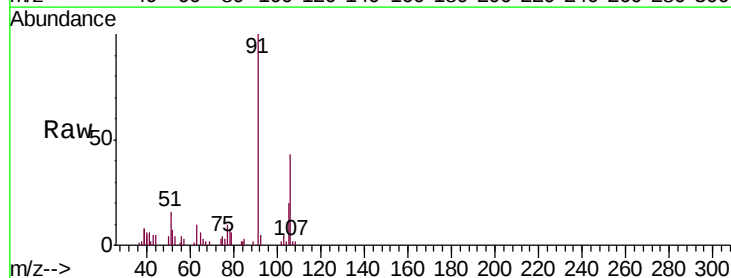
Acq: 10 Sep 2019 20:29

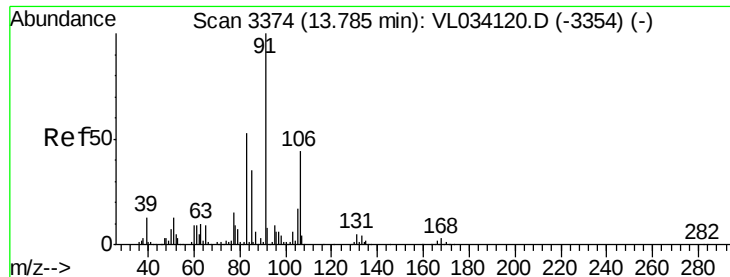
Tgt Ion: 91 Resp: 17200

Ion Ratio Lower Upper

91 100

106 0.0 35.4 53.2#

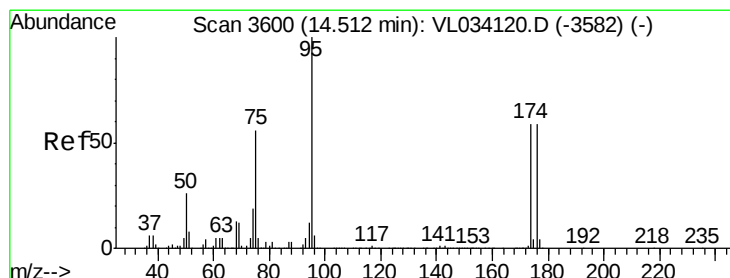
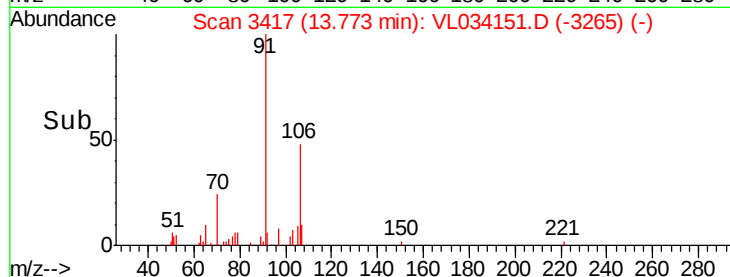
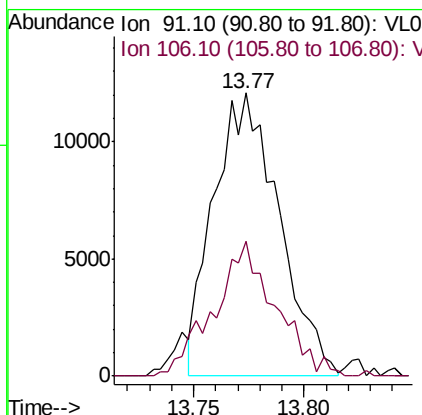
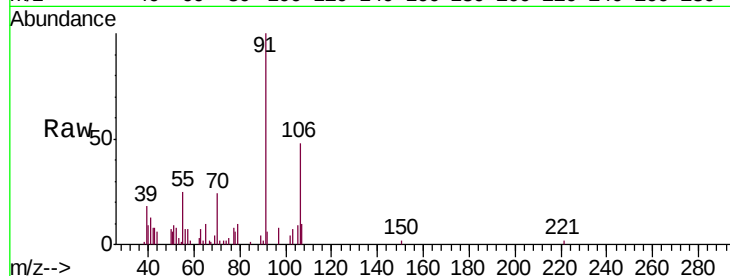




#60
o-Xylene
Concen: 0.142 ppbv
RT: 13.77 min Scan# 3417
Delta R.T. -0.01 min
Lab File: VL034151.D
Acq: 10 Sep 2019 20:29

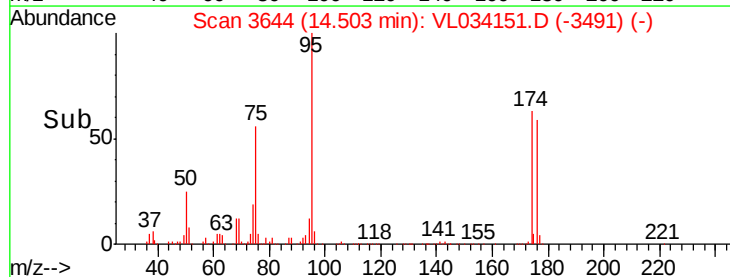
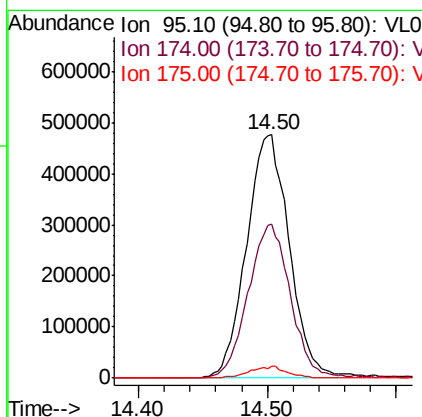
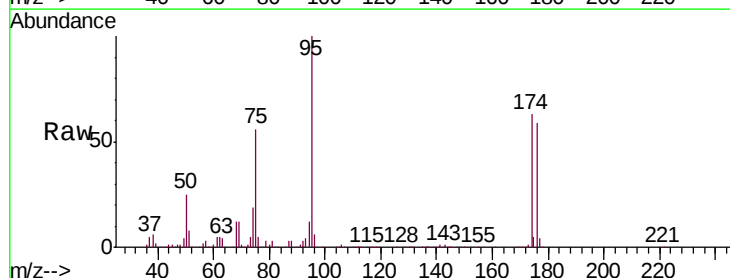
Instrument :
MSVOA_L
ClientSampleId :
SV4DL

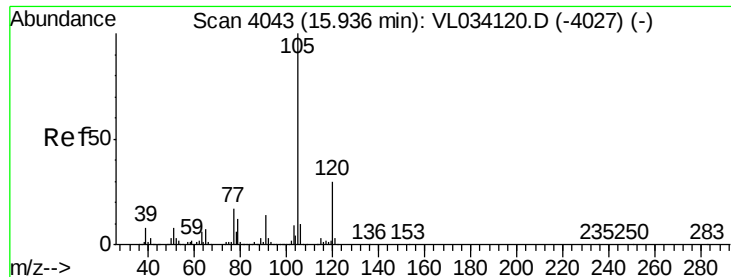
Tgt Ion: 91 Resp: 24834
Ion Ratio Lower Upper
91 100
106 45.3 21.4 64.3



#68
1-Bromo-4-Fluorobenzene
Concen: 10.204 ppbv
RT: 14.50 min Scan# 3644
Delta R.T. -0.01 min
Lab File: VL034151.D
Acq: 10 Sep 2019 20:29

Tgt Ion: 95 Resp: 1096415
Ion Ratio Lower Upper
95 100
174 63.4 48.1 72.1
175 4.5 3.5 5.3





#72

4-Ethyltoluene

Concen: 0.047 ppbv

RT: 15.92 min Scan# 4085

Delta R.T. -0.02 min

Lab File: VL034151.D

Acq: 10 Sep 2019 20:29

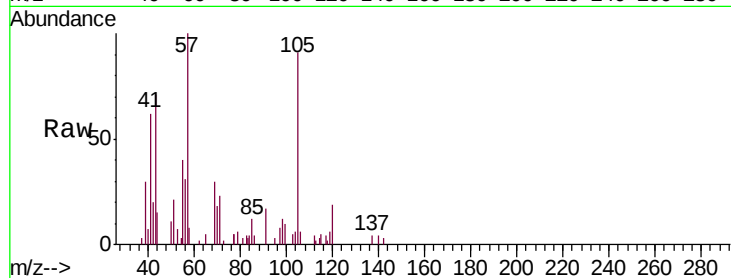
Instrument :

MSVOA_L

ClientSampleId :

SV4DL

Tgt Ion:	105	Resp:	9260
Ion	Ratio	Lower	Upper
105	100		
120	32.3	23.8	35.6
91	15.0	11.4	17.0
77	26.7	12.6	18.8#



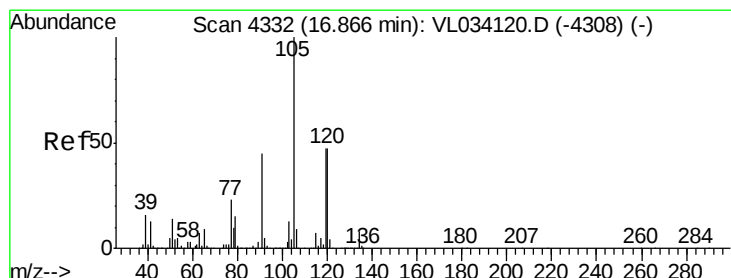
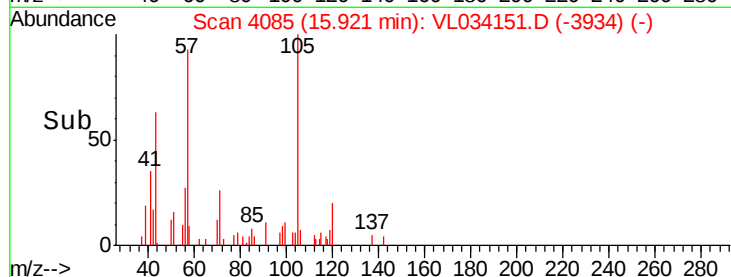
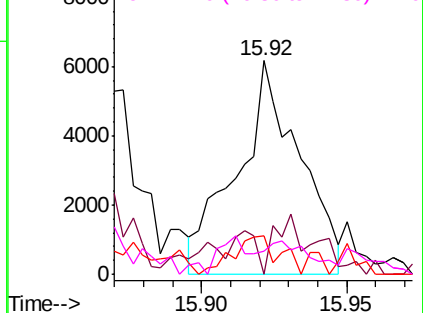
Abundance

Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0



#74

1,2,4-Trimethylbenzene

Concen: 0.123 ppbv

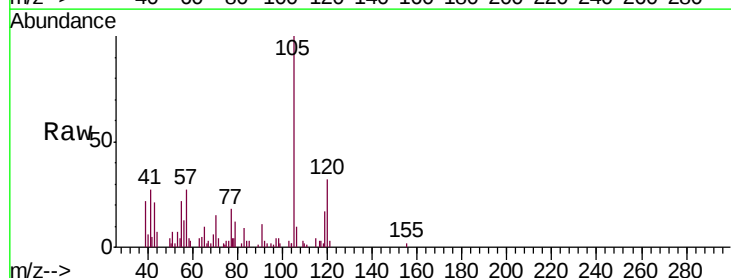
RT: 16.85 min Scan# 4374

Delta R.T. -0.02 min

Lab File: VL034151.D

Acq: 10 Sep 2019 20:29

Tgt Ion:	105	Resp:	24393
Ion	Ratio	Lower	Upper
105	100		
120	30.9	37.7	56.5#
91	11.2	36.2	54.2#
77	12.7	18.5	27.7#



Abundance

Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

