

Data File : VL032386.D
Acq On : 16 Aug 2018 21:03
Operator : SY/AP
Sample : J4457-04DL 10X
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SS02-MIVIDL

Quant Time: Aug 17 03:19:58 2018
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL081518AIR.M
Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_LWed Aug 15 14:58:02 2018
QLast Update : Wed Aug 15 14:58:02 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.82	49	1767422	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.35	114	3435267	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.31	117	3340801	10.00	ppbv	0.00

System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.64 95 2606164 10.23 ppbv 0.00
Spiked Amount 10.000 Range 65 - 135 Recovery = 102.30%

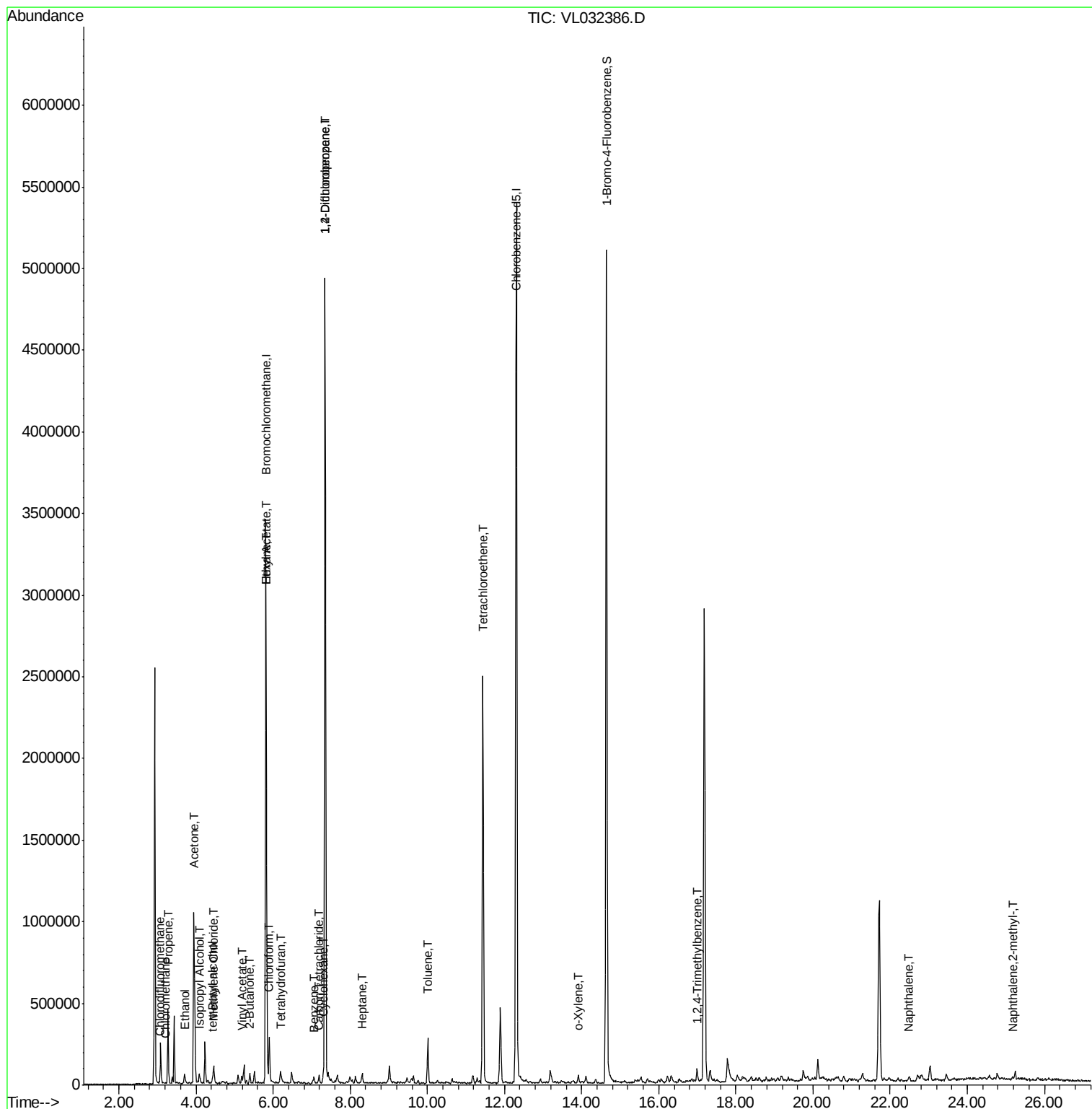
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.11	85	7713	Below Cal		94
3) Chlorodifluoromethane	3.05	51	7080	0.043 ppbv		93
4) Chloromethane	3.21	50	3302	0.034 ppbv		97
9) Propene	3.27	41	108898	1.554 ppbv		100
10) Heptane	8.31	43	11975	0.057 ppbv #		20
13) Ethanol	3.70	45	63138	3.508 ppbv		97
15) Acetone	3.94	43	1159490	6.905 ppbv		95
17) tert-Butyl alcohol	4.43	59	13203	0.469 ppbv #		74
19) Isopropyl Alcohol	4.09	45	52858	0.467 ppbv #		1
20) Methylene Chloride	4.46	84	32626	0.514 ppbv		90
23) Vinyl Acetate	5.20	43	16646	0.057 ppbv #		20
25) Ethyl Acetate	5.83	43	59222	0.165 ppbv #		87
26) Hexane	5.83	57	63842	0.398 ppbv #		46
29) Chloroform	5.90	83	182021	0.774 ppbv		99
30) Cyclohexane	7.31	84	10213	0.084 ppbv #		1
34) 2-Butanone	5.40	43	71939	0.308 ppbv		100
35) Carbon Tetrachloride	7.20	117	12914	0.064 ppbv		86
36) Benzene	7.06	78	20085	0.069 ppbv #		89
39) 1,2-Dichloropropane	7.35	63	984110	8.089 ppbv #		26
41) Tetrahydrofuran	6.21	42	7920	0.063 ppbv #		51
52) Tetrachloroethene	11.44	164	573418	6.676 ppbv		95
53) Toluene	10.01	91	200221	0.627 ppbv		100
60) o-Xylene	13.91	91	17911	0.053 ppbv #		32
74) 1,2,4-Trimethylbenzene	16.99	105	29612	0.077 ppbv #		70
79) Naphthalene	22.49	128	8643	0.351 ppbv #		51
80) Naphthalene,2-methyl-	25.17	142	2506	0.033 ppbv		92

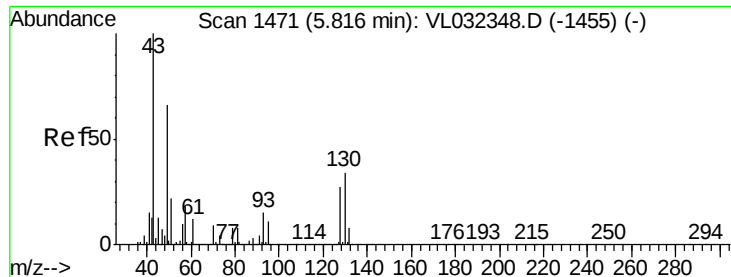
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Aug 15 14:58:02 2018
QLast Update : Wed Aug 15 14:58:02 2018
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.82 min Scan# 1471

Delta R.T. 0.00 min

Lab File: VL032386.D

Acq: 16 Aug 2018 21:03

Instrument :

MSVOA_L

ClientSampleId :

SS02-MIVIDL

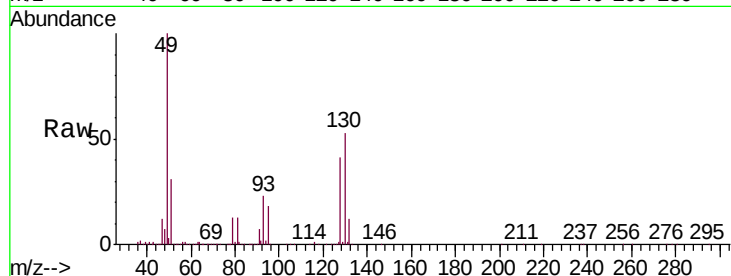
Tgt Ion: 49 Resp: 1767422

Ion Ratio Lower Upper

49 100

128 40.9 20.5 61.6

130 51.7 26.2 78.5

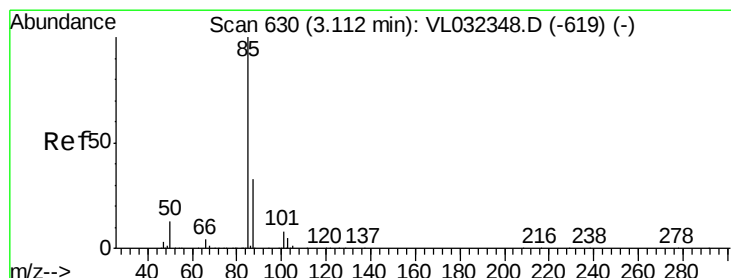
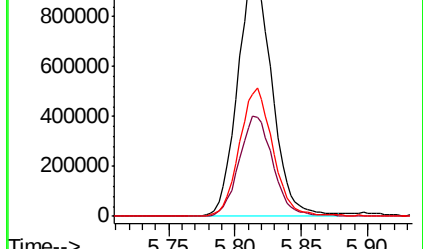
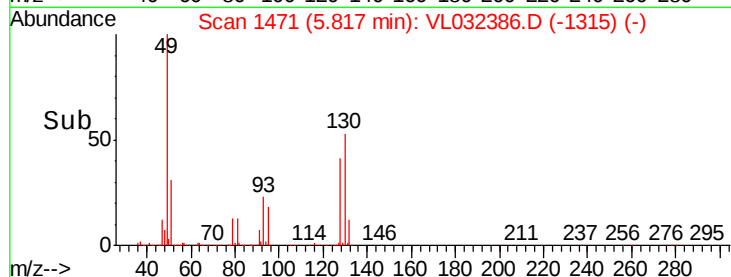


Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V

Time-->



#2

Dichlorodifluoromethane

Concen: Below Cal

RT: 3.11 min Scan# 630

Delta R.T. 0.00 min

Lab File: VL032386.D

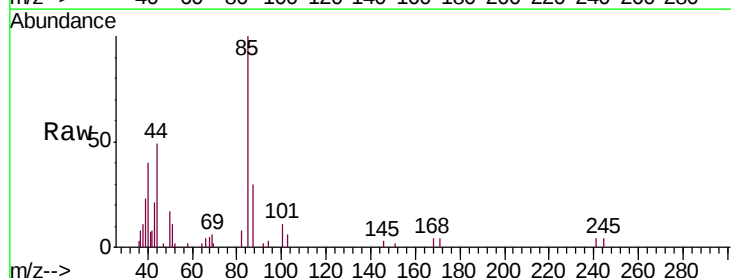
Acq: 16 Aug 2018 21:03

Tgt Ion: 85 Resp: 7713

Ion Ratio Lower Upper

85 100

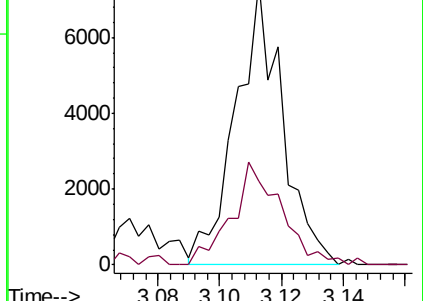
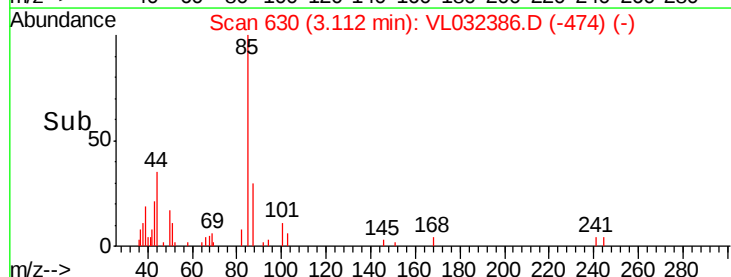
87 29.5 26.3 39.5

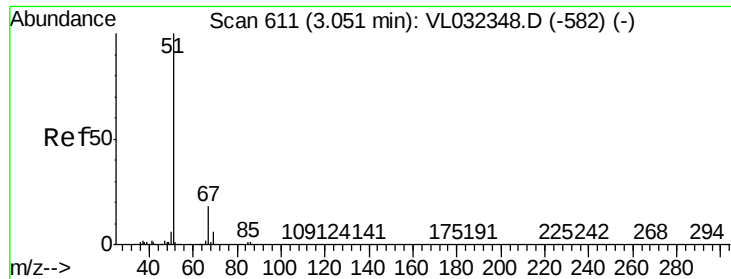


Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

Time-->





#3

Chlorodifluoromethane

Concen: 0.043 ppbv

RT: 3.05 min Scan# 611

Delta R.T. 0.00 min

Lab File: VL032386.D

Acq: 16 Aug 2018 21:03

Instrument :

MSVOA_L

ClientSampleId :

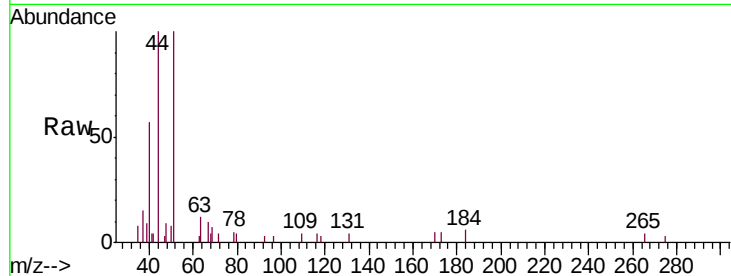
SS02-MIVIDL

Tgt Ion: 51 Resp: 7080

Ion Ratio Lower Upper

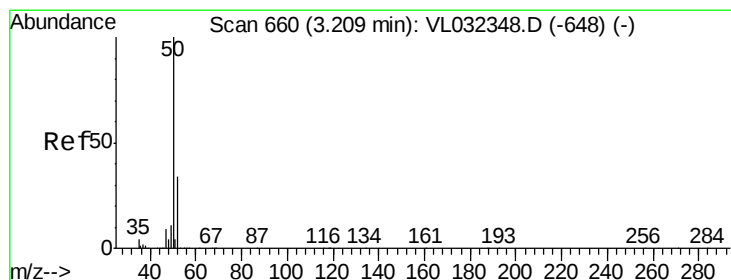
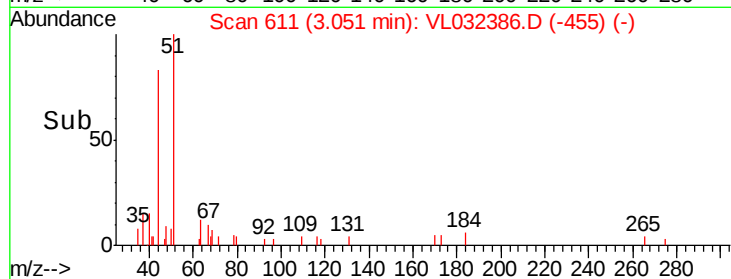
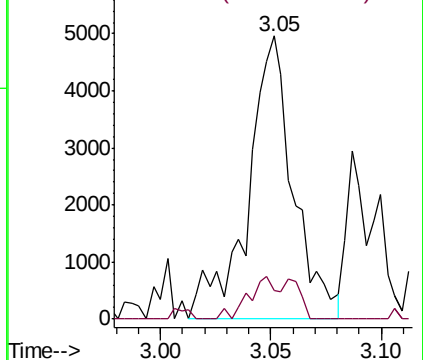
51 100

67 14.2 13.7 20.5



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.034 ppbv

RT: 3.21 min Scan# 659

Delta R.T. -0.00 min

Lab File: VL032386.D

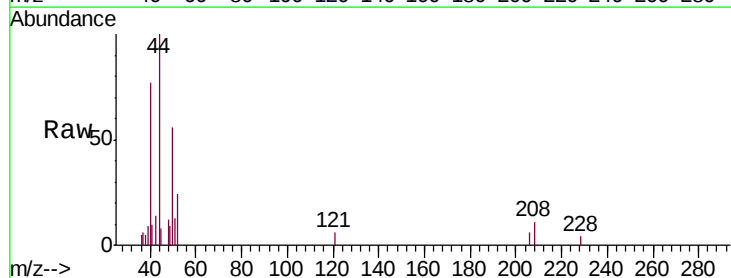
Acq: 16 Aug 2018 21:03

Tgt Ion: 50 Resp: 3302

Ion Ratio Lower Upper

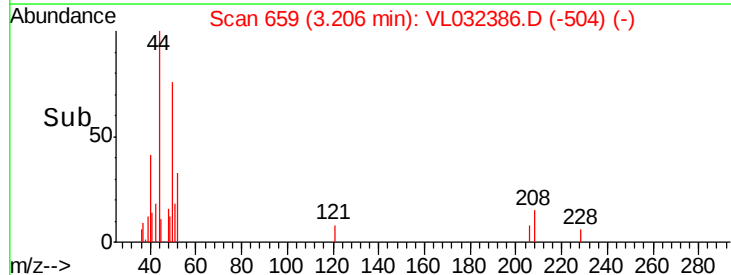
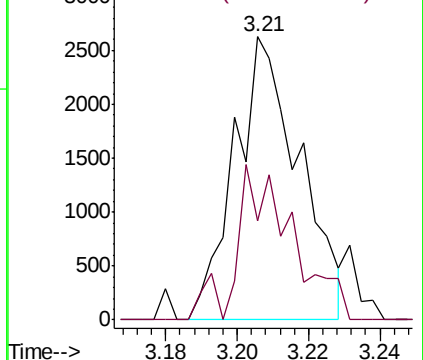
50 100

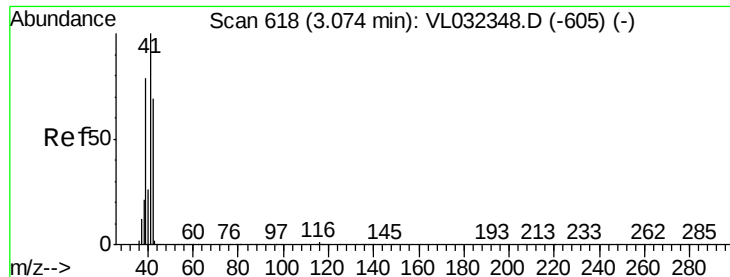
52 35.1 26.8 40.2



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 1.554 ppbv

RT: 3.27 min Scan# 680

Delta R.T. 0.20 min

Lab File: VL032386.D

Acq: 16 Aug 2018 21:03

Instrument :

MSVOA_L

ClientSampleId :

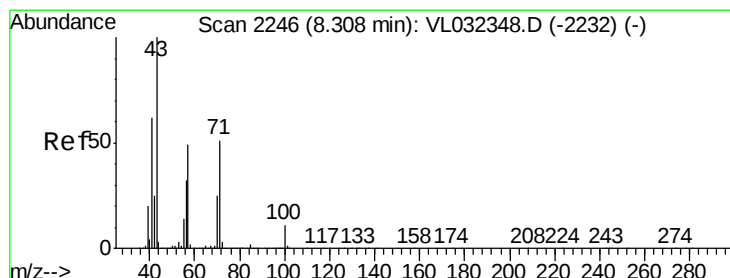
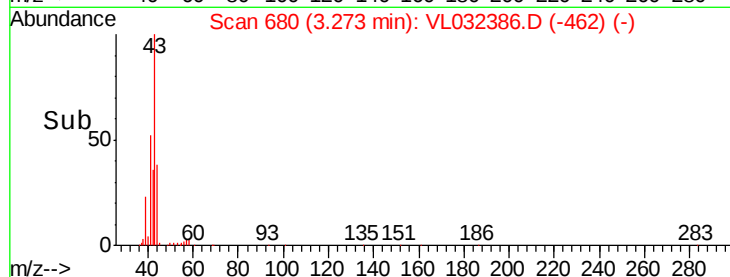
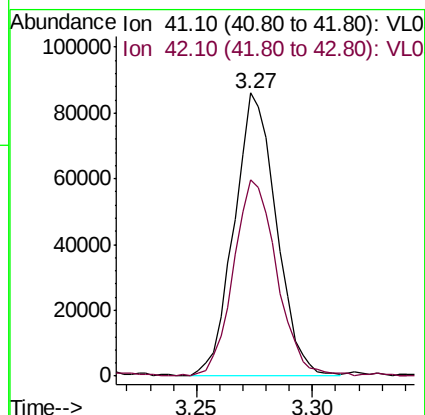
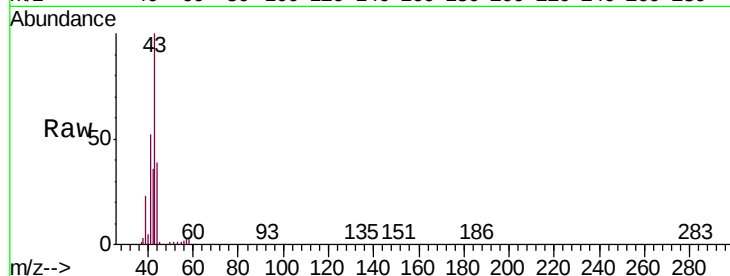
SS02-MIVIDL

Tgt Ion: 41 Resp: 108898

Ion Ratio Lower Upper

41 100

42 70.3 55.9 83.9



#10

Heptane

Concen: 0.057 ppbv

RT: 8.31 min Scan# 2247

Delta R.T. 0.00 min

Lab File: VL032386.D

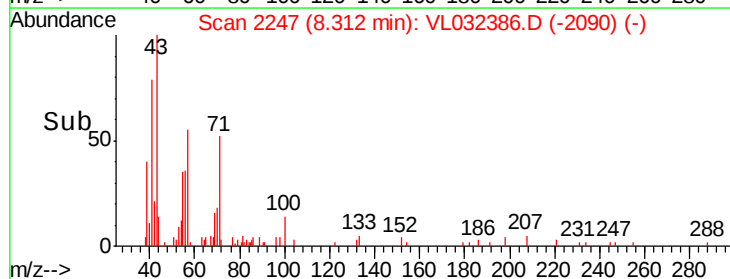
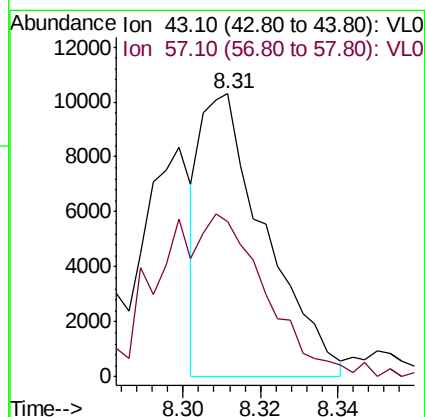
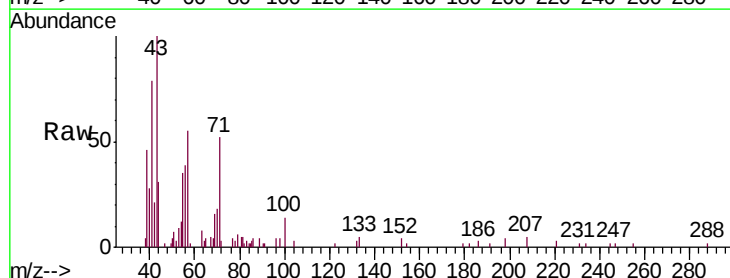
Acq: 16 Aug 2018 21:03

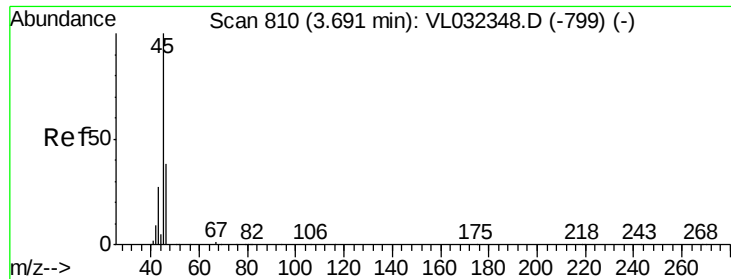
Tgt Ion: 43 Resp: 11975

Ion Ratio Lower Upper

43 100

57 103.9 39.5 59.3#

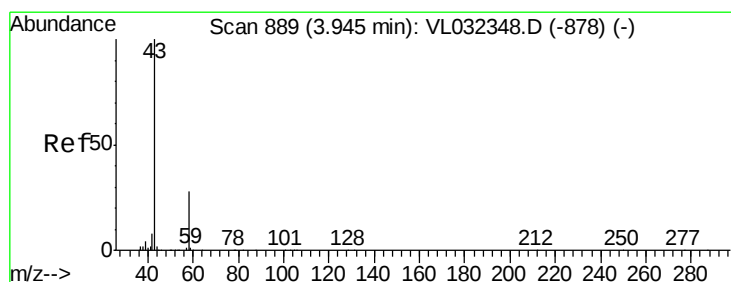
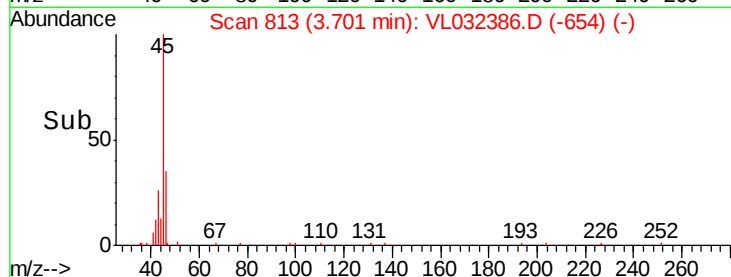
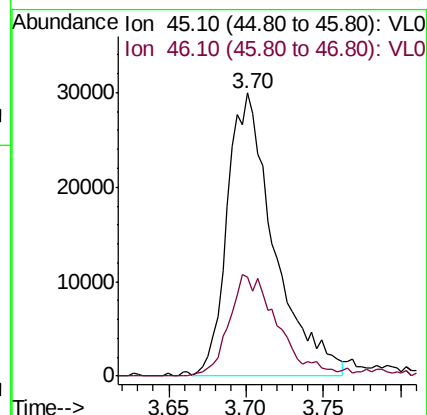
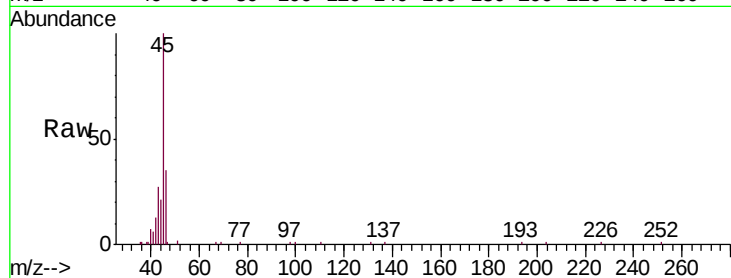




#13
Ethanol
Concen: 3.508 ppbv
RT: 3.70 min Scan# 813
Delta R.T. 0.01 min
Lab File: VL032386.D
Acq: 16 Aug 2018 21:03

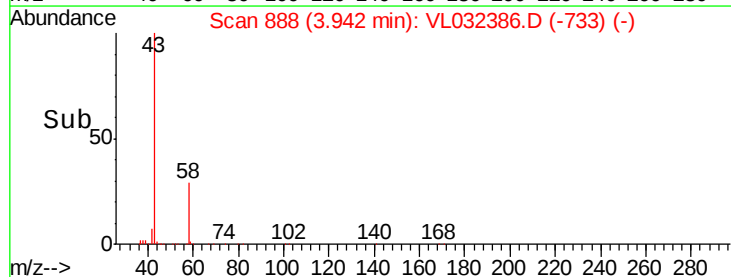
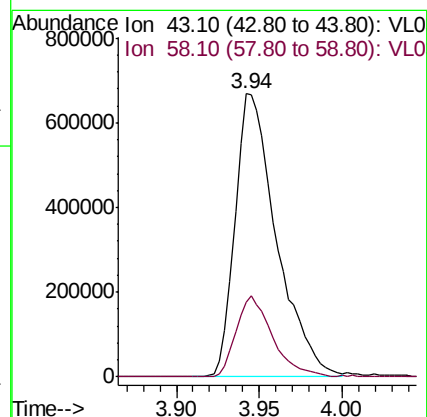
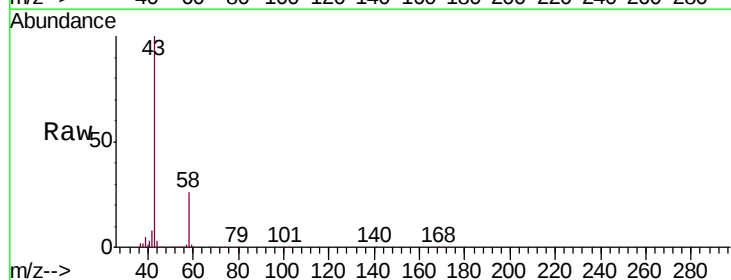
Instrument :
MSVOA_L
ClientSampleId :
SS02-MIVIDL

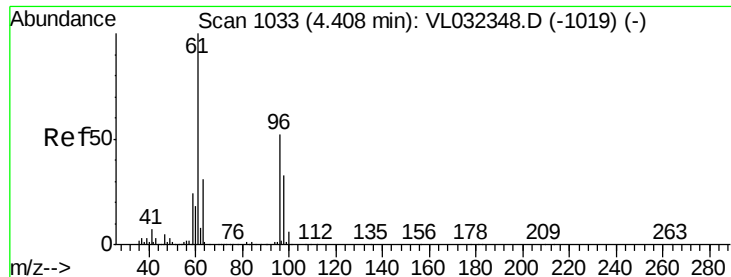
Tgt Ion: 45 Resp: 63138
Ion Ratio Lower Upper
45 100
46 37.4 15.6 62.4



#15
Acetone
Concen: 6.905 ppbv
RT: 3.94 min Scan# 888
Delta R.T. -0.00 min
Lab File: VL032386.D
Acq: 16 Aug 2018 21:03

Tgt Ion: 43 Resp: 1159490
Ion Ratio Lower Upper
43 100
58 25.6 22.4 33.6





#17

tert-Butyl alcohol

Concen: 0.469 ppbv

RT: 4.43 min Scan# 1039

Delta R.T. 0.02 min

Lab File: VL032386.D

Acq: 16 Aug 2018 21:03

Instrument :

MSVOA_L

ClientSampleId :

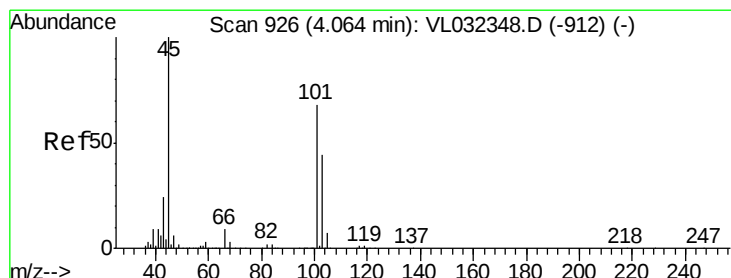
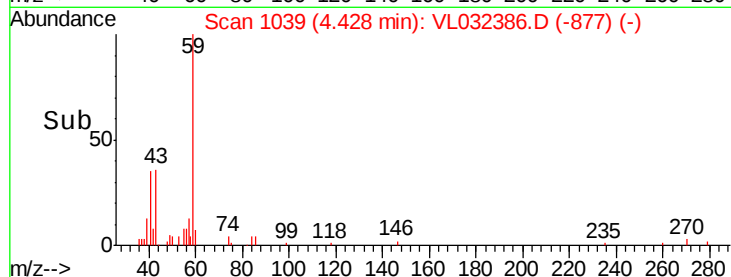
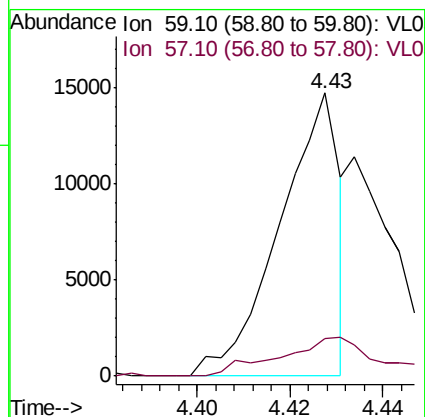
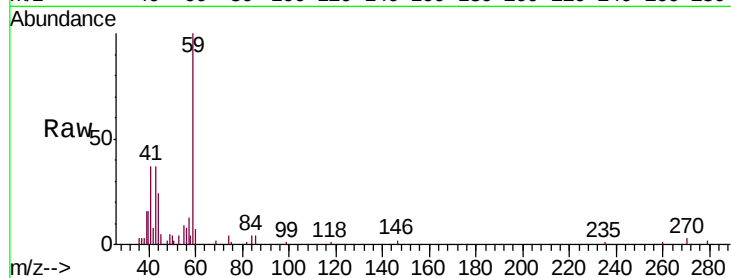
SS02-MIVIDL

Tgt Ion: 59 Resp: 13203

Ion Ratio Lower Upper

59 100

57 0.0 7.6 11.4#



#19

Isopropyl Alcohol

Concen: 0.467 ppbv

RT: 4.09 min Scan# 933

Delta R.T. 0.02 min

Lab File: VL032386.D

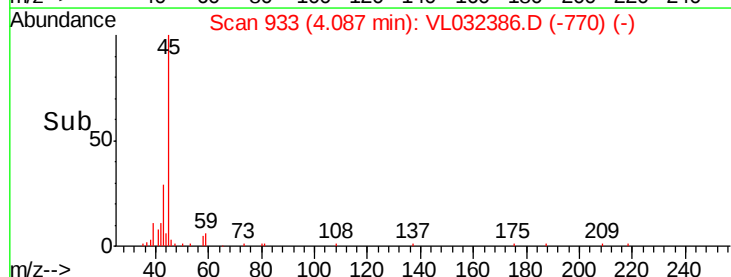
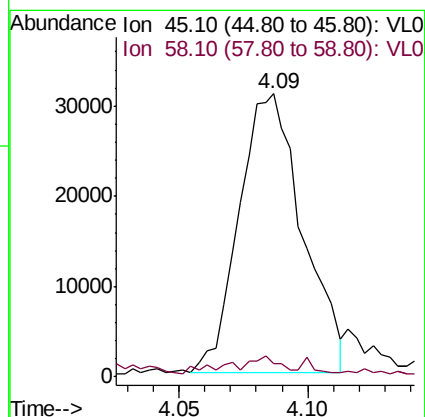
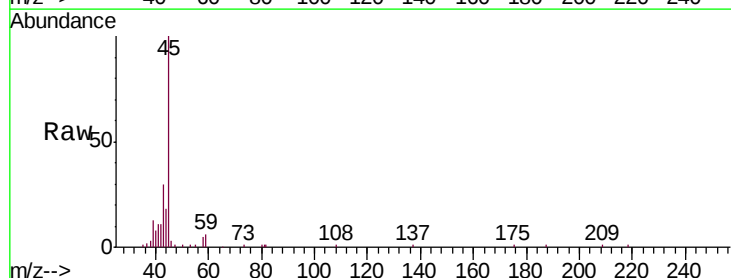
Acq: 16 Aug 2018 21:03

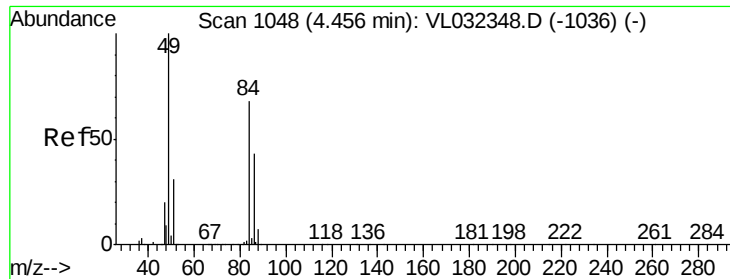
Tgt Ion: 45 Resp: 52858

Ion Ratio Lower Upper

45 100

58 562.0 1.4 2.0#

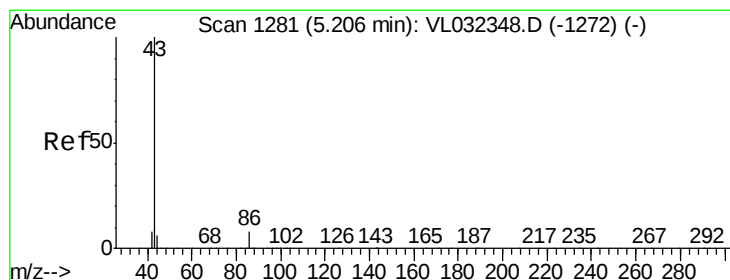
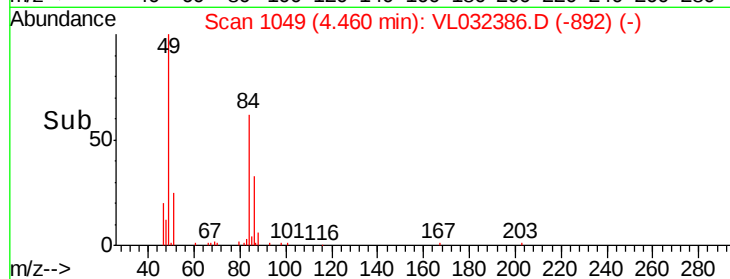
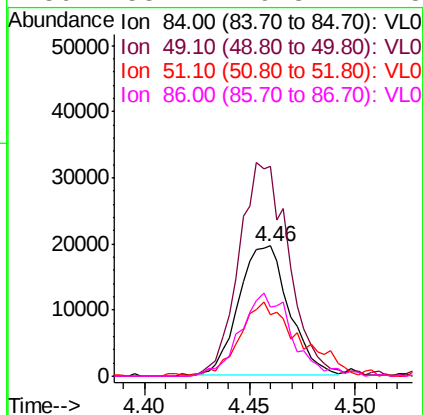
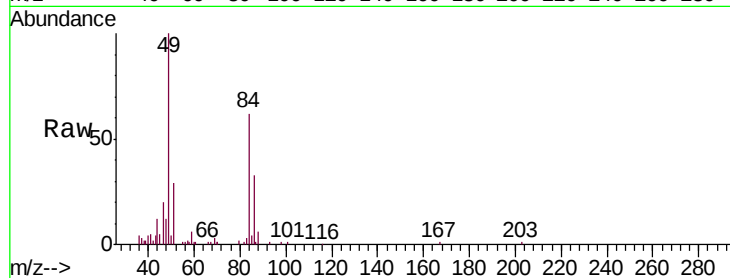




#20
Methylene Chloride
Concen: 0.514 ppbv
RT: 4.46 min Scan# 1049
Delta R.T. 0.00 min
Lab File: VL032386.D
Acq: 16 Aug 2018 21:03

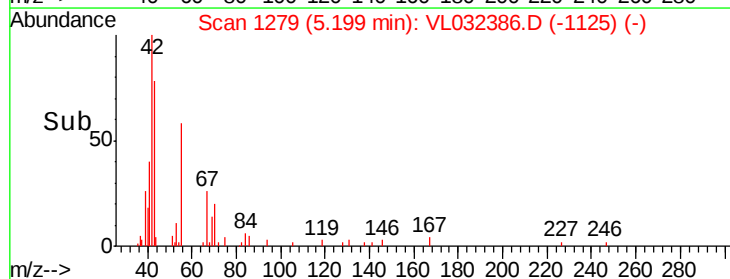
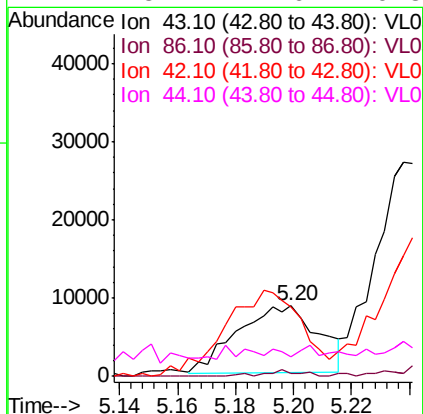
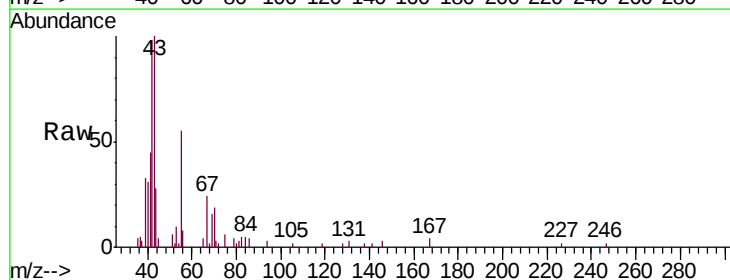
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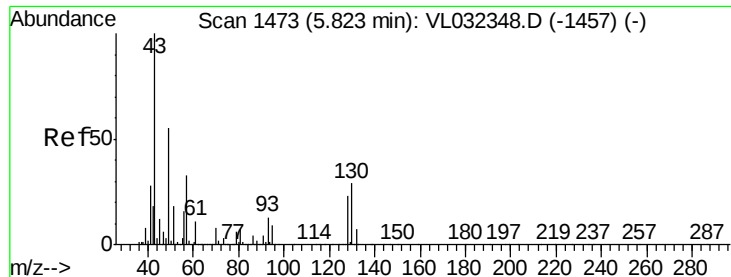
Tgt Ion:	84	Resp:	32626
Ion	Ratio	Lower	Upper
84	100		
49	162.0	117.3	175.9
51	46.8	36.6	55.0
86	53.7	49.8	74.8



#23
Vinyl Acetate
Concen: 0.057 ppbv
RT: 5.20 min Scan# 1279
Delta R.T. -0.01 min
Lab File: VL032386.D
Acq: 16 Aug 2018 21:03

Tgt Ion:	43	Resp:	16646
Ion	Ratio	Lower	Upper
43	100		
86	4.4	5.5	8.3#
42	76.9	7.0	10.6#
44	5.4	4.6	6.8

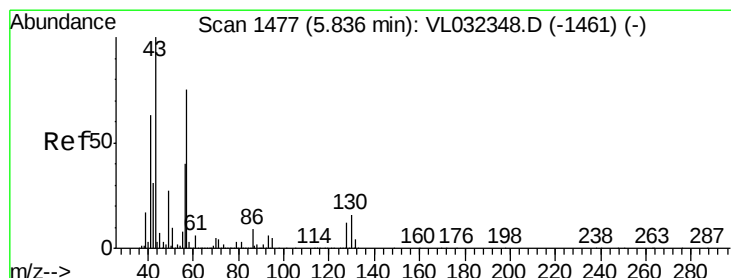
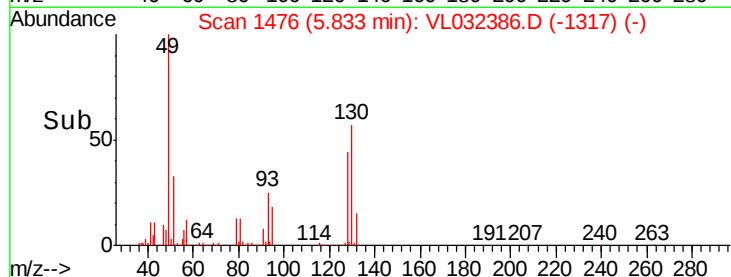
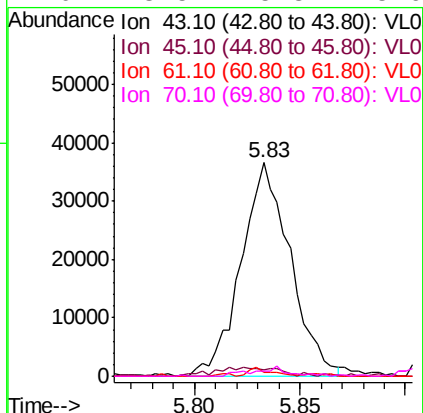
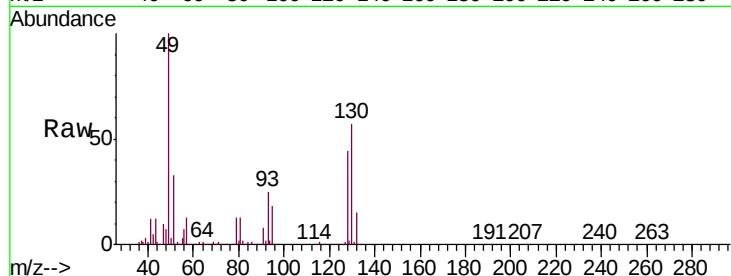




#25
Ethyl Acetate
Concen: 0.165 ppbv
RT: 5.83 min Scan# 1476
Delta R.T. 0.01 min
Lab File: VL032386.D
Acq: 16 Aug 2018 21:03

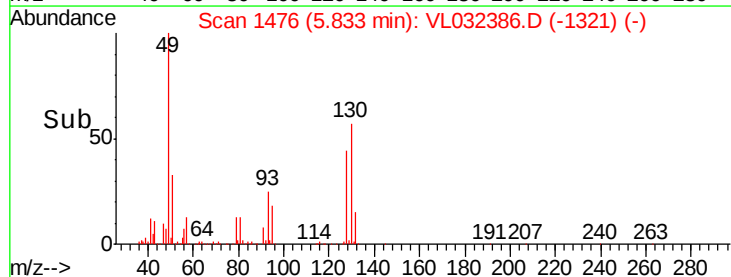
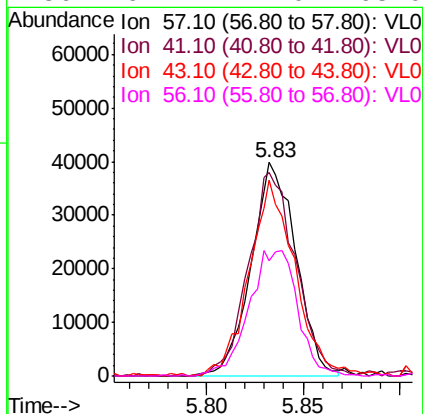
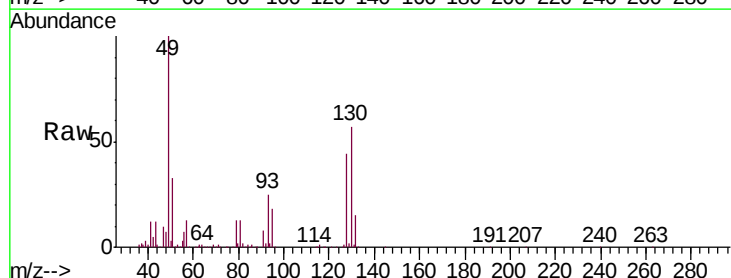
Instrument :
MSVOA_L
ClientSampled :
SS02-MIVIDL

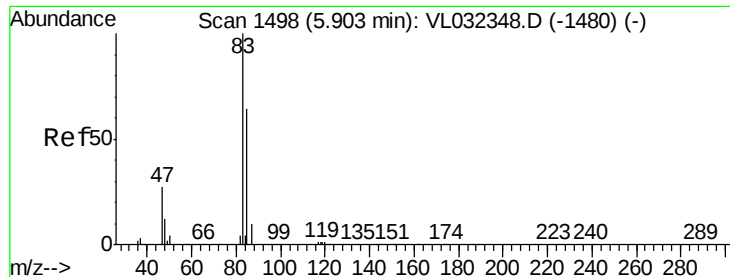
Tgt Ion:	43	Resp:	59222
Ion	Ratio	Lower	Upper
43	100		
45	6.1	7.9	11.9#
61	2.7	7.4	11.2#
70	3.5	5.8	8.6#



#26
Hexane
Concen: 0.398 ppbv
RT: 5.83 min Scan# 1476
Delta R.T. -0.00 min
Lab File: VL032386.D
Acq: 16 Aug 2018 21:03

Tgt Ion:	57	Resp:	63842
Ion	Ratio	Lower	Upper
57	100		
41	101.0	68.0	102.0
43	95.4	175.3	262.9#
56	64.1	42.0	63.0#





#29

Chloroform

Concen: 0.774 ppbv

RT: 5.90 min Scan# 1497

Delta R.T. -0.00 min

Lab File: VL032386.D

Acq: 16 Aug 2018 21:03

Instrument :

MSVOA_L

ClientSampleId :

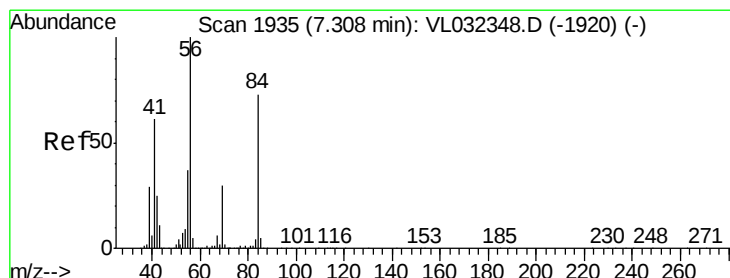
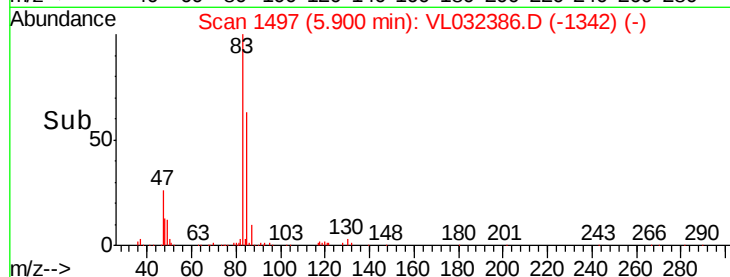
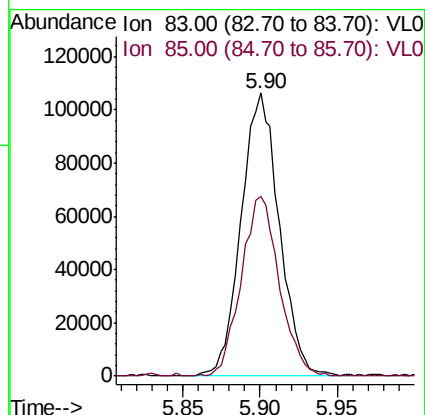
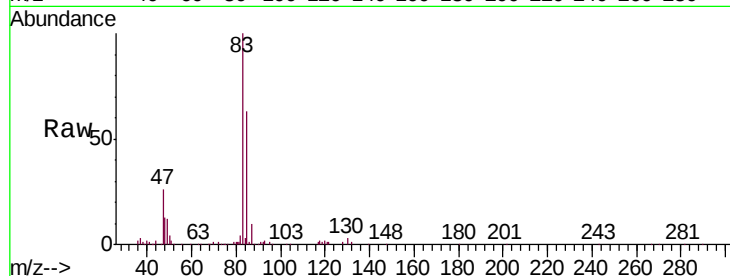
SS02-MIVIDL

Tgt Ion: 83 Resp: 182021

Ion Ratio Lower Upper

83 100

85 63.4 51.6 77.4



#30

Cyclohexane

Concen: 0.084 ppbv

RT: 7.31 min Scan# 1934

Delta R.T. -0.00 min

Lab File: VL032386.D

Acq: 16 Aug 2018 21:03

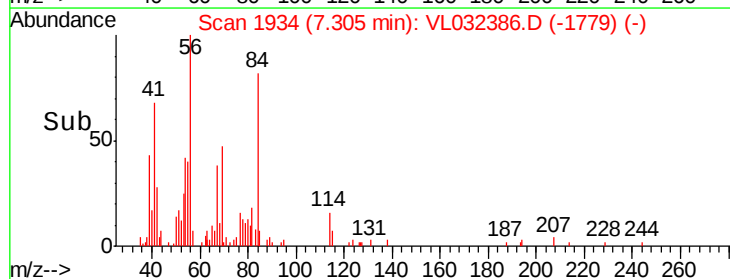
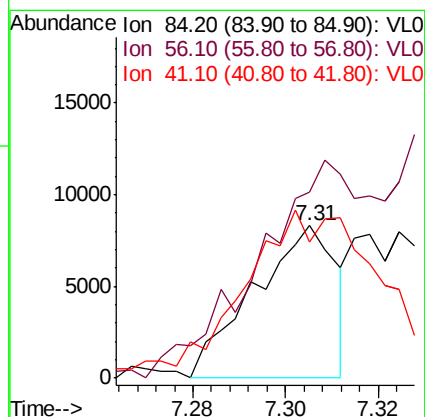
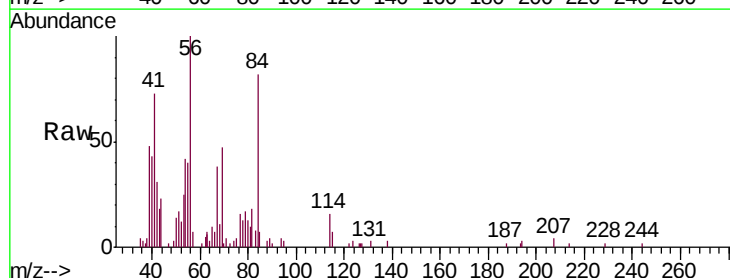
Tgt Ion: 84 Resp: 10213

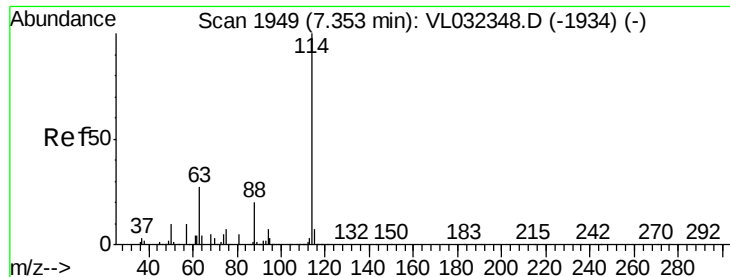
Ion Ratio Lower Upper

84 100

56 0.0 115.7 173.5#

41 220.3 67.9 101.9#

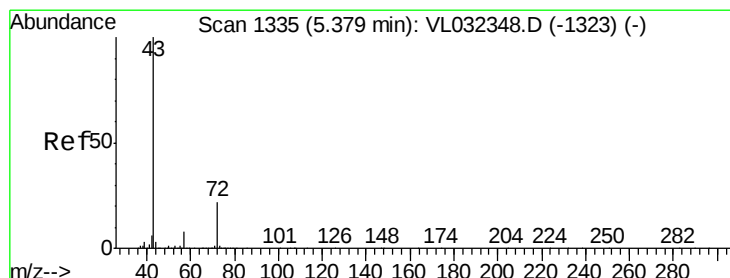
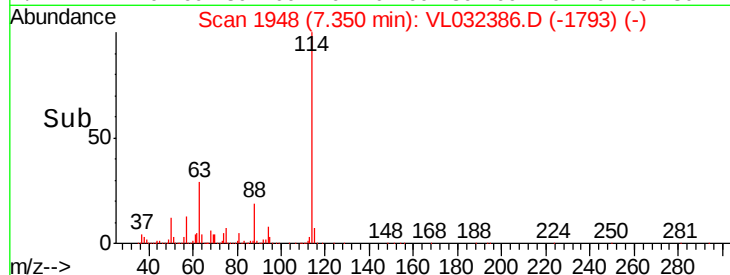
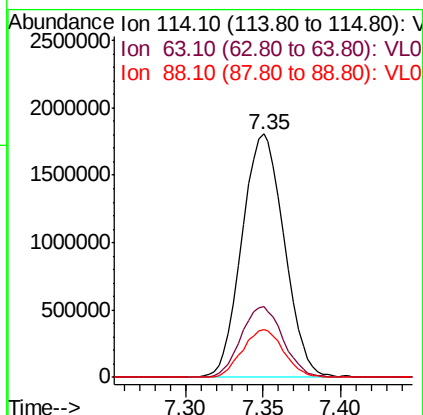
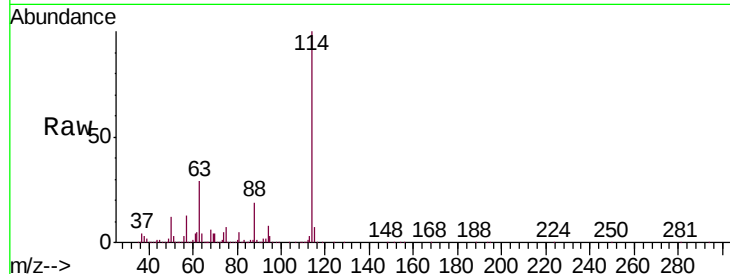




#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.35 min Scan# 1948
 Delta R.T. -0.00 min
 Lab File: VL032386.D
 Acq: 16 Aug 2018 21:03

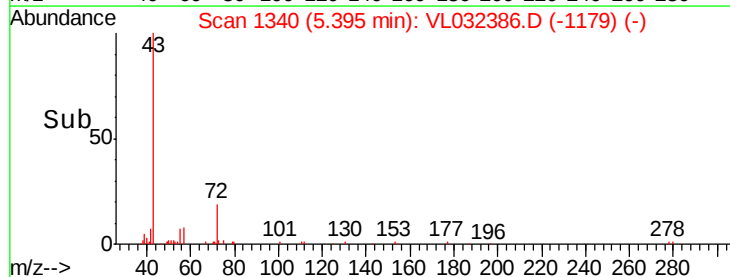
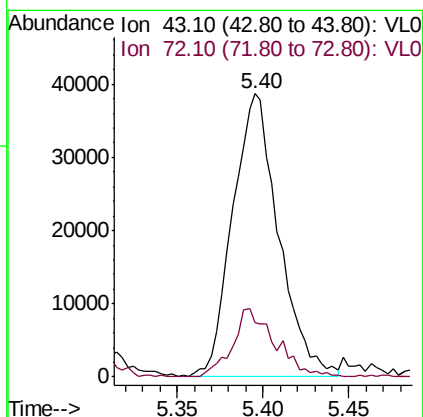
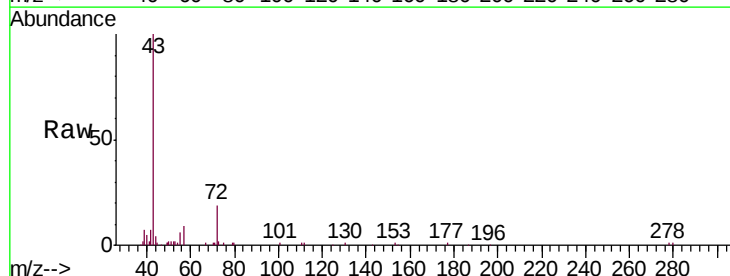
Instrument :
 MSVOA_L
 ClientSampleId :
 SS02-MIVIDL

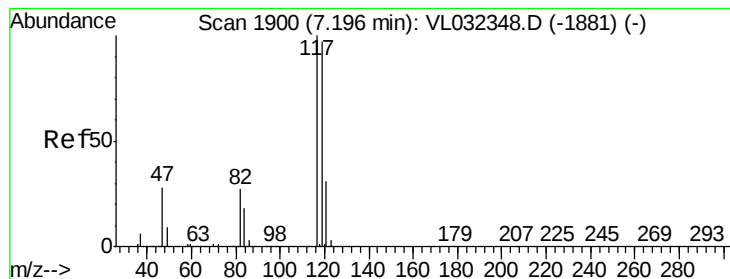
Tgt Ion:114 Resp: 3435267
 Ion Ratio Lower Upper
 114 100
 63 28.9 22.0 33.0
 88 19.2 15.3 22.9



#34
 2-Butanone
 Concen: 0.308 ppbv
 RT: 5.40 min Scan# 1340
 Delta R.T. 0.02 min
 Lab File: VL032386.D
 Acq: 16 Aug 2018 21:03

Tgt Ion: 43 Resp: 71939
 Ion Ratio Lower Upper
 43 100
 72 22.5 17.9 26.9





#35

Carbon Tetrachloride

Concen: 0.064 ppbv

RT: 7.20 min Scan# 1900

Delta R.T. 0.00 min

Lab File: VL032386.D

Acq: 16 Aug 2018 21:03

Instrument :

MSVOA_L

ClientSampleId :

SS02-MIVIDL

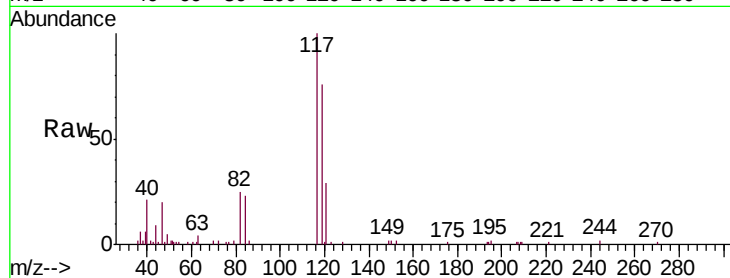
Tgt Ion: 117 Resp: 12914

Ion Ratio Lower Upper

117 100

119 78.7 77.2 115.8

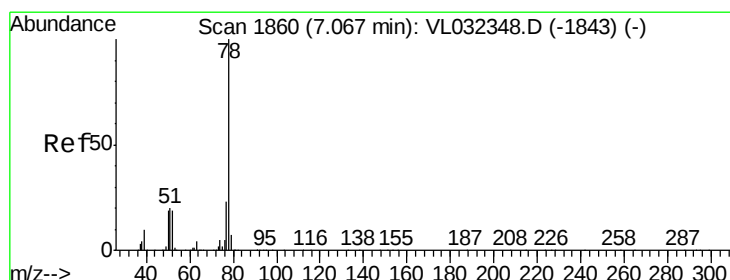
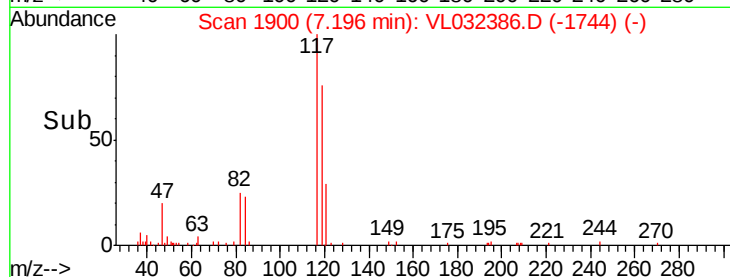
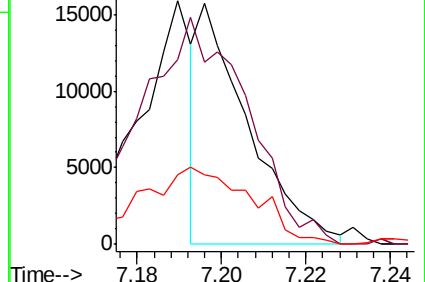
121 29.8 25.1 37.7



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: 0.069 ppbv

RT: 7.06 min Scan# 1857

Delta R.T. -0.01 min

Lab File: VL032386.D

Acq: 16 Aug 2018 21:03

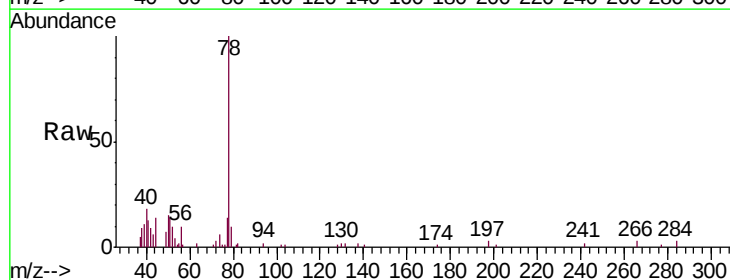
Tgt Ion: 78 Resp: 20085

Ion Ratio Lower Upper

78 100

77 15.4 18.0 27.0#

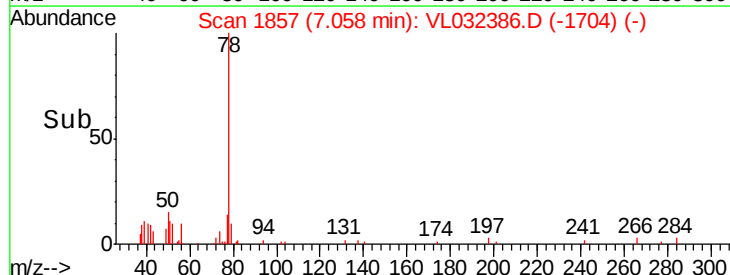
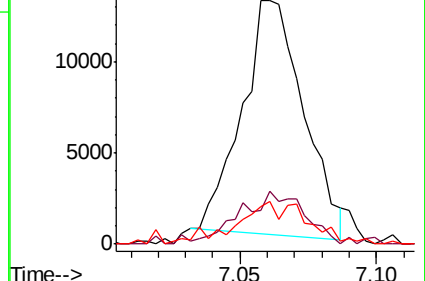
50 15.5 15.1 22.7

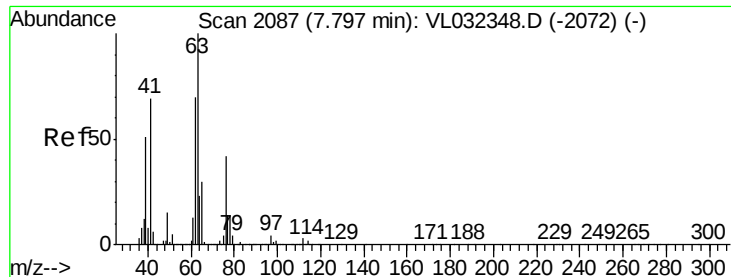


Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0

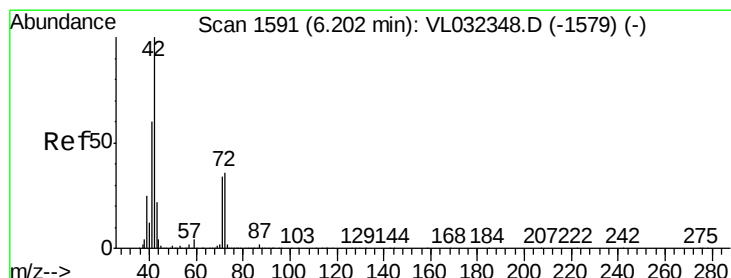
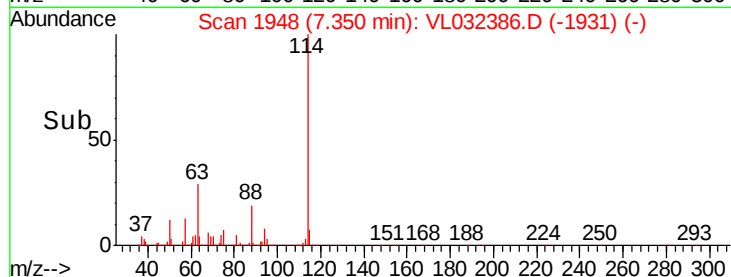
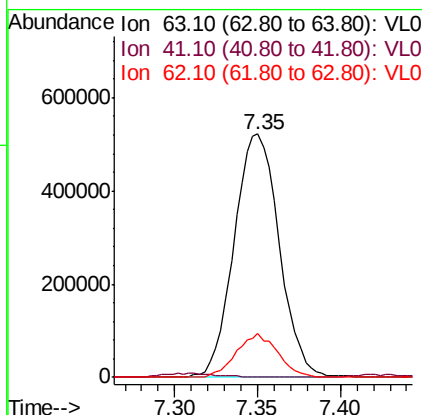
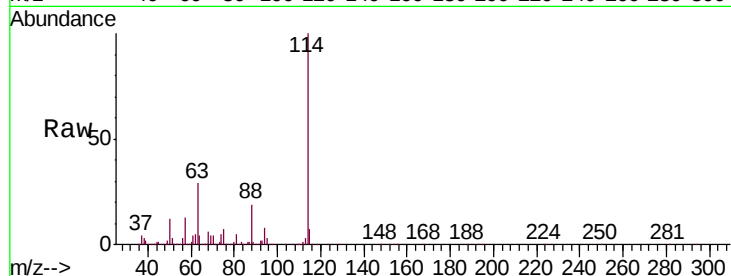




#39
 1,2-Dichloropropane
 Concen: 8.089 ppbv
 RT: 7.35 min Scan# 1948
 Delta R.T. -0.45 min
 Lab File: VL032386.D
 Acq: 16 Aug 2018 21:03

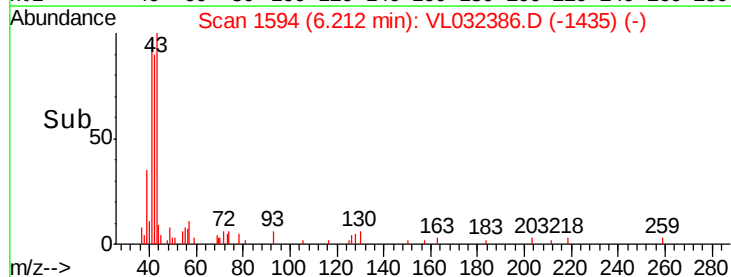
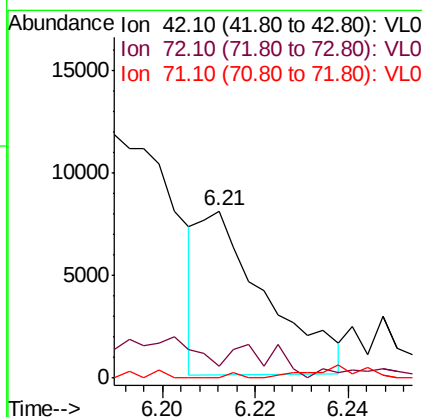
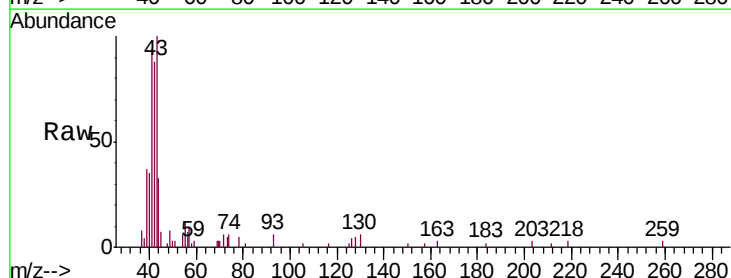
Instrument :
 MSVOA_L
 ClientSampleId :
 SS02-MIVIDL

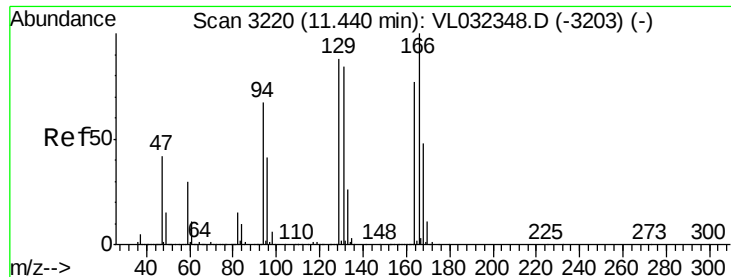
Tgt Ion	Ratio	Lower	Upper
63	100		
41	0.1	55.5	83.3#
62	17.8	56.3	84.5#



#41
 Tetrahydrofuran
 Concen: 0.063 ppbv
 RT: 6.21 min Scan# 1594
 Delta R.T. 0.01 min
 Lab File: VL032386.D
 Acq: 16 Aug 2018 21:03

Tgt Ion	Ratio	Lower	Upper
42	100		
72	60.1	29.8	44.6#
71	0.0	28.2	42.2#





#52

Tetrachloroethene

Concen: 6.676 ppbv

RT: 11.44 min Scan# 3221

Delta R.T. 0.00 min

Lab File: VL032386.D

Acq: 16 Aug 2018 21:03

Instrument :

MSVOA_L

ClientSampleID :

SS02-MIVIDL

Tgt Ion:164 Resp: 573418

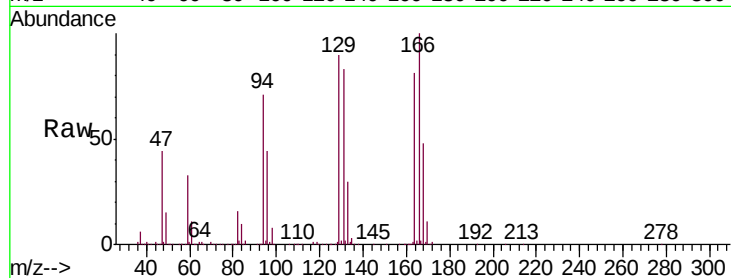
Ion Ratio Lower Upper

164 100

166 122.8 103.5 155.3

129 110.3 90.9 136.3

131 102.3 86.7 130.1

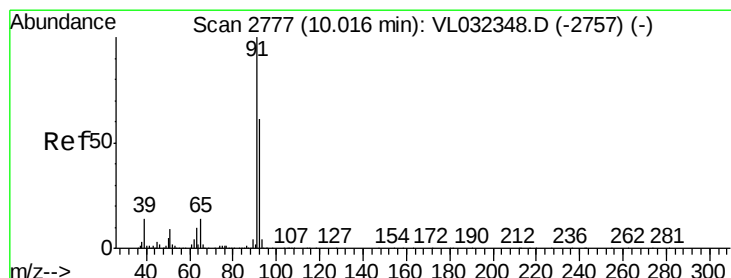
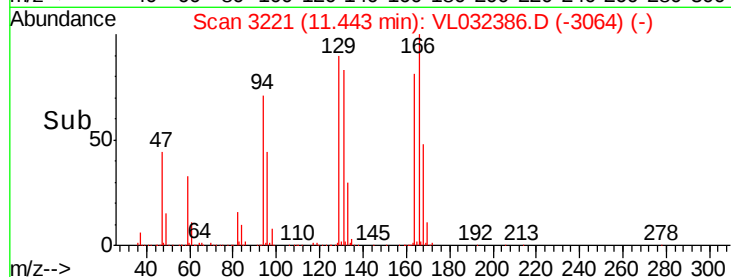
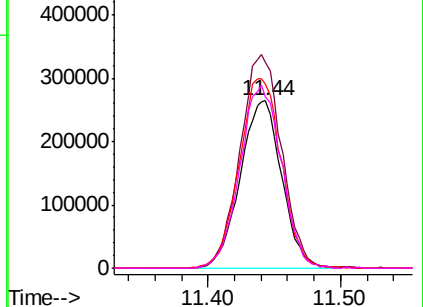


Abundance Ion 163.90 (163.60 to 164.60): V

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: 0.627 ppbv

RT: 10.01 min Scan# 2776

Delta R.T. -0.00 min

Lab File: VL032386.D

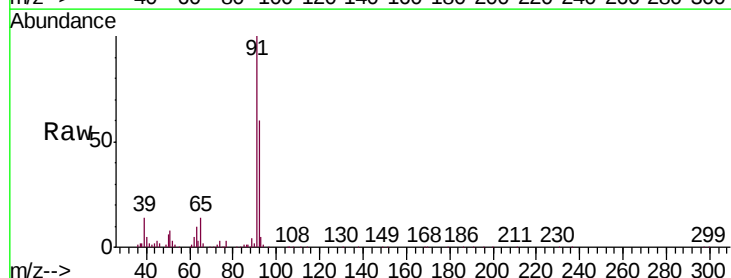
Acq: 16 Aug 2018 21:03

Tgt Ion: 91 Resp: 200221

Ion Ratio Lower Upper

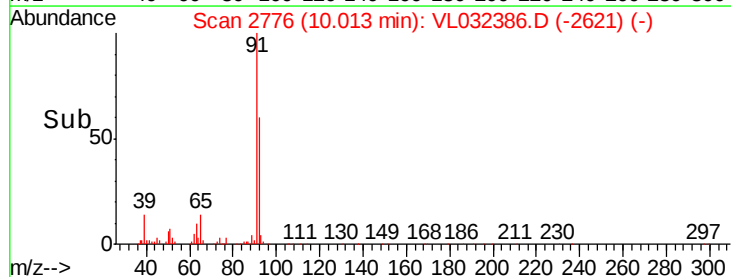
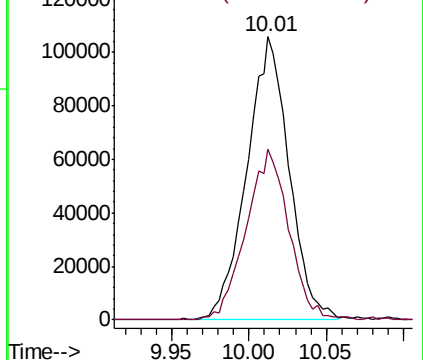
91 100

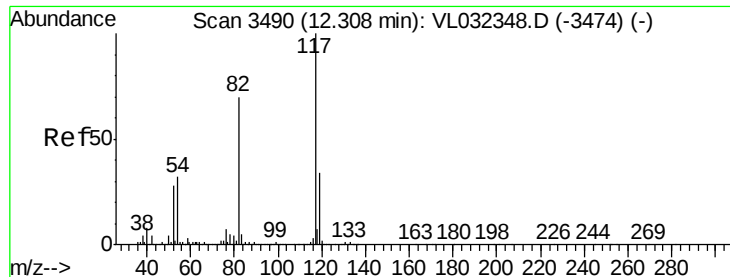
92 61.0 48.7 73.1



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

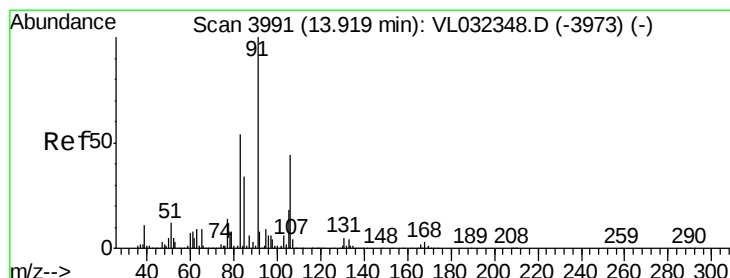
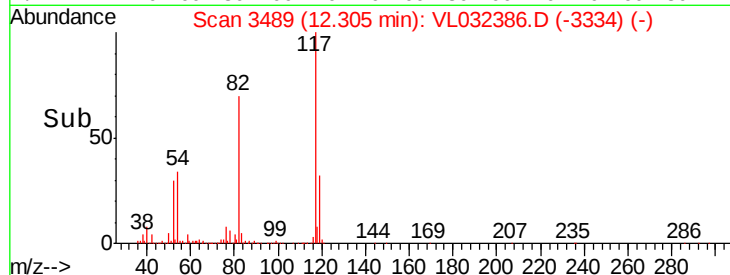
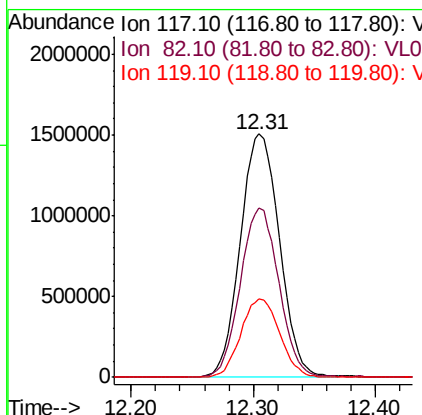
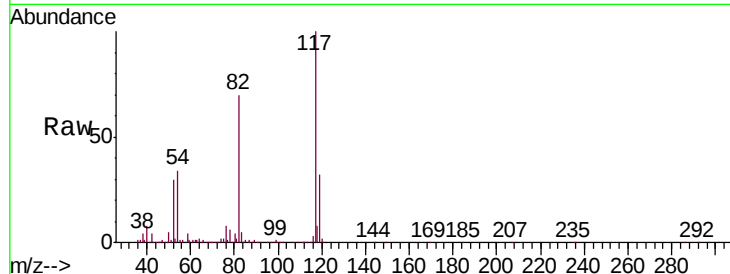




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.31 min Scan# 3489
Delta R.T. -0.00 min
Lab File: VL032386.D
Acq: 16 Aug 2018 21:03

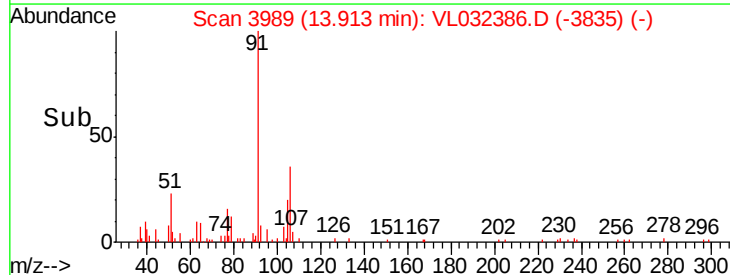
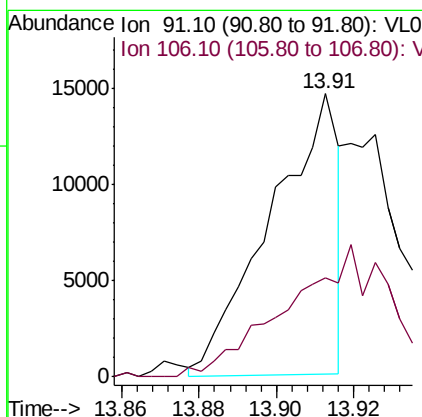
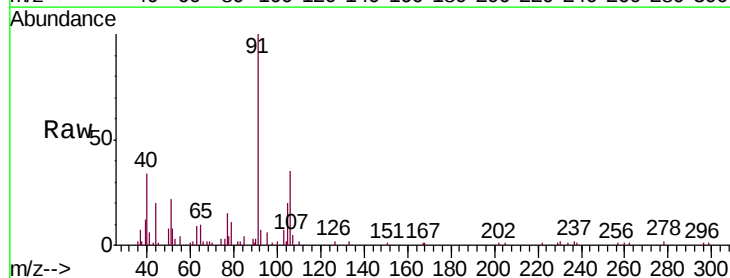
Instrument :
MSVOA_L
ClientSampleId :
SS02-MIVIDL

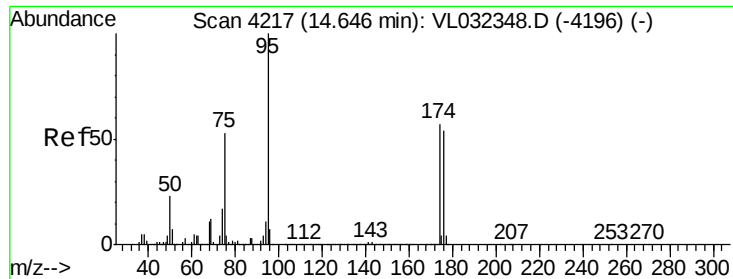
Tgt Ion:117 Resp: 3340801
Ion Ratio Lower Upper
117 100
82 69.2 55.1 82.7
119 32.1 46.0 69.0#



#60
o-Xylene
Concen: 0.053 ppbv
RT: 13.91 min Scan# 3989
Delta R.T. -0.01 min
Lab File: VL032386.D
Acq: 16 Aug 2018 21:03

Tgt Ion: 91 Resp: 17911
Ion Ratio Lower Upper
91 100
106 0.0 22.3 66.8#

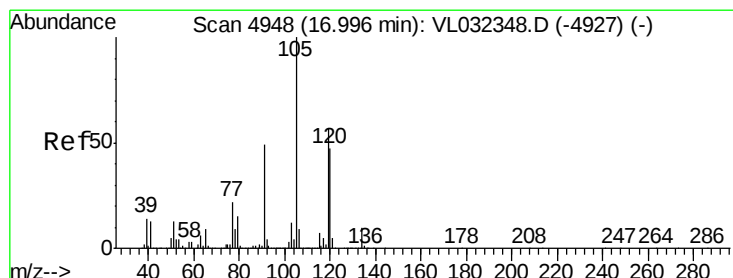
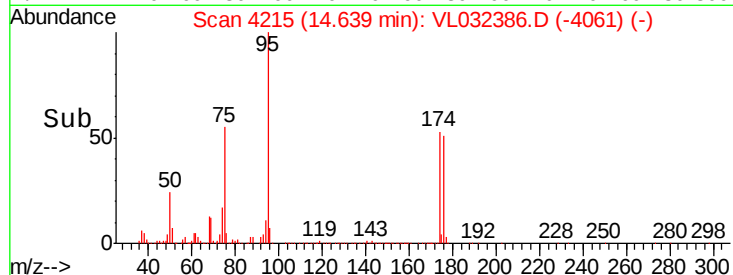
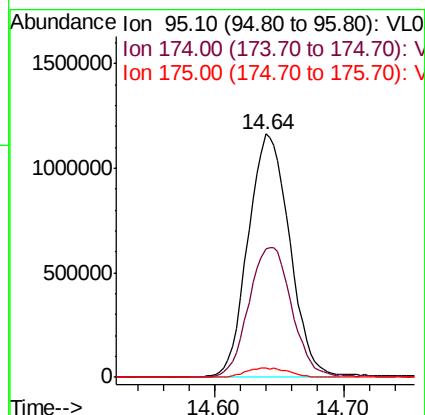
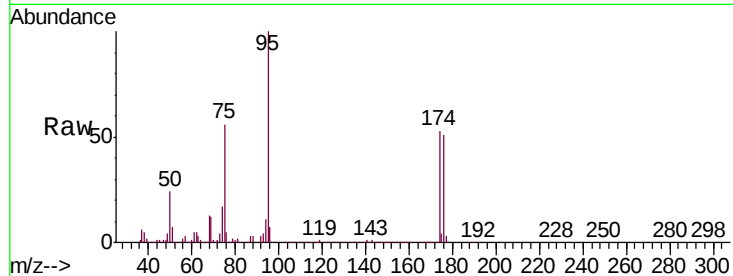




#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.225 ppbv
 RT: 14.64 min Scan# 4215
 Delta R.T. -0.01 min
 Lab File: VL032386.D
 Acq: 16 Aug 2018 21:03

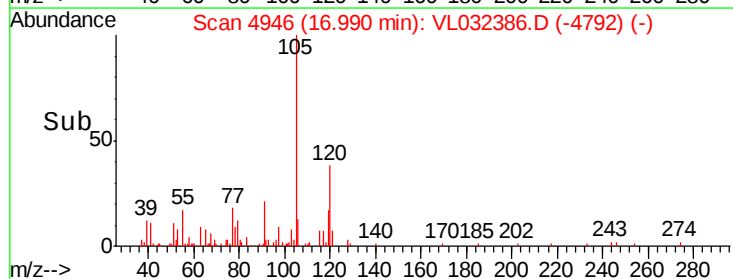
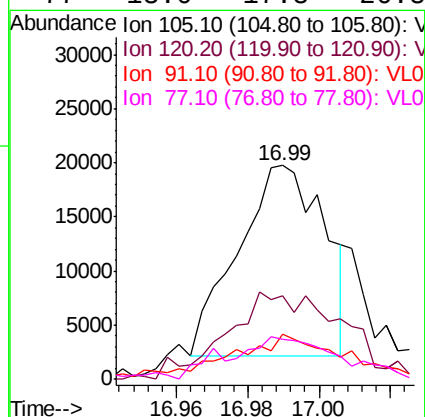
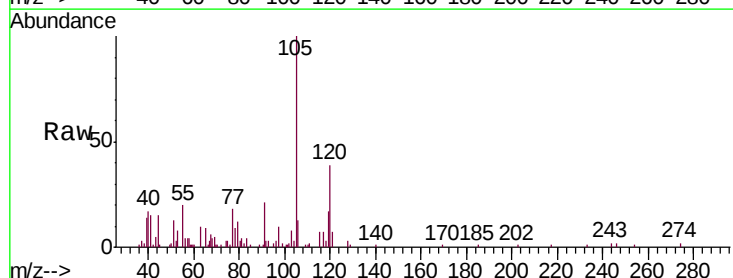
Instrument :
 MSVOA_L
 ClientSampleID :
 SS02-MIVIDL

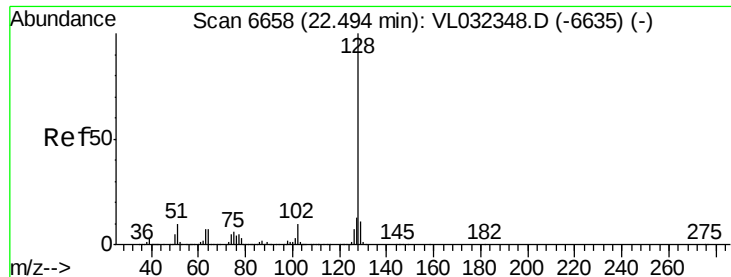
Tgt Ion: 95 Resp: 2606164
 Ion Ratio Lower Upper
 95 100
 174 56.0 46.2 69.4
 175 4.1 3.4 5.0



#74
 1,2,4-Trimethylbenzene
 Concen: 0.077 ppbv
 RT: 16.99 min Scan# 4946
 Delta R.T. -0.01 min
 Lab File: VL032386.D
 Acq: 16 Aug 2018 21:03

Tgt Ion: 105 Resp: 29612
 Ion Ratio Lower Upper
 105 100
 120 33.8 37.6 56.4#
 91 19.9 39.9 59.9#
 77 13.0 17.8 26.8#





#79

Naphthalene

Concen: 0.351 ppbv

RT: 22.49 min Scan# 6658

Delta R.T. 0.00 min

Lab File: VL032386.D

Acq: 16 Aug 2018 21:03

Instrument :

MSVOA_L

ClientSampleId :

SS02-MIVIDL

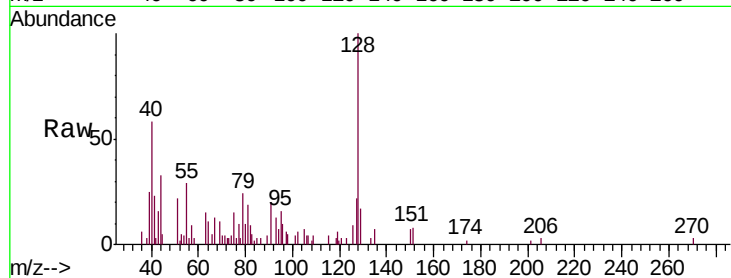
Tgt Ion:128 Resp: 8643

Ion Ratio Lower Upper

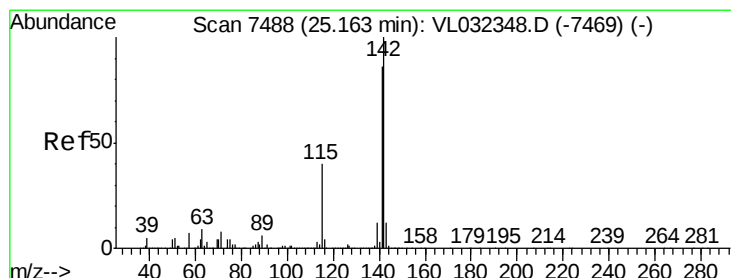
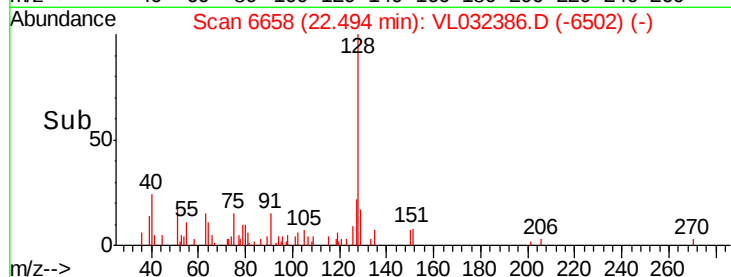
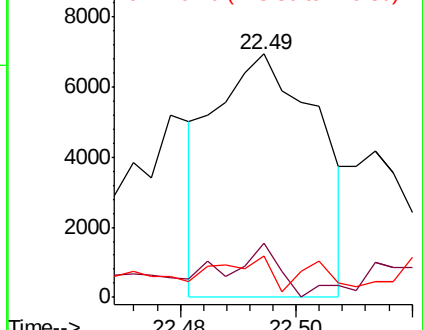
128 100

127 38.0 10.3 15.5#

129 23.2 8.6 13.0#



Abundance Ion 128.10 (127.80 to 128.80): V
Ion 127.10 (126.80 to 127.80): V
Ion 129.10 (128.80 to 129.80): V



#80

Naphthalene, 2-methyl-

Concen: 0.033 ppbv

RT: 25.17 min Scan# 7490

Delta R.T. 0.01 min

Lab File: VL032386.D

Acq: 16 Aug 2018 21:03

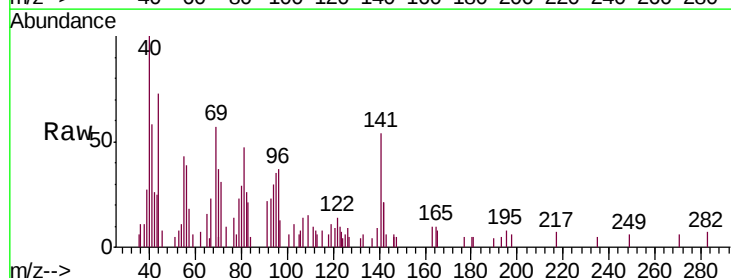
Tgt Ion:142 Resp: 2506

Ion Ratio Lower Upper

142 100

141 91.3 66.7 100.1

115 43.2 31.0 46.6



Abundance Ion 142.00 (141.70 to 142.70): V
Ion 141.00 (140.70 to 141.70): V
Ion 115.00 (114.70 to 115.70): V

