

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL032019\
 Data File : VL033416.D
 Acq On : 21 Mar 2019 10:14
 Operator : SY/AP
 Sample : K1975-03DL2 40X
 Misc : 400ml/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA2DL2

Quant Time: Mar 21 12:44:01 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL031519AIR.M
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Fri Mar 15 14:52:14 2019
 QLast Update : Fri Mar 15 14:52:14 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.76	49	674292	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	1598546	10.00	ppbv	-0.01
55) Chlorobenzene-d5	12.24	117	1540502	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.58	95	1183788	10.37	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.70%

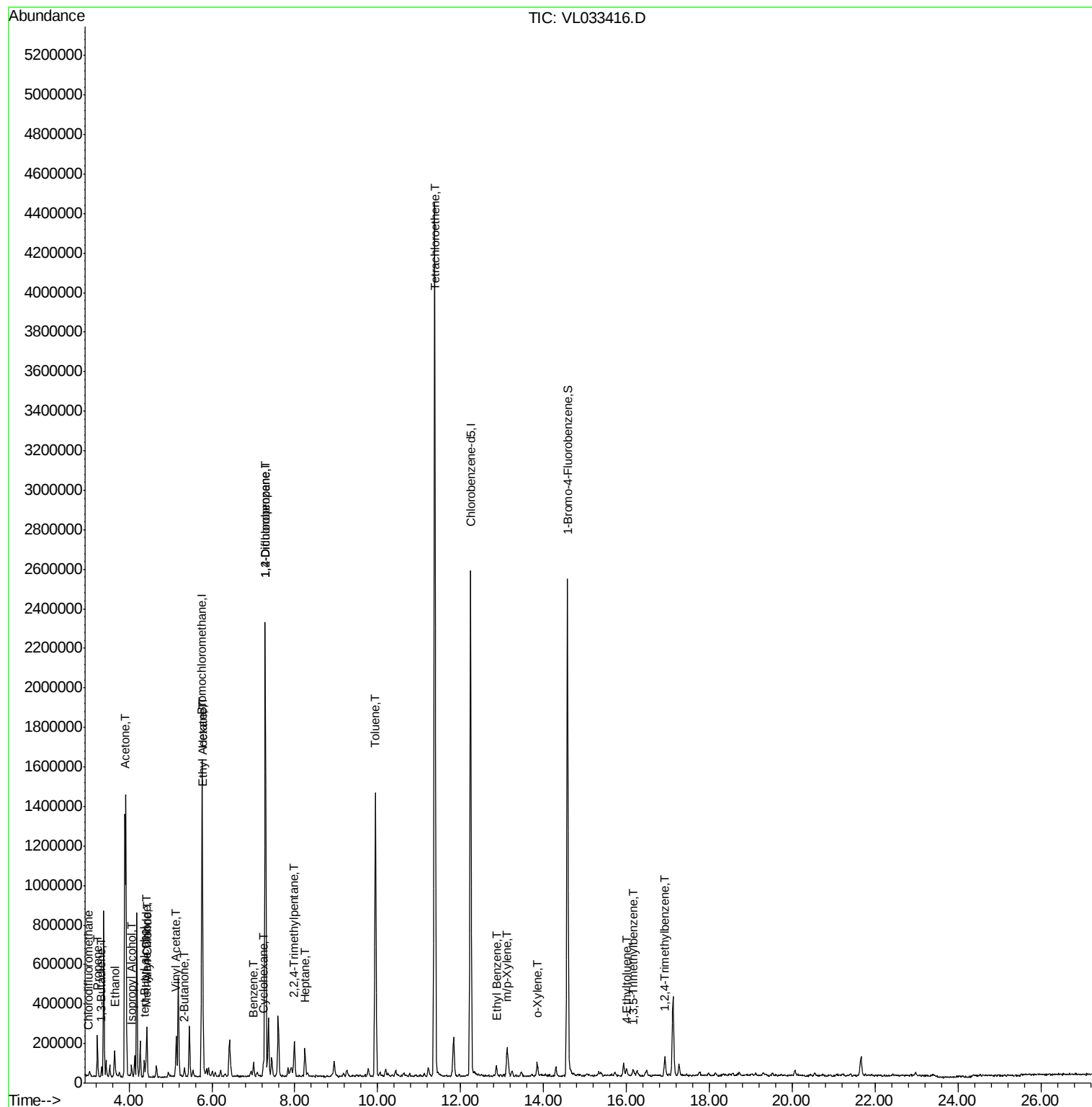
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
3) Chlorodifluoromethane	3.02	51	3184	0.041	ppbv #	90
9) Propene	3.24	41	55775	1.614	ppbv	94
10) Heptane	8.25	43	56252	0.656	ppbv	97
13) Ethanol	3.65	45	143788	8.730	ppbv	98
15) Acetone	3.90	43	1728005	16.486	ppbv #	89
16) 1,3-Butadiene	3.34	39	12385	0.364	ppbv #	9
17) tert-Butyl alcohol	4.38	59	641	0.043	ppbv #	74
19) Isopropyl Alcohol	4.05	45	2796	0.056	ppbv #	95
20) Methylene Chloride	4.41	84	25159	0.736	ppbv #	94
21) Allyl Chloride	4.43	41	34328	0.675	ppbv #	55
23) Vinyl Acetate	5.14	43	20152	0.166	ppbv #	1
25) Ethyl Acetate	5.78	43	93199	0.612	ppbv #	78
26) Hexane	5.78	57	127064	1.865	ppbv #	39
30) Cyclohexane	7.25	84	19679	0.360	ppbv	89
34) 2-Butanone	5.34	43	48842	0.465	ppbv	96
36) Benzene	7.00	78	24142	0.169	ppbv	96
39) 1,2-Dichloropropane	7.29	63	425823	7.948	ppbv #	24
44) 2,2,4-Trimethylpentane	7.99	57	120321	0.508	ppbv #	77
52) Tetrachloroethene	11.37	164	1104614	18.534	ppbv	98
53) Toluene	9.95	91	1123141	6.909	ppbv	99
58) Ethyl Benzene	12.87	91	41037	0.188	ppbv	89
59) m/p-Xylene	13.12	91	145294	0.776	ppbv #	100
60) o-Xylene	13.85	91	32266	0.177	ppbv #	64
72) 4-Ethyltoluene	16.00	105	20295	0.098	ppbv #	85
73) 1,3,5-Trimethylbenzene	16.16	105	10548	0.052	ppbv #	71
74) 1,2,4-Trimethylbenzene	16.93	105	66374	0.310	ppbv #	65

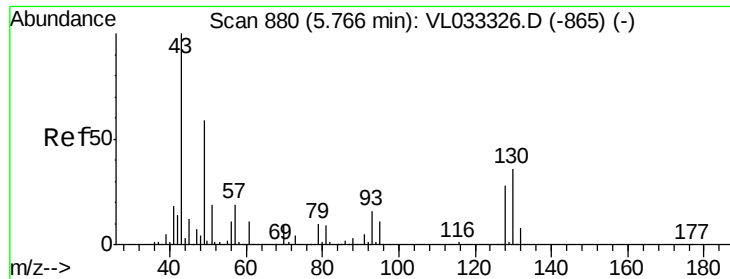
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA_L\DATA\VL032019\
Data File : VL033416.D
Acq On : 21 Mar 2019 10:14
Operator : SY/AP
Sample : K1975-03DL2 40X
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA2DL2

Quant Time: Mar 21 12:44:01 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_L\METHODS\VL031519AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Mar 15 14:52:14 2019
QLast Update : Fri Mar 15 14:52:14 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 878

Delta R.T. -0.01 min

Lab File: VL033416.D

Acq: 21 Mar 2019 10:14

Instrument :

MSVOA_L

ClientSampleId :

IA2DL2

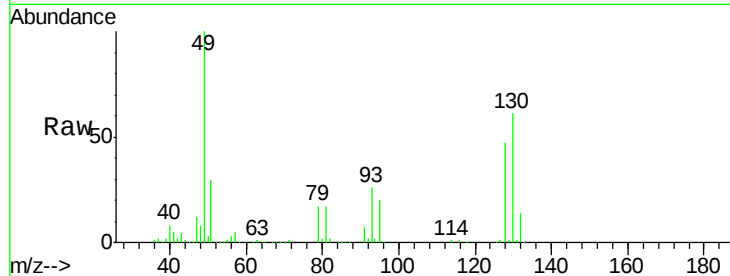
Tgt Ion: 49 Resp: 674292

Ion Ratio Lower Upper

49 100

128 47.9 23.5 70.6

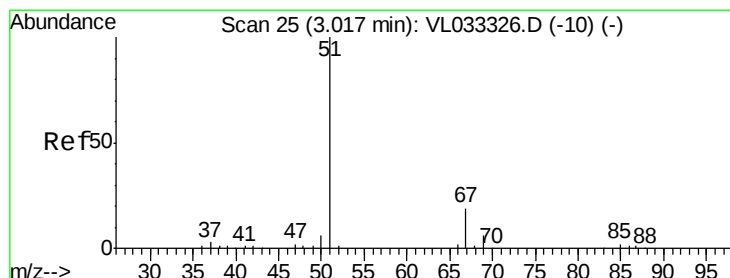
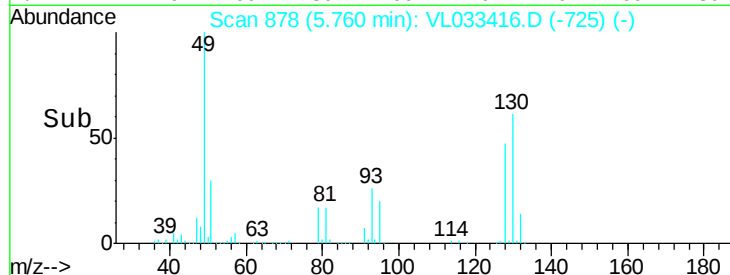
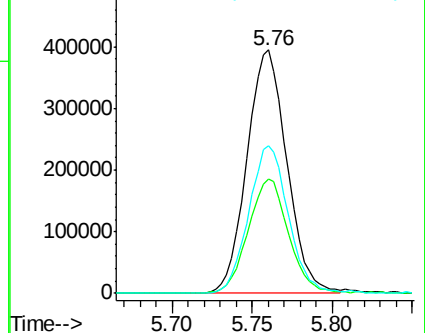
130 61.2 30.1 90.3



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: 0.041 ppbv

RT: 3.02 min Scan# 25

Delta R.T. -0.00 min

Lab File: VL033416.D

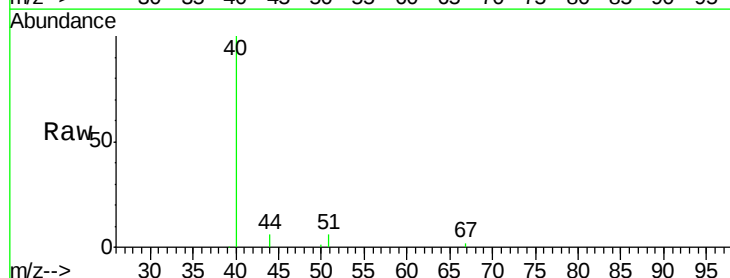
Acq: 21 Mar 2019 10:14

Tgt Ion: 51 Resp: 3184

Ion Ratio Lower Upper

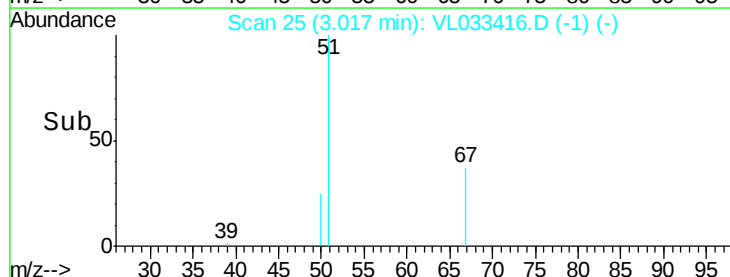
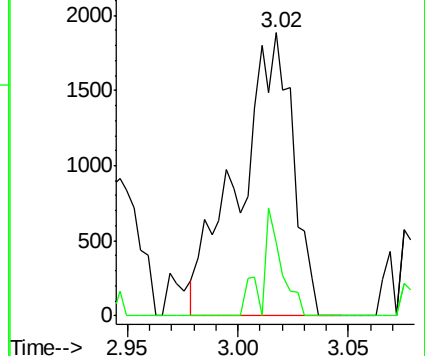
51 100

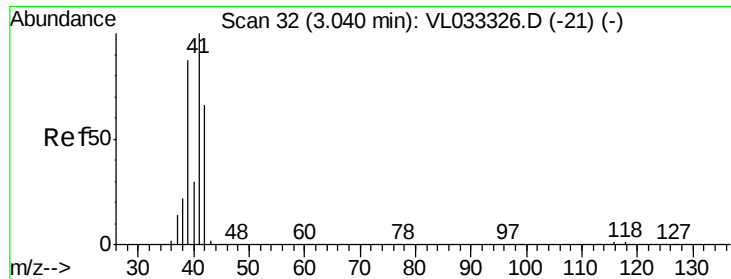
67 14.0 14.9 22.3#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0





#9

Propene

Concen: 1.614 ppbv

RT: 3.24 min Scan# 94

Delta R.T. 0.20 min

Lab File: VL033416.D

Acq: 21 Mar 2019 10:14

Instrument :

MSVOA_L

ClientSampleId :

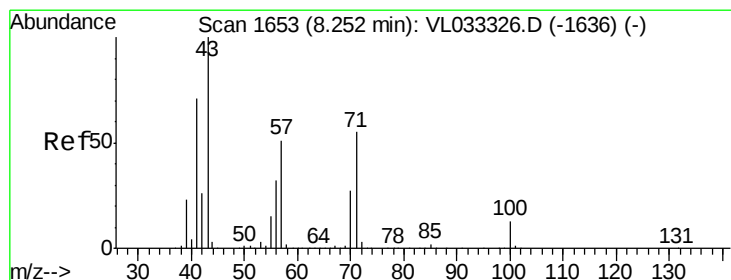
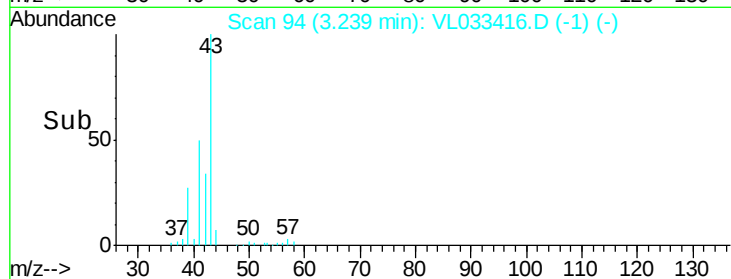
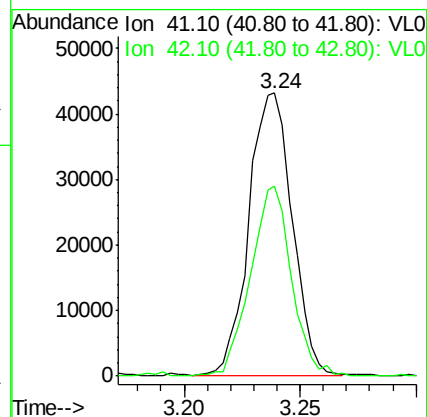
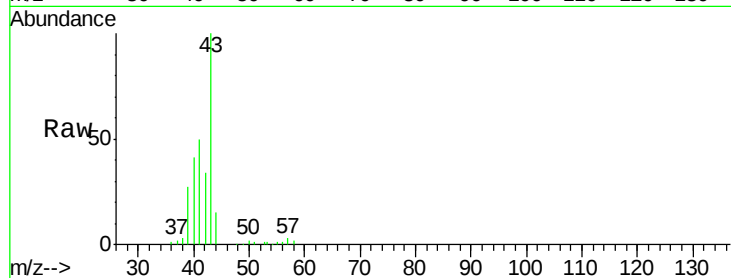
IA2DL2

Tgt Ion: 41 Resp: 55775

Ion Ratio Lower Upper

41 100

42 64.4 55.2 82.8



#10

Heptane

Concen: 0.656 ppbv

RT: 8.25 min Scan# 1652

Delta R.T. -0.00 min

Lab File: VL033416.D

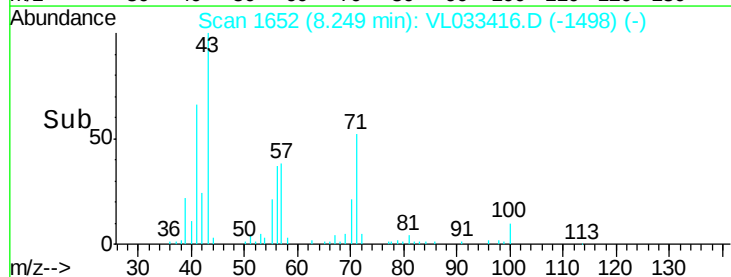
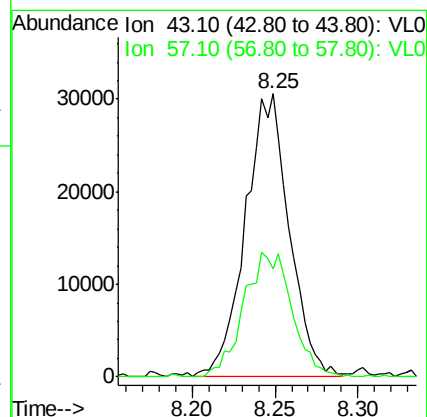
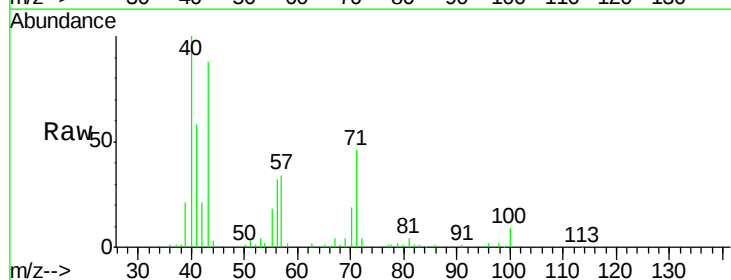
Acq: 21 Mar 2019 10:14

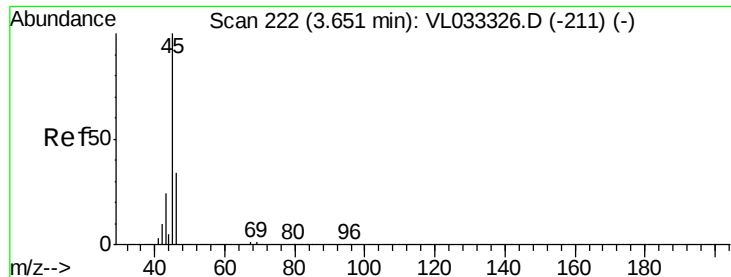
Tgt Ion: 43 Resp: 56252

Ion Ratio Lower Upper

43 100

57 48.5 40.4 60.6

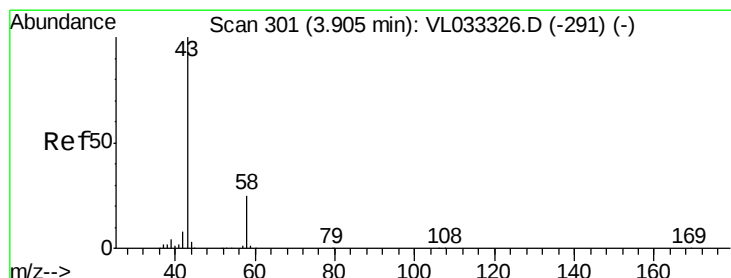
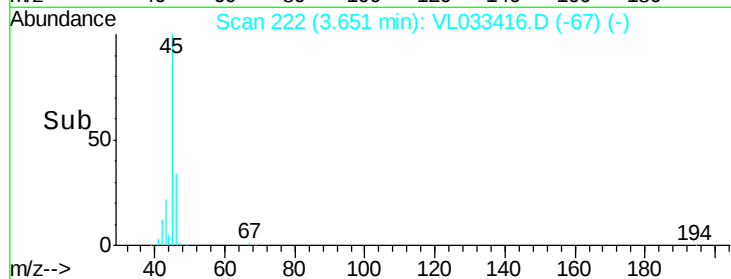
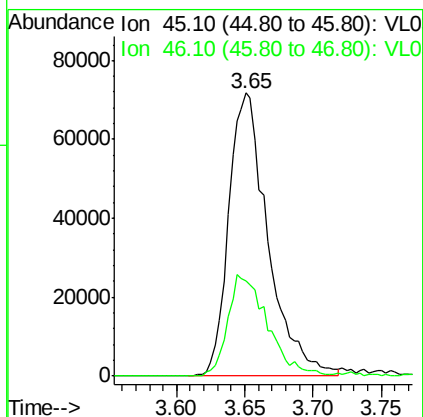
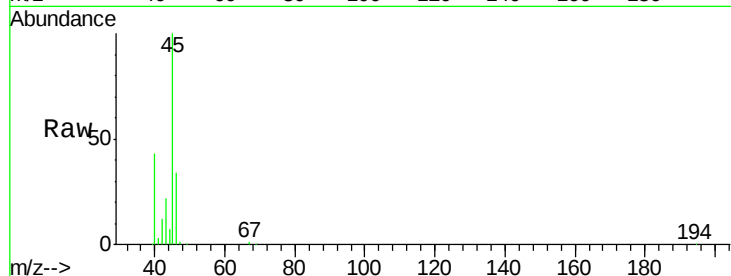




#13
Ethanol
Concen: 8.730 ppbv
RT: 3.65 min Scan# 222
Delta R.T. -0.00 min
Lab File: VL033416.D
Acq: 21 Mar 2019 10:14

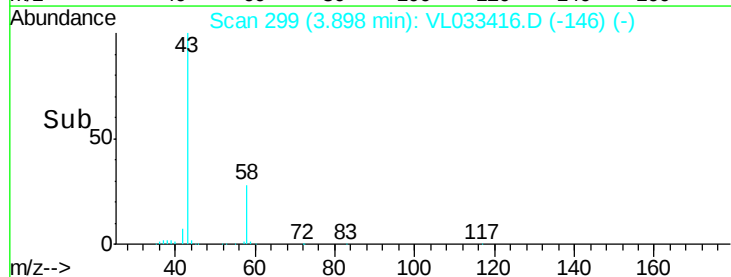
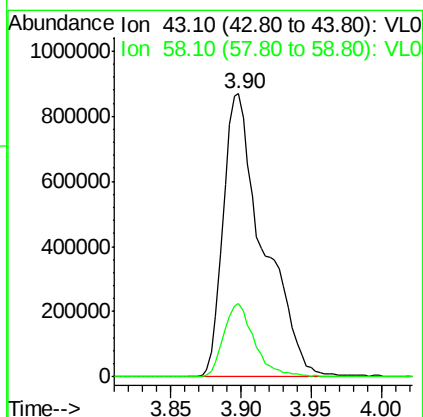
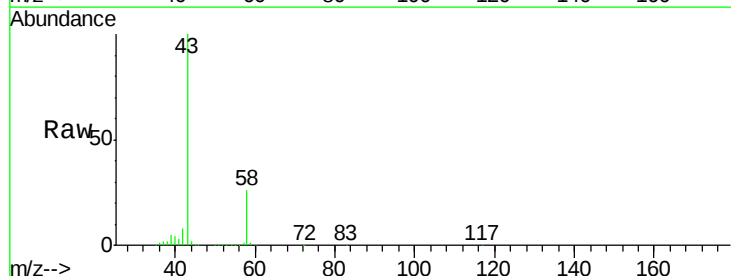
Instrument :
MSVOA_L
ClientSampleId :
IA2DL2

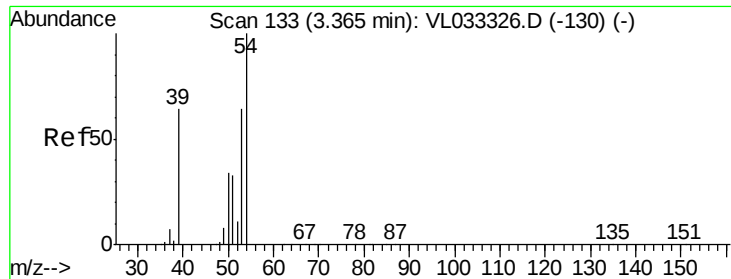
Tgt Ion: 45 Resp: 143788
Ion Ratio Lower Upper
45 100
46 36.0 14.9 59.7



#15
Acetone
Concen: 16.486 ppbv
RT: 3.90 min Scan# 299
Delta R.T. -0.01 min
Lab File: VL033416.D
Acq: 21 Mar 2019 10:14

Tgt Ion: 43 Resp: 1728005
Ion Ratio Lower Upper
43 100
58 20.1 20.4 30.6#

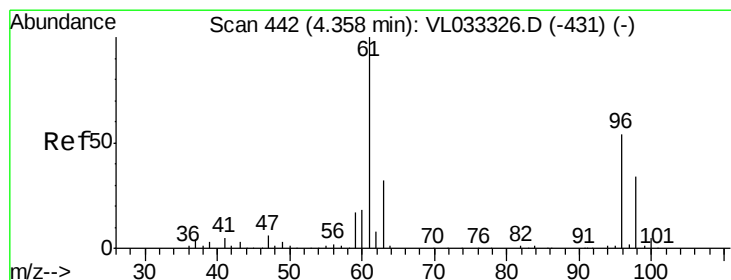
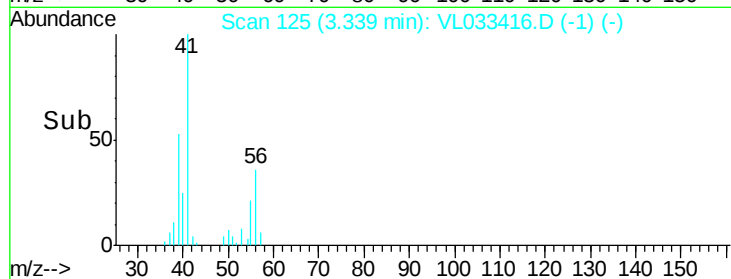
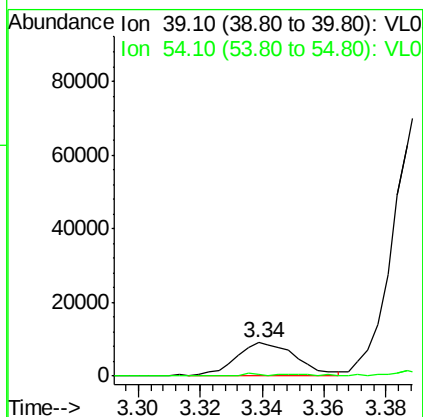
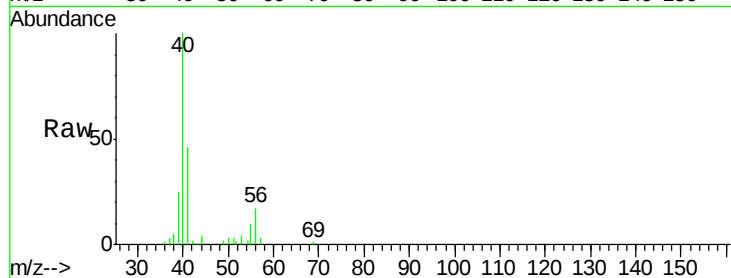




#16
1,3-Butadiene
Concen: 0.364 ppbv
RT: 3.34 min Scan# 125
Delta R.T. -0.03 min
Lab File: VL033416.D
Acq: 21 Mar 2019 10:14

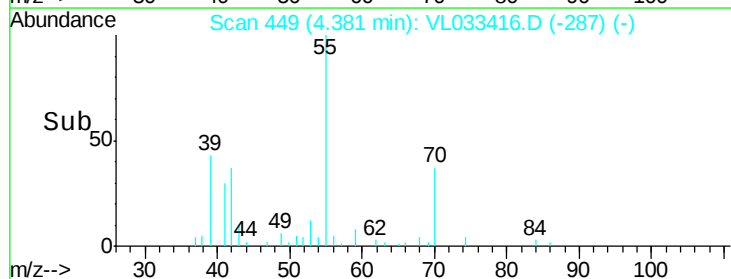
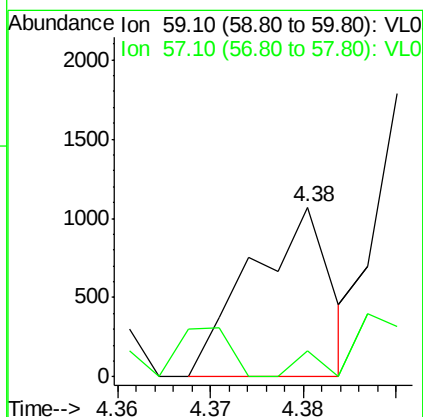
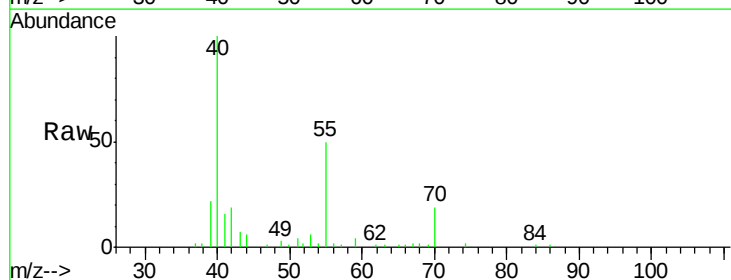
Instrument :
MSVOA_L
ClientSampleId :
IA2DL2

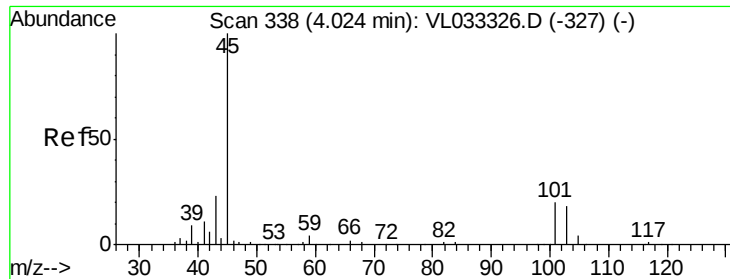
Tgt Ion: 39 Resp: 12385
Ion Ratio Lower Upper
39 100
54 6.9 76.8 115.2#



#17
tert-Butyl alcohol
Concen: 0.043 ppbv
RT: 4.38 min Scan# 449
Delta R.T. 0.02 min
Lab File: VL033416.D
Acq: 21 Mar 2019 10:14

Tgt Ion: 59 Resp: 641
Ion Ratio Lower Upper
59 100
57 0.0 7.7 11.5#





#19

Isopropyl Alcohol

Concen: 0.056 ppbv

RT: 4.05 min Scan# 345

Delta R.T. 0.02 min

Lab File: VL033416.D

Acq: 21 Mar 2019 10:14

Instrument :

MSVOA_L

ClientSampleId :

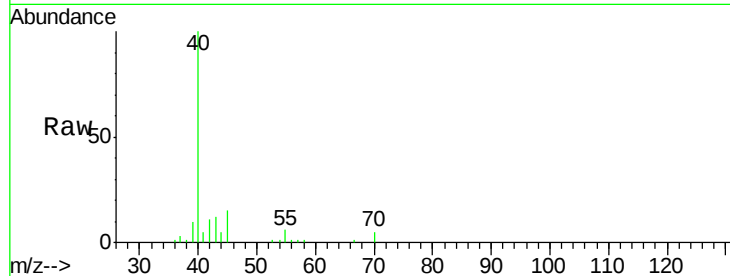
IA2DL2

Tgt Ion: 45 Resp: 2796

Ion Ratio Lower Upper

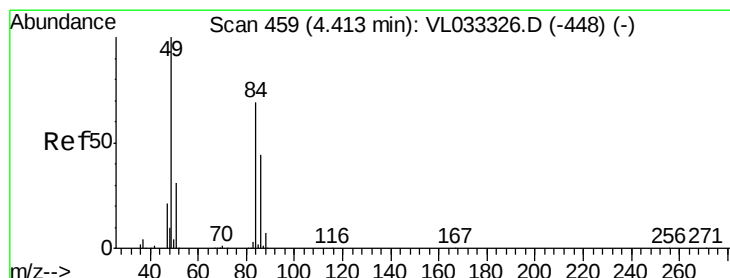
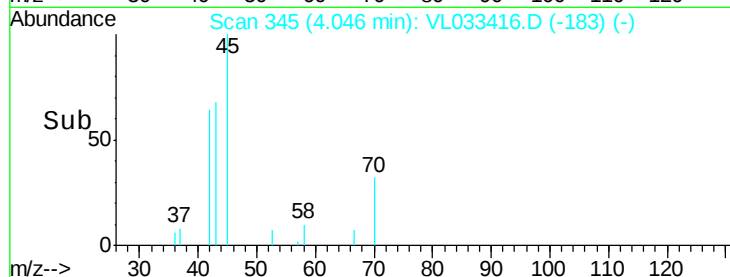
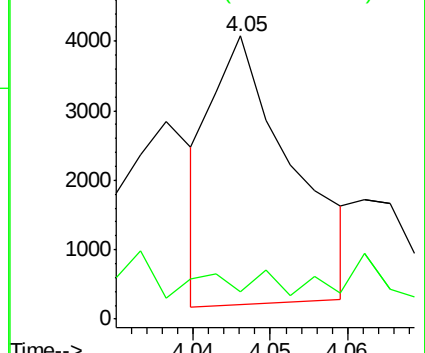
45 100

58 0.0 1.5 2.3#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#20

Methylene Chloride

Concen: 0.736 ppbv

RT: 4.41 min Scan# 457

Delta R.T. -0.01 min

Lab File: VL033416.D

Acq: 21 Mar 2019 10:14

Tgt Ion: 84 Resp: 25159

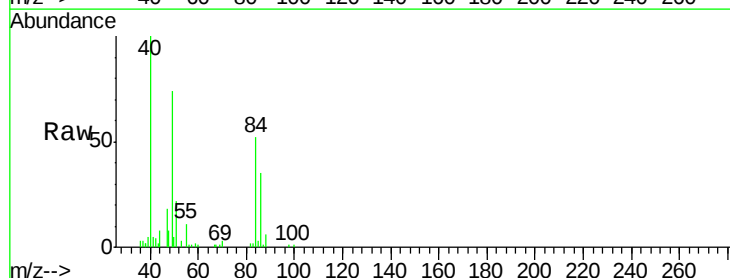
Ion Ratio Lower Upper

84 100

49 139.4 115.4 173.0

51 35.7 35.8 53.6#

86 66.6 50.6 75.8

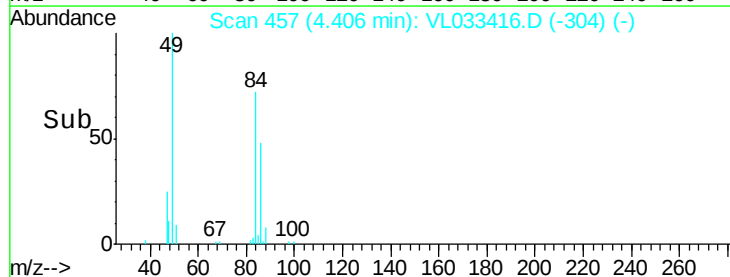
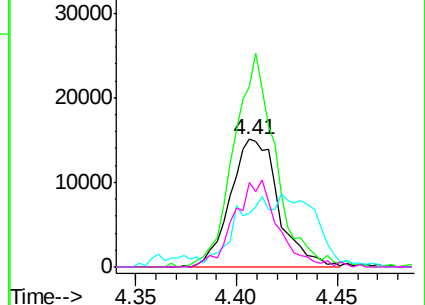


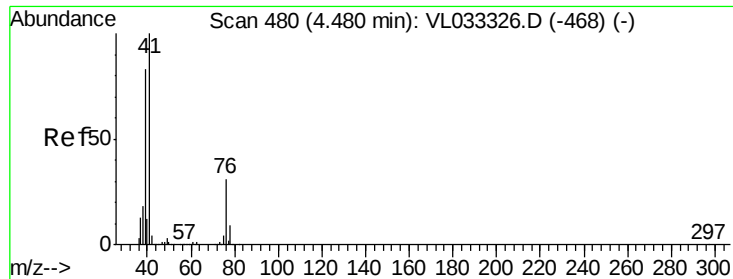
Abundance Ion 84.00 (83.70 to 84.70): VL0

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

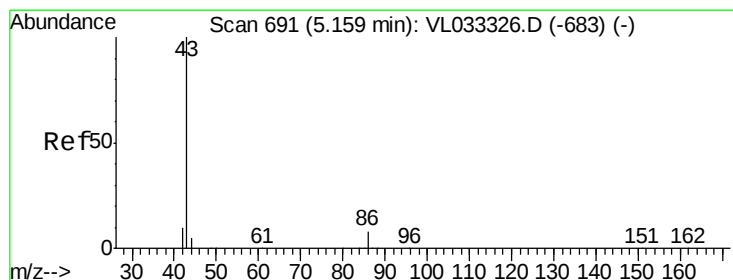
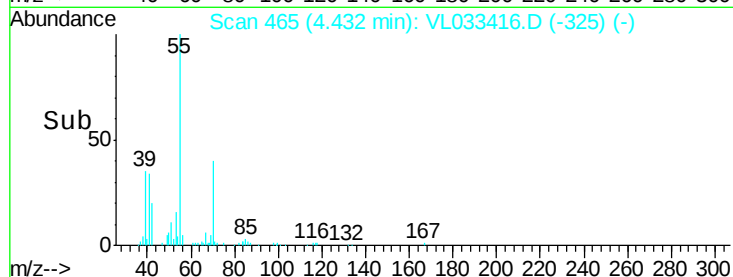
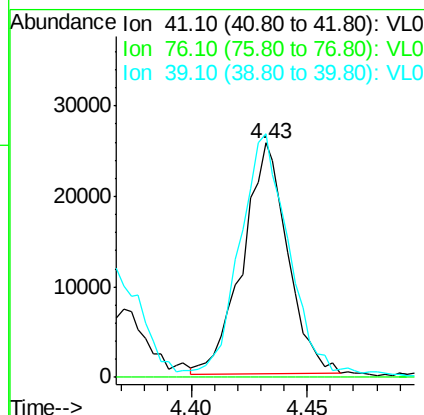
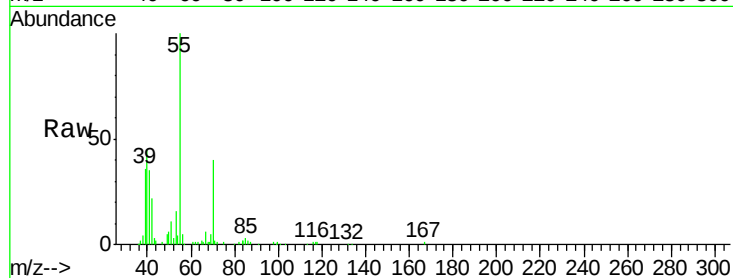




#21
 Allyl Chloride
 Concen: 0.675 ppbv
 RT: 4.43 min Scan# 465
 Delta R.T. -0.05 min
 Lab File: VL033416.D
 Acq: 21 Mar 2019 10:14

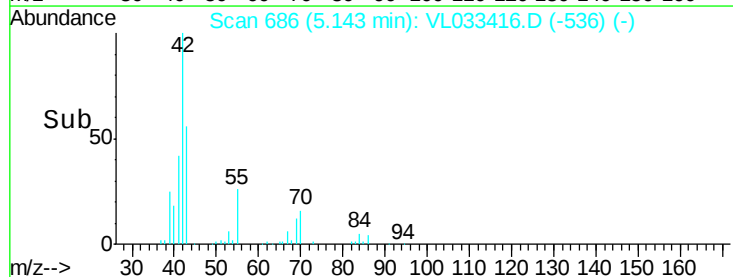
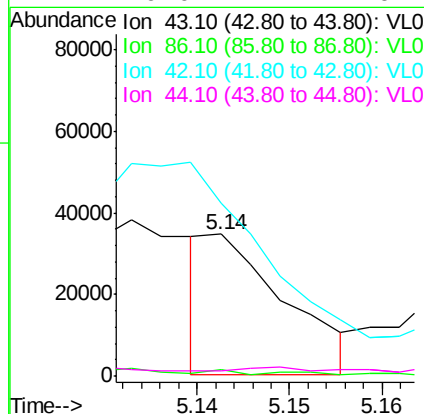
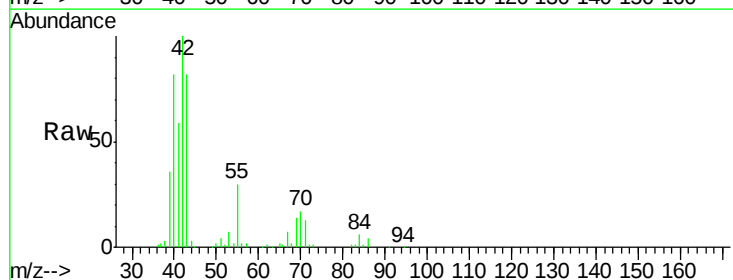
Instrument :
 MSVOA_L
 ClientSampleId :
 IA2DL2

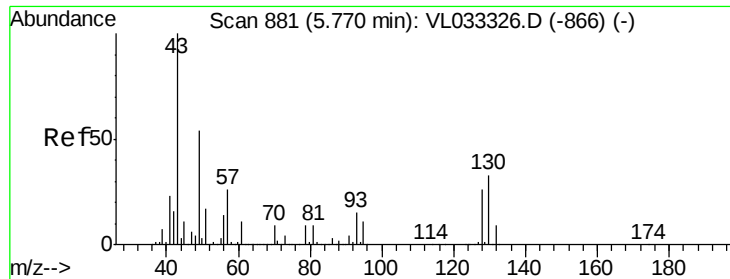
Tgt Ion: 41 Resp: 34328
 Ion Ratio Lower Upper
 41 100
 76 0.2 25.0 37.4#
 39 119.3 65.9 98.9#



#23
 Vinyl Acetate
 Concen: 0.166 ppbv
 RT: 5.14 min Scan# 686
 Delta R.T. -0.02 min
 Lab File: VL033416.D
 Acq: 21 Mar 2019 10:14

Tgt Ion: 43 Resp: 20152
 Ion Ratio Lower Upper
 43 100
 86 5.2 6.2 9.2#
 42 118.5 8.1 12.1#
 44 0.0 4.1 6.1#





#25

Ethyl Acetate

Concen: 0.612 ppbv

RT: 5.78 min Scan# 884

Delta R.T. 0.01 min

Lab File: VL033416.D

Acq: 21 Mar 2019 10:14

Instrument :

MSVOA_L

ClientSampleId :

IA2DL2

Tgt Ion: 43 Resp: 93199

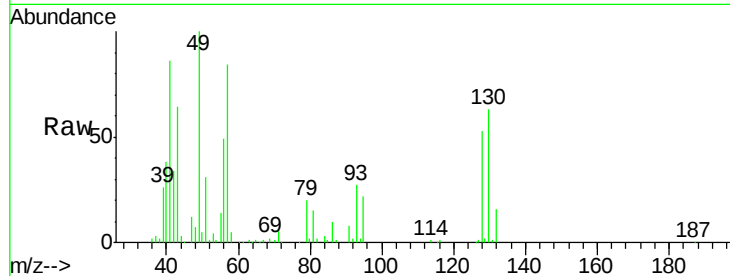
Ion Ratio Lower Upper

43 100

45 0.6 7.9 11.9#

61 0.6 7.4 11.2#

70 2.3 5.7 8.5#

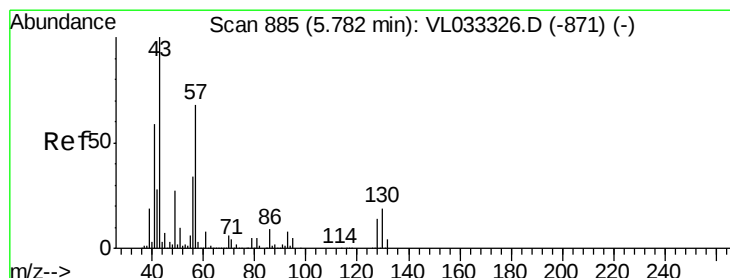
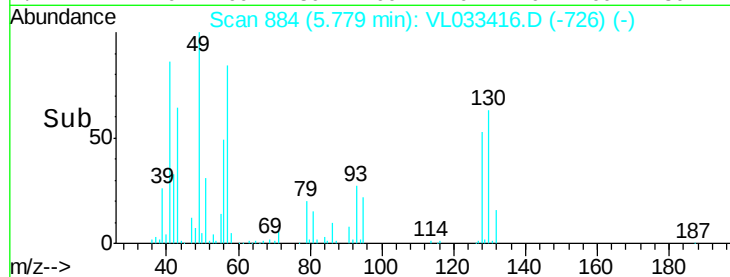
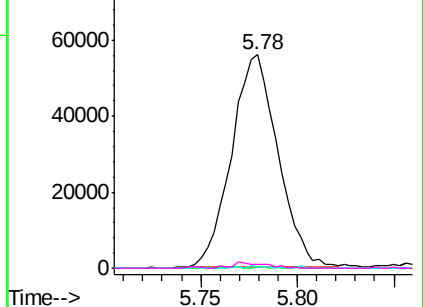


Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 70.10 (69.80 to 70.80): VL0



#26

Hexane

Concen: 1.865 ppbv

RT: 5.78 min Scan# 883

Delta R.T. -0.01 min

Lab File: VL033416.D

Acq: 21 Mar 2019 10:14

Tgt Ion: 57 Resp: 127064

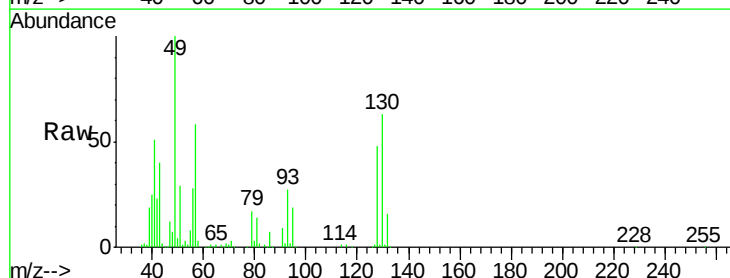
Ion Ratio Lower Upper

57 100

41 100.5 70.5 105.7

43 75.0 181.8 272.8#

56 57.4 42.2 63.2

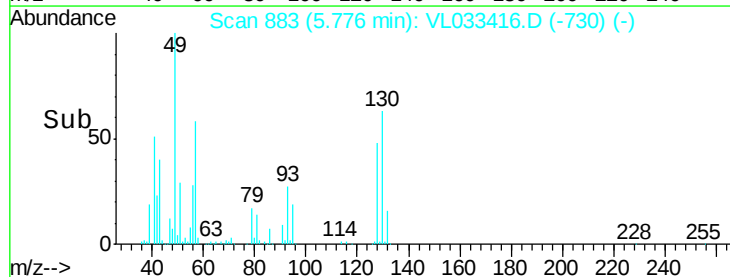
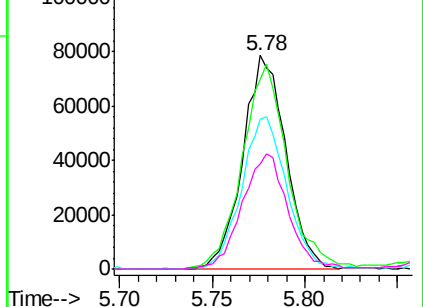


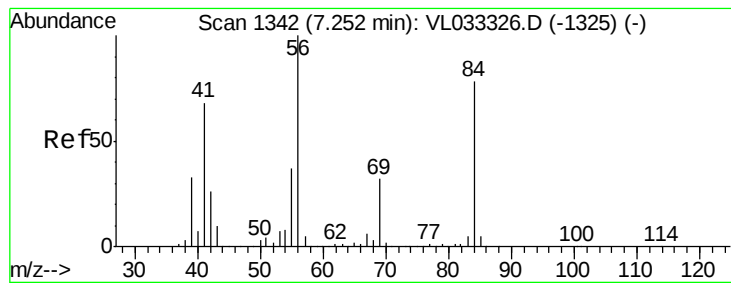
Abundance Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 43.10 (42.80 to 43.80): VL0

Ion 56.10 (55.80 to 56.80): VL0





#30

Cyclohexane

Concen: 0.360 ppbv

RT: 7.25 min Scan# 1340

Delta R.T. -0.01 min

Lab File: VL033416.D

Acq: 21 Mar 2019 10:14

Instrument :

MSVOA_L

ClientSampleId :

IA2DL2

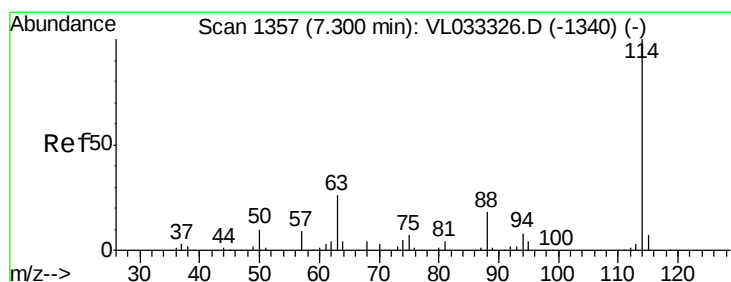
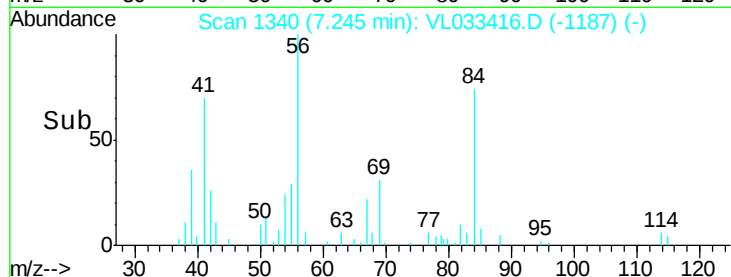
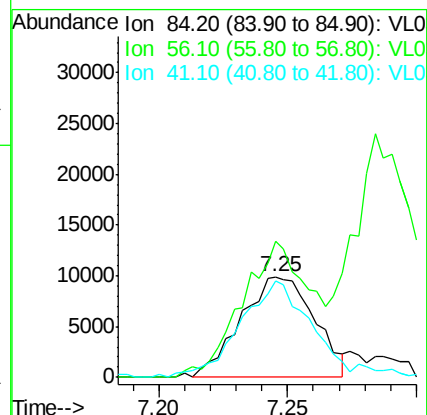
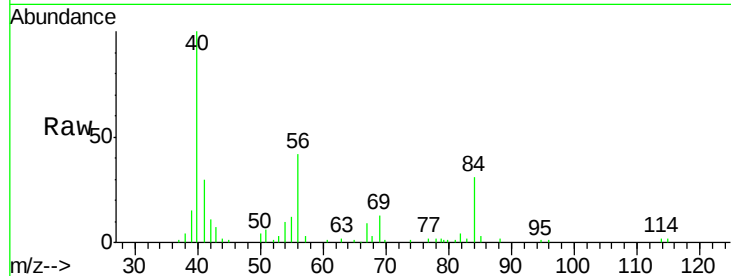
Tgt Ion: 84 Resp: 19679

Ion Ratio Lower Upper

84 100

56 124.2 111.3 166.9

41 95.5 69.6 104.4



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.29 min Scan# 1353

Delta R.T. -0.01 min

Lab File: VL033416.D

Acq: 21 Mar 2019 10:14

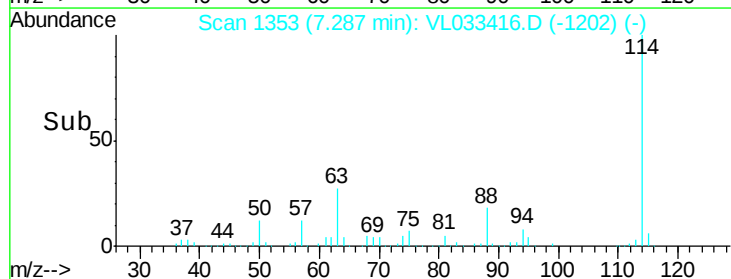
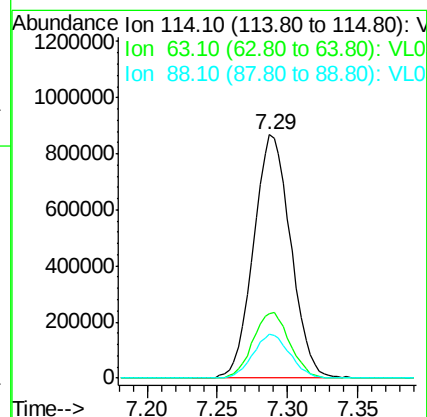
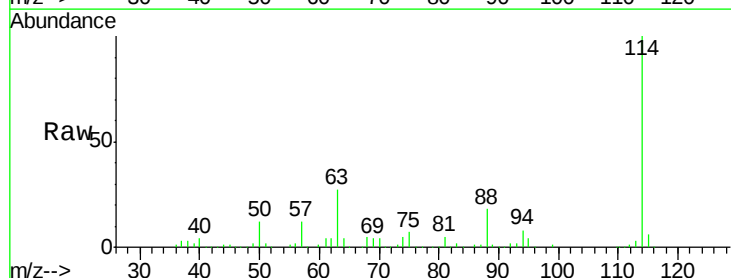
Tgt Ion: 114 Resp: 1598546

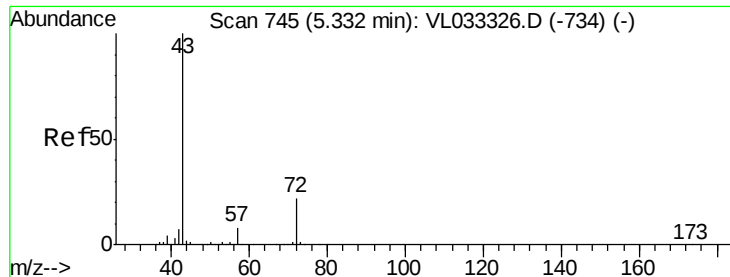
Ion Ratio Lower Upper

114 100

63 26.8 21.4 32.2

88 18.1 14.5 21.7

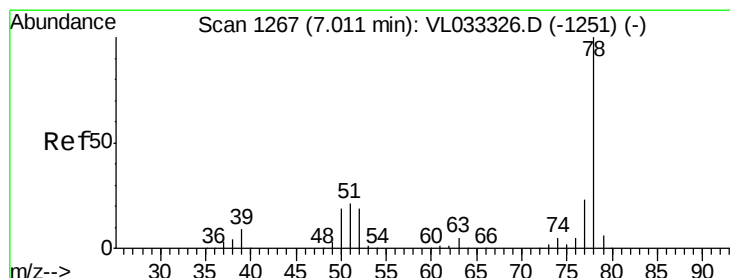
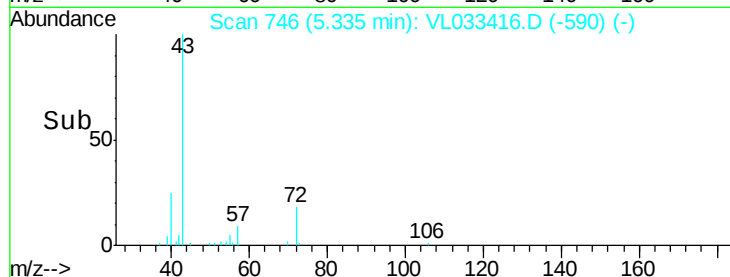
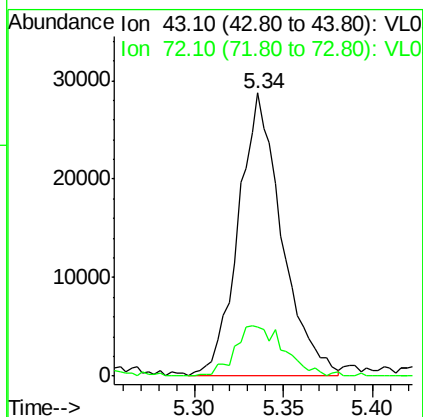
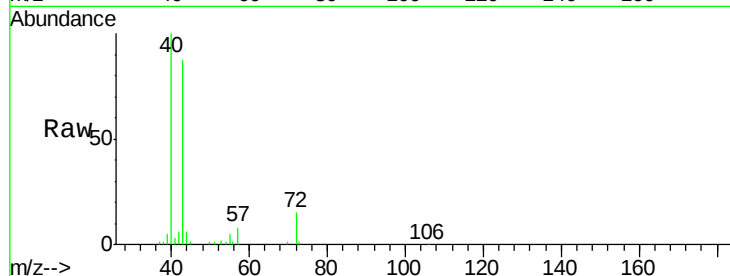




#34
 2-Butanone
 Concen: 0.465 ppbv
 RT: 5.34 min Scan# 746
 Delta R.T. 0.00 min
 Lab File: VL033416.D
 Acq: 21 Mar 2019 10:14

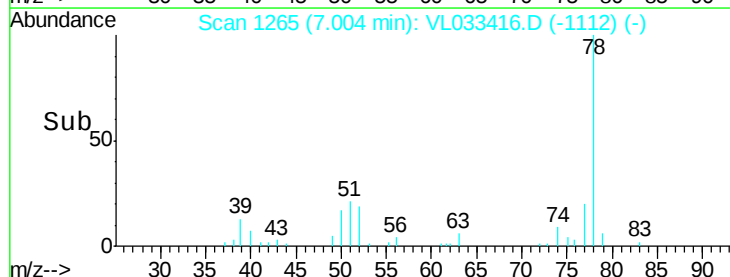
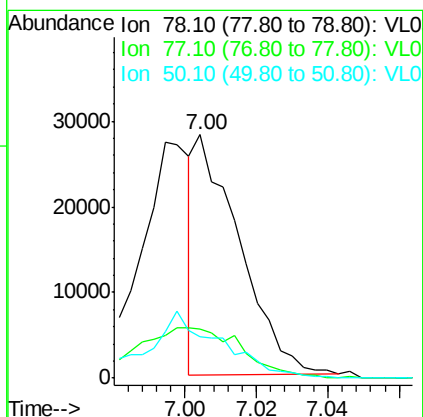
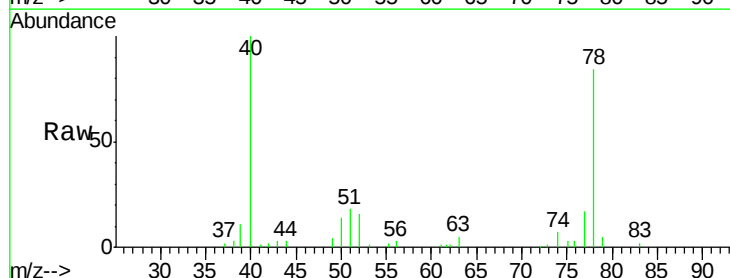
Instrument :
 MSVOA_L
 ClientSampleId :
 IA2DL2

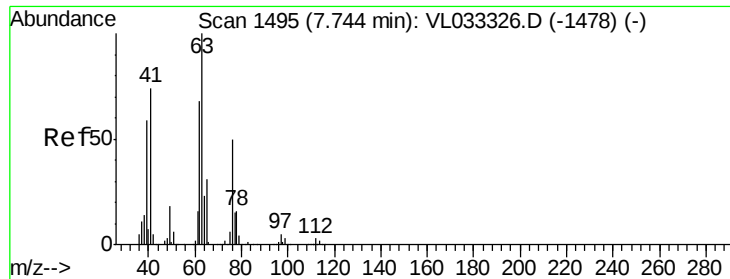
Tgt Ion: 43 Resp: 48842
 Ion Ratio Lower Upper
 43 100
 72 20.2 17.7 26.5



#36
 Benzene
 Concen: 0.169 ppbv
 RT: 7.00 min Scan# 1265
 Delta R.T. -0.01 min
 Lab File: VL033416.D
 Acq: 21 Mar 2019 10:14

Tgt Ion: 78 Resp: 24142
 Ion Ratio Lower Upper
 78 100
 77 20.6 18.1 27.1
 50 17.5 15.2 22.8





#39

1,2-Dichloropropane

Concen: 7.948 ppbv

RT: 7.29 min Scan# 1354

Delta R.T. -0.45 min

Lab File: VL033416.D

Acq: 21 Mar 2019 10:14

Instrument :

MSVOA_L

ClientSampleId :

IA2DL2

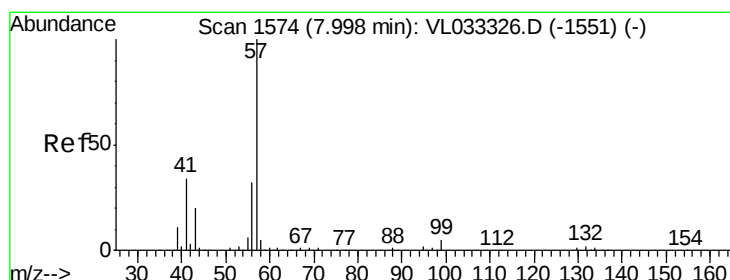
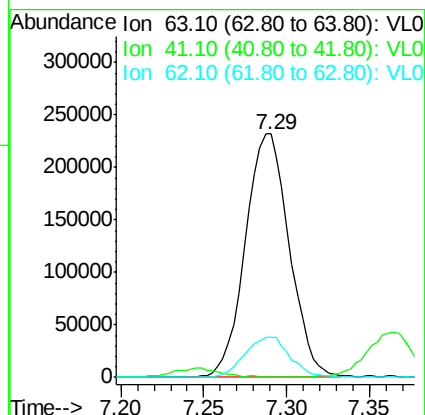
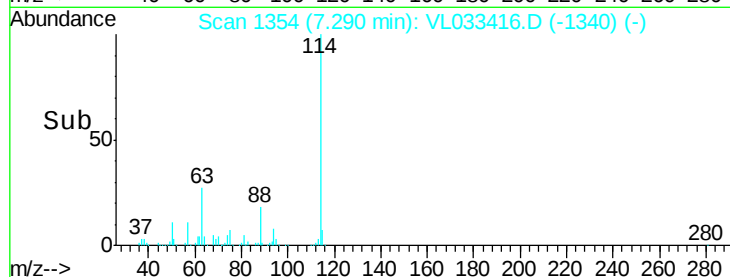
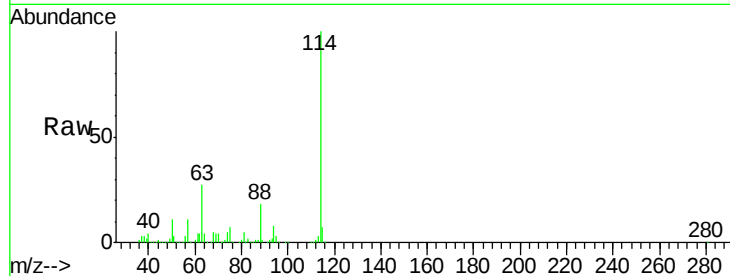
Tgt Ion: 63 Resp: 425823

Ion Ratio Lower Upper

63 100

41 0.0 59.5 89.3#

62 16.6 54.7 82.1#



#44

2,2,4-Trimethylpentane

Concen: 0.508 ppbv

RT: 7.99 min Scan# 1571

Delta R.T. -0.01 min

Lab File: VL033416.D

Acq: 21 Mar 2019 10:14

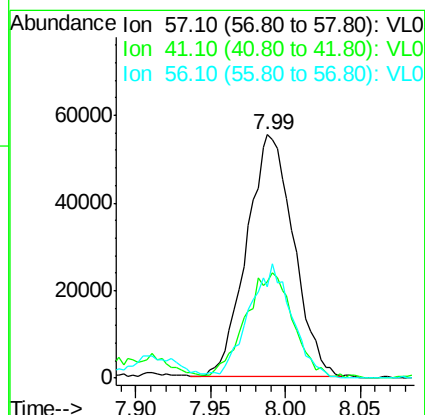
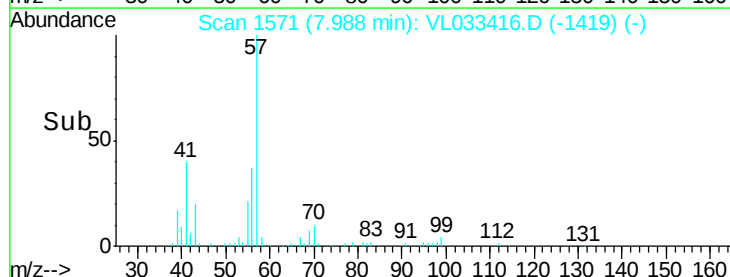
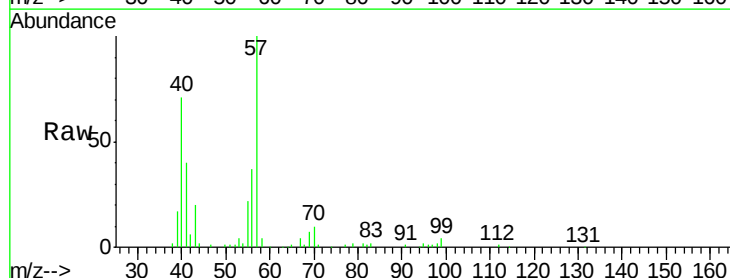
Tgt Ion: 57 Resp: 120321

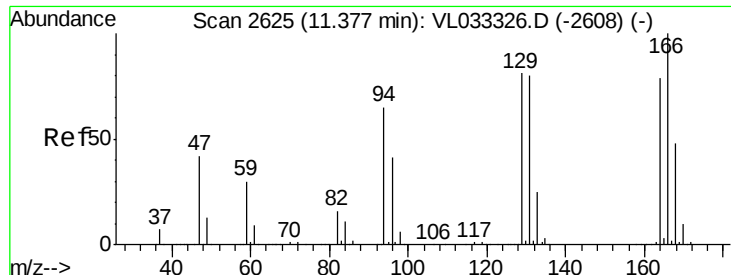
Ion Ratio Lower Upper

57 100

41 45.1 26.0 39.0#

56 43.6 24.6 36.8#





#52

Tetrachloroethene

Concen: 18.534 ppbv

RT: 11.37 min Scan# 2624

Delta R.T. -0.00 min

Lab File: VL033416.D

Acq: 21 Mar 2019 10:14

Instrument :

MSVOA_L

ClientSampleId :

IA2DL2

Tgt Ion:164 Resp: 1104614

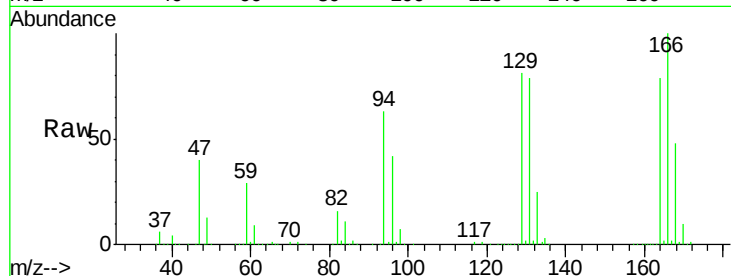
Ion Ratio Lower Upper

164 100

166 125.5 101.5 152.3

129 101.7 82.2 123.2

131 98.7 81.1 121.7

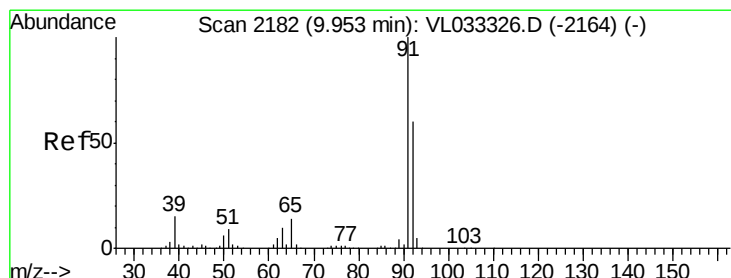
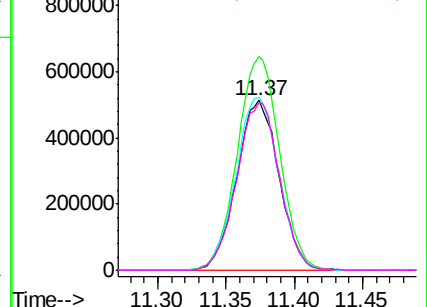
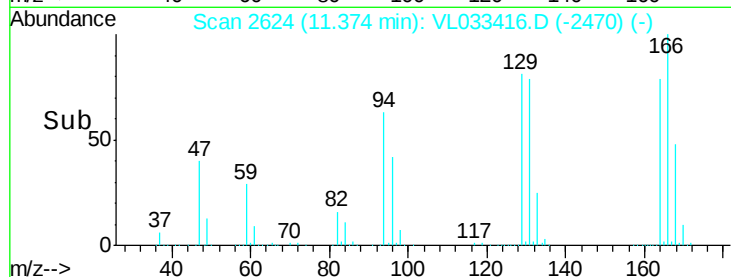


Abundance Ion 163.90 (163.60 to 164.60): V

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: 6.909 ppbv

RT: 9.95 min Scan# 2180

Delta R.T. -0.01 min

Lab File: VL033416.D

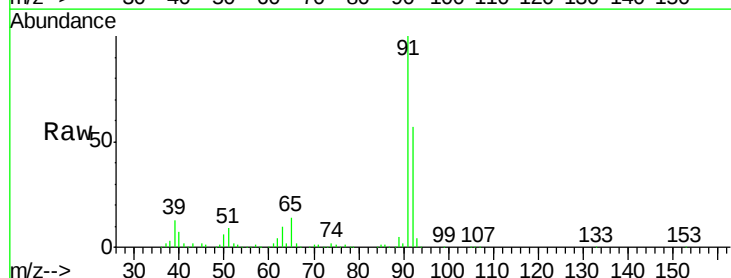
Acq: 21 Mar 2019 10:14

Tgt Ion: 91 Resp: 1123141

Ion Ratio Lower Upper

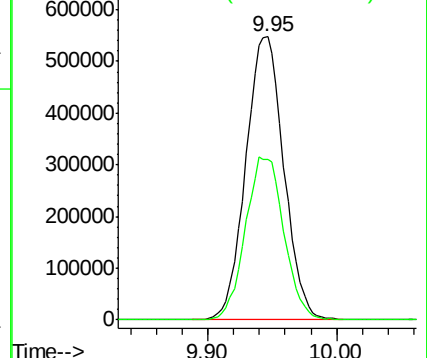
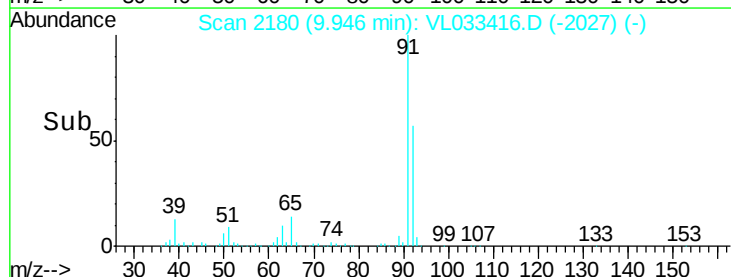
91 100

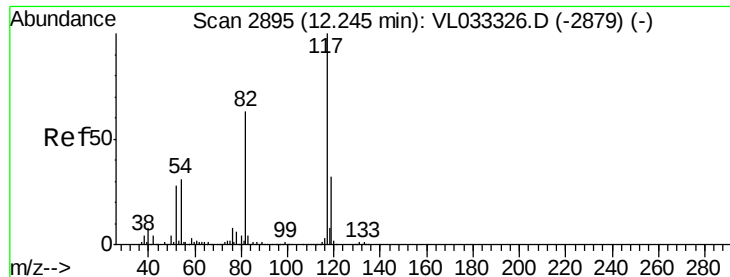
92 58.2 47.4 71.0



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

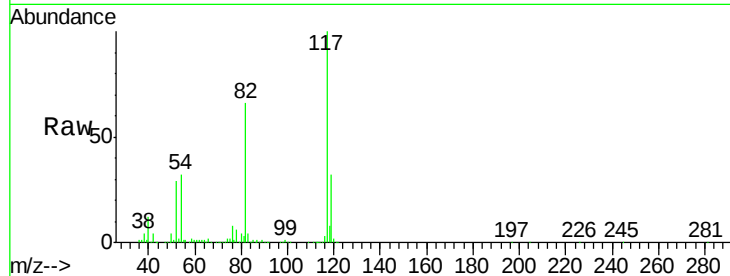




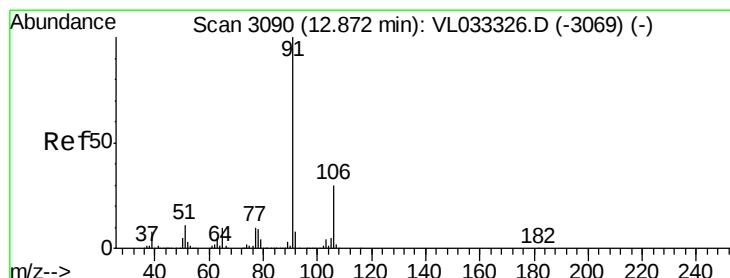
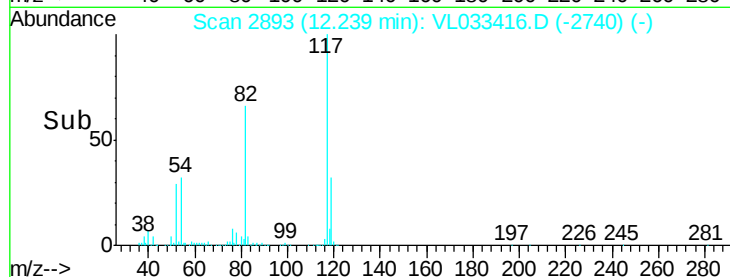
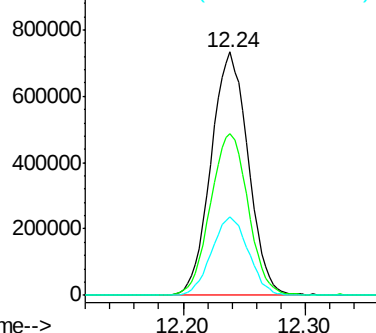
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.24 min Scan# 2893
Delta R.T. -0.01 min
Lab File: VL033416.D
Acq: 21 Mar 2019 10:14

Instrument :
MSVOA_L
ClientSampleId :
IA2DL2

Tgt Ion: 117 Resp: 1540502
Ion Ratio Lower Upper
117 100
82 68.1 53.4 80.2
119 32.2 27.3 40.9

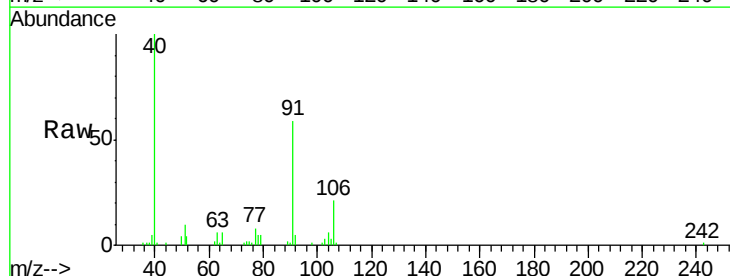


Abundance Ion 117.10 (116.80 to 117.80): V
Ion 82.10 (81.80 to 82.80): VL0
Ion 119.10 (118.80 to 119.80): V

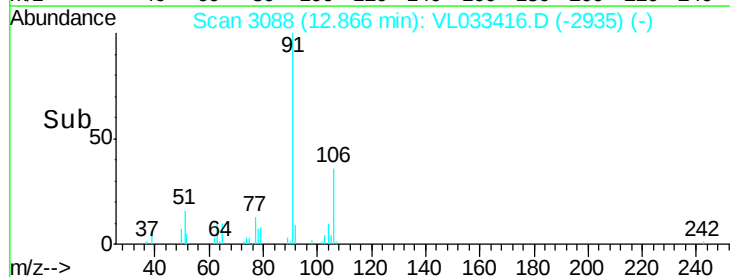
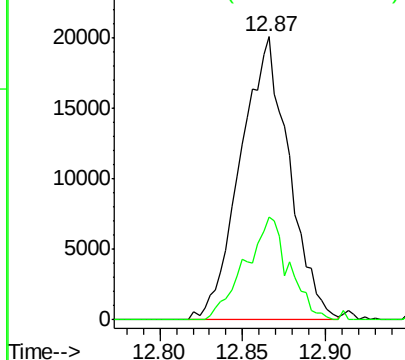


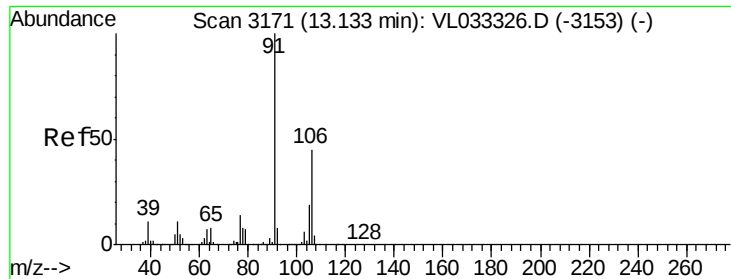
#58
Ethyl Benzene
Concen: 0.188 ppbv
RT: 12.87 min Scan# 3088
Delta R.T. -0.01 min
Lab File: VL033416.D
Acq: 21 Mar 2019 10:14

Tgt Ion: 91 Resp: 41037
Ion Ratio Lower Upper
91 100
106 36.2 24.2 36.2



Abundance Ion 91.10 (90.80 to 91.80): VL0
Ion 106.10 (105.80 to 106.80): V

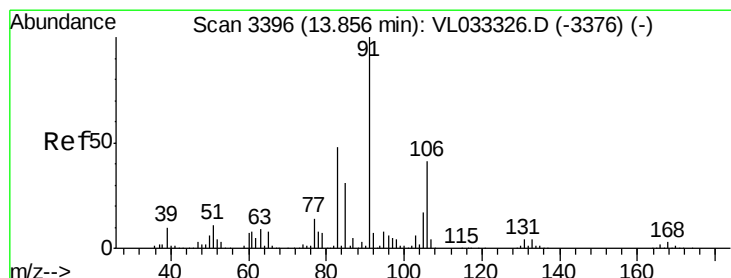
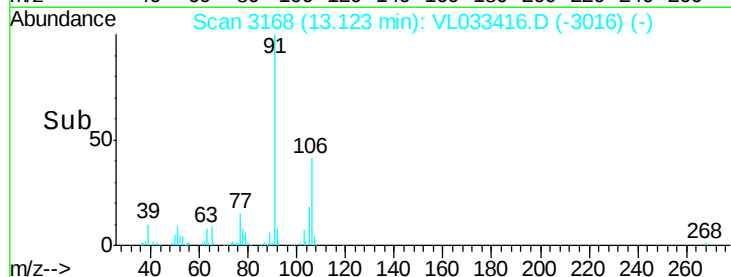
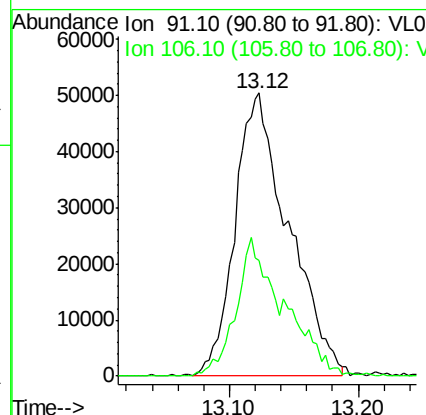
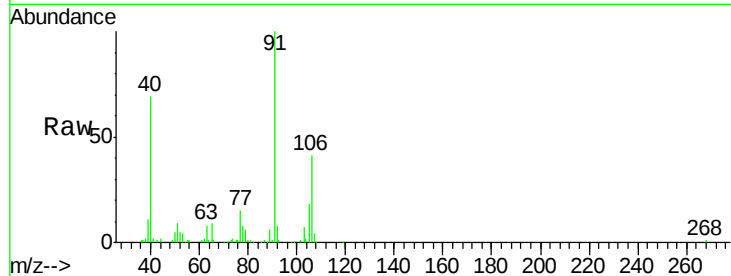




#59
m/p-Xylene
Concen: 0.776 ppbv
RT: 13.12 min Scan# 3168
Delta R.T. -0.01 min
Lab File: VL033416.D
Acq: 21 Mar 2019 10:14

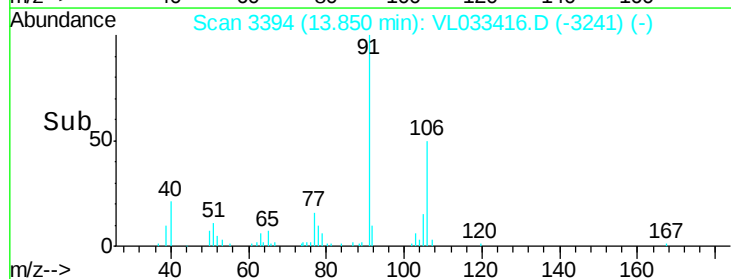
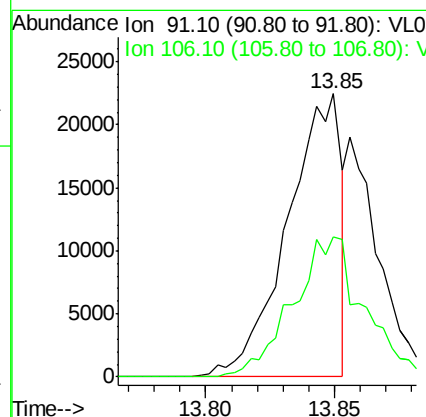
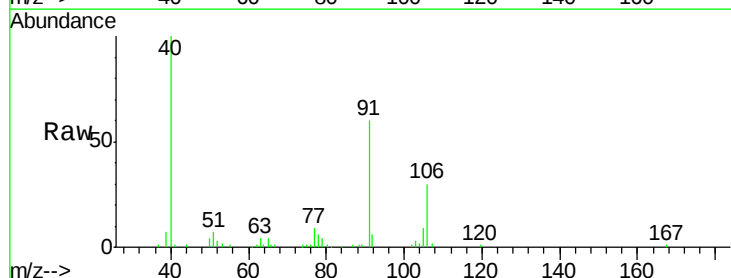
Instrument :
MSVOA_L
ClientSampleId :
IA2DL2

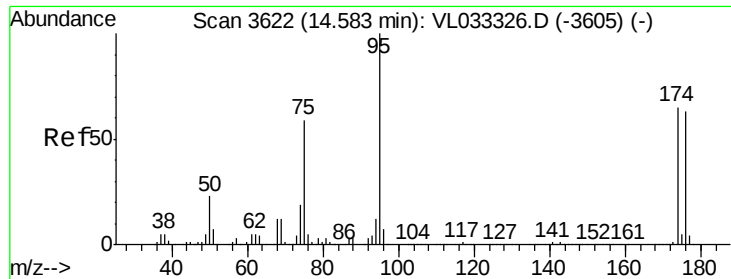
Tgt Ion: 91 Resp: 145294
Ion Ratio Lower Upper
91 100
106 43.7 0.0 0.0#



#60
o-Xylene
Concen: 0.177 ppbv
RT: 13.85 min Scan# 3394
Delta R.T. -0.01 min
Lab File: VL033416.D
Acq: 21 Mar 2019 10:14

Tgt Ion: 91 Resp: 32266
Ion Ratio Lower Upper
91 100
106 65.7 21.3 63.9#

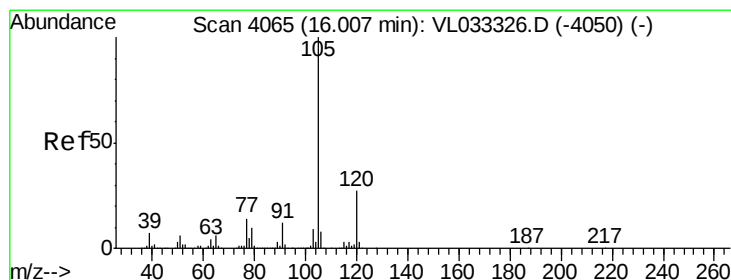
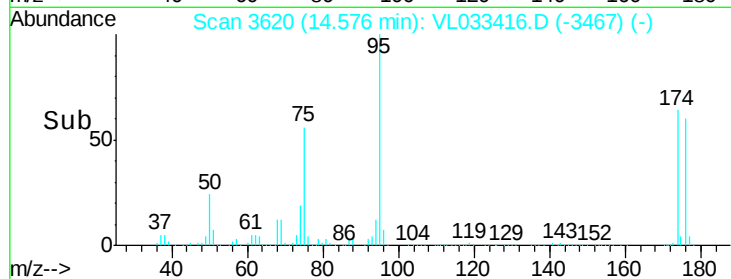
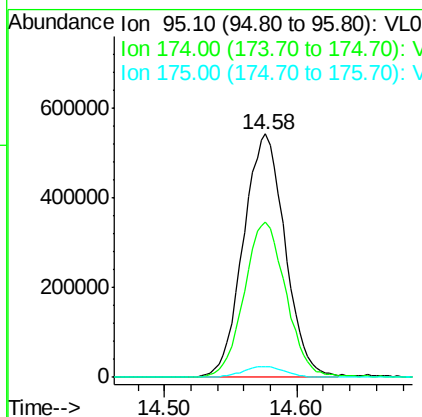
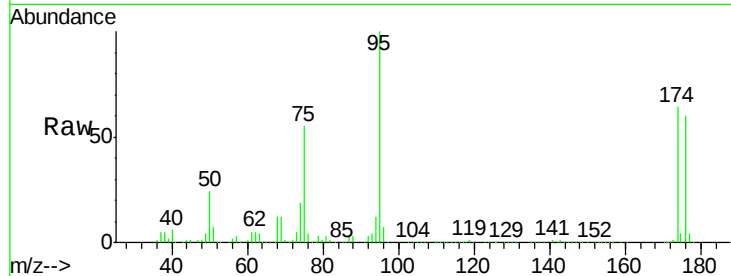




#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.370 ppbv
 RT: 14.58 min Scan# 3620
 Delta R.T. -0.01 min
 Lab File: VL033416.D
 Acq: 21 Mar 2019 10:14

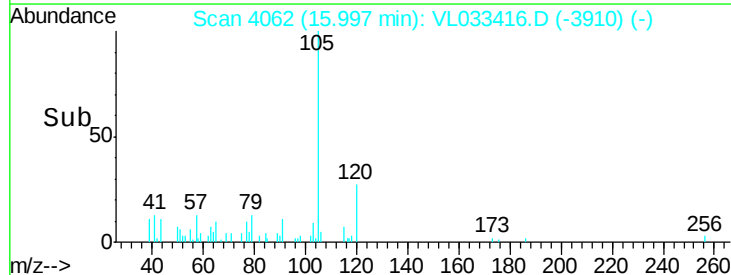
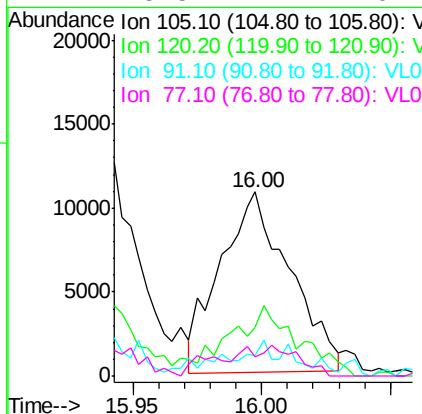
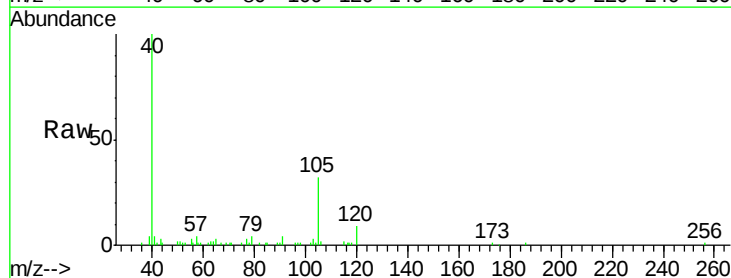
Instrument :
 MSVOA_L
 ClientSampleId :
 IA2DL2

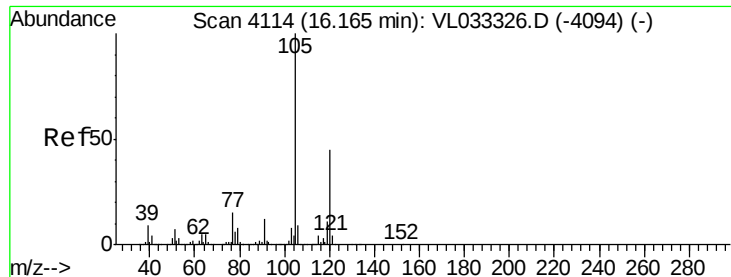
Tgt Ion: 95 Resp: 1183788
 Ion Ratio Lower Upper
 95 100
 174 64.2 51.5 77.3
 175 4.7 3.8 5.6



#72
 4-Ethyltoluene
 Concen: 0.098 ppbv
 RT: 16.00 min Scan# 4062
 Delta R.T. -0.01 min
 Lab File: VL033416.D
 Acq: 21 Mar 2019 10:14

Tgt Ion: 105 Resp: 20295
 Ion Ratio Lower Upper
 105 100
 120 38.3 22.9 34.3#
 91 16.5 10.2 15.2#
 77 18.5 11.1 16.7#





#73

1,3,5-Trimethylbenzene

Concen: 0.052 ppbv

RT: 16.16 min Scan# 4114

Delta R.T. -0.00 min

Lab File: VL033416.D

Acq: 21 Mar 2019 10:14

Instrument :

MSVOA_L

ClientSampleId :

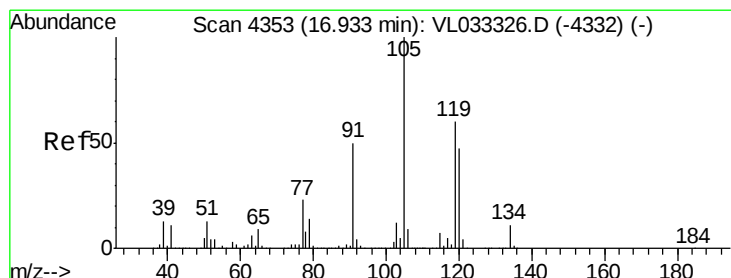
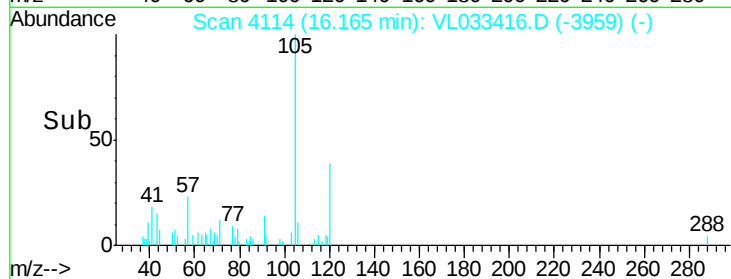
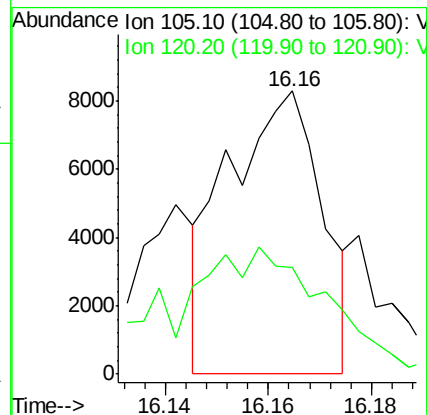
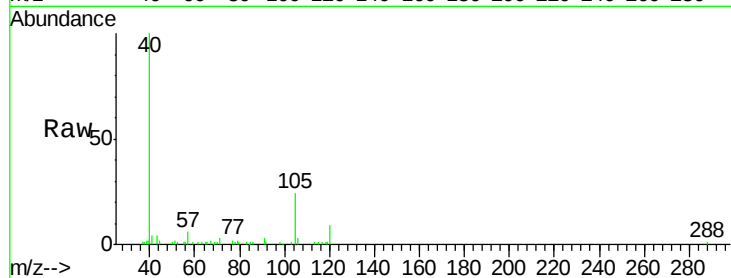
IA2DL2

Tgt Ion:105 Resp: 10548

Ion Ratio Lower Upper

105 100

120 26.2 36.2 54.4#



#74

1,2,4-Trimethylbenzene

Concen: 0.310 ppbv

RT: 16.93 min Scan# 4351

Delta R.T. -0.01 min

Lab File: VL033416.D

Acq: 21 Mar 2019 10:14

Tgt Ion:105 Resp: 66374

Ion Ratio Lower Upper

105 100

120 36.4 37.4 56.2#

91 9.9 41.0 61.4#

77 12.8 18.5 27.7#

